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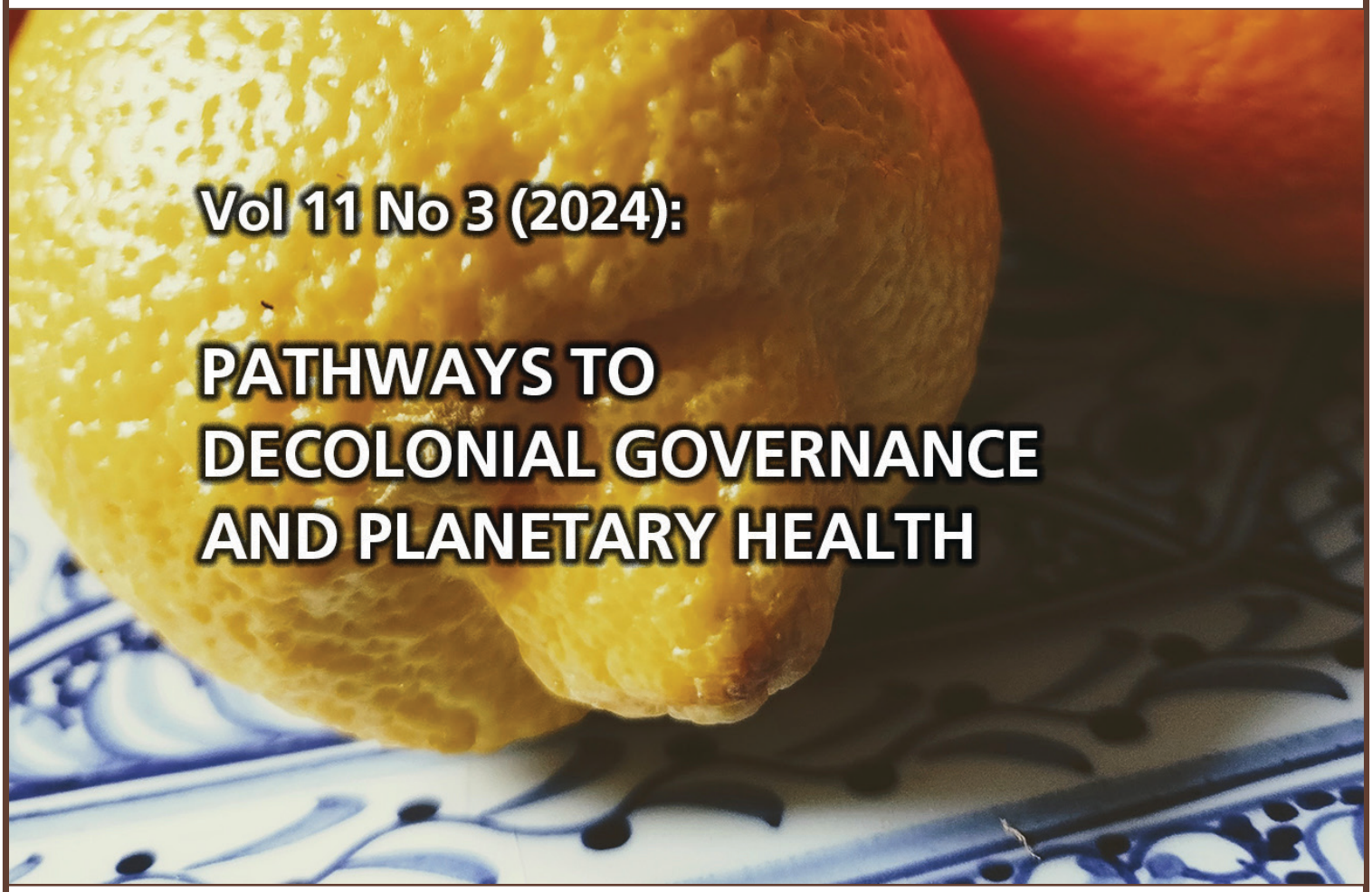

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# PATHWAYS TO DECOLONIAL GOVERNANCE AND PLANETARY HEALTH

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# IN THIS ISSUE

The cover image is a nod to the season and to seventeenth-century still life painting, in which the lemon was a favoured object of study. Its placement in such scenes can be read variously. It is a symbol of luxury and longevity, pride and decay. It is also a souring agent.

The articles in this issue are equally attentive to the bitter and the sweet—the "pervasive and destructive [...] colonial approaches to food system governance" that CFS editor Shailesh Shukla describes in his editorial, as well as the modes of resistance, the innovation, the (un)learning and relationship building that are happening concurrently as we work to change the way we regulate food production and distribution.

We open with a field report that reports on small fields. Richard Bloomfield and Deishin Lee address the current and looming farmer shortage by seeking to understanding the experiences of first-generation, small-scale vegetable farmers—this in view of informing policy changes that support and encourage more farmers of this kind who contribute directly to local food systems. From Southwestern Ontario, Séraphin Balla and Caroline Hervé take us up to Cambridge Bay to examine two major and thoroughly imbricated concerns of Inuit communities: food insecurity and the housing crisis, requiring, as they emphasize, Inuit involvement in the related decisions. Rotz et al. examine the role of food as a weapon of colonization and a tool of liberation, with a primary focus on Gaza under Israeli settler-colonial rule. They also direct our attention to similar patterns of historical colonial land theft and environmental devastation in Canada.

In the context of Toronto's food sovereignty movement, Seidman-Wright et al. argue that food activists have a responsibility to let go of settler claims to authority over food and knowledge systems on stolen lands, and to advocate for deeper systemic changes that redistribute power and resources to Indigenous peoples and Indigenous-led initiatives. Mary Coulas and Gabriel Maracle examine the government of Canada's relationship with Indigenous peoples and how this relationship has, and could, affect national food policy development. Beyond stakeholdership, they are discursively carving out a space for Indigenous partnership.

Sarah Marquis has her eye on digital agriculture (DA) technologies (like robotic machinery, big data applications, farm management software platforms and drones) and the language used to describe them in the Canadian political and media landscape. And Nil Alt offers us a review of Maria Luisa Mendonça's *The Political Economy of Agribusiness: A Critical Development Perspective*.

We conclude with our Choux Questionnaire, in which Lenore Newman has offered, among other responses, her choice for a word or concept that describes an admirable food system. Hint: it's not "colonial." And in the spirit of reciprocity, she invites us to consider the worst meal we've ever had.

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*photo: Alexia Moyer*

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Editorial

# Working with all nations and all relatives in feeding the future: Pathways to decolonial food governance and sustainable planetary health

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*"Our forests are made up of trees. Much like the people who populate this Earth, each person and each tree is different. Different colours, different faiths, different beliefs; they come from different places. But like the forests of our islands... when troubles come to us, they come to us all." And if we are going to withstand the winds of those troubles, like the forests we must intertwine our roots so strongly that these winds of our troubles cannot blow us over."*

- Chief Skidegate Lewis Collinson (as quoted in Cameron, et al., 2021, 10).

Most unprecedented changes and challenges to planetary health that include earth and human health, are attributed to short-sighted policies and systemic barriers. Standardized and top-down approaches of development that often dominate through limited, persuasive, and extractive eurocentric perspectives often dominate in Turtle Island and most colonial regions of the world. Food and food-sustaining relatives (land, water, plants, animals, micro-habitats) which are central to planetary health, are negatively impacted and threatened by these human pressures, which have severe implications for our ability to feed current and future generations (FAO et al., 2023; Planetary Health Alliance, n.d.). Many international agencies (including those affiliated with the United Nations), food systems scholars, grassroots organizations, and community members are grappling with the very imminent challenges of addressing the alarmingly high level of food insecurity in Turtle Island (Council of Canadian Academics, 2014; Fieldhouse & Thompson, 2012) and the global South (Kuhnlein et al., 2013).

Indigenous food systems in Canada and across the globe have experienced colonial histories of dispossession and attempted acculturation (e.g., modern agro-centric

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research and development bias), compelling local communities to become disconnected from traditional land-based practices that were once foundational to their survival (Corntassel & Bryce, 2012). Recently, Indigenous food systems in Canada (Settee & Shukla, 2020) and globally (Kuhnlein et al., 2009 & 2013) have been explored and promoted to address complex challenges of achieving food security and create an enabling space for local voices, Indigenous knowledge systems, and participatory governance by contributing to sustainable planetary health (FAO et al., 2023) that will also secure present and future feeding. Therefore, reconnection, renewal, and revitalization of Indigenous-knowledges and perspectives through small-scale, community-governed, and collaborative approaches are emerging as a strong beacon of hope in sustaining and nourishing human and planetary health futures.

The contributions in this issue vehemently demonstrate how pervasive and destructive the dominant, eurocentric, top-down and colonial approaches to food system governance and policies have been. The most common lesson that emerges from these issues is that despite experiencing the ill effects of colonial legacies, Indigenous food systems persist and, in many cases, prevail through systematic barriers to meet the vision for feeding the present and future. Some papers in this issue also chronicle the experiences of the emerging participatory governance (mostly between Indigenous communities and settlers in Turtle Island) and highlight important lessons (both common and unique) and starting points in understanding, designing, and evaluating similar participatory governance approaches.

While many Indigenous-settler partnership initiatives have evolved to counteract the eurocentric ideologies and structures that govern our food systems, they are still deeply entrenched in settler colonialism. Visitors to Turtle Island like me, even with a similar experience of colonial legacy, must make serious efforts to move beyond just good intentions and genuinely engage in Indigenous led "ethical space" (a term coined by Cree Elder and scholar William Ermine) even if this work is difficult (Kerr et al., 2024). This requires the re-positioning of power and privileges to the advantage of Indigenous partners and their wisdom by "flipping the script" (Deranger et al., 2022). Settlers will have to be ready to re-envision and rewrite the script altogether with perspectives, wisdom and terms as set by Indigenous partners. This should be the first right step in honouring the treaty promises and consistent with the kind of strength-based approach (FNICG, 2020) that is being embraced and advocated by many governments, nations, non-government organizations, scholars, and grassroots community members working with BIPOC communities in recent times (Guinto et al., 2024).

There is evidence-based support for reintroducing Indigenous food systems (old food) as a new healthy alternative for modern times (Turner & Leigh, 2020; FAO et al., 2023), which also empowers Indigenous communities toward sustainable self-determination and Indigenous food resurgence (Corntassel & Bryce, 2012). Revitalization and restoration of Indigenous food systems are not only challenging the dominant oppressive and capitalist food governance but also advocating for decolonization through the renewal of relationships of diverse cultures and nations. Feeding the future requires a diverse array of rainbows—all nations and communities who will work through mutual respect, reciprocity, and reverence for the land, planet, and all relatives (Shukla, Settee and Lincoln, Forthcoming). Promoting intersectoral pedagogies with all (but particularly youth) who will actively engage in

three-eyed seeing[1] (Environment and Climate Change Canada, 2023) will augment Indigenous food system resurgence and Planetary health sustainability.

Many Indigenous teachings and cultural teachings around the world, in their original instructions, recommend seeking and restoring balance in all actions (doing, thinking, and speaking) while caring for seven generations of all relatives. It is not just our requirement and right, but a sacred responsibility that we inherited and want to pass down to future generations—which will have enormous impacts on feeding the present and future: "I am all of my relatives, and all of my relatives are me" (Indigenous Language Institute, 2024).

**Acknowledgements:** I would like to thank Ms. Neepin Cook, Indigenous Studies work-study student, University of Winnipeg, for her editorial assistance.

**Shailesh Shukla:** As a settler person of colour and first-generation immigrant to Treaty-1 Territory, Shailesh's connection to sustainable food systems and planetary health are rooted in the East Indian Sanatana spiritual traditions and his lifelong passion for Indigenous knowledge systems. For more than two decades, he has worked with Indigenous communities, including his doctoral and postdoctoral work on Indigenous knowledge systems and sustainability, this completed in close collaboration with First Nations and Indigenous communities from Turtle Island and South Asia. He co-edited *Indigenous Food Systems: Concepts, Cases and Conversations* with Dr Priscilla Settee and is currently working with both Settee and Dr. Noa Lincoln as lead co-editor of *Indigenous Insights for Planetary Health and Sustainable Food Systems: Learning from International Case Studies*, (forthcoming, summer 2025).

## References

Cameron, L., Courchene, D., Ijaz, S., & Mauro, I. (2021). 'A change of heart': Indigenous perspectives from the Onjisay Aki Summit on climate change. *Climatic Change*, *164*, 43. https://doi.org/10.1007/s10584-021-03000-8

Council of Canadian Academies. (2014). Aboriginal Food Security in Northern Canada: An Assessment of the State of Knowledge. The Expert Panel on the State of Knowledge of Food Security in Northern Canada. Council of Canadian Academies. https://cca-reports.ca/wp-content/uploads/2018/10/foodsecurity_execsummen.pdf

Corntassel, J., & Bryce, C. (2012). Practicing sustainable self-determination: Indigenous approaches to cultural revitalization and restoration. *Brown J. World Affairs 18*(11), 151–162. Available online at: www.jstor.org/stable/24590870

Deranger, E. T., Sinclair, R., Gray, B., McGregor, D., & Gobby, J. (2022). Decolonizing Climate Research and Policy: making space to tell our own stories, in our own ways. *Community Development Journal*, *57*(1), 52–73. https://doi.org/10.1093/cdj/bsab050

Environment and Climate Change Canada. (2023, Nov 16). *Understanding Indigenous Science* [Video]. YouTube. https://www.youtube.com/watch?v=fOMJqshXsoY

[1] Three-eyed seeing approach is coined by Chief Indigenous Science advisor at Environment and Climate Change Canada. It means that nature or planet health should be understood through western sciences, Indigenous ways of knowing and voices of relatives with which we have relationships. Since Indigenous communities have been living with nature from time immemorial, they have developed deep knowledges and understanding of these important other relatives in nature (land, water, mountains, and all aspects of biodiversity), and therefore their voice becomes a critical third eye.

First Nations Information Governance Centre. (2020). Strengths-Based Approaches to Indigenous Research and the Development of Well-Being Indicators. First Nations Information Governance Centre Research Series. https://fnigc.ca/wp-content/uploads/2021/05/FNIGC-Research-Series-SBA_v04.pdf

FAO and Alliance of Biodiversity International and CIAT. (2023). *In Brief: Indigenous Peoples' food systems – Insights on sustainability and resilience from the front line of climate change*. FAO and Alliance of Biodiversity International and CIAT. https://doi.org/10.4060/cc4948en

Fieldhouse, P., & Thompson, S. (2012). Tackling food security issues in indigenous communities in Canada: The Manitoba experience. *Nutrition & Dietetics, 69*(3), 217-221. https://doi.org/10.1111/j.1747-0080.2012.01619.x

Guinto, R., Holley, K., Pictou, S., Tinirau, R., Wiremu, F., Andreé, P., Clark, J. K., Levkoe, C. Z., & Reeve, B. (2024). Challenging power relations in food systems governance: A conversation about moving from inclusion to decolonization. *Journal of Agriculture, Food Systems, and Community Development*, 13(2), 91–108. https://doi.org/10.5304/jafscd.2024.132.009

Indigenous Language Institute. (2024, November 24). *James Vukelich Kaagegaabaw: The Seven Generations and the Seven Grandfather Teachings* [Video]. YouTube. https://www.youtube.com/watch?v=ojmMVKJgthU

Joseph, Leigh & Turner, N.J. (2020). "The Old Foods Are the New Foods!": Erosion and Revitalization of Indigenous Food Systems in Northwestern North America. *Frontiers in Sustainable Food Systems, 4, 59623*. https://doi.org/10.3389/fsufs.2020.596237

Kerr, R., Levkoe, C. Z., McDermott, L., McLaughlin, J., Price, J., Checkley, G., Boulet, A., Bockstael, E., Craig, S., & Froese, A. (2024). "10: Beyond 'Good Intentions': Fostering Meaningful Indigenous-Settler Relationships to Support Indigenous Food Sovereignty". In *Radical Food Geographies,* 171-186. Bristol University Press. https://doi.org/10.51952/9781529233445.ch010

Kuhnlein, H. V., Erasmus, B., and Spigelski, D. (eds.). (2009). Indigenous Peoples' Food Systems: The Many Dimensions of Culture, Diversity, and Environment for Nutrition and Health. Montreal, QC; Rome: Centre for Indigenous Peoples' Nutrition and Environment, McGill University; Food and Agriculture Organization of the United Nations. https://openknowledge.fao.org/handle/20.500.14283/i0370e

Kuhnlein, H. V., Erasmus, B., Spigelski, D., and Burlingame, B. (Eds.). (2013). *Indigenous Peoples' Food Systems & Well-being: Interventions & policies for healthy communities*. Montreal, QC; Rome: Centre for Indigenous Peoples' Nutrition and Environment, McGill University; Food and Agriculture Organization of the United Nations.

Planetary Health Alliance. (n.d.). Planetary Health. Planetary Health Alliance. https://www.planetaryhealthalliance.org/planetary-health.

Settee, P., Shukla, S. (2020). Indigenous Food Systems: Concepts, Cases and Conversations. Toronto, ON; Canadian Scholars. https://canadianscholars.ca/book/indigenous-food-systems/

Shukla, S., P. Settee, & N. K. Lincoln (Eds.) (2025, In Press). Indigenous Insights for Planetary Health and Sustainable Food Systems: Learning from International Case Studies. Canadian Scholars: Toronto/Vancouver

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Field Report

# Reflections from first-generation small-scale vegetable farmers

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## Abstract

Renewal of the agriculture sector requires an influx of young farmers, either members of farming families or first-generation farmers. The latter face distinct challenges (Bloomfield, 2023; Magnan et al., 2023). This study seeks to understand some of their motivations and challenges in order to inform policy changes to support and encourage more first-generation farmers.

Agriculture has long been regarded in Canada as not only economically but also culturally significant. Yet less than 1% of the population are recognised as farmers by the latest census data (Statistics Canada, 2021). In the last three decades alone, Canada has net lost nearly 150,000 farmers and the average age of a Canadian farmer is now 56. Only 8.5% of Canadian farmers were under 35 in the last Agricultural Census, compared to 20% in 1991, and that percentage has been declining steadily since 1931 (Clapp, 2023; Magnan et al., 2022; Qualman et al., 2018; Statistics Canada, 2006, 2022). Further, the number of young people from farming families staying in agriculture is declining. Several reports, including that of the Royal Bank of Canada Climate Action Institute, show that a majority of farmers do not have a succession plan in place although, within the next decade, 40% will retire (Yaghi, 2023). People from non-farming backgrounds find it difficult to enter the profession due to barriers that include prohibitive costs and lack of training. To ensure that Canada can feed its growing population, we must address the farmer shortage by understanding the experiences of new—particularly young—farmers.

Keywords: Agriculture in Canada; agriculture and municipal land use; agricultural policy; first-generation farmers; local food; small-scale vegetable production; young farmers

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## Résumé

Le renouvellement du secteur agricole nécessite un afflux de jeunes agriculteurs et agricultrices, qu'ils soient issus de familles d'agriculteurs ou agriculteurs de première génération. Ces derniers sont confrontés à des défis distincts (Bloomfield, 2023 ; Magnan et al., 2023). Cette étude vise à comprendre certaines de leurs motivations et certains de leurs défis afin d'éclairer les changements de politiques visant à soutenir et à encourager un plus grand nombre d'agriculteurs de première génération.

Au Canada, l'agriculture est depuis longtemps considérée comme un secteur important sur le plan économique, mais aussi sur le plan culturel. Pourtant, d'après les données du dernier recensement (Statistique Canada, 2021), la part de la population reconnue comme agricultrice est de moins de 1 %. Au cours des trois dernières décennies, le Canada a perdu près de 150 000 agriculteurs, et aujourd'hui, l'âge moyen d'un agriculteur canadien est de 56 ans. Seuls 8,5 % des agriculteurs canadiens avaient moins de 35 ans lors du dernier Recensement de l'agriculture, contre 20 % en 1991, et ce pourcentage n'a cessé de diminuer depuis 1931 (Clapp, 2023 ; Magnan et al., 2022 ; Qualman et al., 2018 ; Statistique Canada, 2006, 2022).

Notamment, le nombre de jeunes issus de familles d'agriculteurs qui restent dans le domaine est en baisse. Plusieurs rapports, dont celui de l'Institut d'action climatique de la Banque Royale

## Introduction

This field report shares insights from first-generation farmers to inform policy recommendations that would benefit such farmers in the Middlesex-Elgin-Perth Counties region and more broadly in Ontario.

Agriculture has long been regarded in Canada as not only economically but also culturally significant. Yet less than 1 percent of the population are recognised as farmers by the latest census data (Statistics Canada, 2021). In the last three decades alone, Canada has net lost nearly 150,000 farmers and the average age of a Canadian farmer is now fifty-six. Only 8.5 percent of Canadian farmers were under thirty-five in the last Agricultural Census, compared to 20 percent in 1991, and that percentage has been declining steadily since 1931 (Clapp, 2023; Magnan et al., 2022; Qualman et al., 2018; Statistics Canada, 2006, 2022). Further, the number of young people from farming families staying in agriculture is declining. Several reports, including that of the Royal Bank of Canada Climate Action Institute, show that a majority of farmers do not have a succession plan in place, despite 40 percent will retire within the next decade (Yaghi, 2023). People from non-farming backgrounds find it difficult to enter the profession due to barriers that include prohibitive costs and lack of training. To ensure that Canada can feed its growing population, we must address the farmer shortage by understanding the experiences of new—particularly young—farmers.

Renewal of the agriculture sector requires an influx of young farmers, either members of farming families or first-generation farmers. The latter face distinct challenges, some of which have been detailed elsewhere (Bloomfield, 2023; Magnan et al., 2023). This field note builds on previous work which seeks to further understand some of their motivations and challenges in

order to inform policy changes to support and encourage more first-generation farmers.

We interviewed six first-generation small-scale vegetable producers running four operations in Middlesex, Elgin, and Perth Counties in Ontario. Our focus on first-generation farmers naturally led to a focus on small farms which, in turn, are typically vegetable producers (Muñoz, 2021). First-generation farmers tend to be small-scale because they do not have access to large swaths of family-owned farmland (Laforge et al., 2018; Smaje, 2023; Weis, 2007). Due to the small land tracts available to them, these farmers must generate high revenue per acre, thus leading many to farm fresh vegetables—which are higher value than traditional commodity cash crops such as corn, soy, and wheat. Since small farms tend to contribute directly to local food systems, they help to strengthen food-system resilience (Dale, 2021). Understanding and supporting small first-generation farms can have a broader positive impact on communities and the food system, in addition to addressing the problem of declining farmer population.

## Methodology

We conducted qualitative semi-structured interviews starting with a list of questions about their motivation for starting a farm, how they run their operation, and how they see the future policy landscape with follow-ups based on their responses. We interviewed six first-generation small-scale vegetable farmers running four operations in the Middlesex-Elgin-Perth County region from January to April 2020. This timing was intentionally selected to avoid peak planting and harvesting seasons for vegetable farmers. To solicit participants, we contacted personal acquaintances in the local farm community. One of the authors is embedded within the local farm community and has farm experience which helped to inform the question development and discussions with participants. We then used a snowball approach to connect with others through referrals from the initial set. We were able to create a small group of producers who fit the purpose of this research. Eight first-generation farmers were approached and six agreed to interviews. One round of interviews was conducted in person, each interview lasting forty-five to sixty-five minutes. Three of the four conversations took place inside a house located on the farm, while the fourth took place in an urban home because there was no residence on the land they farmed. Table 1 shows the main characteristics of our participants. Throughout this paper a pseudonym system is used to represent the participants including one letter and number. The letter represents the farm, and the number indicates which participant. The research protocol was approved by the University Research Ethics Board in accordance with the Tri-Council Human Rights Tribunal. The interviews were audio-recorded and transcribed totalling over 21,000 words, by the authors.

The farms in our study ranged from 0.25 to fourteen acres of cropland in production. Notably, two farm operations owned the land and two leased. Their primary outlets for distribution were weekly farmers markets, community supported agriculture programs

(CSAs),[1] and directly to restaurant chefs. All participants had some form of off-farm employment, a significantly higher proportion than the 50 percent that was reported in the latest census data in Canada and has been unchanged since at least 2001 (Statistics Canada, 2006, 2021).

Table 1: Characteristics of Participants

| Characteristic | Farm A<br>Participant A1, A2 | Farm B<br>Participant B1 | Farm C<br>Participant C1, C2 | Farm D<br>Participant D1 |
|---|---|---|---|---|
| **Size of farm (acres)** | 14 | 0.5 | 0.25 | 7 |
| **Number of years in operation** | 8 | 3 | 2 | 9 |
| **Number of full-time employees** | 3 | 1 | 0 | 2 |
| **Number of seasonal employees** | 4 | 1 | 0 | 2 |
| **Number of owners** | 2 | 1 | 2 | 2 |
| **Owner(s) time on farm** | Owner 1: FT<br>Owner 2: PT | Owner 1: FT | Owner 1: PT<br>Owner 2: PT | Owner 1: FT<br>Owner 2: PT |
| **Owner(s) off-farm work** | Owner 1: No<br>Owner 2: Yes | Owner 1: Yes | Owner 1: Yes<br>Owner 2: Yes | Owner 1: No<br>Owner 2: Yes |
| **Distribution channels** | • Farmers markets: 60%<br>• CSA: 35%<br>• Restaurants: 5% | • Farmers markets: 67%<br>• Restaurants: 33% | • Farmers market: 85%<br>• CSA: 15% | • Restaurants and retailers: 60%<br>• Farmers markets: 40% |
| **Land: own / lease** | Own | Lease | Own | Lease (2 locations) |

## Learnings from interviews

The farmers we interviewed shared valuable information about their motivations for starting a farm and their primary challenges. Their motivations can be understood in terms of their relationship to their customers (value proposition) and a broader set of commitments to society (intrinsic motivations). Challenges identified were mainly financial and operational constraints.

[1]CSA is a model in which customers buy a "share" in the farm at the beginning of the year (typically before any harvest) in exchange for a weekly box of vegetables during the harvest for a predetermined number of weeks (COG, 2024).

## Value proposition to customers

When asked about their value propositions, all participants felt that customers valued higher quality vegetables. Vegetables were sold within a day or two of being harvested and most participants associated that freshness with quality. This is in contrast to produce distributed through an industrial food supply chain that may take weeks moving from harvest to plate. Some participants also mentioned the presentation of their food being critical for capturing the awe of their customers. Participant B1 stated: "The thing we hear the most immediately is just that the produce is beautiful. We are very particular about presentation. And I think that's real. When a chef opens up a box and everything is spotless and really clean, it's kind of this seamless thread of excitement."

Notably, official Organic Certification[2] was not seen as a selling point by any participant and none were certified at the time of the interviews. Participant B1 noted that they "came to the understanding that what people really wanted was not to see that you are Organic Certified but just to see that it is local and fresh and it's me." Similarly, Participant A1 stated that "a lot of people aren't looking at us because we're organic. I think it's people who want to buy from the farmer and recognise that quality difference, I think that's the biggest thing." Organic Certification conveys a dimension of quality to consumers through a trusted third party. This could be helpful for large-scale operators in the industrial food system who are disconnected from consumers, but was viewed as unnecessary for these farmers, who could communicate directly with customers through weekly conversations on delivery or at farmers markets. Participant B1 explained: "These relationships have proven to be very fruitful. There is something really nice about seeing the same people every week and there is something nice about having built that trust with a chef and built a relationship to the point where we sit down in the winter and talk about, 'Oh man, let's grow this together.' Chefs are now coming out to the farm more to be more involved."

Therefore, even though all participants practised methods of farming that often met or even exceeded the minimum requirements for Organic Certification, they felt that it offered them only minimal benefit, while the administrative costs of certification were often prohibitive.

The above quote highlights the importance of the direct relationship between the farmer and the consumer. Many business models depend on intermediaries like distributors, retailers, or even internal sales teams to move product from producer to consumer, but for small-scale vegetable producers, these functions are accomplished through the relationship between the producer (farmer) and consumer. This connection goes beyond economic transactions, generating a personal bond between the producer and consumer that helps establish the long-term loyalty required to stabilise small-scale farms. These relationships are viewed as positive long-term social connections and are a motivation for many first-generation farmers. Given the external risks inherent in farming (e.g., climate change, weather patterns, and commodity prices), a committed buyer is critical. Such a relationship allows for flexibility to work

[2] Various bodies are accredited by the Canadian Food Inspection Agency to administer Organic Certification to producers based on practices that are acceptable in organic agricultural production and processing systems according to the Canada Organic Regime (CSI, 2024)

collaboratively when yields are less satisfactory, when produce is deformed, or even during a crop failure.

## Motivations

Participants' motivations to farm extended well beyond economic reasons and included combatting the climate crisis, improving food security, connecting people with healthy food, and resisting corporate control of the food system (Mooney et al., 2015; Weis, 2010, 2022). Participant B1 explained: "I really have come to value the connections with the local community. Just going to market and providing people with something you see that they appreciate, and you know you've done your best to produce and that's really what I'm focussing on now. It's what keeps me going."

Participant C1 emphasised the connection to nature: "When we moved to the farm here, I was able to reestablish that close connection to nature.... So, it really was nature that inspired me to reestablish that connection and further establish the connection with food, community, and sharing our experiences."

While all participants expressed altruistic motivations, each also had a clear vision of their farm as a business. Participant D1 explained: "I saw an opportunity in business and saw that this is where things are going. People are all over this. There is an opportunity, and I know the demand is there, too. I've always been entrepreneurial. I've always been making money on my own."

Although these two perspectives are not necessarily incongruent, much of the literature on small-scale farm production focusses more on altruistic angles, often overlooking the farmers' business acumen and business motivations.

## Challenges

Farmers identified two main categories of challenge: financial and operational. Although these are interdependent, the financial challenges seemed foremost in the farmers' minds.

### Financial

Financial challenges came primarily in two forms: the initial investment and the subsequent cash flow for daily operations.

#### *Startup Capital*

To start a farm, significant capital investment is required for equipment, on-farm infrastructure, and—in many cases—to buy the land. All participants found it difficult to access external funding and therefore spent significant amounts from their personal savings on farm equipment and infrastructure.

Participants expressed uncertainty about where to look for funding, indicating a lack of information or hindered access to available information for people attempting to start farms. Once connected with a lending institution, participants often encountered confused responses from the potential lender, even from financial institutions intended to support farmers, such as Farm Credit Canada or rural credit unions and banks. Lenders seemed more accustomed to working with larger-scale industrial farms. Participant B1 stated:

"They don't really have a formula that fits what we are looking for. We are in this funny in-between grey zone. 'Are you a hobby farm or are you involved in agriculture—what's going on here?'"

There were similar problems seeking government grants intended to support farmers. After learning that a neighbouring (industrial) farm received a $100,000 grant, Participant D1 applied to the same grant for funding to build a greenhouse. The response was: "No, that's not how it works." The participant noted that the amount requested was relatively small compared to amounts requested by industrial farms, but "if a small-scale startup farm were eligible for even $10,000 of this kind of grant funding within a few years of starting their operation, it would go so far."

Acquiring land can also be a major startup capital challenge for first-generation farmers. Participant D1 explained: "The land in this region is absolutely out of reach. Even if I had a $300,000 house I could sell, I probably still couldn't afford [land here].... For one, there are no small plots available. This county definitely promotes protecting the large farms. And they have their reasons. I've talked to the county about it and where they're coming from. When you do [find] those properties, [they] are snapped up by people who want to have a hobby farm. They are not really interested in working the land."

Participant D1 noted: "If you want a hundred-acre piece of land, you need three million dollars in our county. And we're talking farmland now, so you need 20 percent down, so $600,000 cash to get started. So, we actually rent this piece of land." Other participants echoed the issue of rising local land prices driven by those who desire to live in the countryside as a lifestyle choice, rather than to work the land as a vocation. Participants B1 and D1 expected their future in farming would have to take place in a different region "because the sale price [of land] would just be so high, which has led me to look elsewhere."

On the one hand, land prices are so high that starting a medium- or large-scale livestock or cash crop farm is unaffordable. On the other hand, if first-generation farmers look for smaller parcels of land for vegetable production, they compete with buyers for recreational land who are willing to pay a premium for it but are not interested in farming it. These dynamics are reinforced by municipal and provincial policy language designed to protect farmland from urban sprawl development. The Ministry of Agriculture, Food and Rural Affairs expressly discourages the severance of farmland because they believe that land division fragments the agricultural land base and can affect the long-term viability of agriculture (Geerts & Robertson, 2016). Thus, affordable, and appropriately sized farmland is hard to come by for younger first-generation small-scale farmers starting a small-scale vegetable farm enterprise.

### *Cash Flow*

Managing cash flow is also difficult for first-generation farmers. Much of the agriculture industry, including vegetable farming, is seasonal, making cash flow uneven. During the winter and early spring, little revenue can be generated on these farms in Southwestern Ontario without the help of expensive growing-season extension infrastructure such as greenhouses. However, farmers have to pay for operating expenses (e.g., seeds, compost, labour, utilities) before they receive revenue. Participant D1 noted: "I think it cost me $20,000 to sell the first $20,000, so that was a big challenge."

To supplement their income, many farmers (especially first-generation farmers) must also do off-farm work. This has long been recognised as a threat to food security in Canada (Clapp, 2023; Magnan et al.,

2023). More than 50 percent of farmers in Canada need to supplement their household income with off-farm labour (Statistics Canada, 2023a). Although dependence on off-farm income has been decreasing, this trend is driven by the thousands of farmers who have been compelled to leave the vocation entirely, rather than by farmers becoming more self-sufficient (Statistics Canada, 2006). As Participant A1 stated, "This is what a lot of people don't realise, is that if you are going to start a farm, you're committing to three or four years of no income, or next to no income [from the farm]." However, the use of their time in off-farm work undermines their ability to make the farm financially viable, potentially leading farmers into a vicious cycle of low farm income, more off-farm work, and even less time to increase farm income.

Participants also shared their experiences of working off-farm while farming. Participant C2 said: "I was working sixty hours a week, [my wife] was working forty-five hours a week. We were both commuting to different towns to work." All participants acknowledged that off-farm labour contributed to the financial stability of their household, but none considered this to be desirable. Participant D1 also noted that the total hours worked far exceed a typical forty-hour work week "[My wife] is here and she has other jobs off the farm too, so her hours go up and down but it's close to full-time. And then I'm two full-time jobs (on the farm), I put in eighty to ninety hours per week." Although the participants were hesitant to ask for government labour support to decrease their off-farm dependence, Participant C1 expressed their frustration: "We are busting it out here trying to support our community and barely keeping it together and financially it could go down very easily. So absolutely, if there was funding to go towards having help on the farm and...services to help make [providing a primary source of income] feasible, because sometimes it feels like it's not and we aren't quitters and we want to continue to support our community and involve them in our journey, but at this point, it's just quite a struggle."

## Operational

### *Marketing and sales*

Our participants sell their products through farmers markets, CSA programs, and local restaurants and retailers. These channels depend on a strong farmer-client relationship. The potential for interaction and transparency in these smaller-scale direct relationships engenders accountability and trust and allows participants to establish a shared set of goals and values (Mount, 2011).

Strong relationships are the hallmark of a strong supply chain (Beth et al., 2003; Gualandris et al., 2023). However, the relationship between small farmers and their clients is typically between individuals (not firms) and without formal contracts. This can bring risk. Participant D1 gave an example: "If the chef leaves the restaurant, most of the time, so does the business, unless you have a good restaurant that is supportive of what you are doing." Therefore, it is important for small-scale producers to diversify their revenue streams and marketing efforts. This is another time-consuming part of operating a farm that is exacerbated by selling high-margin but low-volume products. Even though the farm is small, the farmer must develop and maintain multiple distribution channels, each requiring personal attention. Two participants explained these challenges, noting the costly nature of the commitment. Participant D1 explained: "We deliver to everybody twice a week. It's a big challenge, too. Distribution is expensive but part of what we do." Further, Participant C2 emphasised the significant time delivery takes from on-farm work: "It wasn't even really the cost of gas to

get there, although that should be a factor. A twenty-minute conversation at every place, that's three hours to deliver seven boxes and we need that three hours here [on the farm]."

### *Labour and Work-life Balance*

First-generation farmers spend a huge amount of time trying to establish their farms. Participant A1 noted:

> I'm sitting here with you and there are five people doing work and they know what they are doing. In 2015, that never would have happened because I didn't know what I was doing, so how could I expect someone else to know what they're doing? So, there is a whole bunch that goes on in those first few years and it's not just how to grow a tomato, it's how to create systems and all that stuff that goes with it. I think that the startup phase is a learning curve. And yes, I'm still passionate about it, but it's not so new that it consumes everything that I'm thinking and doing. Those first couple years, it consumes everything you are thinking and doing.

> When you start a new business, you can spend every waking hour and every thought on it. Now, nobody can do that forever—things will fall apart. So that's called, I guess, the startup phase. I think anybody who goes through a startup knows that you have to get through that. You have to get to a point where you can make it a reasonable vocation. By that, I mean you take a vacation, maybe you have some retirement savings, maybe you can leave the farm once and a while, those kinds of things.

But even further along in the process, these small-scale farmers put in extremely long hours on the farm. Participant D1, who had been operating for seven years, stated: "I'm still at ninety hours a week and this is the last year of that for me. If it doesn't work with a regular fifty-to-sixty-hour week, then I can't do it." Participant C1, in the third year, expressed a similar sentiment: "My part-time [work on the farm] is still a lot of time. I still invest probably five hours a day. We work into the night a lot." The need for knowledgeable labour and low-cost tools appropriate for scale can complicate this further, as described by Participant A1: "What I think was new information was understanding the balance between efficiency of labour and the right tools and how to match them at different scales."

Hiring labour has also been challenging. It is expensive, especially if the farm has not started generating adequate income, and labour shortages—in particular, for seasonal labour—have been difficult to manage. Participant A1 noted with frustration that suppliers of imported vegetables often employ very low-paid labour and do not factor environmental costs into the final grocery store price. "I'm not against free trade, but it doesn't seem right that we expect our labourers to get paid $14 per hour and then we demand that we as farmers compete with the [imported] vegetables. Unless we decide as a society that we don't care that our vegetables are grown here, which is, I feel, the decision we are [currently] making."

As a solution to the cash-flow problem, one participant was planning to introduce a new model, sharing the farm profits equally between owners and full-time workers. The idea is to incentivise the workers to share in the extra labour burden described above traditionally carried exclusively by the owners. Creative solutions like this abound in small-scale farms, which must innovate to survive.

## Reflections

Like many startup founders, first-generation vegetable farmers must grapple with raising adequate investment capital and managing limited cash flow during their early stages of development. Farming, however, has clear biophysical constraints (time and space) not found in most manufacturing, retail, or service industries. For farmers, return on investment is inherently constrained by the time it takes to build soil and how much land is available. While technology has changed some of the possibilities when it comes to land management, there is little evidence this has improved the financial returns to farmers directly (Qualman et al., 2018). Our exploration into the experiences of small-scale first-generation vegetable farmers revealed key challenges. These challenges point us to potential policy changes which could help these farmers.

Policy makers have been encouraging farmers to think more like entrepreneurs and innovators; that is, to invest in expensive new technology to combat the risks of low farm income, high debt, increasing insolvency, and rising poverty (Government of Ontario, 2019). But most Canadian farms are smaller-scale—generating less than $250,000 of revenue and making almost zero percent net income—and there is limited scholarship on the skills needed for farmers to be entrepreneurial (Dias, 2019; Statistics Canada, 2021, 2023b, 2023c). That is, net farm income is low across the board but also highly unequal, with the largest farms capturing most of what little there is and therefore able to reinvest earnings (Qualman et al., 2018). Based on information shared by our participants, small farms without excess profits have difficulty making these expensive investments. Therefore, to create opportunities for small-scale farmers, it seems prudent that federal agricultural policies should include scale-appropriate policy rather than a one-size-fits-all approach. This could include, but not be limited to, further investment in extension agent funding and more public research into low-cost solutions for small-scale farmers. Our preliminary investigation points to the need for further study to this end.

One potential avenue to explore is localized private-public partnerships such as the Fair Finance Fund (2019) a non-profit social finance fund dedicated to providing loans and mentorship services to local food and farm enterprises which can help bridge the wide gap in access to capital for small-scale first-generation farmers (Obregón et al., 2023). In other words, creating supportive links at the local level would help small-scale farmers who do not benefit from export-oriented large-scale food policy that is more applicable for the commodity-driven industrial food system.

Underlying many of the concerns expressed by the participants in this study was access to affordable productive farmland. Provincial and municipal land policies could be assessed and revised to better support not only large industrial farms, but also smaller-scale alternative methods of commercial agricultural production. For instance, the land severance policy in Middlesex County which prohibits division into farm lots smaller than forty hectares (98.8 acres) clearly disadvantages small farms and first-generation farmers.

Moreover, there is longstanding policy that is meant to preserve the agricultural land base from non-agricultural development but has also made it hard for farms to add secondary, value-added uses on land zoned for agriculture such as agri-tourism and recreational uses, or retail services such as a farm market or store. Value-added on-farm enterprise activity is often restricted and encouraged to be located in a settlement area rather than on the farm. This limits the economic possibilities of small-scale farmers, who might otherwise

be able to augment their revenue streams with non-agricultural activities or by capturing higher margins from retailed produce on the farm.

These municipal policies are rooted in the provincial Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas, which paradoxically encourages *all types, sizes and intensities of agricultural uses,*[3] while simultaneously indicating that small farm lots should not be created, based on the implicit assumption that the larger the farm, the more efficient (Geerts & Robertson, 2016). This sort of consolidation and large-scale focus needs to be re-examined if first-generation farmers are to succeed. The small-scale farmers we interviewed demonstrate that they need only two to ten hectares of productive land to create a viable commercial farm enterprise.

Over the last three decades, Canada has lost more than two-thirds of its young farmers (Statistics Canada, 2023d). The full effects of this loss have yet to be realised. It is likely that, in the coming decades, the number of farms and farm families in Canada will fall dramatically, from about 260,000 now to fewer than 100,000 by the 2040s (Desmarais et al., 2017; Qualman et al., 2018).

This is not an inevitable trend. There are young people who would be farmers if they thought they could make their small farms work alongside the bigger farms. More efforts should be made to develop agricultural policies to ensure "that farmers are able to earn a decent living, and to enable the entry of new farmers into farming" (Obregón et al., 2023; Food Secure Canada, 2011). A human-scale approach would strengthen the social bonds between consumers and producers and help rebuild rural communities—both of which would make the nation's food supply, and those producing it more secure for the future.

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[3] Emphasis ours.

## References

Beth, S., Burt, D. N., Copacino, W., Gopal, C., Lee, H. L., Lynch, R. P., & Morris, S. (2003, July*). Building relationships.* Harvard Business Review. https://hbr.org/2003/07/building-relationships

Bloomfield, R. S. (2023, March 6). *Huge investors are driving small farmers off the land.* Canada's National Observer. https://www.nationalobserver.com/2023/03/06/opinion/huge-investors-driving-small-farmers-off-land

Clapp, J. (2023). Concentration and crises: Exploring the deep roots of vulnerability in the global industrial food system. *Journal of Peasant Studies*, *50*(1), 1–25. https://doi.org/10.1080/03066150.2022.2129013

Canadian Organic Growers (COG). (2024). *CSA Directory.* https://cog.ca/csa-directory/

Canadian Seed Institute (CSI). (2024). *Organic Certification.* https://csi-ics.com/organic/services/organic-certification.

Dale, B. (2021). Food sovereignty and the integral state: Institutionalizing ecological farming. *Geoforum*, *127*, 137–150. https://doi.org/10.1016/j.geoforum.2021.10.010

Desmarais, A. A., Qualmann, D., Magnan, A., & Wiebe, N. (2017). Investor ownership of social investment? Changing farmland ownership in Saskatchewan, Canada. *Agriculture and Human Values, 34*, 149–66. https://doi.org/10.1007/s10460-016-9704-5

Dias, S. L. C., Rodriques, R. G., & Ferreira, J. J. (2019). Agricultural entrepreneurship: Going back to the basics. *Journal of Rural Studies, 70*, 125–138. https://doi.org/10.1016/j.jrurstud.2019.06.001

Fair Finance Fund. (2019). *About us.* https://www.fairfinancefund.org/about-us.

Food Secure Canada (2011, April). *Resetting the table: A people's food policy for Canada.* https://foodsecurecanada.org/wordpress/wp-content/uploads/2023/06/2015-FSC-22Resetting-the-Table-A-peoples-food-policy22.pdf

Geerts, H., & Robertson, A. (2016). *Guidelines on permitted uses in Ontario's prime agricultural areas.* Ministry of Agriculture, Food and Rural Affairs. https://www.ontario.ca/files/2024-04/omafra-publication-851-guidelines-on-permitted-uses-in-ontarios-prime-agricultural-areas-en-04-02-2024.pdf

Government of Ontario. (2019). *Seizing global opportunities: Ontario's innovation agenda*. Research Funding. https://www.ontario.ca/page/seizing-global-opportunities-ontarios-innovation-agenda

Gualandris, J., Branzei, O., Wilhelm, M., Lazzarini, S., Linnenluecke, M., Hamann, R., Dooley, K. J., Barnett, M. L., & Chen, C. (2024). Unchaining supply chains: Transformative leaps toward regenerating social–ecological systems. *Journal of Supply Chain Management, 60*(1), 53–67. https://doi.org/10.1111/jscm.12314

Laforge, J., Fenton, A., Lavalée-Picard, V., & McLachlan, S. (2018). New farmers and food policies in Canada. *Canadian Food Studies La Revue Canadienne Des études Sur l'alimentation*, *5*(3), 128–152. https://doi.org/10.15353/cfs-rcea.v5i3.288

Loring P. A. (2021). The imperative to transform global food systems. *Canadian Food Studies / La Revue canadienne des études sur l'alimentation*, *8*(3), 1–4. https://doi.org/10.15353/cfs-rcea.v8i3.561

Magnan, A., Wendimu, M., Desmarais, A., & Aske, K. (2022). "It is the Wild West out here": Prairie farmers' perspectives on farmland investment and land concentration. *Canadian Food Studies / La Revue*

*canadienne des études sur l'alimentation*, *9*(3), 36–60. https://doi.org/10.15353/cfs-rcea.v9i3.518

Magnan, A., Davidson, M., & Desmarais, A. A. (2023). "They call it progress, but we don't see it as progress": Farm consolidation and land concentration in Saskatchewan, Canada. *Agriculture and Human Values, 40*, 277–290. https://doi.org/10.1007/s10460-022-10353-y

Mooney, P., & Group, E. (2015). The changing agribusiness climate: Corporate concentration, agricultural inputs, innovation, and climate change. *Canadian Food Studies La Revue Canadienne Des études Sur l'alimentation*, *2*(2), 117–125. https://doi.org/10.15353/cfs-rcea.v2i2.107

Mount, P. (2011). Growing local food: Scale and local food systems governance. *Agriculture and Human Values*, *29*, 107–121. https://doi.org/10.1007/s10460-011-9331-0

Muñoz, A., (2021). *Why Small-Scale Farming Is Important for our Future and How it Helps to Feed the World.* Market Gardener Institute. https://themarketgardener.com/farming-techniques/why-small-scale-farming-is-important-for-our-future-and-how-it-helps-to-feed-the-world/

Obregón, J-F., Aguanno, M., Brooking, M., & Arjaliès, D-L. (2023) *Advancing regenerative agriculture in Canada: Barriers, enablers, and recommendations* (Publication No. 66) [Report, Western University]. Scholarship@Western. https://doi.org/10.5206/iveypub.66.2023

Qualman, D., Akram-Lodhi, A. H., Desmarais, A. A., & Srinivasan, S. (2018). Forever young? The crisis of generational renewal on Canada's farms. *Canadian Food Studies / La Revue canadienne des études sur l'alimentation*, *5*(3), 100–127. https://doi.org/10.15353/cfs-rcea.v5i3.284

Smaje, C., (2023). *Saying NO to a farm-free future: The Case for an ecological food system and against manufactured foods.* Chelsea Green Publishing.

Statistics Canada. (2006). *Canada's farm population: Agriculture-population linkage data for the 2006 census*. ARCHIVED - 2006 Census of Agriculture https://www150.statcan.gc.ca/n1/ca-ra2006/agpop/article-eng.htm#:~:text=Canada's%20farm%20population%20continued%20its,31.7%25%20of%20the%20Canadian%20population

Statistics Canada. (2007). *Characteristics of farm operators: Table 8.8.1*[Data set]. Statistics Canada. https://www150.statcan.gc.ca/n1/pub/95-629-x/8/4124846-eng.htm

Statistics Canada. (2017). *Archived - Characteristics of farm operators: other paid work, Census of Agriculture, 2011 and 2016, inactive* (Table 32-10-0445-01) [Data set]. Statistics Canada. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210044501

Statistics Canada. (2021). *Census of Agriculture.* https://www.statcan.gc.ca/en/census-agriculture.

Statistics Canada. (2022). *Characteristics of farm operators, Census of Agriculture historical data* (Table 32-10-0230-01) [Data set]. Statistics Canada. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210023001

Statistics Canada. (2023a). *Characteristics of farm operators: Farm work and other paid work, Census of Agriculture, 2021* (Table 32-10-0328-01) [Data set]. Statistics Canada. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210038201

Statistics Canada. (2023b). *Farm financial survey, financial structure by farm type, average per farm (gross farm revenue equal to or greater than $25,000)* (Table 32-10-0102-01) [Data set]. Statistics Canada.

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210010201

Statistics Canada. (2023c). *Farm operating revenues and expenses, annual* (Table 32-10-0136-01) [Data set]. Statistics Canada. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210010201

Statistics Canada. (2023d). *Farm population families classified by family type, farm type and share of family income earned by operators, agriculture–population linkage, 2021* (Table 32-10-0455-01) [Data set]. Statistics Canada. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210045501

Weis, T. (2007). *The global food economy: The battle for the future of farming.* Zed Books.

Weis, T. (2010). The accelerating biophysical contradictions of industrial capitalist agriculture. *Journal of Agrarian Change, 10*(3), 315–41. https://doi.org/10.1111/j.1471-0366.2010.00273.x

Weis, T., & Ellis, R. A. (2022). The de-meatification imperative: To what end? *Canadian Food Studies / La Revue canadienne des études sur l'alimentation*, *9*(1), 196-216. https://doi.org/10.15353/cfs-rcea.v9i1.511

Wise, T. (2019). *Eating tomorrow: Agribusiness, family farmers, and the battle for the future of food.* New Press.

Yaghi, M. (2023). *Farmers wanted: The labour renewal Canada needs to build the next Green Revolution.* RBC Climate Action Institute. https://thoughtleadership.rbc.com/farmers-wanted-the-labour-renewal-canada-needs-to-build-the-next-green-revolution/?utm_medium=email&utm_source=current+account#_blank

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Review Article

# Insécurité du logement et insécurité alimentaire à Cambridge Bay : lumières sur une interrelation

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## Résumé

La crise du logement et l'insécurité alimentaires sont des préoccupations majeures dans les communautés inuites du Canada, et tout particulièrement au Nunavut. Pourtant, bien que les débats autour de ces questions soient particulièrement féconds, la corrélation entre les deux problèmes a jusque-là été faiblement adressée par les recherches anthropologiques. Sur la base des données collectées à Cambridge Bay, cet article montre que l'insécurité alimentaire a partie liée avec l'histoire coloniale qui aura sédentarisé les Inuits et bouleversé leur espace social alimentaire, ainsi qu'avec une conjoncture environnementale et économique fragile. Les Inuits se retrouvent aujourd'hui confrontés à la baisse des activités de collecte, aux changements climatiques, à la faiblesse des revenus et au problème de logement. Mais au cœur de tous ces problèmes aux racines structurelles, la vétusté et le manque de logements viennent aggraver l'insécurité alimentaire en ce qu'ils induisent des dépenses supplémentaires, la surpopulation des ménages et contraignent beaucoup d'Inuit à l'itinérance. Les solutions à l'insécurité alimentaire doivent donc, sans négliger les autres aspects, prendre en compte la question du logement ; ce qui requiert aussi d'impliquer les Inuits eux-mêmes dans les décisions y afférentes.

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## Abstract

The housing crisis and food insecurity are major concerns in Inuit communities in Canada, and particularly in Nunavut. However, although the debates around these issues are fruitful, the correlation between the two problems has so far been poorly addressed by anthropological research. Based on data collected in Cambridge Bay, this article shows that food insecurity is linked to a colonial history that imposed sedentarism upon the Inuit and disrupted their social food space, as well as to a fragile environmental and economic situation. Inuit are now faced with a decline in hunting and foraging, climate change, low incomes and the housing problem. But at the heart of all these structural problems, the dilapidation and lack of housing aggravate food insecurity by inducing additional expenses, household overcrowding and forcing many Inuit into homelessness. Solutions to food insecurity must therefore, without neglecting other aspects, take into account the question of housing; which also requires Inuit involvement in the related decisions.

## Introduction

L'insécurité alimentaire dans les communautés inuit est une préoccupation majeure au Canada (Robin, 2019), notamment dans l'Inuit Nunangat[1] où le nombre de personnes souffrant de la faim et d'un faible accès aux aliments nutritifs de qualité est plus élevé que partout ailleurs. L'insécurité alimentaire est généralement comprise comme une situation où les membres d'un ménage peinent, de façon continuelle, à se procurer une quantité d'aliments suffisante, n'ont pas les moyens de s'offrir des repas nutritifs et culturellement appropriés, ou alors, sont contraints de sauter des repas et de réduire des portions parce qu'il n'y a pas assez de nourriture ni d'argent pour s'en acheter (Arriagada, 2017). Le pouvoir d'achat apparaît alors souvent comme un critère important pour évaluer l'insécurité alimentaire, et la plupart des solutions esquissées pour ce problème mettent l'accent sur l'aspect économique (emplois, coût des produits alimentaires, etc.). Pourtant, bien que l'accès permanent à la nourriture en qualité et en quantité suffisante soit un des principaux enjeux de la sécurité alimentaire, ce problème ne saurait être résolu dans le contexte nordique, sans la prise en compte de problèmes corollaires, tels que le surpeuplement des ménages, l'itinérance et plus largement, l'accès au logement. C'est du moins ce qui ressort de nos enquêtes au Nunavut, plus précisément à Cambridge Bay. Les

[1] L'Inuit Nunangat ou territoire inuit constitue près du tiers des terres du Canada. Il regroupe 51 collectivités situées dans la région inuvialuite (Territoires du Nord-Ouest), le Nunavut, le Nunavik (nord du Québec) et le Nunatsiavut (nord du Labrador). Cf. https://atlasdespeuplesautochtonesducanada.ca/article/inuit-nunangat-2/, consulté en avril 2023.

personnes aux prises avec des problèmes alimentaires mettent pour la plupart en cause soit le surpeuplement de leur ménage, soit l'impact des dépenses de logement (loyer, chauffage, réparations, remplacement des équipements, etc.) sur le revenu disponible, ou encore l'itinérance pour expliquer leur situation.

En effet, l'hébergement de proches et de membres de la famille à charge est une pratique très répandue chez les Inuit (Brière et Laugrand, 2017), tout comme la commensalité est relationnelle, c'est-à-dire qu'elle se traduit par le partage des aliments avec la parenté et des proches (Harder et Wenzel, 2012 ; Labrèche, 2006). Toutefois, cette culture du partage se réalise aujourd'hui dans un contexte où les Inuit, sédentarisés, ont progressivement adopté de nouveaux aliments, surtout à partir de la deuxième moitié du XX$^{e}$ siècle. D'autres facteurs, tels que l'avènement du salariat, l'implantation des épiceries sur leur territoire, leurs interactions multiformes avec les populations du Sud, ainsi que l'influence récente des médias et d'Internet, les exposent aussi à de nouvelles habitudes alimentaires et culinaires. Entretemps, le faible renouvellement du parc immobilier dans les communautés fait que la plupart des logements sont exigus, nécessitent des réparations majeures, sont mal équipés, surpeuplés et en nombre insuffisant , ce qui, par la bande, crée des difficultés alimentaires. Or, la relation entre l'insécurité résidentielle (surpeuplement, pénurie, itinérance, etc.) et l'insécurité alimentaire n'a été que très peu traitée au Nunavut.

Sur la base des données tirées d'entrevues réalisées à la municipalité de Cambridge Bay, nous explorons, sous l'angle anthropologique, les dynamiques complexes qui s'articulent entre l'insécurité alimentaire et les problèmes de logement, leur surpeuplement et l'itinérance. À cet effet, le concept « d'espace social alimentaire » (Poulain, 2003) aidera à appréhender les problèmes alimentaires comme n'étant pas coupés des dimensions sociales et culturelles de la vie des Inuit. Ces problèmes se comprennent aussi en relation avec leur culture, leur histoire, ainsi qu'à l'aune des dynamiques contemporaines de leurs institutions. La perspective est aussi politique, parce que la mise en place de dispositifs qui régulent, contrôlent ou facilitent l'accès des Inuit à la nourriture dans le respect de leurs pratiques culturelles soulève inévitablement la question de leur participation à la gouvernance de leurs communautés. Les décisions qui touchent à la question du logement et au système alimentaire seront d'autant plus acceptables par les Inuit qu'elles les impliqueront directement. On peut alors comprendre que les Inuit préfèrent parler de « souveraineté alimentaire » plutôt que de « sécurité alimentaire », pour mieux exprimer leur volonté d'avoir leur mot à dire. D'où l'intérêt ici du concept de *power shift*, c'est-à-dire un changement de relations de pouvoir entre les communautés et les instances politiques, pour que les Inuit définissent eux-mêmes leurs politiques alimentaires (McSween, 2019). Après un bref survol des perspectives théoriques sur la sécurité alimentaire, l'article présentera la méthodologie de la recherche. Les données de terrain faites essentiellement d'entrevues réalisées à Cambridge Bay aideront ensuite à mieux cerner l'intrication entre la sédentarisation historique des Inuit dans des logements exigus aujourd'hui vétustes et l'insécurité alimentaire. Nous discuterons enfin ces résultats pour montrer que l'insécurité alimentaire à Cambridge Bay a un ancrage structurel qu'il convient de résoudre en même temps que l'insécurité résidentielle.

## L'insécurité alimentaire : le concept et ses perspectives

Le terme « insécurité alimentaire » a été utilisé pour la première fois dans les années 1970 pour qualifier l'indisponibilité de la nourriture à l'échelle des États. Devenu objet d'étude au cours des décennies suivantes, le terme a peu à peu été compris et analysé à la lumière du contexte mondial, notamment du processus d'industrialisation de la production alimentaire, puis du phénomène de la mondialisation. À l'issue de la Conférence de Rome en 1974, l'une des principales orientations retenues pour résoudre les problèmes alimentaires fut d'augmenter la production alimentaire, considérant la croissance soutenue de la population mondiale. Au fil des années, l'Organisation des Nations unies pour l'alimentation et l'agriculture (FAO) va ajuster cette perspective en invitant à améliorer les systèmes de distribution pour faciliter partout l'accès à la nourriture. Elle va également relever que la sécurité alimentaire implique que la nourriture soit culturellement acceptable et que le système alimentaire propre à chaque communauté doit être durable et favoriser la souveraineté et la justice sociale (Lamalice et al., 2016).

Cette dernière orientation donnée par la FAO a un écho favorable dans les communautés inuit, soucieuses qu'elles sont de préserver leur alimentation traditionnelle et leur culture. En effet, les activités de récolte des aliments traditionnels sont non seulement une clé de leur identité, de leur santé et de leur survie, mais sont également l'un des moyens de transmission de leurs valeurs culturelles et de leurs savoirs (Lamalice et al., 2016). Parler de la dimension culturelle de la sécurité alimentaire chez les Inuit, comme chez tous les Autochtones, devrait donc inclure les connaissances sur la nourriture, l'accès et la permanence de ces aliments parmi les indicateurs de la sécurité alimentaire (Power, 2008). De ce point de vue, ce que les Inuit considèrent comme disponibilité ou rareté alimentaire, ou encore nourriture adéquate, émane de leur culture, de leurs croyances et de leur relation au monde (Laflamme, 2014). Il faut également savoir que l'incertitude et l'imprévisibilité, qui sont implicites dans le concept d'insécurité, font plus naturellement partie du mode de vie des Inuit par rapport aux sociétés du Sud : « pour les Inuits, l'incertitude, le changement continuel, l'imprévisibilité, la transformation sont des données constantes de leur environnement, de sorte que les maîtres mots demeurent plutôt l'observation, l'adaptabilité, la négociation, et même l'improvisation », explique Laugrand (2013, p. 2). Pour avoir donc bouleversé leur mode de vie et introduit de nouvelles normes de la sécurité sociale, l'événement colonial est incriminé dans nombre de vulnérabilités actuelles chez les Inuit.

En effet, au motif de rechercher la sécurité (sociale, économique, sanitaire, etc.) selon les standards occidentaux, les instances canadiennes de pouvoir, détenues à majorité par les non-Inuit, ont par le passé appliqué aux Inuit des mesures contrôlantes, intrusives et dénégatives de leur culture. C'est pourquoi les concepts de sécurité/insécurité, pris dans leur acception occidentale, sont potentiellement sujets à controverse dans les milieux inuit (et autochtones en général), parce qu'ils sont porteurs d'enjeux de contrôle social (Laugrand et Oosten, 2002 ; Lévesque, 2011). Dénués de toute contextualisation donc, ces concepts, appliqués au domaine alimentaire chez les Inuit, peuvent fixer le déni colonial de leurs valeurs. Dans notre analyse, les mots insécurité/sécurité traduisent alors les enjeux alimentaires chez les Inuit non pas dans un rapport de correspondance avec des standards modernes en la matière, mais en confrontant plutôt

lesdits standards avec la réalité inuit, pour en déceler les limites et les contradictions.

C'est pour bien mettre en perspective cette préoccupation des Inuit à se départir du colonialisme et à renforcer leur autonomie face aux défis alimentaires que le concept de souveraineté alimentaire trouve chez eux un écho favorable. Il renvoie ici au droit et au pouvoir reconnus à chaque communauté de décider des modalités de la production, de la distribution et de la consommation de sa nourriture en fonction de ses goûts et de ses traditions. Plus holistique que la sécurité alimentaire, la souveraineté alimentaire traduit l'aspiration des Inuit à plus d'autonomie politique et économique au sein de l'État canadien, et donc, à avoir leur mot à dire pour endiguer les problèmes alimentaires (Desmarais et Wittman, 2014 ; Lamalice et al., 2016). Cette autonomie doit être atteinte à tous les niveaux, qu'il s'agisse de la gouvernance, des politiques sociales, économiques et culturelles. Pour cela, il faut une reconfiguration des relations de pouvoir entre les communautés et le gouvernement fédéral. Ce besoin de changement, plusieurs fois exprimé par nos interlocuteurs sur le terrain, sera discuté à la lumière du concept de *power shift* (Mann, 2014).

Le concept de *power shift* a été valorisé par le mouvement Via Campesina, né en Amérique latine et au Pays basque pour défendre les intérêts des paysans en matière agricole et foncière, face au monopole des États et des multinationales. C'est également ce mouvement qui a consacré le concept de souveraineté alimentaire, mettant de côté celui de sécurité alimentaire, pour mettre l'accent sur la dimension politique de la question alimentaire, notamment en ce qui a trait à la gestion de la terre / du territoire, aux droits des minorités, à la résistance aux agro-industries, etc. Le *power shift* est un passage obligé pour atteindre la souveraineté alimentaire autochtone, car c'est en rompant avec l'étreinte paternaliste des États et des organisations transnationales que les Autochtones peuvent reprendre l'initiative dans la prise des décisions qui les concernent. S'ils préfèrent bien souvent parler de souveraineté alimentaire plutôt que de sécurité alimentaire, c'est justement pour souligner leur droit à la gestion de leur territoire, de leurs ressources et de leurs communautés.

On le comprend, donc, la question alimentaire n'est pas dissociable des autres aspects de la vie des Inuit. Voilà pourquoi le concept d'espace social alimentaire, tel que théorisé par Poulain (2003), nous a paru pertinent pour rendre compte, de façon plus globale, des contraintes qui affectent la sécurité alimentaire des Inuit, notamment la surpopulation des ménages. En effet, selon Poulain (2003), on ne saurait traiter de l'alimentation sans tenir compte des questions sociales, politiques et culturelles. La portée heuristique de son concept se situe alors dans la relation qu'il établit entre les aspects à la fois biologique, culturel et territorial de tout système alimentaire. Or ce lien entre nourriture et territoire est très important chez les Inuit (Granger, 2022). De la même façon, les contraintes sur le système alimentaire sont multifactorielles : biologique, écologique ou culturelle. La culture est alors considérée par l'auteur comme un espace de liberté qui permet aux humains de s'adapter à tout type d'environnement. En relevant le caractère social de tout système alimentaire, fait d'adaptabilité et de variabilité, Poulain (2003) relativise du même coup les théories déterministes, possibilistes et environnementalistes, estimant que l'alimentation est quelque chose d'évolutif et de pluridimensionnel. Il identifie pour cela six dimensions de l'espace social alimentaire : le mangeable (le choix opéré par un groupe humain parmi les entités de la biodiversité) ; le système alimentaire (ensemble des structures qui interviennent depuis la collecte jusqu'à la préparation culinaire, en passant par toutes les étapes de la production-transformation) ; l'espace culinaire (à la fois géographique : la distribution dans les lieux ; social :

la répartition sexuelle et sociale des activités de cuisine ; et logique : espace de relations formelles et structurelles) ; les habitudes de consommation (définition du repas, son organisation, la commensalité, les horaires, le nombre et le contexte de prise, les modalités de consommation, etc.) ; la temporalité alimentaire qui se rapporte au caractère cyclique de certains aliments (saison, migration des gibiers, temps des récoltes, etc.) ; et enfin, les différenciations sociales, car l'alimentation dessine les contours d'un groupe social ainsi que la grammaire des différences entre sexes, classes d'âges et catégories sociales. L'alimentation participe donc de la structuration et de l'organisation sociale d'un groupe. L'espace social alimentaire dévoile ainsi les représentations que se fait une société des aliments qu'elle consomme et les interactions multiformes qui y ont lieu (Granger, 2022). Poulain (2003) en déduit qu'il est un fait social total au sens maussien du terme, c'est-à-dire qu'il met en branle la totalité de la société et de ses institutions. Cela est particulièrement vrai pour les Inuit, pour qui le partage de la nourriture est au cœur des relations sociales à tous les niveaux. L'espace social alimentaire permet alors d'aborder l'alimentation des Inuit de Cambridge Bay comme un tout imbriquant diverses formes de pratiques et de relations d'ordre social, économique et symbolique, qui sont soumises à des influences à la fois historiques et conjoncturelles. L'une de ces influences à Cambridge Bay est la question du logement.

Situé au Nunavut, à mi-chemin entre Yellowknife et Resolute Bay, Cambridge Bay est la principale municipalité de la région du Kitikmeot, dont elle héberge les services administratifs. Elle se situe sur la côte sud-est de l'île Victoria, à l'ouest du golfe Queen Maud et se rétrécit dans le détroit de Dease. Cette situation géographique lui permet de bénéficier de nombreuses ressources halieutiques, d'où son nom en inuinnaqtun : Iqaluktuuttiaq, c'est-à-dire « l'endroit où il fait bon pêcher ». Outre la pêche, les Inuit de Cambridge Bay récoltent des petits fruits et pratiquent la chasse. Il s'agit d'un territoire riche d'une faune abondante et d'une flore saisonnière, desquelles les Inuit tirent l'essentiel de leur alimentation traditionnelle. Leur alimentation traditionnelle est donc faite de viande de gibiers, d'oiseaux, de poissons, de fruits de mer et de mammifères marins, ainsi que de petits fruits et de plantes sauvages. Le prélèvement des aliments se fait par la chasse, la pêche et la cueillette. Toutefois, à cause de l'action anthropique, des changements socioéconomiques et climatiques, toutes ces ressources sont exposées à la pollution et se raréfient (Counil et al., 2011 ; Duhaime et al., 2002 ; Inuit Tapiriit Kanatami, 2021). Les Inuit de Cambridge Bay éprouvent donc de plus en plus de difficultés à satisfaire leurs besoins alimentaires ; des difficultés auxquelles viennent s'ajouter les problèmes de logement.

## La crise du logement : un problème chronique dans le Nunavut

Tout le Nunavut fait face à une crise du logement qui a été signalée par Statistique Canada (2022) à la suite de son dernier recensement (datant de 2021). Ledit recensement, ainsi que le *Rapport sur le logement dans le Nord* de la Société canadienne d'hypothèques et de logement (SCHL), publié en décembre 2022, relèvent que l'abordabilité et la disponibilité des logements restent des problèmes importants au Nunavut, plus que partout ailleurs au Canada. Ils font également état de l'augmentation des logements surpeuplés, comme c'est

le cas à Cambridge Bay. Les besoins sont d'autant plus difficiles à combler que les coûts de construction, d'exploitation et d'entretien de logements sont particulièrement onéreux. Comparativement à la moyenne nationale de 10,1 %, les besoins impérieux en logements dans le Nunavut se chiffrent à 32,9 %. Selon un reportage de Radio-Canada (2022) sur la base des données de la Société d'habitation du Nunavut de 2020, on estime à plus de 3500 les ménages qui ont besoin d'un logement. Ce chiffre augmente avec l'essor démographique, car le Nunavut est la région du Canada avec la population la plus jeune et le taux de fécondité le plus élevé. Toujours d'après le même rapport, environ 33 % des ménages vivent dans des logements inabordables ou non convenables du point de vue de la qualité ou de la taille et n'ont pas les moyens de se payer un autre logement. Cette proportion est la plus élevée par rapport aux autres provinces et territoires du pays. Sur environ 46,2 % des ménages inuit éprouvant des besoins impérieux de logement, les locataires sont plus nombreux par rapport aux Inuit propriétaires (22 %) ; 32 % de ces ménages habitent des logements qui nécessitent des réparations, tandis que 53 % vivent dans des logements de taille inappropriée où il n'y a pas suffisamment de chambres (SCHL, 2022).

Il faut par ailleurs souligner que la plupart des gens habitent des logements publics ou subventionnés et donc, hors marché. Néanmoins, certains ménages, très minoritaires, ont accès à des prêts hypothécaires ordinaires. Or, d'après le rapport de la SCHL (2022), le montant mensuel moyen des obligations pour les prêts hypothécaires a augmenté d'environ 5 %, pour s'établir à 1 976 $ entre 2021 et 2022. Le rapport précise que la proportion la plus importante de détenteurs de prêts hypothécaires à travers le Nunavut concerne la tranche d'âge de 35 à 44 ans. Celle-ci détient également le plus élevé (32 %) des soldes hypothécaires non remboursés. À l'inverse, les groupes dont la proportion de détenteurs de prêts hypothécaires est la plus faible sont ceux des personnes de moins de 25 ans et les aînés de 74 ans et plus, du fait de leur faible représentativité dans les emplois bien rémunérés. Considérant que la population du Nunavut est jeune, la faible proportion de prêts hypothécaires détenus par les moins de 25 ans est un signe que cette catégorie a des difficultés d'accès à un logement du marché. Ruiz-Castell et ses collaborateurs (2015) démontrent à ce sujet que malgré la priorité donnée aux familles à faible revenu et avec enfants dans l'attribution des logements où le loyer est fixé en fonction du revenu, les conditions de surpeuplement étaient plus élevées chez les personnes au statut socioéconomique inférieur.

Cambridge Bay a aussi ces problèmes de logement. D'après le témoignage des Inuit et des travailleurs non inuit de la municipalité, de nombreux logements sont non convenables, c'est-à-dire de surface modeste, mal équipés, peu ventilés et avec un nombre insuffisant de chambres à coucher. Or, de l'état d'un logement et de ses équipements dépend le type de cuisine que l'on peut y entreprendre. Pour les ménages surpeuplés, la pression sur l'espace de la cuisine et sur les équipements culinaires crée des contraintes quant à ce qu'on peut conserver, préparer et manger. C'est ce lien entre les conditions de logement et les difficultés alimentaires qui nous intéresse.

## Méthodologie

Cette recherche a été menée dans le cadre du projet « Participatory Action for an Inuit-Led Research on Food Production and Nutrition in Inuit Nunangat », financé par Sentinelle Nord[2] pour une durée de trois ans entre 2019 et 2022. Ce projet a finalement été bouclé en mars 2024, à cause des nombreux délais occasionnés par la pandémie de Covid-19. Mené selon une approche partenariale[3] et transdisciplinaire[4], le projet avait pour objectif d'appuyer la communauté inuit de Cambridge Bay dans la création de son propre système de production alimentaire, à savoir une serre. La contribution des anthropologues à ce projet a consisté à documenter les habitudes alimentaires des Inuit, notamment la place des aliments traditionnels et des légumes ; leurs perspectives sur la culture végétale et sur l'insécurité alimentaire ; la réalité des maladies chroniques en lien avec l'alimentation (cas du diabète). C'est au fil des entretiens avec les Inuit et les non-Inuit sur ces sujets que la question du logement a émergé comme ayant une influence sur l'alimentation. Nous avons alors jugé intéressant d'approfondir les entretiens sur ce lien. Les données ici mobilisées ont été collectées lors de trois séjours effectués à Cambridge Bay entre 2019 et 2021[5] pour des séances de travail avec les partenaires locaux et pour nos enquêtes de terrain.

Pour réaliser nos enquêtes, nous avons bénéficié de l'appui de nos partenaires locaux inuit et non inuit, notamment le Département de santé de la municipalité. Ils ont ainsi facilité nos entretiens auprès des personnes dont nous voulions sonder les perspectives sur la question alimentaire et la santé, sur le logement et la surpopulation des ménages. Les non-Inuit (n=9, dont 5 femmes et 4 hommes) travaillent, entre autres, à la Municipalité, au Département de santé, à la garderie, à la Station canadienne de recherche dans l'Extrême-Arctique (SCREA), au Wellness Center, ou encore au magasin de la Coopérative (Co-op). Nos entretiens, tous réalisés de façon semi-directive à leurs lieux de travail, étaient en anglais et quelques-uns en français. Le principal critère de recrutement des non-Inuit était d'avoir une expérience pertinente de la vie à Cambridge Bay en général et de ce qui est lié aux questions de l'alimentation et du logement en particulier.

C'est également par le truchement de nos partenaires du Département de la santé que nous avons noué contact avec un couple d'aînés qui nous a présenté à plusieurs Inuit ayant accepté nos demandes d'entretien. Parallèlement, nous avons lancé un appel à participation à notre projet à la radio locale et annoncé le même appel sur la page Facebook de la communauté (Cambridge Bay News-Ikaluktutiak). Grâce à la médiation de ce couple d'aînés et à l'effet boule de neige créé par la circulation de l'information dans la communauté, nous avons pu réaliser des entretiens semi-directifs avec 20 Inuit issus de 19 ménages. Tous les entretiens avec les Inuit, d'une trentaine de minutes en moyenne, se sont déroulés en anglais et portaient globalement sur la question de l'alimentation : les besoins de la communauté, la réalité alimentaire dans les familles, la nourriture traditionnelle, la culture du

[2] Il s'agit d'une stratégie de recherche et de formation interdisciplinaires développée par l'Université Laval et financée par Apogée Canada.
[3] Voici les partenaires : Ministère de la Santé du Nunavut ; Municipalité de Cambridge Bay ; Station canadienne de recherche dans l'Extrême-Arctique (SCREA) ; la Kitikmeot Inuit Association (KIA) ; Agriculture et Agroalimentaire Canada ; Université de la Saskatchewan ; UiT l'Université arctique de Norvège ; la société Makivvik.
[4] Anthropologie, agronomie, phytologie, économie, sciences de l'alimentation.
[5] D'abord, deux pré-terrain : le premier d'une dizaine de jours en octobre 2019 et le second, d'environ une semaine en mars 2020, tandis que la collecte proprement dite a eu lieu entre le 8 et le 22 novembre 2021.

partage, les problèmes de logement, etc. La plupart des entretiens ont eu lieu au Wellness Center où diverses activités sont régulièrement tenues pour les Inuit, ainsi qu'à la garderie (Day care). Quelques entrevues ont eu lieu dans les domiciles, et quelques participants nous ont invité chez eux après les entrevues au Wellness Center et à la garderie. Les visites dans les domiciles nous ont ainsi permis de prendre la mesure de la dégradation des logements, de l'état des équipements et d'avoir une idée concrète des cas de surpopulation. La majorité des Inuit interviewés étaient des femmes (n=13), dont 3 ont déclaré être en couple. Une des femmes était octogénaire et nous a plusieurs fois invité chez elle où elle vit avec ses enfants devenus adultes, ses petits-enfants et des proches. Tous les participants Inuit n'ont pas donné leur âge, mais la femme octogénaire était visiblement la plus âgée.

Les enquêtes de terrain terminées, nous nous sommes ensuite attelé à transcrire les entretiens en verbatims selon la langue utilisée pendant l'entrevue. Dans une perspective qualitative et en nous appuyant sur une analyse de contenu thématique des différents verbatims, nous exploitons les témoignages qui permettent de comprendre les perspectives inuit et non inuit sur l'insécurité alimentaire et comment les problèmes liés au logement (pénurie, surpeuplement, coûts, itinérance) influencent la qualité de l'alimentation. L'analyse s'alimente des données de littérature disponibles dans le champ de l'anthropologie alimentaire et de l'histoire politique des Inuit. Afin de préserver l'anonymat, l'identité des personnes citées dans le texte n'est pas révélée.

## Résultats

De l'analyse de nos données, il ressort quatre principaux constats : (1) les problèmes d'insécurité alimentaire actuels ont partie liée avec l'histoire coloniale, qui aura bouleversé l'espace social alimentaire des Inuit sur tous les plans. Contraints à un mode de vie sédentaire, les Inuit ont réorganisé leur système alimentaire et leur espace culinaire, avec l'adoption de nouveaux aliments dont l'accessibilité et la qualité dépendent de leur capacité financière. (2) La sédentarisation a fait du logement un des principaux cadres de vie et de partage des repas. Or, la pénurie de logements et leur coût onéreux sont des problèmes chroniques à Cambridge Bay. De nombreux Inuit au revenu faible se retrouvent ainsi agglutinés dans des logements vétustes et exigus où ils ont du mal à manger à leur faim. (3) Cette promiscuité domestique engendre la violence qui, à son tour, pousse des personnes à (4) l'itinérance et/ou au retrait social. Beaucoup d'Inuit ont alors du mal à se nourrir convenablement dans un contexte où même l'alimentation traditionnelle s'érode. Pour les Inuit avec qui nous avons discuté de ces constats à Cambridge Bay, la recherche de solutions au problème d'insécurité alimentaire doit les impliquer directement. C'est sur ce dernier point que portera la discussion de cet article autour de la notion de *power shift* (Mann, 2014).

### Des changements historiques dans le mode alimentaire

Pour beaucoup d'Inuit que nous avons interrogés, notamment les aînés, l'événement colonial est le

moment à partir duquel tout a changé dans leur mode d'organisation et d'alimentation. Cette conviction est aussi partagée par les non-Inuit. Les points de vue convergent alors vers la reconnaissance qu'en contraignant les Inuit à la sédentarisation, en créant des écoles résidentielles et en introduisant le capitalisme marchand dans les communautés, les peuples venus d'Europe occidentale ont peu à peu modifié les habitudes alimentaires. Néanmoins, le nomadisme d'antan continue à marquer la mémoire collective. Nombre d'Inuit ont ainsi tenu à nous rappeler que par le passé, ils se déplaçaient entre les camps saisonniers pour récolter de la nourriture tout au long de l'année. La nourriture était abondante et les gens avaient du plaisir à partager. Les choses commencent à changer dès l'installation du premier poste de traite de la Compagnie de la Baie d'Hudson dans la région de Cambridge Bay en 1921. Au contact avec les Occidentaux, les Inuit commencèrent à intégrer de nouveaux apports dans leur alimentation, comme le thé, le sucre ou encore la farine, jusqu'à l'adoption de la bannique, aujourd'hui très populaire dans les communautés autochtones au Canada. Ces données sont corroborées par la littérature existante (Counil et al., 2011 ; Laflamme, 2014). Le changement sera encore plus drastique à partir du moment où les Inuit seront contraints à la sédentarisation. Cette sédentarisation passait par la création des villages, des résidences, des écoles, voire par la relocalisation de certains groupes. Pour le cas précis de Cambridge Bay, une travailleuse non inuit explique que la ville s'est construite autour d'infrastructures qui, dès le départ, symbolisaient le pouvoir colonial :

> Il y a d'abord eu le *building* de la GRC, puis de l'Église anglicane. Plus tard vers les années 50, il y eut un gros projet ; il s'agissait de la construction d'un radar à Cambridge Bay. Beaucoup d'Inuit y travaillaient. Le projet leur apportait beaucoup d'emplois rémunérés qui les arrachaient à leur mode de vie traditionnel. Avec l'argent gagné, ils pouvaient s'acheter les produits venus du sud. Presqu'à la même période, une école résidentielle sera construite à Cambridge Bay et les enfants Inuit y seront socialisés et éduqués selon la culture occidentale. Tout cela a vraiment changé la vie de la communauté sur tous les plans, y compris au niveau de l'alimentation.

La mise en place de villages et de résidences a ainsi engagé les Inuit dans une relative immobilité spatiale et entraîné la modification de leur organisation sociale. Un aîné ajoute que « la mise en place des écoles résidentielles aura elle aussi joué un rôle décisif dans la modification de [leurs] habitudes alimentaires, car c'est là que les plus jeunes vont commencer à apprendre à manger les céréales, le pain, le thé, le lait et le sucre ». Auparavant, il avait relevé que des contacts plus anciens avec des explorateurs européens avaient déjà introduit certains produits de consommation chez les Inuit, dont le pain. Mais, plus que ces interactions historiques avec des peuples étrangers, la fixation des Inuit dans des villages a entraîné la réduction de leur mobilité, des activités de chasse et de récolte, ainsi que du transfert intergénérationnel des compétences essentielles à la vie (Inuit Tapiriit Kanatami, 2021). Avec l'abattage des chiens de traîneau dans certaines régions dans les années 1950 (Lévesque, 2008), et plus tard l'imposition de quotas de chasse et de pêche, leur capacité à subvenir à leurs besoins a largement diminué (Inuit Tapiriit Kanatami, 2021).

De nos jours, le développement de l'économie marchande et des épiceries à la faveur du renforcement du transport aérien a augmenté le flux et la consommation d'aliments importés du sud pour cette partie du Canada accessible uniquement par bateau ou par avion. Le mode alimentaire à Cambridge Bay est donc marqué par les habitudes eurocanadiennes : « La municipalité est la plaque tournante pour d'autres régions de Kitikmeot. La population est donc très

multiculturelle, car les gens viennent de partout au Canada pour travailler ici. Cela expose les Inuit à une plus grande variété de bouffe », explique un agent de la Municipalité. Un aîné inuit ajoute à ce sujet que « plus les générations sont jeunes, plus elles sont portées à adopter de nouvelles variantes d'aliments. La haine basée sur des faits historiques diminue avec les générations. Le mélange culturel aide à l'ouverture ». Toutefois, les Inuit demeurent attachés à la culture du partage, comme le décrit une femme non inuit :

> Les Inuits ont gardé leur culture du partage des aliments ; il y a comme une culture du potlatch qui est toujours là : les gens aiment se rencontrer et ils vont apporter un plat qu'ils ont préparé pour partager. On voit ça beaucoup pendant les services funéraires. Or ce que les gens vont cuisiner et apporter plus facilement, ce n'est pas de la nourriture traditionnelle, parce que ça coûte plus cher de l'avoir. Ce que les gens apportent comme nourriture, c'est ce que tu peux trouver dans n'importe quelle épicerie dans le sud : du riz, des pâtes, des liqueurs, des sandwichs.

Cependant, le prix de ces denrées importées est onéreux et l'inflation est galopante à Cambridge Bay, alors que la majorité des Inuit ont des revenus faibles. Presque tous les Inuit que nous avons interrogés se plaignent de la vie chère et de la rareté croissante du gibier. Les chasseurs doivent aller très loin sur le territoire pour trouver du gibier, ce qui rend l'activité à la fois ardue et coûteuse. Comme conséquence, la consommation de la nourriture traditionnelle décline. Les raisons de ce déclin sont presque les mêmes partout dans l'Inuit Nunangat, à savoir : l'action anthropique, les restrictions réglementaires et les changements climatiques (Inuit Tapiriit Kanatami, 2021). Un agent de la Municipalité explique que « les Inuit de Cambridge Bay sont toujours attachés au "country food", mais il y a de moins en moins de chasseurs à cause du coût élevé du matériel et de l'éloignement du gibier ». Ils se tournent donc vers les aliments qui proviennent du Sud, d'autant plus que Cambridge Bay est doté de plusieurs épiceries, dont les deux plus importantes sont approvisionnées en moyenne deux fois par semaine[6]. Les aliments traditionnels, encore plus onéreux, occupent à peine 5 % de ce qui y est vendu, selon le témoignage d'un employé d'une de ces épiceries. Certes, beaucoup d'Inuit sont employés par le gouvernement et par la Municipalité[7], mais ils ont souvent de faibles salaires, par rapport aux non-Inuit. Les Inuit salariés sont dans beaucoup de cas les seuls à apporter un revenu pour leur ménage ; une situation qui les oblige à chercher la nourriture à bas prix, mais faiblement nutritive, comme l'explique une femme : « les gens prennent ce qui est moins cher et facile à cuisiner. Tout est rapide, le "fast" est de mise. Une fois qu'on a de l'argent, ils prennent la nourriture facile ». Or cette consommation de malbouffe est répertoriée comme un indicateur d'insécurité alimentaire en Arctique (Counil et al., 2011).

En bref, la fixation de l'habitat des Inuit, la création des écoles résidentielles et le développement de l'économie marchande ont profondément bouleversé l'espace alimentaire du point de vue du mangeable, des systèmes de production, de transformation et de préparation alimentaire. Ce bouleversement se traduit par l'adoption de nouveaux aliments, de nouvelles modalités d'approvisionnement, de conservation et de préparation des aliments, ainsi que de nouvelles techniques culinaires. Pourtant, les logements dans

[6] Northern Store et Ikaluktutiak Co-op.

[7] Statistique Canada. (2023, 15 novembre). *Profil du Recensement* (tableau), Recensement de la population de 2021. Produit n° 98-316-X2021001 au catalogue de Statistique Canada. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=F&SearchText=Cambridge%20Bay&DGUIDlist=2021S05101392&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0.

lesquels les Inuit vivent à Cambridge Bay ne sont pas toujours à la hauteur de ces nouveaux défis qui se posent à la vie domestique.

## La rareté des logements convenables pour les Inuit

L'une des premières choses qui ressortent de nos échanges avec les Inuit sur la question du logement est que les maisons qui leur ont été attribuées depuis leur sédentarisation n'ont été que très peu ou pas du tout rénovées. En outre, la construction de nouveaux logements est très rare à Cambridge Bay. Un aîné nous décrit la situation :

> Le logement est un réel problème dans notre municipalité. Selon les informations dont je dispose, un peu plus de 295 personnes ont besoin de logement et à peine 35 maisons ont été construites ces dernières années. J'entends parler de quelques projets de logement de la part du gouvernement, mais rien de concret jusqu'ici.

Ce nombre dont nous n'avons pas pu vérifier l'exactitude corrobore néanmoins les données de la SCHL précédemment relevées à l'échelle du Nunavut, Cambridge Bay ayant la particularité, en tant que centre économique du Nunavut, d'être l'objet d'un flux constant d'Inuit et de non-Inuit qui s'y installent pour des raisons professionnelles, économiques, voire scolaires (puisque l'enseignement secondaire y est offert jusqu'à la 12e année, contrairement à d'autres communautés). Ceci, couplé à la croissance démographique, fait que le taux d'inoccupation des logements est pratiquement nul.

Toutefois, d'après des sources concordantes à Cambridge Bay, le problème de logement affecte moins les non-Inuit et les couples mixtes (Inuit et non-Inuit). En effet, les travailleurs non inuit occupent généralement de bons emplois. À défaut d'être logés par leur employeur, ils ont un revenu suffisamment élevé pour se payer un logement décent. Ils se situent généralement entre la classe moyenne et la classe élevée. Mais une agente de la Municipalité nous explique :

> au contraire, un grand nombre de couples inuit se situe dans les catégories revenu moyen et revenu faible. Ils occupent des emplois où il n'y a pas de *housing* fourni ; ça crée déjà une problématique. S'ils n'ont pas de *housing* fourni, ils vont soit aller habiter dans la maison familiale, ou, s'ils sont chanceux, ils vont avoir un logement social du *Nunavut housing Association* (NHA).

Il faut dire que l'accès des Inuit à un logement social à faible coût est un véritable casse-tête tellement les listes d'attente sont longues et les critères d'éligibilité élevés. Or, la NHA ne se réunit qu'une seule fois tous les trois mois et ne se penche en priorité que sur des cas qu'elle juge urgents. La dame poursuit :

> La NHA applique un système de points qui est tel que si tu es considéré comme une personne à problème, c'est-à-dire connue comme étant violente, avec des addictions ou endettée, tu as peu de chance. Il faut vraiment être une personne sans problème et sans dette envers la NHA, là tu as un bon score et on peut donc t'attribuer un logement.

Or, quand on sait combien endémiques sont les problèmes de violence et de dépendance dans les communautés inuit, on comprend que ceux, très nombreux, qui sont connus pour ces problèmes, pourraient être disqualifiés pour l'accès à un logement social en leur nom. Si on considère ensuite la faiblesse des revenus, on comprend également que beaucoup sont pris entre les tenailles de l'insécurité du logement et de l'insécurité alimentaire.

En effet, la politique de logement à Cambridge Bay fait payer le loyer plus cher à ceux qui ont un revenu élevé. Or les Inuit ayant un revenu élevé accueillent généralement des parents et des proches. Ils se retrouvent alors dans une situation où ils dépensent beaucoup à la fois pour le logement et pour nourrir les nombreux membres de la famille à leur charge. Les personnes à faible revenu quant à elles ont tendance à se regrouper à plusieurs dans un même logement. C'est ainsi que les logements abritant cinq personnes et plus sont nombreux à Cambridge Bay[8].

## La surpopulation des logements et les difficultés alimentaires

À Cambridge Bay comme ailleurs en territoire inuit, il est courant que des gens cohabitent en grand nombre dans un même logement. Si cela fait partie des habitudes, les Inuit nous ont néanmoins expliqué qu'il y a un nombre de résidents au-delà duquel on se sent forcément à l'étroit et en surcharge. En effet, d'après Statistique Canada[9], les logements surpeuplés sont des logements où la taille n'est pas jugée convenable pour le nombre de personnes qui y vivent et où il manque une, deux ou trois chambres à coucher ou plus. Cependant, comme l'a déjà relevé Laneuville (2015, p. 9), les normes quant au nombre acceptable de co-résidents dans une maison ne peuvent pas être les mêmes partout au Canada. Pour les Inuit, le fait, par exemple, qu'un enfant n'ait pas sa propre chambre n'est pas nécessairement une anomalie, et les familles sont habituées à des flux humains constants. Cette considération est valable pour Cambridge Bay, car les Inuit y considèrent comme surpeuplée une maison où les pièces disponibles ne suffisent pas pour les résidents, obligeant les gens à dormir sur des sofas et des canapés.

Le sens donné à la co-résidence quant à lui paraît élastique, car une personne qui effectue des séjours réguliers de plusieurs semaines dans une famille peut être considérée comme un co-résident. Toutefois, la réalité est bien plus complexe. Mais sur la base de ce que pensent les Inuit eux-mêmes et comme l'a fait Laneuville (2015) au Nunavik, les co-résidents ici sont des personnes qui dorment habituellement dans la maison de manière continue pendant plus d'un mois. Leur nombre dans un même logement peut parfois aller au-delà de dix, comme l'explique une femme non inuit qui travaille pour la Municipalité :

> Étant donné qu'il n'y a pas beaucoup de maisons, ces familles-là peuvent se retrouver à douze dans un deux chambres : on a par exemple la grand-mère et ses trois enfants qui ont chacun son conjoint ; les petits-enfants sont là aussi, sans oublier qu'il y a d'autres gens qui vivent temporairement dans la maison. Il faut comprendre qu'il y a des personnes qui vivent de temps en temps dans une maison, de temps en temps dans une autre ; elles n'ont pas vraiment de domicile fixe.

Il faut également relever que les pratiques d'adoption des enfants, très courantes chez les Inuit, contribuent, elles aussi, à rendre les familles nombreuses (Decaluwe et al., 2016). Beaucoup d'aînés se retrouvent à être la « tête » de la maisonnée, c'est-à-dire le locataire responsable du loyer, parce qu'il leur est facile d'obtenir un logement social à faible loyer de la NHS. Leurs descendants viennent alors s'y greffer, avec le risque

[8] Information corroborée par Statistique Canada. (2023, 15 novembre). *Profil du Recensement* (tableau), Recensement de la population de 2021. Produit n° 98-316-X2021001 au catalogue de Statistique Canada. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=F&SearchText=Cambridge%20Bay&DGUIDlist=2021S05101392&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0.

[9] *Ibid*.

pour ces derniers de se retrouver sans logement, en cas de décès de l'aîné responsable du logement. Outre les aînés, les femmes inuit (plus nombreuses que les hommes à occuper un emploi salarié) et de jeunes couples salariés sont dans beaucoup de cas responsables du loyer et du revenu principal, souvent le seul, de l'unité domestique. La prise en charge alimentaire des nombreux co-résidents qui ne comptent que sur eux est alors un véritable défi et engendre inévitablement des insatisfactions.

En effet, la surpopulation résidentielle perturbe l'alimentation convenable des habitants d'un logement, surtout quand les revenus sont faibles : « au nombre que nous sommes dans notre maison, honnêtement c'est difficile de satisfaire les besoins alimentaires de tout le monde. Nous sommes actuellement neuf personnes, mais parfois nous sommes plus d'une dizaine. Nous préparons la nourriture en fonction de l'argent que nous avons », fait savoir une femme inuit qui accueille, dans la maison familiale, enfants, petits-enfants et d'autres membres de la parenté. Les enfants âgés de moins de cinq ans étaient au nombre de quatre et aucun des adultes présents dans la maison n'avait un emploi rémunéré. À la question de savoir s'il y avait toujours assez de nourriture pour tout le monde, elle a répondu par l'affirmative, mais que ce n'était pas forcément ce qu'il y a de mieux à offrir comme repas, et que les repas étaient très peu variés. La dame a néanmoins souligné que la famille avait périodiquement accès au gibier grâce à ses deux fils qui pratiquent la chasse. Cet apport, bien que précieux, est loin de combler les besoins de la famille, dans la mesure où la chasse est assujettie à une réglementation stricte, et qu'il faut parfois partager les produits de la chasse avec des proches. Chez les Inuit, la prodigalité, le fait d'être généreux et de partager la nourriture sont très valorisés. Lors des périodes de pénurie, le partage prend la forme d'une obligation morale qui permet la survie de toute la communauté. Accueillir la parenté et des proches dans son logement et partager son revenu participent de cette culture du don dans la sociabilité inuit. Dans certaines conditions même, le vol peut être toléré, lorsqu'une demande raisonnable de nourriture se heurte à un refus (Labrèche, 2006).

Toutefois, à Cambridge Bay, les Inuit reconnaissent que l'introduction du salariat, des épiceries et le relatif déclin des activités de chasse diluent cette solidarité. Les familles nombreuses ne sauraient donc compter sur la générosité des autres membres de la communauté pour assurer tous leurs besoins alimentaires. C'est pourquoi beaucoup font face à l'incertitude quant à la régularité des repas, comme l'explique un aîné :

> la sécurité alimentaire, ce n'est pas avoir telle ou telle chose à table ; c'est être en mesure d'avoir cela aujourd'hui, demain et à chaque fois que j'en ai besoin. Or ce n'est pas exagéré de dire que plus de la moitié des Inuit de Cambridge Bay ne sont pas en mesure de manger à leur faim.

À cause du nombre élevé des habitants de la maison, cette famille, comme cela a été mentionné dans d'autres entretiens, vit également une grande pression sur l'espace de la cuisine, sur les ustensiles et les équipements. Le micro-ondes était hors d'usage, tandis que la porte du réfrigérateur ne se fermait plus normalement. Le logement en lui-même était globalement vétuste et nécessitait beaucoup de réparations ; presque toutes les ouvertures (portes et fenêtres) avaient des défauts d'étanchéité. Mettre en œuvre des travaux d'entretien courant de ce logement et de ses équipements impliquerait des coûts qui influenceraient forcément le budget disponible pour l'alimentation, alors même que cette famille se plaignait déjà des coûts élevés d'électricité et de chauffage. Cette situation est à peu près celle de nombreuses familles inuit à Cambridge Bay. Et dans un ménage surpeuplé, la

pression sur les équipements et sur l'espace culinaire exacerbe les insatisfactions et les tensions.

### *La violence domestique et les problèmes alimentaires*

Les tensions liées au surpeuplement des ménages ont plusieurs fois été signalées lors de nos entretiens comme pouvant nuire à l'alimentation. En effet, la promiscuité est propice à l'animosité qui peut troubler le partage des repas : « quand une maison est surpeuplée, ce n'est pas toujours facile de maintenir un climat d'entente qui est important pour ceux qui doivent manger ensemble. C'est difficile de bien manger dans une maison où il y a de la violence et des querelles », explique une Inuk. Ce n'est pas tant le fait de partager le repas à plusieurs qui pose problème. C'est plutôt l'insuffisance et l'irrégularité des repas dans la promiscuité qui créent des insatisfactions et des conflits. Lorsque les conflits impliquent les femmes dont le rôle est central dans l'alimentation domestique, l'irrégularité des repas s'accentue. Au service responsable de la santé mentale dans la municipalité, on explique que beaucoup d'Inuit ont la pression de ne pas avoir assez d'argent pour se nourrir et pour s'occuper des enfants dans des maisons très souvent surpeuplées. À cause de cela, beaucoup sombrent dans la dépression, l'anxiété, la toxicomanie et la violence.

Or ces problèmes peuvent interférer avec le partage des ressources au sein des ménages et entre eux (en particulier entre les membres de familles élargies ou différentes), aggraver les conflits et diminuer la coopération, et finalement conduire à une insécurité alimentaire accrue, comme d'autres recherches l'ont déjà constaté au Nunavik et ailleurs au Nunavut (Hansen et al., 2021 ; Hervé et Laneuville, 2017 ; Laneuville, 2015 ; Pépin et al., 2018 ; Riva et al., 2014 ; Ruiz-Castell et al., 2015). Voici ce qu'en pense un aîné :

> Les situations où les propriétaires de logements ou ceux (et celles) qui détiennent le principal revenu dans un ménage ne veulent plus avoir trop de monde chez eux sont très fréquentes ; or si les gens ne se sentent pas les bienvenus, est-ce qu'ils peuvent bien manger ? Si un couple qui accueille les membres de la parenté a des problèmes, qu'est-ce qui arrive aux gens qui se nourrissent grâce à eux ?

Ceux qui se sentent de trop peuvent alors faire profil bas ou libérer le plancher. C'est ainsi que la violence domestique peut avoir pour conséquence le retrait social de certains membres de la maisonnée, et donc, un faible soutien des proches et de la communauté. Evans et Lepore (1993) ont déjà démontré le lien entre la détresse liée au surpeuplement domestique et le faible soutien, aussi bien de la parenté restreinte que de la communauté plus large. Une forte intensité des interactions domestiques est susceptible de perturber les relations entre les membres d'un ménage au point de créer l'imprévisibilité. Cette imprévisibilité peut, à son tour, accroître le sentiment de faible contrôle sur l'environnement domestique (Lepore et al., 1992). On observe ainsi que les Inuit qui vivent dans les maisons où il y a de la violence ont tendance à s'isoler et à se retirer des interactions sociales.

La municipalité dispose pour cela de refuges[10] pour accueillir aussi bien les hommes que les femmes et les enfants victimes de violences domestiques. Ces refuges sont des mesures palliatives à court terme pour aider les gens à se remettre d'expériences stressantes, mais ne découragent pas forcément certaines personnes de se retirer des relations sociales et, donc, ne les empêchent

[10] Omingmak Men's Centre et Arnat Qimavik.

pas de se retrouver dans l'isolement. Or, être déconnecté des relations de partage et de réciprocité constitue une forme de mort sociale (Labrèche, 2006), car pour les Inuit, vivre, c'est être en relation et participer à la vie communautaire à travers les dynamiques de don et de contre-don. Accueillir et rendre visite est une manière d'entretenir les liens sociaux (Brière et Laugrand, 2017). Qu'il s'agisse des funérailles, des fêtes organisées à la maison communautaire et au Wellness Centre ou de toute autre activité à caractère communautaire, « y participer est le signe qu'on vit et qu'on est actif pour le bien de la communauté », explique un aîné. Toutefois, l'importance de la communauté n'inhibe pas le besoin d'autonomie des personnes. La capacité à subvenir à ses besoins et à ceux de sa famille demeure un indicateur de respectabilité et d'autonomie dans les sociétés inuit. Avant la sédentarisation, l'autonomie devait également s'acquérir sur le plan résidentiel après un parcours quasi initiatique qui rendait aptes les jeunes à construire une habitation et à subvenir aux besoins de leur famille. Les compétences techniques nécessaires au montage d'une tente, à la construction d'une habitation de neige ou de terre, s'acquéraient progressivement à travers la participation des jeunes aux activités domestiques. Les aînés regrettent beaucoup que ces modalités de transmission des savoirs traditionnels se soient quelque peu érodées au fil du temps. Il faut dire que dans l'éthos inuit, la maîtrise de ces techniques a toujours été la preuve d'une certaine maturité sociale adéquate pour fonder son propre foyer, car les gens étaient très tôt capables de se prendre en main (Hervé et Laneuville, 2017). L'érosion des savoirs traditionnels et les contraintes de la vie moderne où il faut désormais acquérir un logement et payer la nourriture exposent alors de nombreux Inuit à la dépendance résidentielle, alimentaire, ainsi qu'à l'itinérance.

### *Itinérance, retrait social et difficultés alimentaires*

Pour bien comprendre la spécificité de l'itinérance à Cambridge Bay, rappelons avant tout que d'après l'Observatoire canadien sur l'itinérance (Gaetz et al., 2012), elle se rapporte à la situation d'un individu, d'une famille ou d'une collectivité qui n'a pas de logement stable, sécuritaire, permanent et adéquat, ou qui n'a pas de possibilité, les moyens ou la capacité immédiate de s'en procurer un. L'itinérance décrit une variété de situations d'hébergement et de refuges, allant de personnes logées provisoirement à des individus sans abri (Echenberg et Munn-Rivard, 2020). De façon générale, l'Observatoire canadien sur l'itinérance reconnaît quatre types d'itinérance : d'abord, les personnes (absolument) sans abri qui vivent dans la rue ou dans des lieux non appropriés pour loger les humains ; ensuite, les personnes qui recourent aux refuges d'urgence, qu'il s'agisse de refuges d'urgence de nuit pour les sans-abri ou des refuges dédiés aux personnes affectées par la violence familiale ; puis, les personnes logées provisoirement et donc sans droit au maintien dans les lieux ; et enfin, les personnes à risque d'itinérance, soit des personnes qui ne sont pas sans abri, mais dont la situation économique et/ou de logement courante est précaire ou ne satisfait pas aux normes publiques de santé et de sécurité. Toutes ces formes d'itinérance résidentielle sont propices à l'insécurité alimentaire, comme cela a déjà été documenté à travers le Canada (Hamelin et Hamel, 2009 ; Hamelin et Mercier, 2001 ; Russell et Parkes, 2018), mais ne se retrouvent pas toutes à Cambridge Bay, qui est un environnement de grand froid.

Personne n'y est dans la rue. Ce qu'on observe, ce sont surtout des personnes logées temporairement dans les familles, les personnes qui recourent aux refuges

d'urgence comme le Men's Shelter et Arnat Qimavik (pour les femmes), les personnes qui ne sont pas sans abri, mais dont la situation économique et/ou de logement courante est précaire ou ne satisfait pas aux normes publiques de santé et de sécurité. Nos interlocuteurs à la Municipalité soulignent que de nombreux Inuit sont contraints de vivre chez des proches de façon temporaire, parce qu'ils n'ont pas la possibilité d'avoir un logement permanent. Ils sont alors ce que l'Observatoire canadien sur l'itinérance appelle des *couch surfers*, c'est-à-dire des personnes qui passent d'un sofa à l'autre. Elles passent d'une maison à une autre, au gré des possibilités d'accueil par des amis, par la parenté, ou même des étrangers, mais sans la possibilité que la condition de logement devienne permanente. Très souvent incapables de payer le loyer ni de contribuer aux dépenses de nourriture, ces personnes dépendent de la générosité des familles : « ceux qui sont accueillis temporairement chez les proches n'ont pas de plan de repas ; rien n'est sûr pour eux ; ils picorent ici et là quand ils en ont l'opportunité », explique un responsable de la Municipalité. L'insécurité alimentaire qui frappe les *couch surfers* est d'autant plus chronique qu'elle est corollaire d'une insécurité résidentielle difficile à remarquer ; d'où le concept « d'itinérance cachée » alors utilisé pour caractériser leur situation. L'itinérance cachée, d'après Birdsall-Jones et al. (2010), correspond à un manque de sécurité et de permanence résidentielle pour les personnes qui ne sont pas dans la rue grâce à des relations et à des membres de leur famille, mais qui n'ont pas les moyens de se payer un logement. Or chez les amis, la famille et les proches, « on peut facilement être de trop, on ne peut pas être exigeant, on mange ce qui nous est donné ».

Au Département de santé, on pointe également la situation des personnes englués dans des dépendances (alcool, tabac, jeux de hasard) et de celles souffrant de maladies mentales comme étant propice à l'insécurité résidentielle et donc à la faim. En effet, la vie avec ces personnes est souvent difficile, car elles peuvent, volontairement ou malgré elles, adopter des comportements insupportables pour les autres (violence, dépenses compulsives, vols, viols, ivresse, etc.). Une expulsion du logement peut s'ensuivre et contraindre la personne en cause à l'itinérance. Or, vu l'ampleur des problèmes de dépendance, de violence et de santé mentale à Cambridge Bay, il n'est pas surprenant que les personnes aux prises avec ces problèmes soient aussi parmi les plus exposées à l'itinérance. L'insécurité résidentielle touche par ailleurs les personnes dont les relations familiales se détériorent subitement, soit par un divorce, une séparation, des conflits avec des colocataires, etc. Dans les cas, très nombreux, où ces personnes n'ont pas les moyens d'acquérir un logement personnel à court et à long terme, elles peuvent se retrouver dans l'itinérance et, conséquemment, dans des difficultés alimentaires.

Tout ce qui précède concourt à démontrer que les problèmes alimentaires chez les Inuit de Cambridge Bay émanent d'un faisceau de corrélations complexes entre l'histoire coloniale, la sédentarisation, les problèmes de logement, la situation économique des personnes, les dynamiques relationnelles au sein de la parenté, la violence sociale, etc. La discussion que nous allons à présent faire de ces constats montrera que la question de la sécurité alimentaire des Inuit touche inévitablement à celle de leur autonomie politique. Cette autonomie implique le démantèlement des relations de pouvoir asymétriques avec le gouvernement et la mise en place d'institutions participatives (Desmarais et Wittman, 2014). Les recherches de solutions à l'insécurité alimentaire, du point de vue des Inuit eux-mêmes, doivent non seulement les associer, mais prendre également en considération d'autres besoins cruciaux comme celui du logement.

## Discussion : cohérence politique et power shift pour endiguer l'insécurité alimentaire

L'insécurité alimentaire à travers le Nunavut a des explications multifactorielles, mais dans le cadre de la présente réflexion, les constats observés à Cambridge Bay nous conduisent à l'aborder dans sa dimension structurelle, notamment en lien avec le logement. Cette influence des conditions d'habitation sur l'alimentation a déjà été documentée ailleurs au Canada ; entre autres, à Toronto par Kirkpatrick et Tarasuk (2008ab) et au Nunavik par Laneuville (2015). Leurs recherches convergent pour dire que l'insécurité alimentaire est inversement associée au revenu et au revenu après logement. Dans les familles à faible revenu, les achats alimentaires sont faits dans un contexte de demandes concurrentes pour d'autres types de problèmes. Si les dépenses alimentaires peuvent être facilement modifiées pour libérer de l'argent pour d'autres besoins, les coûts de logement semblent incompressibles, les loyers et les charges n'étant abandonnés qu'en cas de crise extrême. Pareils constats ont été faits à Cambridge Bay en plus de la rareté des logements.

En effet, la fixation définitive de l'habitat des peuples autochtones est considérée comme l'un des impacts les plus remarquables de leur rencontre avec les empires occidentaux, car il symbolise à lui seul l'entièreté des transformations structurelles vécues, notamment en lien avec leur autodétermination, leur logement et leur système alimentaire (Duhaime et al., 2001). Lorsque l'insécurité alimentaire émane de problèmes d'ordre structurel, McSween (2019) suggère que les solutions envisagées agissent surtout sur « le champ des systèmes » en place et en amont. Ce « champ des systèmes », à Cambridge Bay, ne renvoie pas seulement à l'environnement socioéconomique, mais également aux relations de pouvoirs entre les Inuit et les instances fédérales dans la définition des politiques alimentaires et de logement. L'espace social alimentaire, nous l'avons vu, imbrique plusieurs dimensions de la vie d'une société, y compris ses institutions.

Kirkpatrick et Tarasuk (2008ab) ont déjà valorisé cette approche holistique en contexte canadien. Ils recommandent par exemple d'agir pour augmenter le revenu pour un groupe social confronté à l'insécurité alimentaire. Dupéré et Gélineau (2012) quant à eux préconisent d'agir sur les prestations sociales, l'emploi, le logement, le transport, les liens sociaux et l'accès à la terre. Les actions ne doivent pas être isolées ou fragmentées, mais toucher à plusieurs domaines de besoins de façon concertée et synergique. McSween (2019) parle de la nécessaire cohérence de l'action publique pour résoudre les problèmes de la sécurité alimentaire, car les mesures adoptées dans un domaine peuvent s'avérer inefficaces si elles font l'économie de la réalité dans d'autres domaines. C'est ce regard d'ensemble que traduit le concept d'espace social alimentaire d'après l'approche de Poulain (2003), et que nous avons jugé pertinent pour montrer que la question alimentaire n'est pas isolée des autres aspects de la vie des Inuit. La cohérence renvoie ici à la synergie entre les différents acteurs concernés par un problème. Qu'il s'agisse du processus décisionnel ou des actions à poser, la cohérence doit privilégier la synergie à la fragmentation et à la dispersion. Elle doit aussi viser l'acceptabilité des solutions en impliquant tous les acteurs concernés. L'acceptabilité chez les Inuit appelle au respect de leur culture et de leurs traditions.

Or, l'implication effective des Inuit et le respect de leurs traditions dans la recherche de solutions, c'est cela le *power shift* (Mann, 2014), c'est-à-dire le changement de paradigme par une reconfiguration des relations de pouvoir en lien avec leur souveraineté et leur autodétermination. Ce besoin de changement a été très souvent exprimé par les Inuit lors de nos échanges à

Cambridge Bay. La souveraineté ne renvoie pas pour eux à l'isolement ou l'autarcie politique ; elle signifie davantage le renforcement des relations avec leur territoire et entre les communautés (Daigle, 2019 ; Morrison, 2011).

Le Canada s'est déjà engagé dans cette voie en matière territoriale avec, entre autres, la *Loi concernant la création du territoire du Nunavut et l'organisation de son gouvernement, et modifiant diverses lois en conséquence* (Nunavut Act, 1993) qui déleste l'État fédéral d'une partie de ses pouvoirs au profit des communautés locales. Le logement et l'aménagement domiciliaire sont encadrés par la *Loi sur la société d'habitation* du Nunavut, tandis que la Société d'Habitation du Nunavut (SHN) se charge de la mise en œuvre de cette loi. Cette dernière travaille en collaboration avec différentes instances comme la Société canadienne d'hypothèques et de logement (à l'échelle nationale), le gouvernement du Nunavut (à l'échelle territoriale), ainsi qu'avec les organismes locaux (Gouvernement du Canada, 2019a). À Cambridge Bay, ces organismes locaux sont principalement la Municipalité et la Kitikmeot Inuit Association. Le défi de la cohérence politique entre toutes ces instances reste entier. Quand il s'agit de l'investissement en matière de logement, le gouvernement fédéral garde encore le contrôle dans les montages financiers. Or, le paradigme du prêt hypothécaire est peu favorable à la majorité des Inuit, car ils sont limités par la faiblesse de leurs revenus. Un rapport du gouvernement fédéral le reconnaît en ces termes :

> Les faibles niveaux de revenu moyen des ménages, conjointement avec les possibilités d'emploi locales limitées dans de nombreuses collectivités, signifient que l'accession à la propriété ou la location sur le marché est hors de la portée de bien des personnes en l'absence d'accords d'achat novateurs. [...] Les banques sont parfois réticentes à accorder des prêts hypothécaires, vu les risques perçus (c.-à-d. le régime foncier). L'assurance, si elle est accessible, est aussi très coûteuse, vu l'estimation ou l'hypothèse d'une plus grande exposition au risque auquel sont exposées les structures des communautés éloignées de l'Inuit Nunangat (Gouvernement du Canada, 2019b).

Comme le souligne si bien la *Stratégie de logement pour l'Inuit Nunangat* (Gouvernement du Canada, 2019b), l'activité économique dans l'Inuit Nunangat n'est pas assez forte pour générer les capitaux nécessaires pour la construction et la rénovation des logements. C'est pourquoi le financement public reste la principale, sinon la seule voie de recours. Or, le gouvernement fédéral étant le principal garant du financement des logements dans l'Arctique, c'est également à lui qu'il revient de décider de l'opportunité et du moment des investissements. De fait, dans bien des communautés, le logement public constitue la seule option viable. C'est pourquoi le *power shift* doit donner aux communautés inuit la possibilité d'innover en matière d'options de logement. La *Stratégie de logement pour l'Inuit Nunangat* (Gouvernement du Canada, 2019b) reconnaît à ce sujet que la diversification des options de logement par les logements de transition et de soutien, les locations privées abordables, les résidences privées, les coopératives, etc. sont nécessaires pour que les communautés soient en mesure de loger leurs membres, ainsi que les personnes qui s'y établissent. L'innovation en la matière devra cependant s'inspirer des cadres culturels inuit (Bayle, 2020 ; Brière et Laugrand 2017 ; Hervé et Laneuville, 2017). Pour les Inuit, il faut des habitats (*dwelling*) plutôt que des maisons (*building*). S'appuyant sur les travaux de Ingold (2021), Hervé et Laneuville (2017) font remarquer que le *dwelling* renvoie aux « formes que les individus construisent, que ce soit imaginaire ou concrètement et elles émergent dans le sillage de leurs activités sociales, dans le contexte relationnel spécifique de leur engagement pratique avec leur

environnement ». Quant au *building*, il renvoie à une activité naturelle et matérielle répondant avant tout à une nécessité vitale, à laquelle on pourrait associer par exemple la nécessité de se construire un abri. Or avant la sédentarisation forcée, les habitats des Inuit étaient des microcosmes qui reflétaient et portaient la profondeur de leurs relations sociales (Bayle, 2020). Les maisons construites par le gouvernement dans les années 1960 ne respectaient en rien la conception de l'espace habité des Inuit, mais correspondaient plutôt à la volonté politique de les assimiler. Elles sont toutes conçues suivant le modèle occidental où l'individualisme marque profondément les comportements, alors que chez les Inuit, on dénote une certaine permanence de l'habitus collectif et nomade (Brière et Laugrand, 2017).

De nos jours, la maison est devenue un objet que l'on acquiert (*building*) et non plus un projet de vie qui s'incarne dans du bâti (*dwelling*). Les Inuit ne participent ni aux politiques de logement ni à la construction de ces maisons : « ce sont d'autres qui décident pour eux. Les pouvoirs réels dans ce domaine sont tous aux mains du gouvernement » (Hervé et Laneuville, 2017, p. 56). C'est ce paradigme politique qui doit changer en même temps qu'un souci de cohérence politique devrait emmener à reconnaître que la solution aux défis alimentaires doit, au même moment, prendre en compte d'autres problèmes, comme l'autonomie résidentielle, la défavorisation économique et l'escamotage des traditions inuit dans les politiques publiques.

## Conclusion

Dans la présente analyse, nous nous sommes attelé à examiner les entrelacs entre l'insécurité résidentielle et l'insécurité alimentaire au Nunavut, plus précisément à Cambridge Bay. Il en ressort que l'espace social alimentaire des Inuit s'est transformé au cours de l'histoire récente. Ils ont aujourd'hui une alimentation mixte qui combine les aliments traditionnels (chasse, pêche, récolte de fruits) et les produits en provenance des grandes métropoles canadiennes. Toutefois, à cause des changements climatiques, de l'action anthropique, des formes variées de pollution, ainsi que du coût onéreux des équipements, l'accès aux aliments traditionnels est de plus en plus difficile, tandis que le coût des aliments nutritifs importés du sud reste hors de portée pour la majorité des Inuit, dont le revenu reste faible. Beaucoup de ménages peinent alors, de façon continuelle, à se procurer une quantité d'aliments suffisante ; n'ont pas les moyens de se faire des repas équilibrés ; ou alors, sont contraints de sauter des repas et de réduire des portions parce qu'il n'y a pas assez de nourriture ni d'argent pour s'en acheter. De telles difficultés sont plus graves dans les ménages surpeuplés avec enfants et vivant d'un seul revenu, celui de la personne responsable du loyer.

La surpopulation n'émane pas seulement de la persistance d'une forte mobilité intra et intercommunautaire qui fait de la maison un espace de rencontres (Brière et Laugrand, 2017). Elle découle surtout de la crise du logement que connaît tout le Nunavut, alors même que les Inuit ont maintenu leur culture de l'accueil, de partage et des visites quotidiennes. Plusieurs changent donc fréquemment de domicile, y compris les enfants qui circulent d'un foyer à l'autre selon les réseaux de parenté. On se retrouve ainsi avec des ménages où le nombre de résidents est largement au-dessus des capacités du

logement. Ces ménages sont sujets à une grande pression sur l'espace de la cuisine et sur les équipements, causant des dépenses de réparation et de remplacement d'équipements qui pèsent sur le revenu disponible pour l'alimentation. Ces ménages sont également sujets aux tensions qui perturbent le partage des repas et acculent des personnes au retrait social. Comme ces dernières, les personnes sans domicile fixe qui passent de canapé en canapé pour une ou plusieurs nuits sont aussi exposées à la faim. L'unité résidentielle, depuis la sédentarisation historique, s'est en effet imposée comme un espace de prédilection pour les rencontres et le partage, dont la nourriture et les revenus. Toute initiative qui vise à atteindre l'autonomie alimentaire chez les Inuit de Cambridge Bay devra donc, au même moment, s'attaquer aux problèmes relatifs à l'autonomie résidentielle dans une logique qui respecte leurs traditions et leur souveraineté (au sens d'autonomie). Il faudra pour cela les impliquer, aussi bien dans la définition des politiques alimentaires et de logement que dans leur mise en œuvre.

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## Références

Arriagada, P. (2017). L'insécurité alimentaire chez les Inuits vivant dans l'Inuit Nunangat. *Statistique Canada*. 75-006-2017-15-fra.pdf

Bayle, M. (2020). Réflexions pour une architecture significative : univers symbolique et matériel de la maison chez les Inuit du Nunavik (Note de recherche). *Études/Inuit/Studies*, *44*(1-2), 161-182. https://doi.org/10.7202/1081801ar

Birdsall-Jones, C., Corunna, V., Turner, N., Smart, G. et Shaw, W. (2010). *Indigenous homelessness, Final report. Working Paper*. Australian Housing and Urban Research Institute. http://hdl.handle.net/20.500.11937/6784

Brière, A. et Laugrand, F. (2017). Maisons en communauté et cabanes dans la toundra : appropriation partielle, adaptation et nomadisme chez les Inuits du Nunavik et du Nunavut. *Recherches amérindiennes au Québec*, *47*(1), 35-48. https://doi.org/10.7202/1042897ar

Canadian Geographic. *Atlas des peuples autochtones du Canada*. https://atlasdespeuplesautochtonesducanada.ca/article/inuit-nunangat-2/

Counil, É., Gauthier, M.-J. et Dewailly, E. (2011). Alimentation et santé publique dans les communautés Inuits du Nord-du-Québec : vers un changement de paradigme. Dans J.-G. Petit, Y. Bonnier Viger, P. Aatami et A. Iserhoff

(dir.), *Les Inuits et les Cris du Nord du Québec*. Presses de l'Université du Québec, Presses universitaires de Rennes.

Daigle, M. (2019). Tracing the terrain of Indigenous food sovereignties. *The Journal of Peasant Studies*, *46*(2), 297-315. https://doi.org/10.1080/03066150.2017.1324423

Decaluwe, B., Poirier, M.-A. et Muckle, G. (2016). L'adoption coutumière chez les Inuit du Nunavik : ses spécificités et conséquences sur le développement de l'enfant. *Enfances, Familles, Générations*, (25). https://doi.org/10.7202/1039503ar

Desmarais, A. A. et Wittman, H. (2014). Farmers, foodies and First Nations: Getting to food sovereignty in Canada. *The Journal of Peasant Studies*, *41*(6), 1153-1173. https://doi.org/10.1080/03066150.2013.876623

Duhaime, G., Chabot, M. et Gaudreault, M. (2002). Food consumption patterns and socioeconomic factors among the inuit of Nunavik. *Ecology of Food and Nutrition*, *41*(2), 91-118. https://doi.org/10.1080/03670240214491

Duhaime, G., Bernard, N. et Godmaire, A. (2001). La sédentarisation des autochtones. Dans G. Duhaime (dir.), *Le Nord* (p. 173-193). Presses de l'Université Laval. https://atlas.cieq.ca/le-nord/la-sedentarisation-des-autochtones.pdf

Dupéré, S. et Gélineau, L. (2012). *Vers une autonomie alimentaire pour tous : Agir et Vivre Ensemble le Changement*. Rapport de recherche. Fonds de recherche du Québec – Société et culture. Programme Actions concertées.

Echenberg, H. et Munn-Rivard, L. (2020). *L'itinérance au Canada : définitions et recensements*. Bibliothèque du Parlement.

Evans, G. W. et Lepore, S. J. (1993). Household Crowding and Social Support: A Quasiexperimental Analysis. *Journal of personality and social psychology*, *65*(2), 308.

Gaetz, S., Barr, C., Friesen, A., Harris, B., Hill, C., Kovacs-Burns, K., [...] et Marsolais, A. (2012). *Définition canadienne de l'itinérance*. Publication de l'Observatoire canadien sur l'itinérance.

Gouvernement du Canada. (2019a). *Recommandations sur la politique sur le logement dans le Nord*. https://www.canada.ca/fr/savoir-polaire/publications/conference-sur-le-logement-dans-le-nord/recommandations-sur-la-politique-sur-le-logement-dans-le-nord.html#h5-23

Gouvernement du Canada. (2019b). *Stratégie de logement pour l'Inuit Nunangat*. https://www.rcaanc-cirnac.gc.ca/fra/1554820296529/1554820324561?wbdisable=true

Granger, A. (2022). *La colonisation et les représentations médiatiques de l'alimentation au Nunavik* [mémoire de maîtrise, Université de Montréal]. Papyrus. https://papyrus.bib.umontreal.ca/xmlui/handle/1866/27913

Hamelin, A.-M. et Hamel, D. (2009). Food Insufficiency in Currently or Formerly Homeless Persons is Associated with Poorer Health. *Canadian Journal of Urban Research*, *18*(2), 1-24. http://www.jstor.org/stable/26193258

Hamelin, A.-M. et Mercier, C. (2001). Itinérance et sécurité alimentaire. *Équilibre en tête*, *15*(4), 1-6.

Hansen, C. B., Larsen, C. V. L., Bjerregaard, P. et Riva, M. (2021). The effect of household crowding and composition on health in an Inuit cohort in Greenland. *Scandinavian Journal of Public Health*, *49*(8), 921-930. https://doi.org/10.1177/1403494820929496

Harder, M. T. et Wenzel, G. W. (2012). Inuit Subsistence, Social Economy and Food Security in Clyde River, Nunavut. *Arctic*, *65*(3), 305-318. http://www.jstor.org/stable/41758937

Hervé, C. et Laneuville, P. (2017). La quête d'autonomie résidentielle des femmes inuites du Nunavik : une perspective relationnelle. *Recherches amérindiennes au Québec*, *47*(1), 49-58. https://doi.org/10.7202/1042898ar

Ingold, T. (2021). *The perception of the environment: Essays on livelihood, dwelling and skill* (1st edition). Routledge. https://doi.org/10.4324/9781003196662

Inuit Tapiriit Kanatami. (2021). *Stratégie sur la sécurité alimentaire dans l'Inuit Nunangat*. https://www.itk.ca

Kirkpatrick, S. et Tarasuk, V. (2008a). Food insecurity in Canada: Considerations for monitoring. *Canadian Journal of Public Health*, *99*(4), 324-327.

Kirkpatrick, S. et Tarasuk, V. (2008b). Food insecurity is associated with nutrient inadequacies among Canadian adults and adolescents. *The Journal of nutrition*, *138*(3), 604-612.

Labrèche, Y. (2006). Variations saisonnières et échange-don de nourriture chez les Inuit du Nunavik.

*Études/Inuit/Studies*, *30*(2), 73-94. https://doi.org/10.7202/017566ar

Laflamme, L. (2014). *La sécurité alimentaire selon la perspective d'Inuit du Nunavik* [thèse de doctorat, Université Laval]. Bibliothèque et Archives Canada. http://central.bac-lac.gc.ca/.redirect?app=damspub&id=6072032f-0560-4ffc-b00e-8479292ffca6

Lamalice, A., Avard, E., Coxam, V., Herrmann, T., Desbiens, C., Wittrant, Y. and Blangy, S. (2016). Soutenir la sécurité alimentaire dans le Grand Nord : projets communautaires d'agriculture sous serre au Nunavik et au Nunavut. *Études/Inuit/Studies*, *40*(1), 147-169. https://doi.org/10.7202/1040149ar

Laneuville, P. (2015). *Bring hope and restore peace a study report on the life and concerns of Inuit women of Nunavik*. Saturviit Inuit Women's Association of Nunavik.

Laugrand, F. (2013). Les Inuit face aux changements climatiques et environnementaux La résurgence de chocs cosmopolitiques ? *Communication*, Vol. 31/2. https://doi.org/10.4000/communication.4458

Laugrand, F., & Oosten, J. (2002). Canicide and Healing. The Position of the Dog in the Inuit Cultures of the Canadian Arctic. *Anthropos*, *97*(1), 89–105. http://www.jstor.org/stable/40465618

Lepore, S., Evans, G. W. et Schneider, M. L. (1992). Role of Control and Social Support in Explaining the Stress of Hassles and Crowding. *Environment and Behavior*, *24*(6), 795-811. https://doi.org/10.1177/0013916592246006

Lévesque, F. (2008). *Les Inuit, leurs chiens et l'administration nordique, de 1950 à 2007 : anthropologie d'une revendication inuit contemporaine* [thèse de doctorat, Université Laval].

Lévesque, F. (2011). An ordinance respecting dogs: How creating secure communities in the Northwest Territories made Inuit insecure. Dans M. Daveluy, F. Lévesque et J. Fergusson (dir.), *Humanizing Security in the Arctic* (p. 73-90). CCI Press.

Mann, A. (2014). *Global activism in food politics: Power shift.* Palgrave Macmillan.

McSween, R.-A. (2019). *Les conditions propices à la cohérence de l'action publique en sécurité alimentaire au Québec* [mémoire de maîtrise, École nationale d'administration publique]. Espace ENAP. https://espace.enap.ca/id/eprint/179/

Morrison, D. (2011). Indigenous food sovereignty: A model for social learning. Dans H. Wittman et A. Desmarais (dir.), *Food sovereignty in Canada: Creating just and sustainable food systems* (p. 97-113). Fernwood Publishing.

Nunavut Act. (1993). *Loi concernant la création du territoire du Nunavut et l'organisation de son gouvernement, et modifiant diverses lois en conséquence*. https://www.laws-lois.justice.gc.ca/fra/lois/N-28.6/page-1.html

Pépin, C., Muckle, G., Moisan, C., Forget-Dubois, N. et Riva, M. (2018). Household overcrowding and psychological distress among Nunavik Inuit adolescents: A longitudinal study. *International Journal of Circumpolar Health*, *77*(1). https://doi.org/10.1080/22423982.2018.1541395

Poulain, J.-P. (2003). L'espace social alimentaire, un concept pour comprendre les modèles alimentaires. *La lettre scientifique de l'Institut Français pour la Nutrition*, *89*, 7-20.

Power, E. M. (2008). Conceptualizing Food Security for Aboriginal People in Canada. *Canadian Journal of Public Health*, *99*(2), 95-97. https://doi.org/10.1007/BF03405452

Radio-Canada. (2022, 18 octobre). Une stratégie pour construire 3000 logements d'ici 2030 au Nunavut. https://ici.radio-canada.ca/nouvelle/1925607/nunavut-3000-logements-2030-societe-habitation-nccd

Riva, M., Larsen, C. V. L. et Bjerregaard, P. (2014). Household crowding and psychosocial health among Inuit in Greenland. *International Journal of Public Health*, *59*(5), 739-748. https://doi.org/10.1007/s00038-014-0599-x

Robin, T. (2019). Our Hands at Work: Indigenous Food Sovereignty in Western Canada. *Journal of Agriculture, Food Systems, and Community Development*, *9*(B), 85-99. https://doi.org/10.5304/jafscd.2019.09B.007

Ruiz-Castell, M., Muckle, G., Dewailly, É., Jacobson, J. L., Jacobson, S. W., Ayotte, P. et Riva, M. (2015). Household Crowding and Food Insecurity Among Inuit Families With School-Aged Children in the Canadian Arctic. *American Journal of Public Health*, *105*(3), 122-132. https://doi.org/10.2105/AJPH.2014.302290

Russell, J. et Parkes, M. (2018). Exploring homelessness and Indigenous food Systems in northern British Columbia. *Canadian Food Studies / La Revue canadienne des études sur l'alimentation*, *5*(2), 162-179. https://doi.org/10.15353/cfs-rcea.v5i2.212

Société canadienne d'hypothèques et de logement. (2022). *Rapport sur le logement dans le Nord*.

https://publications.gc.ca/collections/collection_2022/schl-cmhc/NH12-321-2022-fra.pdf

Statistique Canada. (2022). *Les conditions de logement des Premières Nations, des Métis et des Inuit au Canada selon les données du Recensement de 2021*. Recensement en bref. https://www150.statcan.gc.ca/n1/fr/catalogue/98-200-X2021007

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Research Article

# From Palestine to Turtle Island: Food as a weapon of colonialism and tool of liberation

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## Abstract

This article examines the role of food as a weapon of colonization and a tool of liberation, with a primary focus on Gaza under Israeli settler colonial rule. The latest wave of Israeli military violence uses food militarization as a key tactic of colonial control and domination. Situating the current genocide in Gaza within broader settler-colonial contexts demonstrates how regimes use food and land to control and eliminate Indigenous peoples. The destruction of food systems in Palestine is part of a broader Israeli attack on land sovereignty, which reflects similar patterns of historical colonial land theft and environmental devastation where we write from, in Canada. In spite of this, food sovereignty remains a crucial aspect of resistance for Palestinians as well as Indigenous peoples in Canada and across the world. This article draws on a panel discussion organized by the Canadian Association for Food Studies/L'Association canadienne des études sur l'alimentation (CAFS/ACÉA), featuring insights from three scholars that connect food systems to colonialism

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and struggles for Indigenous self-determination. The discussion underscores the importance of Indigenous movements and mutual aid networks in the fight for land, food, and cultural sovereignty. These particular struggles are part of a larger global resistance against imperialism and colonialism, illustrating the power of food sovereignty as a means of survival, resurgence, and liberation.

**Keywords**: Imperialism; Indigenous food sovereignty; Palestine; resistance; settler-colonialism

## Résumé

Cet article examine le rôle de la nourriture en tant qu'arme de colonisation et outil de libération, en se concentrant principalement sur la situation de Gaza sous le régime colonial israélien. La dernière vague de violence militaire israélienne utilise la militarisation de l'alimentation comme une tactique clé de contrôle et de domination coloniale. Situer le génocide actuel à Gaza dans des contextes coloniaux plus larges permet de montrer comment les régimes utilisent la nourriture et la terre pour contrôler et éliminer les peuples indigènes. La destruction des systèmes alimentaires en Palestine fait partie d'une attaque israélienne plus vaste contre la souveraineté territoriale. Elle s'inscrit dans des schémas semblables de vols territoriaux historiques par la colonisation et de dévastation de l'environnement qui ont été appliqués là où nous écrivons, au Canada. Malgré cela, la souveraineté alimentaire reste un aspect crucial de la résistance du peuple palestinien aussi bien que des peuples autochtones au Canada et dans le monde. Cet article s'appuie sur une table ronde organisée par l'Association canadienne des études sur l'alimentation / Canadian Association for Food Studies (ACÉA/CAFS), et présente les perspectives de trois chercheurs sur les liens entre systèmes alimentaires, colonialisme et luttes pour l'autodétermination. La discussion souligne l'importance des mouvements indigènes et des réseaux d'entraide dans la lutte pour la souveraineté territoriale, alimentaire et culturelle. Ces luttes s'inscrivent dans le cadre d'une résistance mondiale plus vaste contre l'impérialisme et le colonialisme, illustrant le pouvoir de la souveraineté alimentaire comme moyen de survie, de résurgence et de libération.

## Introduction

On October 7, 2024, Hamas-led armed groups in Gaza launched coordinated attacks in southern Israel, resulting in over 1,000 deaths and 251 people taken captive. In response, the Israeli state initiated a massive bombing campaign and ground invasion into the Gaza Strip, marking the most significant military incursion into Occupied Palestinian Territories since the Yom Kippur War in 1973 and the deadliest since Israel's establishment in 1948, killing over 45,500 Palestinian people to date. Many more thousands remain unaccounted for, believed to be buried under the rubble (United Nations, 2024a) . In an essay published by *Al Jazeera*, Ruwaida Amer (2024) vividly describes her family's struggle to survive under relentless bombardment, capturing the human toll of starvation as being "stripped of our human dignity". While ongoing

Israeli state violence against Palestinians is not new, in March 2024, Francesca Albanese, the United Nations Special Rapporteur on the Occupied Palestinian Territories, announced, "there are reasonable grounds to believe that the threshold indicating the commission of the crime of genocide...has been met" (United Nations, 2024a). More recently, a report to the United Nations General Assembly (United Nations, 2024b) from a committee monitoring the Israeli occupation concluded that Isreal was using "starvation as a method of war" (p. 13) and that its policies and practices "are consistent with the characteristics of genocide" (p. 25). Food militarization and weaponization (Fakhri, 2024; GRAIN, 2024) are tactics that have been used by other settler colonial states, including Canada, to control and displace Indigenous populations (Burnett et al., 2016; Carter, 1990; Daschuk, 2013; Mosby, 2013; Rotz, 2017).

Critical food systems scholars have demonstrated how colonialism and capitalism have shaped food systems over time (Holt-Giménez, 2017; McMichael, 2013; Wittman et al., 2011). In Palestine, we are witnessing an intensified version of the longstanding colonial and capitalist assaults on food and land sovereignty that have occurred across the globe. The infrastructure and economic power of the Israeli state (backed by the United States, Canada, and a small number of minority world countries) has been built upon "colonial expansion, land confiscation, the expulsion of Palestinians, and the expropriation of their wealth and property" (Englert, 2020, p. 1659). This dynamic is evident from Israel/Palestine to Canada/Turtle Island[1], with imperialist power rooted in the systematic destruction of Indigenous food systems and strategies of land theft, weaponization of food, and centralization of power. These dimensions of food systems, colonialism, capitalist accumulation, and dispossession are fundamentally intertwined.

As we write in November 2024, over ninety-five percent of people in Gaza are facing severe and life-threatening levels of food insecurity The United Nations (2024c) reports that Gaza is in a full-blown famine, with people regularly going days without food. Top UN officials warn that, as Israel's siege of Northern Gaza tightens, the "entire population of North Gaza is at risk of dying" due to famine. Over the last year, there have been several news reports of infant starvation and people eating animal feed, contaminated grass, and drinking heavily polluted water to survive (IMEMC News, 2024). In fact, in a landmark decision on November 21, 2024, the International Criminal Court (ICC) rejected Israel's challenges to the Court's jurisdiction and issued arrest warrants for Israeli Prime Minister Benjamin Netanyahu and Defense Minister Yoav Gallant. The Chamber found reasonable grounds to believe that Netanyahu and Gallant are criminally responsible as co-perpetrators for the war crime of using starvation as a method of warfare, alongside crimes against humanity including murder, persecution, and other inhumane acts (ICC, 2024). This ruling fully recognized the use of food as a weapon in the military invasion and genocide.

In the current military campaign, Israel has dropped over 75,000 tonnes of explosives on Gaza (Al Jazeera, 2024). According to satellite imagery, seventy percent of Gaza's tree cover has been destroyed or damaged and roughly one third of greenhouses have been demolished, with ninety percent destroyed in the north (Ahmed et al., 2024). Israeli tanks and trucks have decimated orchards, field crops, and olive groves, replacing them with military infrastructure. The artillery, heavy bombing, and demolition are major threats to air, soil, and groundwater

[1] The area of land that is now known as North America is understood to be Turtle Island by several Indigenous Nations, including the Haudenosaunee and Anishinabe, whose traditional territories cover large areas of central Canada and the United States (US), including the Great Lakes region.

(Ahmed et al., 2024). The invasion has filled Gaza with pollutants—including an estimated 80,000 tonnes of asbestos (Global Construction Review, 2024), chemicals, debris, and heavy metals—and its destruction of infrastructure and the near entire displacement of the regional population has created a growing sewage and waste crisis with people forced to live alongside makeshift landfills and waste dumps (Limb, 2024). The term "ecocide" has been used to describe the depth and breadth of destruction and disaster taking place (Ahmed et al., 2024).

Despite these realities food has remained a major site of resistance, with struggles for food sovereignty serving an essential role in Palestinian efforts for justice and self-determination (Nimer, 2024) as they have been for Indigenous Peoples across Turtle Island, historically and today (Martens et al., 2016; Morrison 2011, 2020; Wittman et al., 2011).

In this article, we examine food as both a weapon of settler colonialism and a tool for resistance and Indigenous self-determination based on a discussion organised by the Canadian Association for Food Studies/L'Association canadienne des études sur l'alimentation (CAFS/ACÉA) Ad Hoc Committee on Palestine and the Right to Food (the Committee) on May 9, 2024. While the settler colonial question in Palestine is widely debated across the social sciences and humanities, our goal is to provide a perspective grounded in critical food studies. We aim to contribute to academic and activist discussions with a focus on the historical, political, and cultural significance of food. Food has repeatedly been used as a tool to seize territory, exert power, and control populations across settler-colonial contexts. As scholars living and working on stolen Indigenous lands, we recognize parallels between the settler-colonial processes occurring in Canada and Palestine. The ongoing crisis in Palestine vividly illustrates the assault on sovereign food systems as a key strategy of colonial conquest. Indeed, the land expulsions we see in occupied Palestinian territories today mirror those that took place across Canada in the seventeenth to nineteenth centuries, the results of which have become normalised and invisiblized with time. However, struggles for Indigenous food sovereignty (see, for instance, the ongoing work of La Via Campesina[2])—as part of larger movements for self-determination—remain a vital force of resistance and solidarity across both contexts (NAISA 2024; ICA 2024).

This article was co-developed by members of the CAFS/ACÉA Committee. CAFS/ACÉA is a non-profit organization made up of academic researchers, food practitioners, activists, artists, and media creators who work to support critical, interdisciplinary scholarship and practice across food systems. The Committee was established in late 2023 out of collective concern regarding the increasing violence and aggression perpetrated by the Israeli state on the people of Palestine and the Canadian government's unapologetic support. After several meetings, the Committee agreed to host a series of sessions for CAFS/ACÉA members and the broader public. The first event, the subject of this article, was a panel discussion titled *Food, Empire, and Colonialism: From Palestine to Turtle Island*. It was publicized via the CAFS/ACÉA listserv and shared with partner organizations and networks across Canada and Indigenous territories. The virtual event was structured as a roundtable with three speakers and an interactive discussion with eighty-nine individuals in attendance.

The three speakers were identified by the Committee as individuals who had been directly involved in scholar-activism surrounding issues of Palestine and food systems and whose perspectives could offer insight into

[2] For more on La Via Campasina, see https://viacampesina.org/en/.

the current moment. They included Justin Podur, a professor at York University and an author and host of the Anti-Empire Project podcast; Max Ajl, a senior fellow at University of Ghent and an associated researcher at the Tunisian Observatory for Food Sovereignty and the Environment; and, Yafa El Masri, a Palestinian refugee and postdoctoral research associate at Durham University. The panel aimed to explore connections between food, colonialism, and resistance by linking the ongoing genocide in Gaza with historical and contemporary colonial projects across Turtle Island and the Arab World. Panelists were invited to consider how imperial and colonial regimes have used starvation and the weaponization of food as tools of violence and control. In the context of the severe settler-colonial violence in Gaza, the discussion sought to address the role of food in culture, identity, political community, and connection to land. Additionally, we aimed to investigate strategies across different colonial contexts for revitalizing, repairing, and sustaining food sovereignty for colonized peoples striving for freedom, life, and liberation.

The panel and subsequent discussion were recorded[3] and transcribed. Each of the three presentations was synthesized and reviewed by the speakers to ensure clarity and accuracy. The Committee then reviewed the text and, through reflection and dialogue, co-developed the article. Drafts were reviewed by the Committee and the three speakers (all co-authors), with feedback incorporated into the final text. A popular adaptation of this article was published in the Conversation Canada (Levkoe et al., 2024).

In the following sections, we provide background and context for the use of food as a weapon and tool of liberation in Palestine and Canada, including a brief overview of settler colonialism and its impacts on Indigenous food systems. We then present a synthesis of the three panel presentations, concluding with an overview of the main contributions from each speaker. We connect these insights to the key themes of food as a weapon of settler colonialism and a tool for resistance and Indigenous self-determination in both Canada and Palestine.

## Background and context

The current military campaign in Gaza is part of Israel's long-standing assault on Palestinian land and sovereignty, ongoing since the 1948 Nakba and the establishment of the Israeli state (Massad, 2006). Several historical processes are essential to make sense of the actions of the Israeli state after its creation in 1948: the historical evolution of Zionism as both a nationalist movement and part of the larger European imperialist project; its contradictions as a secular ideology on one hand and its links between nationhood and religious Judaism on the other; and its adoption of strategies and tactics from other settler-colonial states and military imperial operations in the twentieth century (Khalidi 2020; Klein 2023). Key among these is the weaponization of food. While a detailed history of settler colonialism and Zionism is beyond the scope of this article, we highlight the structural dimensions of settler colonialism in Palestine, its similarities to Canadian settler colonialism, and its impacts on Indigenous food sovereignty.

[3] A recording of the panel discussion is available at https://foodstudies.info/resources/committees.

Settler colonialism is a form of colonialism that focuses on seizing land for material gain and social reproduction, achieved through the invasion of territories with the intent to dominate and displace Indigenous populations (Ajl, 2023a; Coulthard, 2014; Harris, 2018). To secure land for settlement and economic expansion, settler colonial projects—like other forms of colonialism—employ a range of strategies, from direct violence and starvation to assimilation, political repression, and cultural erasure. This erasure includes the suppression of Indigenous stories, ways of life, and presence, whether on maps, in symbols, or through place names.

Settler colonialism, as a form of imperialist relations rather than white supremacy or hatred alone, has been met with strong and ongoing Indigenous resistance. As a theoretical framework, settler colonialism provides a lens to understand the dynamics of colonial capitalism and the broader struggle for national liberation, as well as the larger political project that drives the destruction of Indigenous food systems (Ajl, 2023a). Indigenous food systems in particular are directly targeted by settler-colonial regimes, as they are deeply connected to land, Indigenous nationhood, identity, and cultural continuity—all of which these regimes seek to erase (Morrison, 2011; 2020; Whyte, 2018). However, the destruction of Indigenous food systems is not unique to settler colonialism. It is a hallmark of all forms of colonialism and capitalist expansion, both of which aim to dismantle Indigenous sovereignty and replace it with models that serve global capitalist economies (Ajl, 2023a).

Settler colonialism in Israel/Palestine and Canada/Turtle Island emerged from distinct historical and political contexts and at different historical time periods, yet both share a common foundation of state building through processes of destruction and displacement (Wildeman & Ayyash, 2023). Despite political, cultural, and economic differences, both regimes have used similar land-centred strategies, including state policies and legal mechanisms, to expropriate land and displace Indigenous populations. In Palestine, the Zionist movement played a primary role in establishing the settler colonial regime. Zionism first emerged in the nineteenth century as an ethno-cultural nationalist movement linked to imperialist expansion and backed by the British, with a goal to establish a nation state for the Jewish people (Beinart, 2012). Centuries of antisemitic violence that came to a horrific climax with the Nazi holocaust provided a justification for the emergence of the Israeli state in Palestine in the post-World War II era. The dominant proponents of Zionism eventually focussed their political energies on the colonization of Palestine, believed to be the Jewish homeland according to historical and religious texts (Khalidi, 2020; Massad, 2006; Pappe, 2016), with the national Zionist project constructing the myth that Palestine was "a land without a people for a people without a land" (Muir, 2008, pg. 1). The emergence of settler colonialism in Palestine occurred far more recently than in Canada, where this process was initiated in the sixteenth century by the French and the British. Both regimes, however, are rooted in Western Imperialism and have resulted in significant Indigenous displacement and harm (Shipley, 2020; Wildeman & Ayyash, 2023).

Canada employed various methods to displace Indigenous peoples, including development of laws and policies designed to legalize their displacement and facilitate settler encroachment and accumulation. Key examples include the Indian Act (passed in 1876), the Homesteading Act (also known as the Dominion Lands Act of 1872), the Pass System (1882-1935) (Barron, 1987; Kelm & Smith, 2018), and, more recently, the parks system (Rose, 2020; Vranich, 2023). These laws and policies attracted settlers by allowing them to claim

land for a nominal fee while restricting Indigenous peoples to designated reserves and limiting their access to land outside these areas (Carter, 2016; Manuel & Derrickson, 2021; Simpson, 2014). Together, these measures enabled extensive settler expansion at the expense of Indigenous lands and rights— specifically the expansion of food production for export. In Palestine, the Zionist movement, with direct support from the British, established the state of Israel through both violence and policies like the Absentee Property Law of 1950 (Sneineh, 2022). This law legalised the appropriation and settlement of Palestinian lands and properties following the Nakba of 1948. Much of this land was previously used for agriculture, and its loss has severely impacted Palestinian food sovereignty. In its place, Israeli settlements and more capital-intensive models of agricultural production expanded, with citrus production becoming especially prominent: "investments flowed in for land purchase, primarily through the private sector, which owned most of the Zionist land until World War II, and became the [British] Mandate's major export sector, and even dominated the Jewish-Zionist sector of production" (Ajl, 2023a, p. 270; also see Karlinsky, 2000). Moreover, similar to Canada's creation of national parks that displaced Indigenous communities under the guise of conservation, Israel established parks that worked to displace Palestinians from their lands (Desjarlais, 2022). The establishment of these parks not only destroyed Palestinian villages and agricultural systems but also symbolized a broader strategy of dispossession that framed Palestinian presence as incompatible with nature conservation efforts. Such practices reinforce a colonial environmental order, as Desjarlais (2022) and Sasa (2023) describe, whereby tree planting and conservation initiatives in these parks entrench settler presence while erasing Palestinian presence on and connection to the land.

GRAIN (2023) and Amnesty International (2022) have argued that the destruction of Palestinian agriculture and fishing in both Gaza and the West Bank has been a key component of Israel's ongoing colonial project. Prior to October 7th, roughly one-third of Palestinian farmland lay within "access restricted areas," cutting off 113,000 farmers from their lands (Amnesty International, 2022). Since Israel's construction of a separation wall following the failed 1993 Oslo Accords, large portions of the West Bank, ninety percent of which is farmland, have been under direct Israeli control, with a separation barrier dividing farmland and pastureland from hundreds of Palestinian villages, access to which is governed through Israeli permits and checkpoints. Access to water resources and infrastructure is likewise controlled by Israel, including the collection of rainwater. As a result, Palestinians in the occupied territories consume four to six times less water than Israelis (Amnesty International, 2022).

Israel's blockade of Gaza has been in place since 2007 and has severely affected fishing, an essential part of both food access and cultural practices, due to fuel shortages and restricted access to equipment. Even before the current military invasion, approximately eighty-five percent of fishing areas along the Gaza coast were off-limits to Palestinians, with those who enter unauthorised zones facing risks such as gunfire, imprisonment, and the confiscation of their boats (Amnesty International, 2022). These persistent and evolving strategies of settler colonialism, rooted in notions of "making the desert bloom" as a form of settler land improvement (George, 1979), aim to undermine Palestinian food sovereignty and disrupt connections to land and waters, a key site of cultural continuity and Indigenous nationhood (Whyte, 2018). Despite these challenges, food cultivation and cultural practices persist, along with movements for Palestinian self-determination (Nimer, 2024). Although the scale,

pace, and technologies of violence in Israel's current military campaign have escalated in the last year, they represent the culmination of a long-term, systematic assault on Palestinian land and food sovereignty. This ongoing assault includes the destruction of farmland, the killing and starvation of livestock, the devastation of tree crops, and the dismantling of local food economies.

Many of the settler-colonial strategies at work in Palestine, including the creation of a mythical national entitlement to land, the attempted severing of Indigenous nations' connections with land, and the weaponization of food, are familiar in the Canadian context. These include: the religious justification for the seizure of Indigenous lands via the doctrine of discovery, originating in the fifteenth century, which gave Christians so-called divine rights to claim non-Christian territories and underpinned colonial law in Canada (Barker, 2021; Miller et al, 2010); the destruction of Indigenous food systems such as bison herds, which were replaced with European cattle (Daschuk, 2013); the creation of the Royal Canadian Military Policy to subdue Indigenous people when they were the majority population on the Prairies (Gerster, 2019); settler campaigns for frontier oil and mineral extraction; the replacement of Indigenous food systems with settler state-sponsored programs of agricultural modernization (Carter, 1990, 2016; Yellowhead Institute, 2019); the creation of an apartheid legal system through the Indian Act (Kelm & Smith, 2018); and the restriction of Indigenous movement via the Pass system (Barron, 1987). These settler-colonial, imperial, and supremacist regimes have varied across different contexts and times, but their underlying logics and goals are similar.

## Perspectives on food, empire, and colonialism

In their analysis of the role of food in the current assault on Gaza, Justin Podur, Max Alj and Yafa Al Masri offered insights into the relationships between food, genocide, and colonial expansion more broadly. In this section, we begin with Podur, whose analysis places the current assault on Gaza into a broad global and historical context, highlighting the weaponization of food as a strategy of British imperialism by means of food system globalization. From here, the decades-long assault on Palestinian food sovereignty and the current famine in Gaza are not byproducts of Israeli self-determination, but rather tools of settler colonialism evident in other places. Ajl focuses on the Arab region, reflecting on the Palestinian experience in the context of imperial and colonial expansion. Finally, El Masri draws from her experiences and relationships as a Palestinian refugee to share a personal account of how war and genocide have impacted food culture, practices, and memory for her people. She also presents the role of food in material, cultural, and political care work and practices of resistance. Moving from a global analysis of how imperial and colonial regimes weaponize food, followed by a regional analysis of colonial expansion across the Arab world, to a local ethnographic account of food culture and resistance for Palestinian refugees, these three scholars guide us through diverse spaces, scales, and layers of complexity.

### Justin Podur: Colonial regimes and the dismantling of food systems

Podur reminded us that the systematic and deliberate destruction of Indigenous food systems in Palestine and Lebanon by Israel is part of a broader pattern observed

throughout the Middle East and in other regions where colonial and imperial regimes have weaponized food. In a recent article, Bilal Nour Al-Deen (2024) describes the Israeli scorched earth policy towards Southern Lebanon, which has caused severe environmental and agricultural devastation to the region. Israeli forces have destroyed or damaged 6,000 hectares of agricultural land, including 60,000 olive trees (some of which were 300 years old) as well as citrus, banana, almond, and other non-fruit trees. Additionally, fields have been destroyed and poisoned and fisher people have been killed. As an expert from Lebanon's Southern Green Association puts it, "there is a clear, deliberate burning of the forest cover, destruction of olive vines and fruit trees and contamination of the soil, which explains the intensive use of white phosphorus" (quoted in Nour Al-Deen, 2024).

The destruction of agricultural land, creation of famines through war, engineering of hunger, and enforced dependence on foreign-produced food commodities have been common practice in occupied Palestine since the time of the Nakba. Israel's destruction of the orange, cedar, and olive trees in Lebanon and Palestine is not incidental. Colonial powers often target the livelihoods of occupied peoples by destroying food sources. During the Gorta Mor or Great Hunger in Ireland from 1844-1852 (misnamed and minimised as the "Potato Famine"), this caused nearly one million deaths and forced another million to flee, while Britain continued to export food from Ireland to the mainland. Similarly, after the British East India Company began taking over parts of the subcontinent in 1757, India experienced periodic famines that persisted until its independence in 1947. In *Late Victorian Holocausts*, Mike Davis (2001) estimates that between thirty and sixty million people died in a series of preventable famines in regions including India, China, Brazil, Ethiopia, Korea, Vietnam, the Philippines, and New Caledonia. Davis argues that these deaths were a direct result of the forced integration of local food systems into the global economy controlled by the British Empire—focused on food export and commodification for imperial interests, rather than local sustenance and food sovereignty.

Similarly, the Industrial food regime, dominated by US hegemony that emerged after World War II (with the involvement of international institutions such as the World Bank and the International Monetary Fund), has deployed food as a weapon at many different stages to ensure control over the system in the interests of both US foreign policy and corporate profits. Scholar Vandana Shiva has documented this process in several books, including the recent *Oneness vs. the 1%* (2020). Countries in the global south were encouraged—often by international financial institutions like the International Monetary Fund (IMF) and the World Bank—to borrow and invest in cash crops for export to earn sufficient foreign exchange to service their foreign debt (McMichael, 2013). This approach was part of the broader Structural Adjustment Programs (SAPs) introduced by institutions such as the IMF and World Bank, especially following the debt crisis of the 1980s. Countries across Sub-Saharan Africa (e.g., Ghana, Mali, Kenya), Latin America (e.g., Brazil, Mexico, Colombia), the Caribbean (e.g., Jamaica, Haiti), and South and Southeast Asia (e.g., India, Philippines, Indonesia) were targeted by these programs. SAPs often required participating countries to reduce spending on agriculture and food subsidies, especially for local production, which left populations food insecure, more dependent on food imports, and at higher risk of poverty and starvation (Patel & McMichael, 2009). Gershman and Irwin (2000) argue that SAPs facilitated a net transfer of resources from developing to developed countries, exacerbating poverty by reducing incomes and limiting access to essential social services.

These consequences exacted a "cruel toll in deteriorating life quality, massive physical and psychological suffering, and squandered human potential" (Gershman & Irwin, 2000, pp. 24–25). Many of these nations now find themselves trapped in debt as they have integrated into volatile international agricultural commodity markets, facing fluctuating prices and rising costs for seeds, pesticides, fertilizers, and equipment. This integration undermines local agri-food trade and self-sufficiency. Countries often struggle to repay their loans, leading to economic restructuring and further privatization of national assets, which typically benefits US and allied corporations within the global food system. When local governments resist this erosion of sovereignty and cannot be easily manipulated or overthrown, foreign sanctions are frequently imposed, resulting in widespread hunger and economic instability (Podur, 2020).

These realities amount to the imposition of a monocultural and ecologically harmful agricultural model that replaces the diverse and intergenerational food systems of Indigenous cultures. Regarding Palestine, we observe a conflict that encompasses not only a struggle for land but also a battle over food systems. The intentional destruction of Palestine's food system serves as a primary tool of colonial and imperial power. This is a clear and intense assault on an Indigenous people and their traditional food systems, comparable to the most egregious examples of colonial oppression we have seen over the past 500 years.

### Max Ajl: Colonialism and food system transformation across the Arab region

Ajl delved into the impact of colonialism in the Arab region, examining the critical roles of land and food systems in the struggle for regional and local sovereignty and liberation. Echoing Podur, Ajl contends that the situation in Gaza is not an isolated case but should be understood within the broader context of colonialism and the integration of the Arab world into the global capitalist economy. He argues that the history of the Arab region from the eighteenth century to the present has been marked by a series of colonial impositions, the creation of de facto settler colonies, the semi-proletarianization of Arab populations, and concentration of land ownership (Ajl, 2021). The eighteenth century saw a period of significant European settlement and colonial expansion, both globally and within the Arab region specifically (Amin, 1977). Direct forms of land grabbing and displacement were employed by European powers (primarily Britain and France) alongside debt development policies, including SAPs, that undermined local and regional economies and the region's cultural and political sovereignty. Throughout the nineteenth century, states like Egypt and Tunisia, under leaders such as Muhammad Ali Pasha in Egypt, pursued sovereign development policies (Batou, 1993). These efforts, aimed at modernizing their economies and asserting political autonomy, inadvertently made them more vulnerable to direct colonization and land acquisition by European settlers, who perceived these moves as threats. The process of primitive accumulation—characterized by land seizure and the displacement or depeasantization of local and Indigenous populations—was evident in regions such as Palestine, Algeria, Morocco, and Libya, and resulted in severe genocide and land alienation in Tunisia specifically (Lutsky, 1969). This widespread land dispossession had profound economic, political, and cultural repercussions across the region. One result was a turn to primary sector economies across the region alongside the establishment of several regional military bases. Together, this disrupted local development while also turning these areas into battlegrounds for European inter-imperial conflict.

During the late nineteenth and early twentieth centuries, Iraq, Syria, Lebanon, Egypt, Tunisia, Morocco, and Algeria all began producing export crops for the benefit of European colonial powers, creating conditions for forced return to primary production (Lutsky, 1969). During this time, export-oriented commodity production became further entrenched across the Arab region. People became workers on European estates, and all suffered from colonial income deflation and a decrease in cereal consumption per capita. Along with massive land concentration, this semi-proletarianization of the population produced widespread regional slums and bidonvilles and created large reserve armies of labour. These slums and reserve armies became central to some national liberation struggles in the Arab region (Ajl, 2019).

The harsh conditions of exploitation imposed by European powers fueled widespread national liberation movements, which can be better understood as peasant uprisings. These movements began in Palestine from 1936 to 1939 and reemerged in 1948, with volunteers coming from Tunisia, Egypt, Syria, and other regions (Kanafani, 1972). As Frantz Fanon (1968) emphasized, the struggle for access to land was a central factor driving these armed national liberation movements in the region.

During the period of national developmentalism from 1952 to 1970, post-liberation Arab popular republicanism emerged as a vision for organising society around principles of popular participation, dignity, and development, in contrast to monarchies. However, due to the Cold War, the US sought to undermine any independent development efforts, whether capitalist or communist, to ensure the dominance of client states in the region. In response, peasant and labour movements across the region became increasingly organised from below. These early post-colonial peasant movements achieved significant victories in the struggle for food and land sovereignty through newly independent nation states (Kadri, 2016). Notable examples include agrarian reforms in Egypt during the 1950s and 1960s, the Ba'ath Party's agrarian reforms from 1963 to 1970, cooperative and farmer-led movements in South Yemen and Algeria, and the Dhofar Revolution in Oman, which resulted in changes to land tenure and credit allocation. These reforms improved food availability and supported import substitution, industrialization, and widespread nationalization, with peasants and land playing central roles in Arab republicanism. Amidst this context, the ideals of Maoist China offered an alternative development model centered on a worker-peasant alliance. China's approach to sovereign industrialization, agrarian reform, and indigenous technological development provided a different perspective on development, influencing thinking in the region (Ajl, 2023b).

With the end of the Cold War, the development options available in the Arab region were severely limited as opportunities for supporting popular movements were overshadowed by US-led neoliberal policies, a shift that also contributed to the siege of Iraq. Moreover, international foreign policy efforts targeting Palestine, including the Oslo I and Oslo II agreements, along with widespread anti-terrorism legislation, politically and ideologically besieged Palestinian and national liberation forces (Kates, 2014). As a result, throughout the 1990s, rural poverty surged in parts of the Arab world that avoided direct conflict, such as Egypt. By the 2000s, rural poverty in these areas had reached near-crisis levels, approaching 100 percent.

Finally, more recent US aggression in the Arab region—such as the invasions of Iraq in 2003, Lebanon in 2006, Syria from 2011 to 2015, and Yemen in 2015—has severely undermined and destroyed state sovereignty across the Arab region. The focus of the national struggle has shifted to defending political

sovereignty itself, a need that extends beyond Palestine to include countries like Yemen and Syria. Consequently, class struggle has become primarily centered on securing political sovereignty and creating the necessary political space for meaningful popular development.

## Yafa El Masri: Food and belonging among Palestinian refugees

El Masri examined the experiences of Palestinian refugees, with a particular focus on women, in the context of colonial expansion and displacement. She also investigated the crucial role of food in preserving cultural memory and maintaining connections amid profound loss and upheaval.

After the forced displacement of 1948, many Palestinians became stateless refugees living in waiting zones in neighboring countries such as Lebanon, Syria, Jordan, and Egypt. Referred to as Palestine Refugees in their host communities, they were granted neither citizenship nor other forms of naturalization or legal status by host states[4] (Shiblak, 1996). As a result, they are excluded from accessing work, healthcare, education, and other state services in the places where they have lived for decades (Abdulrahim & Khawaja, 2011). This situation creates a dual exclusion—both from their temporary host countries and from their homeland—leading to widespread poverty, food insecurity, and a loss of heritage and identity (El Masri, 2020).

In response to this double exclusion, Palestinian refugees embrace food and food-making practices as a means of resistance and cultural preservation. Networks of sisterhoods in Palestinian refugee camps in Lebanon bring together women to safeguard and pass on culinary traditions from their villages of origin through cooking, food preparation, and sharing. These networks and practices not only help preserve cultural memory and identity but also counter food insecurity and establish an alternative humanitarian care network. Food sharing serves as a form of resistance against injustices related to food and land and is intricately linked to the broader struggle for the Palestinian right of return.

El Masri is a Palestinian who was born and grew up in the Bourj el-Barajneh refugee camp in Lebanon, where approximately 25,000 Palestinian refugees reside. Her mother had a very close-knit community of friends that grew up together in the refugee camp and cooked food together. When they discussed what to cook, they learned about each other's villages, dishes, soils, and climates and shared stories of home through food. These conversations were casual but also political. For example, one woman's food was considered very spicy, and she explained this by recounting that, historically, Gaza was a major trade port, particularly in the spice trade between Asia and Europe.

El Masri also learned about culturally significant Palestinian foods at the local market and on the land. At the market, vendors shared that Black Calla, or *Arum Palestinum*, also known as *the* Palestinian plant, is a culturally significant food used for stomach disorders. However, toxins need to be removed before eating it and making it into a traditional Palestinian dish. Olive oil, another key food, is purchased by refugees from places close to the Palestinian border. Geographical

[4] Forms of integration, citizenship, or access to rights vary from one state to another. For example, while Palestine refugees are denied citizenship and all forms of rights and access to public services in Lebanon, they enjoy access to a wider range of rights without access to citizenship or naturalization in Syria. In Jordan, even though many Palestine refugees do have access to citizenship and public services, their citizenship documentation is different from those of Jordanians and entails a lower range of citizen rights.

factors, such as full sun exposure and temperatures that never drop below fifteen degrees Celsius, create a good harvest of olives and, therefore, make the best olive oil. The women would pass on stories about culturally significant foods such as thyme, mallow, and sage that they harvest in the landscapes nearby. For example, they recounted that *Maramieh* (meaning "that of Mary"), a type of sage, is what Mary would collect and boil for baby Jesus, to calm his stomach aches and cure his digestive problems.

The lands that refugees were separated from, denied access to, and deprived of knowing are now accessible through the knowledge that is shared and passed down. Refugees connect with these places through stories, shared practices, and the plants and recipes that are handed down from generation to generation. Collective cooking plays a crucial role in addressing food insecurity by facilitating food sharing. According to UNRWA (2024), more than half of the families in Palestinian refugee camps experience food insecurity. Many of these refugees manage this challenge through food sharing—exchanging and sharing culturally significant ingredients and meals. This practice helps sustain their food access and intake while preserving their Palestinian identity in exile. These informal care networks provide an alternative to official humanitarian aid, enabling refugees to support one another with a deep understanding of each other's lives and struggles. This support system allows refugees to live with dignity and avoid the need to publicly rely on increasingly limited humanitarian food services.

Collective cooking and the sharing of culturally significant foods offer emotional access and connection to the land and culture. These practices not only foster a sense of belonging but also serve as a form of resistance against the socioeconomic exclusion caused by Palestinian land dispossession and Lebanese state refugee policies. For Palestinian refugees, who often feel displaced from the lands they inhabit, cooking becomes a way to assert their presence and identity both in their colonized homeland and in their current residence, while they await the possibility of returning home.

Geographies of refugee and colonized food access are shaped by host community policies and settler colonialism. Informal food networks play a crucial role in addressing unequal food access by allowing refugees and colonized peoples to preserve their cultural identities through shared food practices and memories. These networks can serve as a vital tool in exile or against land and food injustices, making food a central element in radical movements advocating for the right of return (El Masri, 2024). While food insufficiency is often framed as an issue of poverty and underdevelopment, food also fosters a sense of belonging and connection to the land. Food underpins the right to the land, and food reveals how we know ourselves and our ancestral lands and culture.

## Discussion

Podur, Alj, and El Masri's contributions underscore the ongoing and systemic issues related to food, land, and forced displacement within the settler-colonial contexts of Arab countries and Palestine, which parallel those in Canada. They also highlight how food has been utilized as a tool for resistance and Indigenous self-determination.

Podur illustrated the role the destruction of sovereign food systems has played in colonial projects across different times and places. He argued that the

situation in Palestine mirrors patterns seen in other settler-colonial regimes that have dismantled Indigenous food systems and forced self-sufficient populations into a commodified global food system, often precipitating or aggravating famine in their wake. Racism was used to dehumanize these groups and justify their poverty, food insecurity, and oppression. The global changes initiated by European colonialism and imperialism in the nineteenth century persisted into the post-World War II era under US hegemony, with support from international organizations like the IMF, the World Bank, and the World Trade Organization (WTO), as well as transnational corporations. Newly independent nations were often trapped in structural dependency and neo-colonial relationships, leading to the continued destruction of sovereign food systems and resulting in famines, land grabs, and environmental crises.

Ajl provided an overview of Western imperial destruction in the Arab region, including Palestine, and its effects on food systems. Starting in the eighteenth century, many Arab countries experienced a series of colonial invasions, leading to the depeasantization and semi-proletarianization of Arab populations, as well as the concentration of land ownership in emerging settler colonies. These conditions sparked widespread national liberation movements throughout the region, including in Palestine. In the post-colonial era, Western imperial interests and Cold War geopolitics led to further interventions by external forces. Like Podur, Ajl highlighted the collusion between global capitalist interests and regional politics, which supported oppressive regimes aiming to suppress the struggles of subordinate and marginalized peoples.

El Masri examined how people become refugees and the specific impacts of war on women, who are often displaced into refugee camps but continue to preserve their food culture and sovereignty. She emphasized the deep connection Palestinians maintain with their food, highlighting that this connection reflects their ancestral ties to the land and the crops it produces. The recipes and meals of the Palestinian table represent a long-standing relationship between the people and their land, built over generations. El Masri also pointed out that food is one of the first aspects targeted by settler colonial violence to undermine Indigenous peoples and their connection to the land. Despite these efforts, Palestinian women actively resist this systematic separation. They leverage relationships, memories, stories, kitchen spaces, markets, and even the very structures designed to exclude them (such as refugee camps) to re-establish their connection to the land and its produce. As she reflected on food sharing in her own refugee camp, we saw its links to broader forms of resistance, including the struggles unfolding in Gaza amid forced starvation.

In both Canada and Palestine, the destruction of Indigenous land and food systems is central to the settler-colonial project. Although the Israeli and Canadian contexts differ in terms of historical realities, they share many stories of land, food, and cultural dispossession. In Canada, the Indian Act restricted Indigenous hunting and fishing on lands seized by the government. Throughout the nineteenth and twentieth centuries, persistent land seizures and efforts at cultural assimilation aimed to dismantle Indigenous food systems and replace them with settler farming and food production. Today, the Indian Act continues to limit the ability of First Nations peoples to make decisions, take control of their own food systems, and attain food sovereignty (Grey & Patel, 2014).

We see a similar assault on Indigenous food sovereignty in Palestine. In Area C of the West Bank, agricultural production is severely restricted and frequently demolished. The Israeli government has enacted policies that damage Palestinian food systems,

including the destruction of essential agricultural structures such as animal shelters, storage rooms, and agricultural roads (HRW, 2016). Additionally, access to water has been restricted, and large areas of the West Bank have been designated as military zones or appropriated for Israeli settlers, further limiting Palestinians' ability to use the land for food production. Indeed, both regions are experiencing a broader trend toward restructuring food systems to focus on export commodity production, which aligns with the interests of Western nations and corporate actors.

These discussions emphasize the roles food systems play in the interconnected systems of settler colonialism, imperialism, enclosure, dispossession, and capitalist accumulation. In each case, communities are forced into capitalist food systems designed to benefit governments and corporations. In fact, similar connections can be drawn between these cases and the current counterrevolutionary war in Sudan (Abbas et al., 2024; Hayes, 2024). Currently, half of the Sudanese population is severely food insecure. However, this violence and starvation are deeply rooted in nearly sixty years of British colonial rule followed by decades of "neoliberal privatization policies recommended by the World Bank," which "decimated the agricultural sector long before this [current] war began" (Hayes, 2024). These policies, like those employed elsewhere, have destroyed local and Indigenous food systems, making the population "more dependent on food imports from the Gulf, Asia, and Europe." (Hayes, 2024).

A common thread running through these cases is the disregard for people's dispossession and the denial of their basic rights, from being removed from their lands and traditional food systems to losing the ability to feed themselves and access food. Another key thread is the role of Indigenous movements, revolutionary efforts, and aid networks in supporting Indigenous survival and the fight for land, food, and cultural sovereignty. A liberated Palestine must, therefore, be understood and achieved within a broader lens of "world-wide struggle against imperialism, neo-colonialism, and underdevelopment" (Ajl, 2023a, p. 279).

Food can also be used as a powerful tool of resistance by enabling communities to take back power and control of their food systems, maintain their cultural identities, reduce economic dependence on oppressive regimes, and sustain their population during crisis. In the Palestinian context, food sovereignty initiatives like victory gardens during the First Intifada demonstrated how local food production supported political resistance and community subsistence (Nimer, 2024). In the Canadian context, Indigenous peoples have used food as a tool for resurgence and resistance through reconnecting to land-based food and governance systems, revitalizing ecological knowledge, and rekindling relationships with the human and more-than-human worlds (Coté, 2016; Robin, 2019). By reclaiming control over food systems, Indigenous peoples challenge the deliberate de-development policies imposed by settler-colonial regimes, resist forced dependency, and strengthen their capacity for steadfastness in the face of ongoing oppression and violence.

## Conclusion

In this article, we have presented perspectives on how food is used both as a weapon of settler colonialism and as a tool for resistance and Indigenous self-determination, from Palestine to Turtle Island. While each place and context differ, the patterns of settler colonialism, enclosure, dispossession, and capitalist

accumulation share many similarities. In both regions, dominant powers have used food to control land and Indigenous populations. Despite these challenges, Indigenous peoples have continually used food as a form of resistance, bringing communities together, revitalizing cultures, rebuilding relationships, and fostering global networks of solidarity. Though we write this at a specific moment in time, the issues we discuss will profoundly affect both Indigenous and settler populations for years to come. We hope to highlight the critical connections between food and food systems and invite scholars in food studies to continue this conversation and take meaningful action.

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## References

Abdulrahim, S., & Khawaja, M. (2011). The cost of being Palestinian in Lebanon. *Journal of Ethnic and Migration Studies*, *37*(1), 151–166. https://doi.org/10.1080/1369183X.2011.521363

Abbas, S., Elamin, N., Elnaiem, R., & Omer, A. (2024). In Sudan, the people's revolution versus the elite's counterrevolution. *Hammer & Hope*. https://hammerandhope.org/article/sudan-revolution

Ajl, M. (2019). *Farmers, Fellaga, and Frenchmen* [Unpublished doctoral dissertation]. Cornell University.

Ajl, M. (2021). Does the Arab region have an agrarian question? *The Journal of Peasant Studies*, *48*(5), 955–983. https://doi.org/10.1080/03066150.2020.1753706

Ajl, M. (2023a). Logics of elimination and settler colonialism: Decolonization or national liberation? *Middle East Critique*, *32*(2), 259–283. https://doi.org/10.1080/19436149.2023.2191401

Ajl, M. (2023b). Planning in the shadow of China: Tunisia in the age of developmentalism. *Comparative Studies of South Asia, Africa and the Middle East*, *43*(3), 456–470. https://doi.org/10.1215/1089201X-10892781

Al-Deen, B. N. (2024, April 7). Israel's war on Lebanon's trees. *The Cradle*. https://thecradle.co/articles-id/24288

Al Jazeera. (2024, April 23). 200 days of Israel's war on Gaza. *Al Jazeera*. https://www.aljazeera.com/gallery/2024/4/23/photos-200-days-of-israels-war-on-gaza

Ahmed, K., Gayle, D., & Mousa, A. (2024, March 29). 'Ecocide in Gaza': Does scale of environmental destruction amount to a war crime? *The Guardian*. https://www.theguardian.com/environment/2024/mar/29/gaza-israel-palestinian-war-ecocide-environmental-destruction-pollution-rome-statute-war-crimes-aoe

Amer, R. (2024, November 16). Stripped of our human dignity: What it means to be hungry in Gaza. *Al Jazeera*. https://www.aljazeera.com/features/2024/11/16/stripped-of-our-human-dignity-what-it-means-to-be-hungry-in-gaza

Amin, S. (1977). *Unequal development: An essay on the social formations of peripheral capitalism*. Monthly Review Press.

Amnesty International. (2022). *Israel's apartheid against Palestinians*. Amnesty International. https://www.amnesty.org/en/wp-content/uploads/2022/02/MDE1551412022ENGLISH.pdf

Barker, A. J. (2021). *Making and breaking settler space: Five centuries of colonization in North America*. UBC Press.

Barron, F. L. (1987). The Indian pass system in the Canadian West, 1882-1935. *Prairie Forum*, *13*(1), 25–42.

Batou, J. (1993). Nineteenth-century attempted escapes from the periphery: The cases of Egypt and Paraguay. *Review*, *XVI*(3), 279–318.

Beinart, P. (2012). *The crisis of Zionism*. Melbourne University Publishing.

Burnett, K., Hay, T., & Chambers, L. (2016). Settler colonialism, Indigenous peoples, and food: Federal Indian policies and nutrition programs in the Canadian North since 1945. *Journal of Colonialism and Colonial History*, *17*(2).

Carter, S. (1990). *Lost harvests: Prairie Indian reserve farmers and government policy*. McGill-Queen's University Press.

Carter, S. (2016). *Imperial plots: Women, land, and the spadework of British colonialism on the Canadian prairies*. University of Manitoba Press.

Coté, C. (2016). "Indigenizing" food sovereignty. Revitalizing Indigenous food practices and ecological knowledges in Canada and the United States. *Humanities*, *5*(3), 57. https://doi.org/10.3390/h5030057

Coulthard, G. (2014). *Red skin, white masks: Rejecting the colonial politics of recognition*. University of Minnesota Press.

Daschuk, J. W. (2013). *Clearing the plains: Disease, politics of starvation, and the loss of Aboriginal life*. University of Regina Press.

Davis, M. (2001). *Late Victorian Holocausts : El Niño famines and the making of the third world*. Verso.

Desjarlais, P. (2022). Planted dispossession – Race, nature, nation. *Transactions of the Jewish National Fund*, *2*. www.jnf.news

El Masri, Y. (2020). 72 years of homemaking in waiting zones: Lebanon's "permanently temporary" Palestinian refugee camps. *Frontiers in Sociology*, *5*, 587063. https://doi.org/10.3389/fsoc.2020.587063

El Masri, Y. (2024). Food-making in the sisterhoods of Bourj Albarajenah refugee camp: Towards radical food geographies of displacement. In C. Hammelman, C. Z. Levkoe, & J. Reynolds (Eds.), *Radical food geographies:*

*Power, knowledge and resistance*. Bristol University Press.

Englert, S. (2020). Settlers, workers, and the logic of accumulation by dispossession. *Antipode*, *52*(6), 1647–1666. https://doi.org/10.1111/anti.12659

Fakhri, M. (2024, June 4). *Starvation, genocide, and the Palestinian people's food sovereignty*. Rutgers University. https://www.youtube.com/watch?v=l0a-0YPfBpo

Fanon, F. (1968). *The wretched of the earth*. Grove Press,

George, A. (1979). "Making the desert bloom" a myth examined. *Journal of Palestine Studies*, *8*(2), 88–100.

Gershman, J., & Irwin, A. (2000). Getting a grip on the global economy, In J. Y. Kim, J. V. Millen, A. Irwin, & J. Gershman (Eds.), *Dying for growth: Global inequality and the health of the poor* (pp. 11-44). Common Courage Press.

Gerster, J. (2019, June 15). The RCMP was created to control Indigenous people. Can that relationship be reset? *Global News*. https://globalnews.ca/news/5381480/rcmp-indigenous-relationship

Global Construction Review. (2024, November 20). *Palestinians exposed to deadly levels of asbestos in ruined Gaza, expert warns*. Global Construction Review. https://www.globalconstructionreview.com/palestinians-exposed-to-deadly-levels-of-asbestos-in-ruined-gaza-expert-warns/

GRAIN. (2023, October 27). *The Palestinian people have a right to their lives, land, and sovereignty*. GRAIN. https://grain.org/en/article/7046-the-palestinian-people-have-a-right-to-their-lives-land-and-sovereignty

GRAIN. (2024, June 11). *Genocide and food weaponisation in Palestine: Global resistance as hope*. GRAIN Land Blog. https://grain.org/en/article/7161-genocide-and-food-weaponisation-in-palestine-global-resistance-as-hope

Grey, S., & Patel, R. (2015). Food sovereignty as decolonization: Some contributions from Indigenous movements to food system and development politics. *Agriculture and Human Values*, *32*, 431–444.

Harris, C. (2018). *A bounded land: Reflections on settler colonialism in Canada*. UBC Press.

Hayes, K (Host). (2024, September 26). *Breaking down Sudan's struggle: What the world is missing* [Audio podcast episode]. Interviewees: Nisrin Elamin and Yusra Khogali. In *Movement Memos*. Truthout. https://truthout.org/audio/breaking-down-sudans-struggle-what-the-world-is-missing/

Holt-Giménez, E. (2017). *A foodie's guide to capitalism*. NYU Press.

Human Rights Watch. (2016). Occupation, Inc.: How settlement businesses contribute to Israel's violations of Palestinian rights. https://www.hrw.org/report/2016/01/19/occupation-inc/how-settlement-businesses-contribute-israels-violations

Indigenous Climate Action (ICA). (2024). *Statement in Solidarity with Palestine*.

https://www.indigenousclimateaction.com/entries/statement-in-solidarity-with-palestine

International Criminal Court (ICC). (2024, November 21). *Situation in the State of Palestine: ICC Pre-Trial Chamber I rejects the State of Israel's challenges to jurisdiction and issues warrants of arrest for Benjamin Netanyahu and Yoav Gallant*. International Criminal Court. https://www.icc-cpi.int/news/situation-state-palestine-icc-pre-trial-chamber-i-rejects-state-israels-challenges

International Middle East Media Center (IMEMC). (2024, June 5). *WAFA: WHO regional director – Some Gaza residents are drinking sewage water and eating animal feed*. Retrieved from https://imemc.org/article/wafa-who-regional-director-some-gaza-residents-are-drinking-sewage-water-and-eating-animal-feed/

Kadri, A. (2016). *The unmaking of Arab socialism*. Anthem Press.

Kanafani, G. (1972). *The 1936-39 revolt in Palestine*. Committee for a Democratic Palestine. https://www.marxists.org/archive/kanafani/1972/revolt.htm

Karlinsky, N. (2000). California dreaming: Adapting the California model to the Jewish citrus industry in Palestine, 1917-1939. *Israel Studies*, *5*(1), 24–40. https://doi.org/10.2979/ISR.2000.5.1.24

Kates, C. (2014, January 27). *Criminalizing resistance*. Jacobin. https://www.jacobinmag.com/2014/01/criminalizing-resistance/

Kelm, M. E., & Smith, K. D. (2018). *Talking back to the Indian Act: Critical readings in settler colonial histories*. University of Toronto Press. https://doi.org/10.1080/02722011.2019.1615266

Khalidi, R. (2020). *The hundred years' war on Palestine: A history of settler colonialism and resistance, 1917–2017*. Metropolitan Books.

Klein, N. (2023). *Doppelganger: A trip into the mirror world*. Farrar, Straus and Giroux.

Levkoe, C. Z., Stiegman, M., Rotz, T., & Soma, T. (October 30, 2024). *Colonialism, starvation and resistance: Food is weaponized, from Gaza to Canada*. The Conversation Canada. https://theconversation.com/colonialism-starvation-and-resistance-how-food-is-weaponized-from-gaza-to-canada-241525

Limb, L. (2024, June 3). The UN is investigating the environmental impact of the war in Gaza. Here's what it says so far. *Euro News*. https://www.euronews.com/green/2024/03/06/the-un-is-investigating-the-environmental-impact-of-the-war-in-gaza-heres-what-it-says-so-

Lutsky, V. (1969). *Modern history of the Arab countries*. Progress Publishers.

Manuel, A., & Derrickson, G. C. R. M. (2021). *Unsettling Canada: A national wake-up call*. Between the Lines.

Martens, T., Cidro, J., Hart, M. A., & Mclachlan, S. (2016). Understanding Indigenous food sovereignty through an Indigenous research paradigm. *Journal of Indigenous Social Development*, *5*(1), 18–37.

Massad, J. A. (2006) *The persistence of the Palestinian question: Essays on Zionism and the Palestinians*. Routledge.

McMichael, P. (2013). *Food regimes and agrarian questions*. Fernwood Publishing.

Miller, R., Ruru, J., Behrendt, L., & Lindberg, T. (2010). *Discovering Indigenous lands: The doctrine of discovery in the English colonies*. Oxford University Press.

Morrison, D. (2011). Indigenous food sovereignty: A model for social learning. In A. A. Desmarais, N. Wiebe, & H. Wittman (Eds.), *Food sovereignty in Canada: Creating just and sustainable food systems* (pp. 97-113). Fernwood publishing.

Morrison, D. (2020). Reflections and realities: Expressions of food sovereignty in the fourth world. In P. Settee & S. Shukla (Eds.), *Indigenous food systems* (p. 284). Canadian Scholars Press.

Mosby, I. (2013). Administering colonial science: Nutrition research and human biomedical experimentation in Aboriginal communities and residential schools, 1942–1952. *Social History*, *46*(91), 145–172. https://doi.org/10.1353/his.2013.0015

Muir, D. (2008). "A Land without a People for a People without a Land". Middle East Quarterly, *15(2). https://www.meforum.org/middle-east-quarterly/a-land-without-a-people-for-a-people-without-1877*

Native American and Indigenous Studies Association. (n.d.). *NAISA Council Statement on Palestine*. Native American and Indigenous Studies Association. https://naisa.org/about/council-statements/naisa-council-statement-on-palestine/

Nimer, F. (2024, August 27). Food sovereignty in a Palestinian economy of resistance. *Al-Shabaka: The Palestinian Policy Network*. https://al-shabaka.org/briefs/food-sovereignty-in-a-palestinian-economy-of-resistance/

Pappe, I. (2006). *The ethnic cleansing of Palestine*. Oneworld Publications.

Patel, R., & McMichael, P. (2009). A political economy of the food riot. *Review*, *32*(1), 9–35.

Podur, J. (2020). *Sanctions as a weapon targeting development*. Sociology of Development: A Section of the American Sociological Association. https://sociologyofdevelopment.com/sectorsnewsletters/sectors-symposia/fall_2020_podur/

Robin, T. (2019). Our hands at work: Indigenous food sovereignty in western Canada. *Journal of Agriculture, Food Systems, and Community Development*, *9*(B), 85–99. https://doi.org/10.5304/jafscd.2019.09B.007

Rose, J. W. L. (2020). Liberal order and climate control: Ontario Parks as environmental settler colonialism (Order No. 28389548). *ProQuest Dissertations & Theses Global Closed Collection*, 2529985529.

Rotz, S. (2017). 'They took our beads, it was a fair trade, get over it': Settler colonial logics, racial hierarchies and material dominance in Canadian agriculture. *Geoforum*, *82*. https://doi.org/10.1016/j.geoforum.2017.04.010

Sasa, G. (2023). Oppressive pines: Uprooting Israeli green colonialism and implanting Palestinian A'wna. *Politics*, *43*(2), 219–235. https://doi.org/10.1177/02633957221122366

Shiblak, A. (1996). Residency Status and Civil Rights of Palestinian Refugees in Arab Countries. *Journal of Palestine Studies*, *25*(3), 36–45. https://doi.org/10.2307/2538257

Shipley, T. (2020). Canada In The World: Settler Capitalism and the Colonial Imagination. Fernwood Publishing.

Shiva, V. (2020). *Oneness vs. The 1%: Shattering Illusions, Seeding Freedom*. Chelsea Green Publishing.

Simpson, A. (2014). Mohawk interruptus: Political life across the borders of settler states. Duke University Press.

Sneineh, M. A. (2022). Explained: Israel's 'Absentees' Property Law' and the eviction of Palestinians from their homes. *Middle East Eye*. https://www.middleeasteye.net/news/israel-palestinian-absentees-property-law-eviction-homes-explained

United Nations. (2024a, May). 10,000 people feared buried under the rubble in Gaza. *UN News*. https://news.un.org/en/story/2024/05/1149256

United Nations. (2024b, November). Israeli practices and settlement activities affecting the right of the Palestinian people and other Arabs of the occupied territories: Report of the special committee to investigate Israeli practices affecting the human rights of the Palestinian people and other Arabs of the occupied territories. UN General Assembly. https://documents.un.org/doc/undoc/gen/n24/271/19/pdf/n2427119.pdf

United Nations. (2024c, October). Entire population of north Gaza at risk of dying, warns UN's top humanitarian official. *UN News*. https://news.un.org/en/story/2024/10/1156171

United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). (2024). *Palestine refugees*.

United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). (2024, November 21). *Gaza: 15 years of blockade*. United Nations Relief and Works Agency for Palestine Refugees in the Near East. https://www.unrwa.org/gaza15-years-blockade

Vranich, R. (2023, Spring). Beyond preservation and use: National parks and settler colonialism in western Canada, 1880s–1930s. *Prairie History,* (10), 5-19.

Whyte, K. (2018). Settler colonialism, ecology, and environmental injustice. *Environment and Society: Advances in Research*, *9*(1), 125–144. https://doi.org/10.3167/ares.2018.090109

Wildeman, J., & Ayyash. M., M. (2023). *Canada as a Settler Colony on the Question of Palestine*. University of Alberta.

Wittman, H., Wiebe, N., & Desmarais, A. A. (2011). *Food sovereignty in Canada: Creating just and sustainable food systems*. Fernwood Publishing.

Yellowhead Institute. (2019). *Land Back: A Yellowhead Institute Red Paper* (Issue October).

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Research Article

# Exploring activist perspectives on Indigenous-settler solidarity in Toronto's food sovereignty movement

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## Abstract

While settler food activists have increasingly taken up the framework of Indigenous food sovereignty in their work, they continue to define food systems on stolen lands. In this article, we explore whether and how food activists in Toronto are building solidarity with Indigenous peoples and movements in their work. Drawing on semi-structured interviews with food activists and content analysis of Toronto food organizations, we identify three main themes: (un)learning, relationship-building, and visioning for the future within systemic constraints. Our findings reveal that many settler food activists engage in (un)learning processes, building decolonizing relationships, and supporting greater Indigenous leadership at their organizations. However, participants' solidarity-building efforts remain in the minority among food organizations more broadly, and there is significant work to be done to prioritize Indigenous struggles for land and sovereignty in food movement work. Further, NGO structure and function, corporatized and donor-centric funding models, and settler colonialism more broadly, significantly constrain the capacities of food organizations to align with Indigenous goals and visions. We argue that settler food activists have a responsibility to more deeply consider the role of food activism in upholding and challenging settler colonialism, to let go of settler claims to authority over food and knowledge systems on stolen lands, and to advocate for deeper systemic changes that redistribute power and resources to Indigenous peoples and Indigenous-led initiatives.

Keywords: Activism; food movements; Indigenous food sovereignty; settler colonialism; settler-Indigenous solidarity

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## Résumé

Alors que les personnes militantes de l'alimentation issues de la colonisation adoptent de plus en plus le cadre de la souveraineté alimentaire autochtone dans leur travail, elles continuent à définir les systèmes alimentaires sur des terres volées. Dans cet article, nous cherchons à savoir si et comment les activistes de l'alimentation de Toronto construisent une solidarité avec les peuples et les mouvements autochtones dans leur travail. À partir d'entrevues semi-structurées avec des activistes de l'alimentation et d'une analyse de contenu d'organisations alimentaires de Toronto, nous identifions trois thèmes principaux : l'apprentissage (ou le désapprentissage), l'établissement de relations et la vision quant à l'avenir à l'intérieur de contraintes systémiques. Nos résultats révèlent que de nombreuses personnes militantes de l'alimentation issues de la colonisation s'engagent dans des processus de (dés)apprentissage, dans l'établissement de relations de décolonisation et dans l'appui à un plus grand leadership autochtone au sein de leurs organisations. Cependant, les efforts de solidarité des personnes participantes restent minoritaires dans les organisations alimentaires en général, et il reste beaucoup à faire dans le mouvement alimentaire pour donner la priorité aux luttes autochtones pour la terre et la souveraineté. De plus, la structure et la fonction des ONG, les modèles de financement corporatistes et fondés sur les donateurs, ainsi que le colonialisme de peuplement en général limitent considérablement les capacités des organisations alimentaires à se mettre en phase avec les objectifs et les visions autochtones. Nous soutenons que les activistes de l'alimentation issus de la colonisation ont la responsabilité d'examiner plus profondément le rôle de l'activisme alimentaire dans le maintien et la remise en question du colonialisme de peuplement, de laisser tomber les prétentions coloniales d'autorité concernant l'alimentation et les systèmes de connaissance sur les terres volées, et de plaider pour des changements systémiques plus profonds qui redistribuent le pouvoir et les ressources aux peuples autochtones et aux projets menés par des personnes autochtones.

## Introduction

Imagine corn, beans, and squash in a bowl of Three Sisters stew. Each spoonful, a dose of all the complex carbohydrates and amino acids needed to nourish the body, and a reminder of the longstanding symbiotic relationships between these plants and many Indigenous peoples across Turtle Island. Author one first learned about the Three Sisters at a community kitchen event run by Chef Johl Whiteduck Ringuette from NishDish, who led a group of undergraduate students in making a Three Sisters stew. While cooking together, Chef Johl taught the group about the Three Sisters cultivation system and its importance to Anishinaabe peoples' food sovereignty—not only for growing traditional foods in a sustainable way, but also for restoring the highly nutritious Anishinaabe diets disrupted by colonialism. As a white settler student interested in the international food sovereignty movement, Author one wondered why there was so little discussion—both in her classes and in food activist spaces she had been in—surrounding what it means to seek food justice or "sovereignty" over food

systems in a settler colonial context. Learning about *Indigenous* food sovereignty from Chef Johl marked a transformative moment in shifting Author one's thinking around food activism and white settler complicity and responsibility.

Author one is a settler with Norwegian, Scottish, and Polish-Ashkenazi Jewish ancestry. Her ancestors on both sides came to the so-called United States through Ellis Island in the early 1900s seeking economic opportunity and safety from persecution as Jews on her father's side. This positionality has pushed her to think more deeply about her place on the lands she calls home, and her responsibilities and obligations to work to dismantle structures of oppression as a settler ally. Author two is a white settler of English, Austrian/German, and Acadian ancestry. Her research and activism aim to support collective efforts for environmental justice and wellbeing and greater settler solidarity for Indigenous sovereignty, justice, and self-determination.

In Canada, conversations around food system change have increasingly aligned with the food sovereignty framework through calls for communities to have greater autonomy and access to healthy, culturally appropriate, and sustainably produced foods. Here, we engage with "food sovereignty"[1] as a framework for the most current iteration of many food movements' aspirations, grounded in a rejection of the neoliberal capitalist food system and affirmation of diverse sustainable food practices (Martínez-Torres & Rosset, 2014; Akram-Lodhi, 2015). While the concept's "big tent" politics has been both celebrated (Patel, 2009, p. 666; McMichael, 2015) and criticized (Bernstein, 2014; Li, 2014), food sovereignty remains essential to many food activists' visions for food system change, including participants in this project.

However, Indigenous and settler ally scholars have called into question settler food activists' claims to defining food systems on stolen Indigenous lands (Morrison, 2011; Coté, 2016; Daigle, 2017; Kepkiewicz, 2018; Bohunicky et al., 2021). This is problematic in a context where settler privileges to own and farm land are founded upon the dispossession, exploitation, and genocidal violence inflicted upon Indigenous peoples. After all, the settler colonial project took up a range of strategies and logics over space and time, but the weaponization of food remained an essential tool, from the theft, conversion, and destruction of lands that formed the basis of Indigenous food systems to state-sanctioned policies of starvation.[2] Today, settler colonial logics continue to create inequities in the food system, not only through policy restrictions on traditional hunting practices or development projects that enclose and degrade traditional territories, but also, in some ways, through the very food movements that seek food justice.

Until recently, discussions of how settler colonialism shapes and is reproduced through food movement practices have received scant attention in food movement literature. A small group of scholars exploring Indigenous-settler relations in food movements in Canada have raised concerns about the ways that settler-led food sovereignty movements can work to uphold settler colonialism by: advocating for state-led policy changes that further affirm settler state jurisdiction over Indigenous lands; focusing primarily on settler farmer dispossession of and "'rights' to land; and failing to challenge private land ownership regimes, which

[1] We also see food sovereignty's intersectional approach and focus on "sovereignty" as helpful for encouraging dialogue surrounding Indigenous struggles for land, life, and sovereignty and settler responsibilities to support them.
[2] For resources on food as a tool of the Canadian colonial project, see *Lost Harvests* by Sarah Carter (1990), *Clearing the Plains* by James Daschuk (2013), and *Administering Colonial Science* by Ian Mosby (2013).

continue to be used to 'legally' justify the occupation of Indigenous lands" (Kepkiewicz & Dale, 2018, p. 986; Daigle, 2017; Rotz & Kepkiewicz, 2018; Bohunicky et al., 2021). Because of these issues, Indigenous and settler ally scholars have called upon settler food activists to reimagine approaches to food system change in ways that confront settler colonialism and support Indigenous struggles for land and sovereignty (Morrison, 2011; Daigle, 2017; Kepkiewicz, 2018; Bohunicky et al., 2021; Littlefield et al., 2024). As Bohunicky et al. (2021) remind us, "in a settler colonial context we must ask: access and redistribution for whom, protection from what, and control by who" (p. 142)? This study responds to scholars' calls for more empirical work on how settler food activists in Canada address these questions.

This article explores whether and how food activists in Toronto work to build solidarity with Indigenous peoples. Based on semi-structured interviews with nine settler[3] food activists in Toronto and content analysis of seventeen Toronto food organizations' websites, we present the findings following three main themes that emerged from participants' reflections: (un)learning, relationship-building, and visioning for the future within systemic constraints. Our research shows that many settler food activists are working towards solidarity with Indigenous peoples by engaging in (un)learning processes, building decolonizing relationships, and supporting greater Indigenous leadership at their organizations. Meanwhile, our findings suggest that participants' solidarity-building efforts remain in the minority among Toronto food organizations more broadly, and significant work is still needed to prioritize Indigenous struggles for land and sovereignty in food movement work. Participants highlighted the limited capacities of food organizations to fully align with Indigenous goals and visions due to NGO structure and function, corporatized and donor-centric funding models, and settler colonialism more broadly. One potential way forward is to build greater coordination between food movement actors across scales to resist problematic models and support more systemic shifts towards decolonization. Ultimately, settler food activists have a responsibility to consider more deeply the role of food activism in upholding and challenging settler colonialism, to let go of settler claims to authority over food and knowledge systems on stolen lands, and to advocate for deeper systemic changes that redistribute power and resources to Indigenous peoples and Indigenous-led initiatives. The following sections provide an overview of food sovereignty in the context of settler colonialism, our research methods, and a detailed discussion and analysis of our findings.

[3] Following Phung (2011), Jafri (2012), and Dhamoon (2015), we understand "settler" to refer to a broad spectrum of differently-positioned peoples in Canada with varying degrees of privilege, complicity, and responsibility. Our use of this term is not to conflate all settlers as the same, but rather, to draw attention to the particular ways each one of us has come to this place as non-Indigenous peoples—experiences which are unique and also connected to intersecting systems of domination—and to encourage dialogue around our responsibilities to Indigenous peoples. This project involves a range of settler voices, including white settlers and People of Colour raised in so-called Canada and recent immigrants.

## Food sovereignty in the settler colonial context

Examinations of food sovereignty as it relates to settler colonialism and Indigenous struggles for self-determination have largely remained "an afterthought" in the broader food sovereignty literature (Martens et al., 2016, p. 21), though this field has expanded in recent years as scholars have called for greater engagement (Morrison, 2011; Coté, 2016; Daigle, 2017; Kepkiewicz, 2018). Central to these critiques is the call for greater interrogation of settler colonialism as the structural context in which food movements operate in Canada. Settler colonialism is distinct from other forms of colonialism, as there is no spatial separation of the metropole from the colony (Tuck & Yang, 2012). That said, important critiques of settler colonial theory have shown that the strong separation between settler and other forms of colonialism do not reflect the messiness, fluidity, or strategic variation of colonial realities across space and time, realities that may include logics of exploitation as well as elimination. Indeed, many cases, especially throughout Africa, do not fit neatly into either category of "settler" or "franchise" colonialism (Englert, 2020). Following Kelley (2017), Englert (2020, p. 1650) illustrates this messiness "in the case of enslaved African populations in the Americas, which are neither settlers afforded the right to exploit, expropriate and/or eliminate the Indigenous populations, nor part of the Indigenous population whose claim over the land is to be undone." Kelley argues that sharp distinctions between exploitation or elimination prioritizes certain colonial formations; while ignoring the many contradictions it presents for others, namely those in Africa and colonized regions outside of the Anglo-Saxon world (Englert, 2020). Rather than placing a firm separation between different colonial formations, it is perhaps more useful to consider the different strategies and relations that settler colonies have deployed, "which can include exploitation, elimination, or both. One strategy can morph into another through such processes as the development of new strategic necessities for the colonial powers, interactions with Indigenous resistance, or changing economic relations with the metropolis" (Englert, 2020, p. 1654). In this sense, Englert focuses on aims and goals of settler colonialism, as opposed to specific methods, which encourages analysis "of the multiplicity of settler strategies within an overall strategy of accumulation." (2020, p. 1657) This point is crucial because it illustrates the ways that settler colonial formations can evolve alongside changing political economic conditions and spaces. In the case of the food movement in Canada, the geopolitical history and context of settler colonialism as well as neoliberal reform and the corporatization of nonprofits and charities are all pertinent to how current strategies unfold.

Access to and control over territory has been a key motive, but the exploitation of labour has also been a significant feature of settler accumulation at certain times, places, and within specific industries—including agriculture (Wolfe, 2006; Coulthard, 2014). Such settler colonial violence has continued and "shape-shifted" into new forms (Corntassel, 2012, p. 95) involving "force, fraud, and more recently, so-called 'negotiations'"[4] (Coulthard, 2014, p. 7). These strategies, Coulthard (2014) argues, make up the "politics of recognition" (p. 3), which advance state agendas of co-optation and assimilation with the aim of reproducing settler colonial state power over Indigenous lands, peoples, and sovereignty. While "decolonization" and "reconciliation" are increasingly

[4] For example, title claims, resource development proposals, and self-government agreements.

taken up in settler state discourse, Tuck and Yang (2012) point out that these ideas become mere "diversions" and "half steps" without the repatriation of land—"all of the land"—to Indigenous communities, as true decolonization would entail (p. 7, 10).

In this context, Indigenous food sovereignties connect to larger struggles for self-determination. As Morrison (2011) explains, Indigenous food sovereignty is simply a new name for what has always been a "living reality" for Indigenous peoples through food practices that uphold their "long-standing responsibilities to nurture healthy relationships" with the earth (p. 97). Indigenous scholars Coté (2016), Daigle (2017), Whyte (2018), and Robin (2019) explore Indigenous food systems from Indigenous perspectives, underscoring the ways that Indigenous food sovereignties are pluralistic and differentially situated in communities' own political and cultural traditions. Kyle Whyte (2018) underlines the intersectional nature of Indigenous food sovereignties which are intertwined with Indigenous societies' "collective continuance" more broadly. Whyte (2018) describes this as the "adaptive capacity" of a society to sustain and reproduce itself, rooted in the deep relationships between human institutions and ecosystems (p. 7). As Nisqually leader Billy Frank Jr. explains, "without the salmon, there is no treaty right," speaking to the ways that salmon conservation is inextricably connected to his community's struggles for self-determination (as cited in Whyte, 2018, p. 4). In this way, Indigenous food sovereignties are grounded in the intersectionality between food, land, culture, and governance that make up Indigenous nationhood, impelling a deeper understanding of "food sovereignty" as embedded in the entirety of Indigenous lifeways.

These perspectives complicate settler activists' claims to define food systems on stolen lands. Scholars problematize food sovereignty's general focus on liberal notions of rights and sovereignty, which center the nation-state and fail to recognize Indigenous peoples' cultural responsibilities and relationships (Morrison, 2011; Corntassel, 2012; Coté, 2016; Daigle, 2017). As Daigle (2017) argues, Indigenous understandings of relationships with land, water, animals, and plants as non-human kin "complicate Euro-centric notions of sovereignty that are based on Lockean conceptions of land as property that can be enclosed, owned, and controlled" (p. 300). Outlining the struggles of the Algonquins of Barriere Lake against colonial incursion, Pasternak (2017) explains that Indigenous governance structures are based on responsibility to their relations, meaning that the "authority to have authority rests in ontologies of care" (p. 269; Coté, 2016). Such conceptualizations affirm the ways that "multiple sovereignties are lived every day according to a relational politics that is based on kinship relations and interdependent ecologies" (Daigle, 2017, p. 300). In sum, Indigenous food sovereignty is about much more than the familiar bundle of rights relating to food production and consumption, where a "right to define 'agricultural policy' is indistinguishable from a right to be Indigenous" and thus a right to fully realized and recognized sovereignty (Grey & Patel, 2015, p. 439; Hoover & Mihesuah, 2019).

Taking guidance from these insights, how can settler food activists act in solidarity with Indigenous peoples through their work? This is the primary question that guides this research. "Solidarity," like "decolonization," is a term that has often been overused, performative, and disconnected from real action (Tuck & Yang, 2012; Snelgrove et al., 2014). To counter this, scholars argue that settlers should see themselves as "sites of uncomfortable change" and deepen their (un)learning through self-reflexivity about positionalities, ongoing engagement with difference, and embracing difficult emotions or discomfort (Boudreau Morris, 2017, p.

469; Corntassel & Gaudry, 2014; Davis et al., 2017). However, there is a significant risk of self-reflection becoming self-indulgent when it re-centers settler feelings, emotions, and positionalities (Jafri, 2012; de Leeuw & Hunt, 2018; Gani & Khan, 2024). As Snelgrove et al. (2014) explain, considering questions of settlerhood and one's position on Indigenous lands—whether as an invited guest, visitor, trespasser, immigrant, or refugee—should aim to foster "a responsibility-based ethic of truth-telling to identify and act upon new pathways to Indigenous resurgence" (p. 4). Engaging with the difficult emotions that such truth-telling may inspire is also essential to prevent what Tuck and Yang (2012) call "settler moves to innocence," where we avoid taking responsibility for our involvement in settler colonialism (p. 9).

Beyond self-education and reflexivity, scholars argue that Indigenous-settler solidarities must be grounded in actual practices and place-based relationships and approached as incommensurable but not incompatible (Tuck & Yang, 2012; Snelgrove et al., 2014; Kepkiewicz, 2018). Snelgrove et al. (2014) explain solidarity as a messy process of "ongoing feedback loops" of trust and accountability to one's relationships, both human and non-human (p. 19). Thus, solidarity-building is understood to occur at different scales, from self-education to community engagement, which aligns with Corntassel and Gaudry's (2014) pedagogy of "insurgent education" (p. 168). They argue that insurgent education is an important part of building solidarity with Indigenous resurgence movements through practices such as experiential education and restoration of Indigenous protocols and leadership that re-center Indigenous peoples and relationships and foster accountability for taking direct action to dismantle structures of oppression (Corntassel & Gaudry, 2014). In a context of ongoing settler colonial violence and climate change, Whyte (2020) explains, it is essential that we work collectively to repair and establish kin relationships grounded in principles foundational to many Indigenous philosophical traditions including consent, trust, accountability, and reciprocity—something that food activist spaces may be particularly helpful in facilitating with their focus on land, community-building, and environmental health and justice.

For settler food activists to enter relationships of solidarity with Indigenous peoples, approaches to food system change ought to be reframed in ways that center Indigenous resurgence and self-determination as a "precondition" to food sovereignty in Canada at large (Kepkiewicz, 2018, p. 60). The extent to which these changes occur within food movements in Canada is unclear, but it appears that some shifts are underway. At the national level, the People's Food Policy Project (PFPP) involved consultation with the Indigenous Circle at Food Secure Canada, who developed a seventh pillar of food sovereignty in addition to six pillars developed at La Via Campesina's Nyéléni Forum in 2007: "food is sacred" and embedded in a web of human-environment relationships that must be respected (PFPP, 2011, p. 10; Kneen, 2011). However, as Kepkiewicz (2018) points out, the PFPP's (2011) final report remained focused primarily on settler food systems and government policy "without attention to the ways that settler systems and policy often inhibit many of the ideas discussed by the Indigenous Circle" (p. 18). More recently, Food Secure Canada has engaged in consultation processes with people involved in food movement work to develop a new food policy for 2030. Based on their reporting, it seems that Indigenous food systems are being prioritized in these preliminary discussions (Food Secure Canada, 2023).

In Ontario, the Yellowhead Institute has published a report on Indigenous food sovereignty and the challenges Indigenous communities face in accessing

resources, support, and funding for food-related initiatives. Drawing on interviews with Indigenous and non-Indigenous peoples who have engaged with the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA), Robin, Rotz, and Xavier (2023) outline how proposals for Indigenous-led food and agricultural projects are frequently rejected or saddled with "inappropriate, unsuitable, and unattainable project revisions and timelines" by OMAFRA review committees (p. 10). Their findings reveal that exclusion, paternalism, and lack of understanding of Indigenous rights, knowledges, and experiences remain key issues within OMAFRA, leaving Indigenous peoples structurally excluded from decision-making and policy development processes (Robin et al., 2023). In dialogue with this report, Kaitlin Rizzari (2023), of the Tkaronto Plant Life initiative, points out that OMAFRA does not include any "policy that protects, facilitates and encourages food growing, animal raising, and skill building for Indigenous and BIPOC farmers within cities," effectively excluding many urban and Indigenous initiatives in Toronto that deviate from conventional agro-centric practices (para. 7). Although Indigenous food activists continue to carve out space for themselves amidst these challenges, there is evidently much work to be done to support Indigenous food sovereignties and unsettle settler-dominated movements for food system change (Littlefield et al., 2024).

## Methods

The approach to this research was guided by Indigenous, feminist, and anti-colonial literatures that have pushed back against longstanding Eurocentric and heteropatriarchal biases, including false claims to objectivity and neutrality in research and views of the researcher as a rational authoritative expert (McDowell, 1992; Rose, 1993; Kovach, 2021; Tuhiwai Smith, 2021). We recognize the historical role that research has played in furthering the colonial project through the transplanting of academic institutions from Europe, mapping of "empty" lands, and circulation of "travellers' tales" of the "Other" that reinforced damaging narratives of Indigenous people and affirmed imperialist discourses of discovery and settlement (Tuhiwai Smith, 2021, p. 8). Such colonial legacies and Eurocentric biases continue to define academia today through, for example, notions of individual intellectual property rights and the researcher/subject binary upheld in ethics reviews and peer-review processes (Gaudry, 2011; Stiegman & Castleden, 2015; Tuhiwai Smith, 2021). Following Adam Gaudry (2011), we seek to support "insurgent" research by challenging the academy's assumptions and amplifying Indigenous and other anti-colonial perspectives.

Two main principles underpin this research. First, we take guidance from Indigenous methodologies and aim to foreground "relational accountability," which "implies that all parts of the research process are related, from inspiration to expiration, and that the researcher is not just responsible for nurturing and maintaining this relationship but is also accountable to 'all your relations'" (Louis, 2007, p. 133; Wilson, 2008). This entails building relationships throughout and beyond the research, engaging in acts of learning and reciprocity, being accountable to the communities one is involved with, and pushing back on the extractivism that has historically defined Western research (Wilson, 2008; Kovach, 2021). In practice, this involved: conducting preliminary outreach to scholars and activists involved in food activist work in Toronto to incorporate their perspectives during initial research design; contributing time as a volunteer at two food

organizations; engaging in pre- and post-interview conversations; and providing compensation in the form of honorariums to participants. This has also involved longer-term learning and practice to create and support native habitat, food, and pollinator spaces in our communities, as well as ongoing Indigenous solidarity and land defense organizing. With all of this said, we recognize that relational accountability is a methodological ideal that cannot be fulfilled in one project, but rather, is a lifelong commitment.

Second, self-reflexivity informed the project's methodology, from the research design to data collection. Feminist scholars have discussed the importance of critical reflection on one's positionality to situate oneself within the larger power relations that shape research and knowledge production and be transparent about one's biases and subjectivity—an always incomplete yet generative process for understanding our relationships and responsibilities (Rose, 1997; McDowell, 1992; Moss, 2000). During volunteer sessions, preliminary outreach, and during interviews, reflexive discussions occurred regularly between Author one and other settler food activists. The informality of many of these conversations enabled an open space for what Kohl & McCutcheon (2014) call "kitchen table reflexivity" (p. 3) for participants to engage with discomfort and unpack their positionalities in relation to structures of power—which seems important to building relationships and creating space for more critical conversations in the future.

Through ongoing critical reflection and informal discussions, the idea arose to reverse the gaze and focus on settler food activists of diverse backgrounds. This choice was informed by the methodologies of Kepkiewicz (2018) and Bohunicky et al. (2021), whose work this project aims to build upon at the city scale, as well as anthropologist Laura Nader's call to "study up" and return the gaze to the "culture of power rather than the culture of the powerless" (as cited in Tallbear, 2014, p. 4). While this statement reflects an oversimplified binary, it resonates with our view that white settlers (including ourselves) have a responsibility to address structures of oppression which they benefit from and are complicit in. As Kepkiewicz (2018) argues, reversing the gaze in the context of food activism is not as straightforward as studying "up," but rather occurs "within or across" diverse food activist communities, where individuals are differently situated along varied axes of power (p. 35)—a point that becomes particularly important in an urban context like Toronto. This project aims to focus on settler food activists to explore how peoples with diverse positionalities understand their role in supporting Indigenous struggles for sovereignty.[5]

Author one conducted semi-structured interviews with nine non-Indigenous food activists in Toronto. Participants were recruited using a purposive snowball sampling method and included seven staff members and two volunteers at two Toronto food organizations.[6] Although the project aims to reverse the gaze by

[5] We recognize that there is a risk in centering settler voices by not including Indigenous voices in this project. The choice to reverse the gaze and focus on settlers was informed by preliminary conversations with activists and scholars involved in Toronto's food activist community which shaped the research design. These activists and scholars urged Author one to reach out primarily to settler activists in an effort to prevent further labour being placed on Indigenous people to educate settlers on their responsibilities to Indigenous peoples, as there are many resources that settlers can access to deepen their (un)learning, such as the sources engaged with in this project.

[6] The choice to focus on food organizations in Toronto was primarily logistical, as this provided an avenue for establishing contact with people involved in food movement work. We also acknowledge that the focus on "food" organizations may be inherently colonial, as it implies a separation of food from other facets of life, which contrasts with many Indigenous cultures' view of food as inextricable from the whole of Indigenous cultures (Morrison, 2011; Settee & Shukla, 2020). Through this research, we have become aware of some Indigenous organizations that may not have an explicit "food" focus but are

focusing primarily on settler food activists, it was also important to reach out to Indigenous food activists in hopes of including their perspectives. However, time constraints on the research and the intense workloads of Indigenous activists who we were in contact with prevented this from being possible. As some participants explained, their Indigenous colleagues were stretched-thin and managing numerous roles and projects, including leading Indigenous-centered programming at their organizations. While interviews were the primary data source, a content analysis of seventeen Toronto food organizations' (sixteen settler-led, one Indigenous-led) websites was also conducted for context.

Interviews were transcribed and coded thematically using NVivo. Following participants' reflections on Indigenous-settler solidarity-building, the three main themes that structure the following sections ((un)learning, relationship-building, visions for the future within systemic constraints) loosely follow a scalar progression from micro to macro, yet, in reality, we do not understand these processes to fall so neatly into these boundaries. Rather, we see these processes as informing one another across scales in non-linear ways. While many participants expressed that one area (i.e., relationship-building in food activist communities) remained their primary focus, they also underlined that solidarity-building cannot occur in isolation and ultimately requires action and collaboration across scales.

## Findings

### (Un)learning towards solidarity

Participants highlighted settler education as a key component of building solidarity with Indigenous peoples in food activist spaces. Most participants underlined the need for settlers to take responsibility for educating themselves to prevent placing further labour on Indigenous peoples and to approach relationships in respectful and informed ways. This is not to say that participants saw settler education as occurring only at an individual level; rather, they articulated (un)learning as both an internal journey and a collective process that occurs through the building of community relationships. Many viewed education as a first step for settlers, but also stressed that, in the words of one self-identified Black settler, "there's no wiping our hands of it. It's ongoing and it's forever."

Some participants discussed efforts at their organizations to engage in uncomfortable conversations about settler colonialism, reconciliation, and settler positionalities to facilitate settler (un)learning. The participant mentioned above explained how team meetings have increasingly centered on critical conversations which "have gotten super uncomfy." Most participants viewed this discomfort as an important emotion for settlers to sit with. One newcomer activist expressed their "fear of making mistakes and fear of doing the wrong thing or saying the wrong thing," making the process "of engaging with these [topics] stressful"—a common challenge among

nonetheless engaged in resurgent food struggles alongside other types of programming. We are intentionally not naming them here, as such information could identify participants who work in partnership with some of these organizations. However, we want to emphasize that Indigenous activists and organizations are undoubtedly an active part of Toronto's food movement.

settlers in learning about and acknowledging their complicity in settler colonialism. As one Black activist discussed, settlers' own egos and fear can prevent more transformative conversations, as it is difficult "to hold words that feel scary to us." Echoing other participants' reflections, they maintained that for some participants "'settler' isn't a great word, but it's also a truthful word and if we acknowledge things, then we can grow from it."

Unpacking one's positionality was highlighted by most participants as essential to deepening their (un)learning around settler complicities and responsibilities. Consistent with dialogues in scholarship exploring settlerhood (Phung, 2011; Jafri, 2012), many participants discussed settlerhood as a spectrum and underlined the difficulty of articulating what it means to be a "settler," especially in Toronto where many people identify primarily with terms such as "immigrant," "newcomer," or "refugee." One Black activist reflected on this complexity as a descendant of enslaved African people: "For myself, [settler] is not something I identify as.... I don't come from... Well, ironically, my people are part of European colonization here and that history of settlerism, settling here. But we are stolen people brought to work on stolen land."

Another activist self-identified as a refugee, highlighting the complexity of settlerhood for people who carry experiences of displacement: "A lot of us, in modern times, are scattered across the planet... We had a civil war which resulted in a lot of people being displaced. So, I think I would consider myself a settler of sorts here on Turtle Island, but my political relationship to settler colonialism feels different."

Others echoed this point, with one person explaining their position as a child of immigrants from an African country as being interconnected with "colonialism" and other forces "that made it so people felt like they had to come to the West for a 'good life.'"

Throughout these reflections on positionality, some participants underlined that settler experiences of oppression—themselves varied and intersectional—should not be equated with those of Indigenous peoples. As one Black settler reflected, "Even though I didn't grow up on the land my family is from, I don't feel lost. I can speak the language, my name literally is that, I feel such a deep connection... My mom gave me a book of how [our] people came to be. And that is knowledge that many Indigenous people on this land do not get."

The refugee activist mentioned above also highlighted the challenge of acknowledging settler privileges and complicities within communities carrying political trauma: "A lot of our parents come here and their focus is like: get a job, get a house, stay stable. And [they] don't even want to be politically active because they hold a lot of trauma when it comes to political activism... It's like: 'I - just - want - to - settle.' And therein lies the issue... Whose land are you settling on?"

Considering that immigration processes are facilitated by the settler state, another participant said their position as a South Asian immigrant-settler makes them complicit in upholding settler colonialism. While it was clear that some participants were thinking deeply about complicity, only about half directly addressed this.

Many participants highlighted these (un)learning processes surrounding positionality as helpful for building mutual understanding of the intersectionality between systems of power. As a "stolen person on stolen land," one Black activist said, "there's a shared history of that oppression in the land" which they use as a basis for building solidarity with Indigenous peoples in their work. For refugees, another activist noted, "once you learn the history, it's pretty easy to be like, 'okay, well I'm actually very familiar with this history.... That's what happened to my people in my country.'"

One immigrant settler underlined that all peoples, including white settlers, have experienced disconnection from relationships to land through colonial capitalist forces and, even as we may benefit in certain ways and to varied degrees, these systems ultimately harm us all.

In their reflections on settler education, many participants expressed how engaging with Indigenous knowledges[7] has been essential to their (un)learning. Some participants highlighted how learning from Indigenous knowledges has encouraged them to question views of land as a "resource" or something to be "owned" and, instead, prioritize values such as reciprocity and caretaking in their relationships to others and the land. One Black settler also reflected on how they have come to question Western biases after realizing that the agroecological practices that inform their work are rooted in the traditional knowledges and activism of Black, Indigenous, and People of Colour (BIPOC) communities. Speaking about regenerative agriculture, they reflected: "This is Indigenous knowledge and something that has been run by Black and Brown people. [Urban agriculture] was literally born in the '70s in New York by Black women.... Practices and knowledge that are framed today as "permaculture" are actually just Indigenous knowledge...that up until this time wasn't seen as valuable [by western knowledge and science]."

Another participant, however, expressed that learning from Indigenous knowledges was not a focus of their work. As a white settler farmer, they reflected, they were "inspired by the Three Sisters" cultivation system but admitted that they tend to "follow more contemporary sources, often white men." This participants' minimal engagement with Indigenous perspectives—and the problematic undertones of their characterization of Indigenous perspectives as non-"contemporary"—differs from most participants in this project, yet this does not imply that their viewpoint is uncommon among food activists in Toronto more generally.

Overall, most participants in this project underlined the importance of learning from Indigenous perspectives to address settler biases and rethink their relationships to land. One Black activist reflected on the transformative (un)learning they have experienced by "building intimacy with the land" in their work and learning from Indigenous ecological knowledges. They explained their memories of "the ways that the land opened up once I started recognizing these plants...that hold medicine, that have been here for centuries and have grown alongside the people." Some of these plants, they learned, include non-Indigenous plants that have become naturalized and cultivated for the medicines they have to offer. They reflected on Kimmerer's[8] discussion of the plantain plant in *Braiding Sweetgrass*

[7] While we refer broadly to "Indigenous knowledges" here, we want to underline the plurality of the many Indigenous cultures across Turtle Island, who each have distinct languages, traditions, governance systems, and ways of knowing (ICFSC, 2010). As Battiste and Henderson (2000) explain, while there is no uniform definition for Indigenous knowledge, "the closest one can get to describing unity in Indigenous knowledge is that knowledge is the expression of the vibrant relationships between people, their ecosystems, and other living beings and spirits that share their land" (p. 42; McGregor, 2004; Morrison, 2011). We utilize this broader term to refer to the convergences between Indigenous worldviews surrounding relationality and interdependencies between all life, which contrast to Western philosophy, which views the world through Cartesian dualisms that separate (among other things) humans from nature, the latter of which is to be "managed" and "controlled" (Morrison, 2011; Tuhiwai Smith, 2021).

[8] We recognize that there have been critiques of books like *Braiding Sweetgrass* for over-generalizing Indigenous worldviews. As Métis scholar Zoe Todd (2021) tweeted, *Braiding Sweetgrass* falls into "a canon of 'Indigenous eco' scholarship written largely for white audiences that erases the decolonial/decolonization struggles and scholarship of folks in the Global South…erases Black Studies and doesn't attend to capital/empire." Piuma and Conklin Akbari (2021) see *Braiding Sweetgrass* as a "gentle" book of personal narrative that provides an entry point into Indigenous scholarship but

which "changed [their] whole heart" and helped them think through their responsibilities as a first-generation Black settler: "This plant came from Europe and wasn't Indigenous but became naturalized to here. Kimmerer spoke about people who come here and feel like it's a stepping stone between their home and where they need to be. That part really hit me. I was like: yeah, for people that this isn't 'home' to, is there still that reverence?.... When I think of land I have to think of here. My mind can't go to [my home country]. Even though I love the land there, that's not where I was raised. That's not my lived reality."

Learning from the lessons of the plantain plant, they concluded, "how do settlers that have not been here for generations, who immigrated over, make peace as well? How do we start to grow relations [and] be here in wellness?"

## Relationship-building in the organizational context

Many participants underlined relationships as central to their visions of food system change, echoing both food sovereignty and critical Indigenous literatures (Morrison, 2011; Corntassel, 2012; Martínez-Torres & Rosset, 2014). Participants discussed efforts at their organization to build relationships with Indigenous peoples including: sharing lease and land space; providing access to kitchens, event spaces, and greenhouses; and supporting and participating in Indigenous-centered/led programming. Some organizations have also established formal partnerships with Indigenous organizations, who lead various events around Indigenous food and culture, such as seasonal ceremonies led by Anishinaabe elders and traditional food workshops. For example, one participant discussed a maple syrup day led by their Indigenous partners which was "completely Indigenous knowledge" and a "pivotal" learning moment for many community members about the Indigenous origins of a food that has been co-opted as "Canadian." Another participant discussed their role as an assistant coordinator in an Indigenous garden program for people transitioning out of incarceration, where they provide support to Indigenous program leaders with their skillset in horticultural education and therapy. Some activists also discussed how designated spaces for Indigenous community members had been established at their organizations, such as Indigenous medicine gardens and ceremonial structures, which they saw as important for supporting Indigenous resurgence and healing, while facilitating Indigenous-settler dialogue. As one Black activist reflected, having the "physical space of Indigenous presence on the land" was important to moving beyond "theory and land acknowledgements" towards enacting solidarity in place.

While settler food activists in the city are finding ways to "pass the mic" to Indigenous peoples and step back into more supporting roles, such steps are not straightforward. As one immigrant settler reflected, relationships should be a "central focus" of food activism, "but that is difficult in practice because of the systems that we work in [which] have actively tried to destroy those relationships, not only within Indigenous communities, but also between settlers and Indigenous communities.... The complexity is that we live in a

warn readers not to lose sight of the unsettling and uncomfortable parts – such as the ways we are complicit in settler colonialism – which are "easy to not pay attention to if you don't want to" (15:18). Books like Kimmerer's (2013) may help us reflect more deeply on our relationships and responsibilities to others and the earth, but there is more work to be done to consider how settlers can (un)learn in ways that attend to the specificity of the places we live (e.g. whose lands we live on; what nations we are accountable to; what treaty agreements we are subject to).

system that does not exist in "right" relationship to most things."

Some participants reflected on the messiness of building relationships with Indigenous peoples while working within NGO structures and settler colonial systems more broadly. The participant above highlighted the "uncomfortable dynamic" of operating on Indigenous land and paying Indigenous people to come "facilitate their teachings on this land, which technically they should have access to anyway." Another immigrant activist shared that they felt "more guilty" since getting involved in this work, because they have "ventured in and made more mistakes"—a feeling compounded by trying to "decolonize" while seeing their work as colonizing, too: "When we are farming, we are taking land and we're taking from it. And then in our work with Indigenous partners, a lot of our structures can be an imposition of colonialism—whether it's financial requirements or policies and procedures of the workplace."

One immigrant activist echoed this, highlighting how organizations' standard practices may not always be compatible with Indigenous approaches, although there is now "documentation being built up" among food organizations surrounding Indigenous "protocols, how to approach an Indigenous person, when to offer tobacco [etc.]." Despite these efforts, this participant expressed dismay that the busyness of their job ultimately prevents them from being able "to consistently support" their Indigenous partners to the degree they would like to, making that relationship one that remains "on the periphery" on an event-by-event basis. Within these collaborations, they concluded, "there are going to be communication breakdowns where you have to actively work in that relationship to be able to then overcome those misunderstandings, barriers, hurts, [and] grief."

Although participants' responses indicate that Toronto food activists are beginning to build meaningful relationships with Indigenous peoples through their work and confront the associated challenges, our content analysis of seventeen food organizations' websites is less conclusive. Six out of the seventeen organizations made no mention of topics related to Indigenous perspectives, Indigenous-led initiatives, land acknowledgements, decolonization, or reconciliation, and seven engaged minimally with these topics (between one to four mentions across all webpages). Only four organizations' websites had five or more mentions, with three organizations highlighting Indigenous-centered initiatives. Among the five websites with land acknowledgements, only two included commitments to taking action to support Indigenous struggles. Notably, in a field where land is an inherent focus, none of these organizations' websites included discussions around Indigenous jurisdiction, land restitution, or what it means to operate on stolen Indigenous lands.

## Navigating settler colonial systems: Limits of food organizations and visions for the future

Despite efforts to (un)learn and build relationships with Indigenous peoples, all participants expressed that food organizations are ultimately limited in their abilities to challenge settler colonialism and support Indigenous struggles due to corporatized and donor-centric funding models, conflicting budget priorities and budget constraints, and settler colonialism more broadly. Many participants described settler colonialism as manifesting at various scales, both within organizations and across the larger political economic system within which organizations work.

Dependency on funding was seen as a significant barrier to gaining greater control over organizational

programming and directing it towards solidarity-building efforts. As one immigrant settler expressed, applications for funding typically means "writing down what the grantor wants," which can result in a "disconnect unless there are specific grants" for things that organizations want to do or are needed for their communities. Another refugee activist highlighted the risks of getting caught up in the funding cycle by spending money on frivolous things like "tents or stickers" for fundraising events or other kinds of "hoopla," rather than being directed primarily at programming for their community. This also means that certain food initiatives get prioritized over others according to what agricultural activities funders see as legitimate. Unless there is further funding for Indigenous-led initiatives, one immigrant settler activist reflected, "some gaps" will continue to exist in their organizations' solidarity-building efforts as they are "still held back by a lot of rules and budget limitations." Ultimately, one immigrant activist concluded, the funding model is "a colonizer system designed to control the flow of resources in a specific way that is not always beneficial to the people who live within a certain community."

Moving through the dominant grant circuit, food organizations are also limited by constrained budgets and labour issues. One refugee participant explained that food organizations in Toronto tend to "rely on funding from Canada Summer Jobs [which] is forever feeding into this short-term precarious labour that young earth-workers are constantly being pushed into." The effects of this were felt by their organization recently, as they found themselves "losing valuable staff because the funding ended [which] stalled the amazing work" their organization had done to support greater inclusion of BIPOC youth. Many participants also underlined the ways that staff at food organizations are typically overburdened[9] in the context of strained budgets and capitalist relations and, thus, are limited in their capacities to engage more meaningfully in solidarity-building efforts.

Two participants also underscored problematic forms of leadership that they saw as a pervasive problem for food activists seeking work. For one Latine activist, there was a "revolving door" of volunteers and staff at multiple community gardens they had worked at, due to undemocratic leadership by predominantly white settlers. A refugee activist echoed this, reflecting on the "push to bring in Black and Indigenous representation," particularly following the Black Lives Matter protests in 2020. They argued that some food organizations' efforts to "hire as many Black and Brown people as possible" were performative and, ultimately, problematic as they failed to do "any of the critical work to actually engage with these communities" and address racism in tangible ways.

Given these systemic issues, participants outlined their hopes for the future of food sovereignty in Canada and called for structural change away from capitalism and greater recognition of communities' "rights" to determine and control their food systems, echoing food sovereignty scholarship (Patel, 2009; Martínez-Torres & Rosset, 2014). Some activists underlined the importance of food sovereignty in a society where, as one Black activist noted, "people have been denied choice for so long" and, as one white settler concurred, consumers are "at the whims" of companies like Loblaws. Conversations in Toronto have increasingly moved towards recognizing the "larger system behind this: capitalism" and the need for people to become

[9] In some interviews for this project, these high demands on staff were evident. For example, one interview was interrupted 5 times within 35 minutes by colleagues, volunteers, and clients seeking the participant's assistance—a period that was technically the participant's lunch break.

"self-determining" when it comes to their food systems, one immigrant settler explained. "People's right to live" is threatened, they concluded, "if they don't have sovereignty over feeding themselves."

Alongside these calls for communities in general to gain more "sovereignty" over their food systems, many participants also called for Indigenous struggles for sovereignty and self-determination to be foregrounded in food movements going forward. Along with Indigenous leadership, many participants expressed hopes for the returning of land to Indigenous peoples and saw this as a keystone of the food movement's future, particularly in the face of the climate crisis. As one refugee activist reflected, "we are simply soothing ourselves by saying that we are "decolonizing" or "reconciling" if we are not doing work that is furthering the Land Back movement." Others hoped "to see some policies changing around the way land is used," as one white settler reflected, and called for Indigenous leaders to be at the "forefront" of these decision-making processes.

Meanwhile, not all participants understood Land Back in its literal sense to be essential. As one white settler activist reflected, "Land Back isn't the actual land. It's reconciliation, decolonization. It is not undoing what was done. It is acknowledging what was done, communicating, being open, coming together, having the conversations, and shifting the systems." This response reflects an abstraction of the idea of Land Back and some disjuncture in settler understandings of concepts like Land Back and decolonization. Indeed, one refugee activist expressed a rather different view: "I see a lot of people try to take 'land back' and make it abstract. And like, no! Actual land back. I hope for that to become an acceptable thing for the average person who lives on Turtle Island [where] it's not this lofty political goal. It's just something that we could see happen in our everyday reality."

This participant also underscored that Land Back efforts can take many forms and outlined how they try "to further Land Back by seed-bombing native species and participating in the removal of invasive species." As discussed previously, the creation of designated spaces for Indigenous community members could also be seen as efforts to return land to Indigenous community members in food movement spaces.

## Discussion

The findings of this research show that many settler food activists in Toronto actively strive to think more deeply about their responsibilities to confront settler colonialism and support Indigenous sovereignty and self-determination through their work. Participants' responses demonstrate an understanding of settler education as a crucial step towards transforming what Davis et al. (2017) call "settler consciousness"[10] and building solidarity with Indigenous peoples. While (un)learning is cyclical, lifelong, and always incomplete (Davis et al., 2017; Kluttz et al., 2020), participants echoed scholars who argue that settlers have a responsibility to self-educate to prevent placing further labour on Indigenous peoples and to build a

[10] Davis et al. (2017) explain "settler consciousness" as being made up of "the narratives, practices and collective Canadian identity that are based solidly in a foundation of national historical myths…[which] pervade all institutions and all spheres of society" (p. 401).

foundation of mutual understanding so that decolonizing relationships may flourish (Morrison, 2011; Kepkiewicz, 2018).

Many participants reflected on the value of engaging with discomfort in their (un)learning—a key point highlighted throughout the literature on Indigenous-settler solidarity (Corntassel & Gaudry, 2014; Boudreau Morris, 2017; Davis et al., 2017; Bohunicky et al., 2021). As Corntassel and Gaudry (2014) argue, a "pedagogy of discomfort" can be a productive approach for motivating settlers to learn about colonial realities, "make amends and to be responsive to Indigenous struggles for decolonization" (p. 169). In discomforting acts of "truth-telling" (Corntassel & Gaudry, 2014), participants reflected on their positionalities as settlers who are differently positioned and implicated. Although only some participants discussed complicity, conversations are developing among Toronto food activists that move beyond self-reflection on one's ancestry, towards unpacking the varying "degrees of penalty and privilege" that implicate us to confront intersecting systems of domination (Dhamoon, 2015, p. 30; Jafri, 2012). While discussions of settlerhood do little to dismantle colonialism if we remain solely focused on the "question of 'who' at the expense of the 'how'" (Snelgrove et al., 2014, p. 22), participants' responses demonstrate that unpacking one's positionality can support (un)learning in transformative ways.

Along with positionality, most participants highlighted the importance of learning from Indigenous perspectives when reflecting on and countering settler biases and building better relationships with Indigenous peoples and the land. These reflections resonate with Morrison (2011), who argues that Indigenous knowledges are invaluable to developing better food systems, as Indigenous peoples have sustained the land and their food systems for millennia in dynamic and adaptable ways. Such knowledges offer alternatives to the colonial-capitalist values that currently dominate the global food system. Additionally, our findings highlight the value of food activist spaces in providing a unique context for this learning to occur in connection to others and the land. While it is evident that there is room for settler education to go deeper—especially as this project likely over-represents those settlers who are engaging in deeper (un)learning, given their interest in participating in this project[11]—our findings suggest that settler food activists in Toronto are making space for critical reflection surrounding settler roles and responsibilities in addressing settler colonialism and supporting Indigenous work and struggles.

Many participants highlighted efforts within their communities to build relationships with and center Indigenous peoples in their work such as sharing lease space with Indigenous partners, supporting and participating in Indigenous-led programming, and establishing designated spaces for Indigenous community members. Such efforts imply that some settler food activists are beginning to act upon their responsibilities to cede power to Indigenous peoples by "scrapping settler agendas, listening, stepping back, and supporting Indigenous leadership" (Kepkiewicz, 2018, p. 199). Some participants expressed how they have aimed to occupy more supporting roles, deferring to Indigenous leaders and trying to follow Indigenous protocols. As many scholars argue, Indigenous leadership is an integral part of supporting Indigenous resurgence, which is necessarily discomforting for settlers who may need to give up power that had been previously taken for granted (Tuck & Yang, 2012;

[11] It is worth noting that a few White settler activists declined or canceled interviews out of feeling "uncomfortable" speaking on these topics.

Corntassel & Gaudry, 2014; Kepkiewicz, 2018; Bohunicky et al., 2021). Overall, it seems that most participants are working to build place-based relationships and becoming more personally accountable to Indigenous peoples through their work—something Snelgrove et al. (2014) argue can help move solidarity from "performative" and "temporally driven" acts around highly publicized movements (e.g. Idle No More) towards being more spatially grounded and localized (p. 24).

At the same time, participants underscored the challenges of trying to build relationships within settler colonial systems, including corporatized funding models and NGO structures. Participants' spoke to the need to cultivate "ongoing feedback loops" of trust and accountability between settler and Indigenous peoples to navigate mistakes and missteps as they occur (Snelgrove et al., 2014). These reflections also highlight how building relationships in ways that fully align with Indigenous cultures is challenging and, perhaps, impossible when food organizations continue to operate within and through settler colonial structures. This connects to dialogues around solidarity-building as necessitating an "ethic of incommensurability," which Tuck and Yang (2012) explain as the recognition that various social justice projects may not always be able to "speak to one another" or "be aligned or allied" (p. 28) and, ultimately, "decolonization will require a change in the order of the world" (p. 31). Recognizing these incommensurabilities, Snelgrove et al. (2014) argue, opens possibilities for finding "potential lines of affinity" between decolonization and other struggles, which can only be sustained through place-based relationships that are accountable to Indigenous peoples and "resist repeating colonial and other relations of domination" (p. 23). As participants' reflections demonstrate, some settler food activists in Toronto are trying to approach Indigenous-settler solidarities as "incommensurable, but not incompatible" (Snelgrove et al., 2014, p. 3) by working through the conflicts between Indigenous approaches and dominant organizational structures as well as finding common ground to build better relations between peoples and the earth.

Meanwhile, our findings also suggest that there is significant work to be done. Participants' efforts to build relationships with Indigenous peoples may be in the minority among food organizations in the city more generally, as our content analysis suggests. Our findings show that very few organizations seem to be prioritizing Indigenous partnerships, initiatives, or clarification regarding settler responsibilities to challenge and dismantle settler colonialism. Although website content does not necessarily speak to the actual work these organizations do on the ground, their public media plays a role in shaping the broader conversation around decolonization and reconciliation, which as of now is not presented as a priority for most food organizations in the city. Concurrently, some participants discussed how current collaborations with Indigenous peoples tend to occur more peripherally on an event-by-event basis, rather than being central to organizational programming. This suggests that Toronto settler food organizations more broadly have yet to respond to calls to support Indigenous resurgence and challenge settler colonialism.

Looking to the larger systems that shape the landscape of food activism, participants' responses highlight that food organizations' capacities to align with Indigenous struggles are limited by donor-centric funding models, strained budgets, problematic forms of leadership, and settler colonialism more broadly, which many participants saw as manifesting both through organizational practices and through the larger system in which organizations operate. These responses speak to a common challenge faced by food organizations,

where they typically fall into the role of emergency service providers filling in for the neoliberal "shadow state" and remain bound to their funders (Wakefield et al., 2013). Participants' reflections on funding resonate with scholars who call for a shift in funding structures and priorities—in both government and organizations' own funding programs—towards supporting Indigenous food sovereignty initiatives in ways that affirm Indigenous communities' rights to design programs on their own terms and determine how funds are used (Rotz & Kepkiewicz, 2018; Robin et al., 2023). For activists at food organizations, these shifts in funding priorities would support solidarity-building efforts by moving decolonizing work from sitting "perpetually on the side of their desk" towards the center (Bohunicky et al., 2021, p. 149).

Considering these systemic issues, participants' visions for the future reveal some points of contention that deserve greater attention in food movement spaces. Many participants reiterated settler claims to sovereignty and self-determination, which scholars have problematized for being pervasive, yet largely unexamined within settler-led food movements (Grey & Patel, 2015; Kepkiewicz, 2018). While most participants called for Indigenous leadership and Land Back to be foregrounded in food activism moving forward, there was disjuncture in activists' understandings of what this means in practice and a notable silence surrounding what systemic transformation might look like. Settler-led food movements might take guidance from scholars and activists who outline key steps towards these goals, such as pushing for the return of land to Indigenous peoples and the restoration of Indigenous legal traditions as systems that apply not only to Indigenous peoples, but also to settler communities in their roles as treaty partners[12] (ICFSC, 2010; Rotz & Kepkiewicz, 2018; Kepkiewicz & Dale, 2018). By advocating for these systemic transformations in support of Indigenous struggles for sovereignty, rather than further atomization, we might begin to enter relationships of solidarity based on fostering "the shared authority to speak the law together, to find ways to become properly entangled" (Pasternak, 2017, p. 269).

## Conclusion

In this article, we have explored how settler food activists in Toronto perceive and/or work towards solidarity with Indigenous peoples in their work. The findings shed light on settler understandings of how Indigenous-settler solidarities are taking shape in Toronto's food sovereignty movement, highlighting the progress as well as the challenges of working within organizational structures and settler colonialism at large. Based on participants' reflections, we argue that many settler food activists strive to unpack settler complicities and responsibilities, learn from Indigenous knowledges, support Indigenous leadership, and build decolonizing relationships on Indigenous terms. At the same time, our findings also show that participants' efforts to build solidarity with Indigenous peoples may be peripheral within Toronto's food activist community more broadly, and more work needs to be done to center Indigenous struggles for self-determination in food movements going forward. While food organizations face structural barriers like dependency on corporatized

[12] See Starblanket (2019) for a fulsome analysis of treaty interpretation and the roles, rights and responsibilities of treaty partners.

and donor-driven funding models and budgetary constraints, settler food activists have an obligation to do more to complicate our visions of food system change, let go of claims to define food systems on Indigenous lands, and advocate for systemic transformation towards decolonization.

This research contributes to dialogues surrounding food sovereignty and Indigenous-settler relations in so-called Canada, responding to calls for greater empirical work on settler colonialism and food movements and how food activists understand their roles and responsibilities to Indigenous peoples. It also contributes to understandings of food movements as potential spaces for transformation of Indigenous-settler relations, which Kepkiewicz (2018) points out has been underexplored in literature examining Indigenous-settler solidarities (Land, 2015; Davis et al., 2017; Boudreau Morris, 2017) but is now emerging (Bohunicky et al., 2021). While we have aimed to speak primarily to food activist communities at the grassroots, this research may also contribute to greater dialogue between food movement actors, researchers, and policy makers surrounding what changes might better support widespread decolonization of our food systems and relationships with Indigenous peoples. We hope this project helps to foster more critical conversations among settler food activists—and settlers in general—surrounding our complicities and responsibilities to Indigenous peoples as treaty partners in our quest to build more sustainable food systems.

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## References

Akram-Lodhi, A. H. (2015). Accelerating towards food sovereignty. *Third World Quarterly, 36*(3), 563-583. https://doi.org/10.1080/01436597.2015.1002989

Battiste, M., & Henderson, J. Y. (Sa'ke'j). (2000). *Protecting Indigenous Knowledge and Heritage*. UBC Press.

Bohunicky, M., Levkoe, C., & Rose, N. (2021). Working for justice in food systems on stolen land? Interrogating food movements confronting settler colonialism. *Canadian Food Studies, 8*(2), 563-583. https://doi.org/10.15353/cfs-rcea.v8i2.452

Boudreau Morris, K. (2017). Decolonizing solidarity: Cultivating relationships of discomfort. *Settler Colonial Studies, 7*(4), 456–473. https://doi.org/10.1080/2201473X.2016.1241210

Carter, S. (1990). *Lost harvests: Prairie Indian reserve farmers and government policy*. McGill-Queen's University Press.

Corntassel, J. (2012). Re-envisioning resurgence: Indigenous pathways to decolonization and sustainable self-determination. *Decolonization: Indigeneity, Education & Society*, *1*(1), 86–101.

Corntassel, J. & Gaudry, A. (2014). Insurgent education and Indigenous-centered research: Opening new pathways to community resurgence. In B. L. Hall, C. Etmanski, & T. Dawson (Eds.), *Learning and teaching community-based research* (pp. 167–185). University of Toronto Press.

Coté, C. (2016). "Indigenizing" food sovereignty. Revitalizing Indigenous food practices and ecological knowledges in Canada and the United States. *Humanities, 5*(57), 1-14. https://doi.org/10.3390/h5030057

Coulthard, G. S. (2014). *Red skin, white masks: Rejecting the colonial politics of recognition*. University of Minnesota Press.

Daigle, M. (2017). Tracing the terrain of Indigenous food sovereignties. *The Journal of Peasant Studies, 46*(2), 297–315. https://doi.org/10.1080/03066150.2017.1324423

Daschuk, J. (2013). *Clearing the Plains: Disease, politics of starvation, and the loss of Aboriginal life*. University of Regina Press.

Davis, L., Hiller, C., James, C., Lloyd, K., Nasca, T., & Taylor, S. (2017). Complicated pathways: Settler Canadians learning to re/frame themselves and their relationships with Indigenous peoples. *Settler Colonial Studies, 7*(4), 398–414. https://doi.org/10.1080/2201473X.2016.1243086

de Leeuw, S. & Hunt, S. (2018). Unsettling decolonizing geographies. *Geography Compass*, *12*(7), 1–14. https://doi.org/10.1111/gec3.12376

Dhamoon, R. (2015). A feminist approach to decolonizing anti-racism: Rethinking transnationalism, intersectionality, and settler colonialism. *Feral Feminisms*, *4*, 18. https://feralfeminisms.com/rita-dhamoon/

Edelman, M. (2014). Food sovereignty: Forgotten genealogies and future regulatory challenges. *The Journal of Peasant Studies, 41*(6), 959–978. https://doi.org/10.1080/03066150.2013.876998

Englert, S. (2020). Settlers, workers, and the logic of accumulation by dispossession. *Antipode*, *52*(6), 1647–1666. https://doi.org/10.1111/anti.12659

Food Secure Canada. (2023, May 16). *Renewing the food policy for Canada: Towards 2030.* Food Secure Canada. https://foodsecurecanada.org/2023/05/16/consultation-update-key-takeaways-from-the-discussions/

Gani, J. K., & Khan, R. M. (2024). Positionality statements as a function of coloniality: Interrogating reflexive methodologies. *International Studies Quarterly*, *68*(2), sqae038. https://doi.org/10.1093/isq/sqae038

Gaudry, A. J. P. (2011). Insurgent research. *Wicazo Sa Review, 26*(1), 113–136. https://doi.org/10.5749/wicazosareview.26.1.0113

Grey, S. & Patel, R. (2015). Food sovereignty as decolonization: Some contributions from Indigenous movements to food system and development politics. *Agriculture and Human Values, 32*(3), 431–444. https://doi.org/10.1007/s10460-014-9548-9

Hoover, E. & Mihesuah, D. A. (2019). Introduction. In E. Hoover & D. A. Mihesuah (Eds.), *Indigenous food sovereignty in the United States: Restoring cultural knowledge, protecting environments, and regaining health* (pp. 3–25). University of Oklahoma Press.

Indigenous Circle of Food Secure Canada (ICFSC). (2010). *First principles protocol for building cross-cultural relationships.* Food Secure Canada. https://foodsecurecanada.org/sites/foodsecurecanada.org/files/First_Principles_July_2010.pdf

Indigenous Circle of Food Secure Canada (ICFSC). (2011). *Indigenous food sovereignty: Discussion paper 1.* Food Secure Canada. https://foodsecurecanada.org/sites/foodsecurecanada.org/files/DP1_Indigenous_Food_Sovereignty.pdf

Jafri, B. (2012, March 21). *Privilege vs. complicity: People of Colour and settler colonialism.* Federation for the Humanities and Social Sciences. https://www.federationhss.ca/en/blog/privilege-vs-complicity-people-colour-and-settler-colonialism

Kelley, R. D. G. (2017). The rest of us: Rethinking settler & native. *American Quarterly, 69*(2), 267–276. https://doi.org/10.1353/aq.2017.0020

Kepkiewicz, L. (2018). *Unsettling food sovereignty in Canada: Settler roles and responsibilities; tensions and (im)possibilities* (Publication No. 10750931) [Doctoral dissertation, University of Toronto]. ProQuest Dissertations Publishing. https://hdl.handle.net/1807/101616

Kepkiewicz, L. & Dale, B. (2018). Keeping 'our' land: Property, agriculture and tensions between Indigenous and settler visions of food sovereignty in Canada. *The Journal of Peasant Studies, 46*(5), 983-1002. https://doi.org/10.1080/03066150.2018.1439929

Kimmerer, R. W. (2013). *Braiding sweetgrass*. Milkweed Editions.

Kluttz, J., Walker, J., & Walter, P. (2020). Unsettling allyship, unlearning and learning towards decolonising solidarity. *Studies in the Education of Adults, 52*(1), 49–66. https://doi.org/10.1080/02660830.2019.1654591

Kneen, C. (2011). Food Secure Canada: Where agriculture, environment, health, food, and justice intersect. In H. Wittman, A. A. Desmarais & N. Wiebe (Eds.), *Food sovereignty in Canada: Creating just and sustainable food systems* (pp. 80–96). Fernwood Publishing.

Kohl, E. & McCutcheon, P. (2015). Kitchen table reflexivity: Negotiating positionality through everyday talk. *Gender, Place & Culture*, *22*(6), 747–763. https://doi.org/10.1080/0966369X.2014.958063

Kovach, M. (2021). *Indigenous methodologies: Characteristics, conversations, and contexts* (2nd ed.). University of Toronto Press.

Land, C. (2015). *Decolonizing solidarity: Dilemmas and directions for supporters of Indigenous struggles*. Zed Books.

Li, T. M. (2014). Can there be food sovereignty here? *Journal of Peasant Studies, 42*(1), 205-211. https://doi.org/10.1080/03066150.2014.938058

Littlefield, C., Stollmeyer, M., Andrée, P., Ballamingie, P., & Levkoe, C. Z. (2024). Exploring settler-Indigenous engagement in food systems governance. *Agriculture and*

*Human Values*, *41*, 1085-1101. https://doi.org/10.1007/s10460-023-10534-3

Louis, R. P. (2007). Can you hear us now? Voices from the margin: using Indigenous methodologies in geographic research. *Geographical Research*, *45*(2), 130–139. https://doi.org/10.1111/j.1745-5871.2007.00443.x

Martens, T., Env, M., Cidro, J., Hart, M. A., & McLachlan, S. (2016). Understanding Indigenous food sovereignty through an Indigenous research paradigm. *Journal of Indigenous Social Development, 5*(1), 18–37. https://umanitoba.ca/faculties/social_work/media/V5i1-02martens_cidro_hart_mclachlan.pdf

Martínez-Torres, M. E. & Rosset, P. M. (2014). Diálogo de saberes in La Vía Campesina: Food sovereignty and agroecology. *Journal of Peasant Studies, 41*(6), 979-997. https://doi.org/10.1080/03066150.2013.872632

McDowell, L. (1992). Doing gender: Feminism, feminists and research methods in human geography. *Transactions of the Institute of British Geographers*, *17*(4), 399–416. https://doi.org/10.2307/622707

McGregor, D. (2004). Coming full circle: Indigenous knowledge, environment, and our future. *American Indian Quarterly*, *28*(3/4), 385–410.

McMichael, P. (2015). A comment on Henry Bernstein's way with peasants, and food sovereignty. *Journal of Peasant Studies, 42*(1), 193-204. https://doi.org/10.1080/03066150.2014.936853

Morrison, D. (2011). Indigenous food sovereignty: A model for social learning. In H. Wittman, A. A. Desmarais & N. Wiebe (Eds.), *Food sovereignty in Canada: Creating just and sustainable food systems* (pp. 97-113). Fernwood Publishing.

Mosby, I. (2013). Administering colonial science: Nutrition research and human biomedical experimentation in aboriginal communities and residential schools, 1942–1952. *Social History*, *46*(91), 145–172. https://doi.org/10.1353/his.2013.0015

Moss, P. (2000) *Placing Autobiography in Geography.* Syracuse University Press.

Pasternak, S. (2017). *Grounded authority: The Algonquins of Barriere Lake against the state*. University of Minnesota Press.

Patel, R. (2009). What does food sovereignty look like? *The Journal of Peasant Studies, 36*(3), 663–706. https://doi.org/10.1080/03066150903143079

People's Food Policy Project (PFPP). (2011). *Resetting the table: A people's food policy for Canada*. Food Secure Canada. https://foodsecurecanada.org/sites/foodsecurecanada.org/files/FSC-resetting2012-8half11-lowres-EN.pdf

Phung, M. (2011). Are People of Colour settlers too? In A. Mathur, J. Dewar, & M. DeGagné (Eds.), *Cultivating Canada: Reconciliation through the lens of cultural diversity* (pp. 289–298). Aboriginal Healing Foundation.

Piuma, C. & Conklin Akbari, S. (2021, April 5). Braiding sweetgrass (No. 43) [Audio podcast episode]. In *The Spouter-Inn; or, A Conversation with Great Books*. Megaphonic. https://www.megaphonic.fm/spouter/43

Rizarri, K. (2023, April 11). *Tkaronto is a place for sustenance*. Yellowhead Institute. https://yellowheadinstitute.org/2023/04/11/tkaronto-is-a-place-for-sustenance/

Robin, T. (2019). Our hands at work: Indigenous food sovereignty in Western Canada. *Journal of Agriculture, Food Systems, and Community Development, 9*(B), 85-99. https://doi.org/10.5304/jafscd.2019.09B.007

Robin, T., Rotz, S., & Xavier, A. (2023). *Indigenous food sovereignty in Ontario: A study of exclusion at the Ministry of*

*Agriculture, Food & Rural Affairs*. Yellowhead Institute. https://yellowheadinstitute.org/wp-content/uploads/2023/04/OMAFRA-YI-Report-April-2023.pdf

Rose, G. (1993). *Feminism and geography: The limits of geographical knowledge.* Cambridge: Polity Press.

Rose, G. (1997). Situating knowledges: Positionality, reflexivities and other tactics. *Progress in Human Geography, 21*(3), 305–320. https://doi.org/10.1191/030913297673302122

Rotz, S. & Kepkiewicz, L. W. (2018). Settler colonialism and the (im)possibilities of a national food policy. *Canadian Food Studies, 5*(3), 248–258. https://doi.org/10.15353/cfs-rcea.v5i3.275

Rotz, S., Xavier, A., & Robin, T. (2023). "It wasn't built for us": The possibility of Indigenous food sovereignty in settler colonial food bureaucracies. *Journal of Agriculture, Food Systems, and Community Development, 12*(3), 3. https://doi.org/10.5304/jafscd.2023.123.009

Settee, P., & Shukla, S. (2020). Introduction. In P. Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations* (pp. 1–13). Canadian Scholars.

Snelgrove, C., Dhamoon, R. K., & Corntassel, J. (2014). Unsettling settler colonialism: The discourse and politics of settlers, and solidarity with Indigenous nations. *Decolonization: Indigeneity, Education & Society, 3*(2), 32.

Starblanket, G. (2019). Constitutionalizing (In)justice: Treaty Interpretation and the Containment of Indigenous Governance. *Constitutional Forum / Forum Constitutionnel*, *28*(2), 13. https://doi.org/10.21991/cf29383

Stiegman, M. L. & Castleden, H. (2015). Leashes and lies: Navigating the colonial tensions of institutional ethics of research involving Indigenous peoples in Canada. *International Indigenous Policy Journal, 6*(3), 1–10. https://doi.org/10.18584/iipj.2015.6.3.2

TallBear, K. (2014). Standing with and speaking as faith: A feminist-Indigenous approach to inquiry. *Journal of Research Practice, 10*(2), 1–8. http://jrp.icaap.org/index.php/jrp/article/view/405/371

Todd, Z. (2021, June 23). Metis scholar Zoe Todd: [Blog]. Tumblr. https://fatehbaz.tumblr.com/post/654827883896979456/metis-scholar-zoe-todd-social-media-thread-from

Tuck, E. & Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society*, *1*(1), 40. https://jps.library.utoronto.ca/index.php/des/article/view/18630/15554

Tuhiwai Smith, L. (2021). *Decolonizing methodologies: Research and Indigenous peoples* (3rd ed.). Zed Books.

Wakefield, S., Fleming, J., Klassen, C., & Skinner, A. (2013). Sweet charity, revisited: Organizational responses to food insecurity in Hamilton and Toronto, Canada. *Critical Social Policy*, *33*(3), 427–450. https://doi.org/10.1177/0261018312458487

Whyte, K. (2018). Food sovereignty, justice, and Indigenous peoples: An essay on settler colonialism and collective continuance. In A. Barnhill, M. Budolfson, & T. Doggett (Eds.), *The Oxford Handbook of Food Ethics*. Oxford University Press.

Whyte, K. (2020). Too late for indigenous climate justice: Ecological and relational tipping points. *WIREs Climate Change*, *11*(1), e603. https://doi.org/10.1002/wcc.603

Wilson, S. (2008). *Research as ceremony: Indigenous research methods.* Fernwood Publishing.

Wolfe, P. (2006). Settler colonialism and the elimination of the native. *Journal of Genocide Research*, *8*(4), 387–409. https://doi.org/10.1080/14623520601056240

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Research Article

# Colonial approaches in Canadian national food policy development: Carving our space for Indigenous partnership

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## Abstract

The Government of Canada has claimed that the relationship with Indigenous peoples, that of First Nations, Inuit and Métis people, is their most important relationship. The rhetoric around reconciliation and Indigenous-Crown relationships are a major directive within federal policy. Using the theoretical framework of discursive institutionalism, this journal article looks at how this approach has, or has not, shaped the development of a national food policy. Discursive institutionalism is critical to understanding the complex relationships and perspectives embedded in national food policy development. Looking at the federal government's reports, discourse, and actions, this article highlights how Indigenous people continue to be seen as stakeholders, as opposed to partners in nation-to-nation relationships. This paper analyzing the government's approach to food policy stresses that the government recognizes the importance of having a national food policy, as well as acknowledging that Indigenous people need to be a part of the process. Indigenous peoples are distinct peoples with inherent rights that must been recognized and supported by the Crown, and that understanding needs to be a part of all policies and laws that can impact Indigenous peoples and communities.

Keywords: Canadian food policy; discursive institutionalism; Indigenous food; national food policy; policy considerations; Truth and Reconciliation

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## Résumé

Le gouvernement du Canada a affirmé que la relation avec les peuples autochtones – les Premières Nations, les Inuits et les Métis – était sa relation la plus importante. La rhétorique autour de la réconciliation et des rapports entre les Autochtones et la Couronne est une directive majeure de la politique fédérale. En utilisant le cadre théorique de l'institutionnalisme discursif, cet article examine comment cette approche a, ou n'a pas, façonné l'élaboration d'une politique alimentaire nationale. L'institutionnalisme discursif est essentiel pour comprendre les relations et les perspectives complexes inhérentes à l'élaboration des politiques alimentaires nationales. En examinant les rapports, le discours et les actions du gouvernement fédéral, cet article met en évidence le fait que les populations autochtones continuent d'être considérées comme des parties prenantes, plutôt que comme des partenaires dans des relations de nation à nation. Cet article souligne, en analysant l'approche du gouvernement en matière de politique alimentaire, que celui-ci reconnaît l'importance d'une telle politique nationale ainsi que la nécessité que les peuples autochtones participent au processus. Les peuples autochtones sont des peuples distincts dotés de droits inhérents qui doivent être reconnus et soutenus par la Couronne. Cette compréhension doit faire partie de toutes les politiques et lois susceptibles d'avoir un impact sur les peuples et les communautés autochtones.

## Introduction

In Canada, the First Nations, Inuit, and Métis—the Indigenous Peoples of this land—have a distinct constitutional relationship with the Crown. This relationship, including existing Aboriginal[1] and treaty rights, is recognized and affirmed in section 35 of the *Constitution Act, 1982 (Constitution Act, 1982)*. Under Section 35, Indigenous communities have unique rights and interests as peoples with distinct cultures, governments, histories, languages, perspectives, needs, and aspirations. Section 35 also promises that Indigenous nations will become partners in Confederation based on a fair and just reconciliation between Indigenous Peoples and the Crown.

Since 2008, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) has assisted in coordination and has advised federal officials on the duty-to-consult (DC). DC is an integral part of federal government activity regarding regulatory changes, licencing and authorizations of permits, operational decisions, policy development, and negotiation. It may be referenced as part of statutory obligations, provisions in land claims agreements, and consultation protocols (CIRNAC, 2024b). The government of Canada recognizes that Indigenous self-government and laws are critical to Canada's future and that Indigenous perspectives and rights must be incorporated in all aspects of this relationship (Government of Canada, 2021). When properly designed and executed, "consultation in the context of the legal duty can support reconciliation through relationship building with Indigenous Peoples" (CIRNAC, 2024a, para 4).

DC and reconciliation in food policy development speaks to the needs and history of Indigenous People. How food is framed points to essential facets in the relationship between Indigenous Peoples and the federal government. Comprehensive policy development proactively identifies and considers the impacts of the policy. In turn, the operational side of policy development is vital for determining if and how the internal workings of the Canadian state support DC and reconciliation when developing food policy.

In 2023, national Indigenous organizations, including Inuit Tapiriit Kanatami[2] (ITK, 2023), Assembly of First Nations[3] (AFN; Forster, 2023), and the Native Women's Association of Canada[4] (NWAC; 2023) argued the federal government continues to come up short in advancing reconciliation. This observation echoes the argument that it is impossible to dismantle colonial relations within a settler state (Alfred, 2009; Coulthard, 2014; Maracle, 1996; Simpson, 2011; Tuck & Yang, 2012). Reflecting on national food policy, Sarah Rotz and Lauren Wood Kepkiewicz (2018, p. 250) explained "that decolonization requires Indigenous self-determination and land repatriation to Indigenous nations," arguing "as long as settler governments continue to claim sovereignty over Indigenous land and nations...it is impossible to decolonize a national food policy that is administered by the federal government."

*Food Policy for Canada: Everyone at the Table!* (FPC; AAFC, 2019) is an example of consultation with reconciliation and the DC as federally mandated policy priorities. This research considered what DC,

[1] Aboriginal is the legal term for First Nations, Inuit, and Métis people in Canada, particularly around issues related to the Canadian Charter of Rights and Freedoms. It will be used when appropriate (Department of Justice Canada [DJC], 2018).
[2] ITK is a non-profit national advocacy organization representing 65,000 Inuit across the Inuit Nunangat (ITK, 2017, 2022).
[3] AFN is the national organization representing over 900,000 First Nations people (AFN, 2022).
[4] The NWAC is a national non-profit Indigenous organization representing a political voice of Indigenous (First Nations, Metis, Inuit) women throughout Canada (NWAC, 2018).

reconciliation and a nation-to-nation partnership(s) looked like in Canada's political institutions when developing FPC. This paper focuses on the federal public service: Did Agriculture and Agri-Food (AAFC) include processes and spaces in the policy's development that supported DC and reconciliation frameworks? While public consultations included Indigenous Peoples, we argue Indigenous voices were situated as stakeholders, which did not demonstrate respectful nation-to-nation relations.

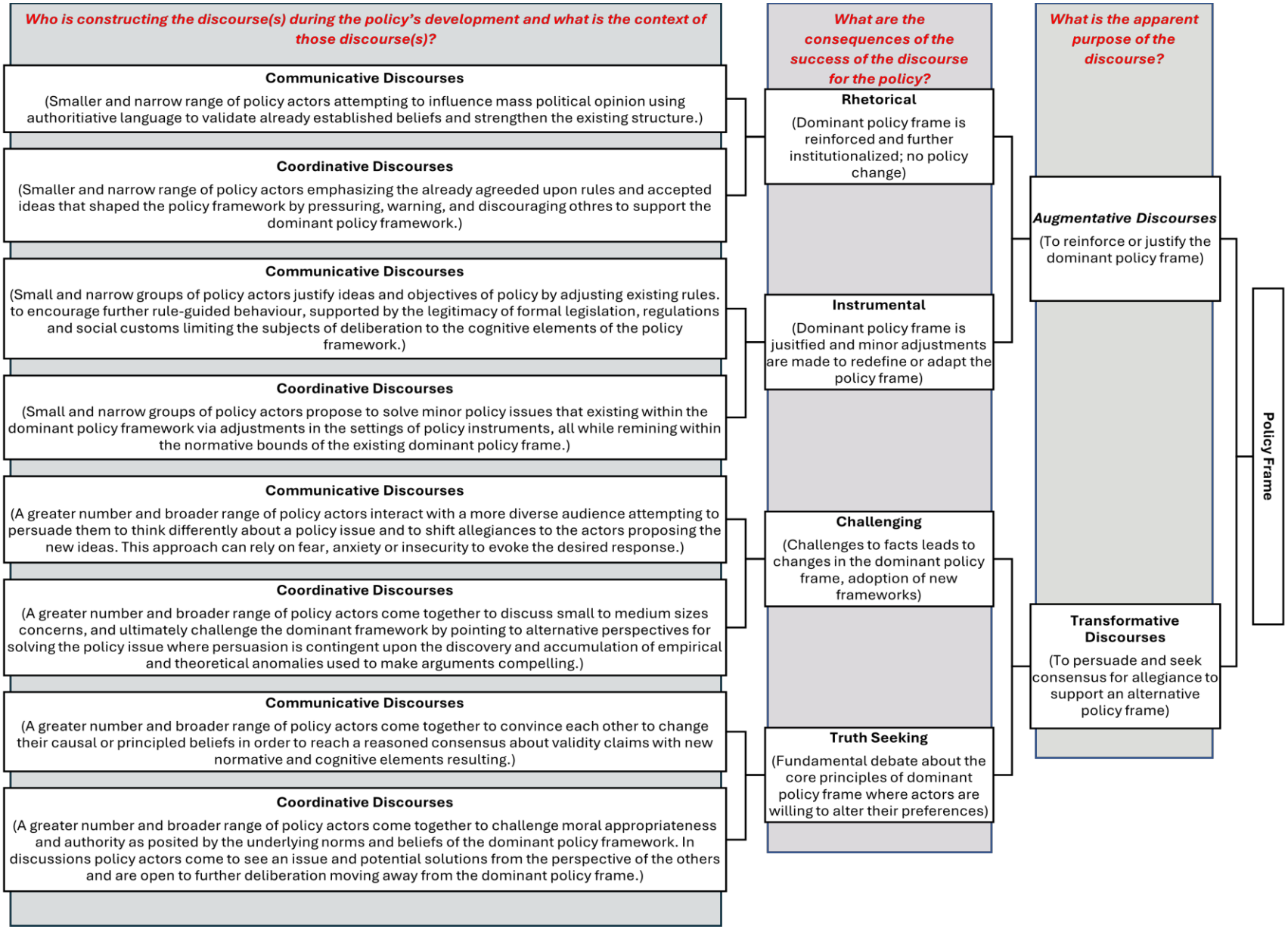
The paper unfolds as follows. First, this research's theoretical framing, methodology, and methods are presented. Then, colonialism and the historical relations between Indigenous communities and the federal government are highlighted, scoping to the legal obligations central to DC and food policy. Next, the process for developing FPC is presented. The information presented is focused on engagement between AAFC, national Indigenous advocacy organizations, and Indigenous communities. The final section discusses key observations and recommendations for more meaningful nation-to-nation consultation in Canadian food policy.

## Theoretical lens, analytical framework, and methodology

Discursive institutionalism is a practical analytical framework for studying the complexities and power dynamics of food policy development in Canada (Coulas, 2021). Discursive institutionalism offers an interdisciplinary perspective for explaining food policy development within Canada's complex institutional environments by considering how ideas and the way those ideas are communicated influence decision-making. It also provides the means for studying transformative power in institutions and policy making (Carstensen & Schmidt, 2016; Coulas, 2021). Discursive institutionalism considers how norms and preferences persist or change (Schmidt, 2010). For FPC, the discursive interactions and hierarchies between actors and consideration of political institutions' influence on actors and vice versa reveal enabling factors and obstacles in policy development.

To identify and assess the conceptual and institutional elements, an analytical framework (Figure 1) was developed.[5] Figure 1 rests on three questions: 1) Who is constructing the discourse(s) and what is the context of those discourse(s)?; 2) What are the consequences of the success of these discourses?; and 3) What is the apparent purpose of these discourses? (Coulas, 2021). The first question draws out normative and cognitive elements found in policy. Data was categorized as coordinative discourse if it demonstrated policy actors engaged in creating, deliberating, arguing, bargaining, and reaching an agreement on policies or as communicative discourse if it showed an attempt to influence mass political opinion and engagement with the public to elicit support or disapproval for a specific policy frame.

[5] The analytical framework was previously published in Coulas 2021. Tenets from Vandna Bhatia and William Coleman's (2003, p.720-721) *Framework for Analyzing Political Discourse and Policy Change* were foundational for this framework.


Who is constructing the discourse(s) during the policy's development and what is the context of those discourse(s)?
Communicative Discourses
(Smaller and narrow range of policy actors attempting to influence mass political opinion using authoritiative language to validate already established beliefs and strengthen the existing structure.)
Coordinative Discourses
(Smaller and narrow range of policy actors emphasizing the already agreeded upon rules and accepted ideas that shaped the policy framework by pressuring, warning, and discouraging othres to support the dominant policy framework.)
Communicative Discourses
(Small and narrow groups of policy actors justify ideas and objectives of policy by adjusting existing rules. to encourage further rule-guided behaviour, supported by the legitimacy of formal legislation, regulations and social customs limiting the subjects of deliberation to the cognitive elements of the policy framework.)
Coordinative Discourses
(Small and narrow groups of policy actors propose to solve minor policy issues that existing within the dominant policy framework via adjustments in the settings of policy instruments, all while remining within the normative bounds of the existing dominant policy frame.)
Communicative Discourses
(A greater number and broader range of policy actors interact with a more diverse audience attempting to persuade them to think differently about a policy issue and to shift allegiances to the actors proposing the new ideas. This approach can rely on fear, anxiety or insecurity to evoke the desired response.)
Coordinative Discourses
(A greater number and broader range of policy actors come together to discuss small to medium sizes concerns, and ultimately challenge the dominant framework by pointing to alternative perspectives for solving the policy issue where persuasion is contingent upon the discovery and accumulation of empirical and theoretical anomalies used to make arguments compelling.)
Communicative Discourses
(A greater number and broader range of policy actors come together to convince each other to change their causal or principled beliefs in order to reach a reasoned consensus about validity claims with new normative and cognitive elements resulting.)
Coordinative Discourses
(A greater number and broader range of policy actors come together to challenge moral appropriateness and authority as posited by the underlying norms and beliefs of the dominant policy framework. In discussions policy actors come to see an issue and potential solutions from the perspective of the others and are open to further deliberation moving away from the dominant policy frame.)
What are the consequences of the success of the discourse for the policy?
Rhetorical
(Dominant policy frame is reinforced and further institutionalized; no policy change)
Instrumental
(Dominant policy frame is jusitfied and minor adjustments are made to redefine or adapt the policy frame)
Challenging
(Challenges to facts leads to changes in the dominant policy frame, adoption of new frameworks)
Truth Seeking
(Fundamental debate about the core principles of dominant policy frame where actors are willing to alter their preferences)
What is the apparent purpose of the discourse?
Augmentative Discourses
(To reinforce or justify the dominant policy frame)
Transformative Discourses
(To persuade and seek consensus for allegiance to support an alternative policy frame)
Policy Frame

The second question then considers different kinds of influence and power actors held and executed (or withheld) in shaping policy. As the research focuses on the causal forces of discourse and how communicative or coordinative discourses can reinforce or alter an existing policy framework, the data was categorized under rhetorical, instrumental, challenging, or truth-seeking discourses. The third question was addressed once the data was classified: Was continuity or transformative policy change observed?

Between 2016 and 2020, data was gathered via (a) fifty-nine semi-structured interviews,[6] (b) participant observation, and (c) analysis of 331 government and stakeholder documents. This research was funded by the Social Sciences and Humanities Research Council Partnership Grant, Food, Locally Embedded, Globally Engaged (FLEdGE). These methods were employed to reveal power dynamics within policy actors' experiences during the development of FPC and to provide triangulation for analyzing the data. The overarching methodology[7] was discourse analysis—a qualitative text analysis method (Schmidt, 2011).

## The intersections of duty-to-consult and food policy development in Canada

DC is crucial for supporting Indigenous food sovereignty. In Canada, there is a need to address food insecurity within Indigenous communities, as 30.7 percent of off-reserve Indigenous People experience food insecurity (Tarasuk et al., 2021). Further, 30.9 percent of Indigenous People over the age of sixteen experience some form of food insecurity—whether marginal, moderate, or severe—while 24.1 percent of Indigenous Peoples experience moderate or severe food insecurity (Statistics Canada, 2022). These statistics stand in stark contrast to the general population of Canada, with 18.4 percent of all people in Canada experiencing some form of food insecurity, while 12.9 percent of people experiencing moderate or severe food insecurity (Statistics Canada, 2022). This highlights the critical need for a holistic approach to ensuring the food security of Indigenous People across Canada, regardless of residency.

However, government-led food policy and research approaches have a shared history of colonialism. There needs to be more respect and transparency that underpinned the Canadian government's approach to relationships with Indigenous People. For example, Ancel Keys' groundbreaking University of Minnesota starvation experiment between 1944 and 1946 was used to craft Canada's nascent food guide in the 1940s (Mosby, 2013). Similar studies were used to understand how Indigenous bodies reacted to malnutrition or certain vitamin deficiencies, which were the basis of recommendations for the benchmark for Canada's nutritional needs.

Since the Royal Commission on Aboriginal Peoples (RCAP; Library and Archives Canada, 2016), concerted efforts have been made to address this history. RCAP was the most significant production of research, engagement, and consultation about

[6] Interviewees included politicians, public servants, academics, agri-food industry representatives, and not-for-profit organization representatives. Of the fifty-nine interviews, twenty occurred with state policy actors and twenty-seven occurred with non-state policy actors.
[7] The methodology is also published in Coulas 2021.

Indigenous Peoples' history, conditions, issues, and aspirations in Canada. Highlights from RCAP get at the principal tenor of the entire process: "We held 178 days of public hearings, visited ninety-six communities, consulted dozens of experts, commissioned scores of research studies, reviewed numerous past inquiries and reports. Our central conclusion can be summarized simply: *The main policy direction, pursued for more than 150 years, first by colonial then by Canadian governments, has been wrong*" (CIRNAC, 2010, para 6, emphasis in original).

The federal government largely ignored RCAP's recommendations; it was still a milestone in Crown-Indigenous relations. It articulated the experiences, perspectives, and voices of Indigenous Peoples in a way that the Canadian government had not heard. It highlighted the longstanding policy failures rooted in paternalism, assimilation, and colonialism. Since the 1990s, researchers and government officials have shifted their perspectives on collaborative research. Collaborative research means that Indigenous voices, attitudes, and values are incorporated at every project stage, from the planning to the final product.

Historically, the federal government's DC approach has predominantly been used around research development and extraction. In turn, the history of Crown-Indigenous relations in Canada warrants skepticism about the strength and willingness for consultation to be done in good faith. The source of DC is the Supreme Court Case *Haida Nation v. British Columbia* (2004), which states that the Crown must consult with Aboriginal people before making decisions or taking initiatives that may infringe upon existing Aboriginal rights. While the DC emerged from the courts as an extension of the longstanding reworking of Crown-Indigenous relations, it is not strictly bound to the court or legal system. The DC interweaves policies, laws, history, and relations to ensure Indigenous rights are upheld and respected.

In response to the Supreme Court of Canada's decisions in *Haida Nation v. British Columbia*, *Taku River Tlingit First Nation v. British Columbia* and *Mikisew Cree v. Canada,* the federal government launched an *Action Plan on Aboriginal Consultation and Accommodation* in November 2007 (AANDC, 2011). The initiative engaged sixty-eight Indigenous communities and organizations, as well as industry, provinces, and territories, in the engagement process from January 2009 to March 2010. Participants identified numerous requirements for meaningful consultation emphasizing duty-to-consult cannot be "interpreted narrowly or technically, but must be given full effect in order to promote the process of reconciliation between the Crown and Aboriginal peoples as mandated by s.35(1) of the *Constitution Act, 1982"* (CIRNAC, 2024a, Annex B para 8). Further, more explicit standards for the pre-consultation period were called for to ensure Indigenous communities could be prepared by identifying community objectives, goals, and authorities. In short, the Crown and Indigenous communities must have a mutual understanding of what consultation means when First Nations, Inuit, and Métis perspectives are involved.

More recently, on June 21, 2023, the federal government passed significant legislation adopting Bill C-15, an *Act Respecting the United Nations Declaration on the Rights of Indigenous People* (Minister of Justice, 2020). This could be a powerful vehicle to establish standards for protecting Indigenous rights and ensuring genuine consultation. The preamble states (UNDRIP, 2021, p. 2): "Whereas the Government of Canada is committed to taking effective measures—including legislative, policy and administrative measures—at the national and international level, in consultation and cooperation with Indigenous Peoples, to achieve the

objectives of the Declaration." Article 19 (UNDRIP, 2021) states that: "States shall consult and cooperate in good faith with the Indigenous Peoples concerned through their representative institutions in order to obtain their free, prior, and informed consent before adopting and implementing legislative or administrative measures that may affect them" (p. 12).

What is striking is that DC and engagement are also directly tied to food sovereignty. Priority 87 of the UNDRIP Action plan supports Indigenous food sovereignty and self-determination, stating the Crown will (DJC, 2023):

Support Indigenous Peoples' food security, sovereignty, and sustainability through:

- funding and other program measures
- promoting food-focussed research to better understand the intersection of Indigenous Peoples' food security, sovereignty, and sustainability
- promoting trade in Indigenous Peoples' food products and removal of barriers to that trade.

When working with Indigenous People, the work of the Crown and Canadian political institutions needs to be rooted in a relationship that views the partners as equals and not as addressing the needs of their subjects. In turn, DC is critical in changing the relationship between Indigenous People and the federal government. While FPC was developed after the Action Plan and before Bill C-15, the case study presents important forums for considering how the federal government can uphold its promises.

## Development of food policy for Canada: November 2015 – June 2019 Theoretical lens, analytical framework, and methodology

This section contextualizes the development of FPC, ultimately situating positions of power and influence during the policy's development. Early stages of policy development are presented, demonstrating the tone and approach of the Trudeau Government, and then analysis of FPC demonstrates achievements and shortfalls.

### Early stages of policy framing and internal government activity

On November 12, 2015, a national food policy was prioritized. In his Mandate Letter to the Honourable Lawrence MacCauley, Canada's Minister of Agriculture, Prime Minister Justin Trudeau called for the development of "a food policy that promotes healthy living and safe food by putting more healthy, high-quality food, produced by Canadian ranchers and farmers, on the tables of families across the country" (2015, para 14). Trudeau explained in all 2015 mandate letters: "I made a personal commitment to bring new leadership and a new tone to Ottawa.... No relationship is more important to me and to Canada than the one with Indigenous Peoples. It is time for a renewed, nation-to-nation relationship with Indigenous Peoples, based on recognition of rights, respect, co-operation, and partnership" (para 7). This direction inspired hope for change and suggested that AAFC would take a different approach to developing a FPC (Andrée et al., 2021).

On December 4, 2015, the Speech from Throne opened the forty-second session of Parliament. While food policy was not mentioned, the approach for Crown-Indigenous relations was: "Because it is both the right thing to do and a certain path to economic growth, the Government will undertake to renew,

nation-to-nation, the relationship between Canada and Indigenous Peoples, one based on recognition of rights, respect, co-operation, and partnership" (Johnston, 2015, p. 6).

The misalignment between the Speech from the Throne and the mandate letter suggested that the national food policy was not a top priority. Nevertheless, the emphasis on improving the relationship between Canada and Indigenous Peoples signified the potential to bring food policy to the fore within reconciliation.

Indigenous consultation was not new to AAFC but remained novel for policy development. In 2020, Tom Rosser Assistant Deputy Minister at AAFC, explained:

> "The Liberal Government came to office with a pretty ambitious agenda for Indigenous reconciliation and as a department…we [AAFC] had an off- and on-again kind of role in promoting Indigenous involvement in agriculture…. We didn't, in contrast to departments [e.g., Fisheries and Oceans Canada]…have a lot in the way of legal or Constitutional obligations to reach out to Indigenous groups who didn't have a lot of Indigenous centred programing and it just hadn't been a big focus for us as a department, historically."

Informant F explained that most of AAFC's stakeholders are farmers and agricultural producers. In turn, while the department intended to understand Indigenous food systems better and engage Indigenous Peoples, the engagement was scoped to agriculture. As food policy appears limited to agricultural commodities, the interconnections of food's social, political, and economic relations must be brought forward. Further, the direction to engage with Indigenous Peoples through stakeholder consultation did not uphold a nation-to-nation relationship.

Nation-to-nation relations broadly describe how a government interacts with Indigenous Peoples and communities, albeit that approach needs to be clarified in 2015. However, on February 22, 2017, the federal government's approach became more transparent with the establishment of the Working Group of Ministers, a formal body that worked with Indigenous leaders, youth, and experts were responsible for examining (Trudeau, 2017a): "relevant federal laws, policies, and operational practices to help ensure the Crown is meeting its constitutional obligations concerning Aboriginal and treaty rights; adhering to international human rights standards, including the United Nations Declaration on the Rights of Indigenous Peoples; and supporting the implementation of the Truth and Reconciliation Commission's Calls to Action."

The working group included six ministers, not including the Minister of Agriculture and Agri-food (Trudeau, 2017b). In 2018, the federal government adopted the working group's Principles Respecting the Government of Canada's Relationship with Indigenous Peoples (DJC, 2018). The principles "reflect a commitment to good faith, the rule of law, democracy, equality, non-discrimination, and respect for human rights" (DJC, 2018, p. 3). In 2021, as outlined in the *Indigenous Knowledge Policy Framework for Project Reviews and Regulatory Decisions,* the Principles guided federal departments and agencies to fulfill their approach to Indigenous relations (Government of Canada, 2021).

## Public consultations: Bilateral and self-led Indigenous engagement

Informant D explained that to carry out public consultations, AAFC's Food Policy Unit (FPU)[8] recognized engagement with Indigenous Peoples would occur with time constraints due to the threat of a potential election and change in government in 2019. Public consultations occurred from June 2017 to November 2017. They took the form of an online survey, town halls, a national food summit, written submissions, community-led engagement sessions hosted by civil society organizations, bilateral and self-led Indigenous engagement sessions, and regional engagement sessions (AAFC, 2018). The findings of the public consultations were published in AAFC's 2018 *What We Heard Report: Consultations for a Food Policy for Canada* (WWH). Indigenous input was collected across these forums. However, engagement was most fruitful within the following bilateral and self-led Indigenous engagement sessions.

### Nishnawbe Aski Food Symposium

The Nishnawbe Aski First Nation Food Symposium was an annual event encouraging the discussion of the growing disparity between Indigenous communities and the rest of Canada (National Indigenous Diabetes Association, n.d). The Symposium occurred between August 22 and 24, 2017 (Green, 2017). Before the Nishnawbe Aski Food Symposium, AAFC's FPU was invited by the Nishnawbe Aski Food Advisory Council to participate in a general meeting. Informant D noted once the relationship was established, AAFC's FPU was invited to participate in the 2017 Nishnawbe Aski Food Symposium. Members of AAFC's FPU spent the day immersed in sessions led by Indigenous People.

Informants C, D, and F (and  Rosser (noted that the symposium was significant because space was created for discussions between AAFC's FPU, Indigenous communities, and national Indigenous representatives. Informants C, D, E and F also explained that AAFC presented their work on FPC and received direct feedback from individuals experiencing food insecurity, involved in community-based initiatives (e.g., food banks, community gardens), and wanted to discuss food sovereignty. After the symposium, informants B, C, D, E and F noted that AAFC's FPU continued correspondence with symposium participants.

### Assembly of First Nations

AFN's session brought together knowledge holders and food policy experts in food security, health, environment, and economic development (AAFC, 2018; Levi, 2017a). Senior-level AAFC officials were invited and participated (AAFC, 2018). The session allowed AFN regional representatives to learn about Canada's work on FPC. It allowed AAFC's representatives to engage with AFN representatives and AFN regional representatives (Levi, 2017b). The session also provided space for discussing what a First Nations Food Policy might look like and who would be involved in the development. The latter pointed to the importance of taking stock of existing and proposed research, policies, and programs within the Canadian state (Levi, 2017a).

The session included a presentation by AAFC, three panels, and a wrap-up discussion. Following AFN's engagement session, a draft report was produced by Elisa Levi, an Indigenous consultant and event facilitator (Levi, 2017a). The report situated the forum

[8] This body lead the development of FPC within AAFC.

as a meeting and not a consultation for First Nations. Some participants were unaware of FPC and stressed needing more time before a report could be generated for AAFC. As an informative resource about the session, key observations stand out.

First, the draft report and panels demonstrated an ongoing cautious approach held by First Nations representatives. Responding to AAFC's presentation, participants noted public consultation demonstrated continued colonial approaches for collecting data from First Nations. Participants felt the federal government's engagement process did not adequately provide a meaningful process for First Nations to participate, and the Yellowknife regional engagement session did not allow input subject matter presented at other engagement sessions (Levi, 2017b). Further, the panel presentations highlighted the importance of title and land rights of First Nations and that a distinction-based approach was missing from AAFC's efforts. From this standpoint, FPC came second to developing a National First Nations Food Policy.

Second, the theme of a systems approach was instilled across First Nations presentations. The draft report emphasized that many First Nations continued to grapple with food issues in their community, yet it was understood that no short-term or singular solution would suffice. In turn, the resurgence and support for reclaiming traditional food systems was identified as a key element for First Nations food systems to revive cultural practices and move towards better overall health for individuals and economies (Levi, 2017b).

Third, many presentations highlighted food insecurity and access issues across scales, indicating that any work on FPC or a First Nations food policy would require ongoing nation-to-nation relations. This prompted questions about how FPC supported reconciliation. Dawn Morrison pointed out that for many First Nations, food sovereignty is problematic "because of its etymological underpinnings" (Levi, 2017b, p. 5). The term provides a specific policy approach to addressing the underlying issues but does not adequately capture concerns and practices within First Nations food systems. It is a term used by settlers "because they could understand it" (Levi, 2017b, p. 5).

The forum highlighted the continuation of historically embedded oppression and racism. For First Nations participants, this session provided information and indicated a general interest to continue discussions within the Assembly. Informants D and F noted that for AAFC, this session provided new insights about First Nations food systems and important networking. For all participants, food policy—developed by any group—required further critical consideration about framing and implementing a systems approach across scales.

### Inuit Tapiriit Kanatami

From October 17 to 18, 2017, ITK and the Inuit Food Security Working Group organized the National Inuit Engagement Session on A FPC to 1) Develop a shared vision of the Inuit food system in the Inuit regions; 2) identify strengths and challenges experienced within the food system for Inuit; and 3) build on previous work to identify strategies that can improve the food system in Inuit Nunangat (AAFC, 2018; ITK, 2017, 2022). Over two days in Ottawa, more than fifty participants provided input on food security, nutrition and health, conservation policy, harvesting, wildlife institutional management, economic development, and community-based programming (ITK, 2017). The session's findings were captured in *An Inuit Specific Approach for the Canadian Food Policy and submitted to the House of Commons Standing Committee on Agriculture and Agri-Food* (2017).

The findings situated how Inuit communities and organizations understood Inuit-Crown relations as shaped by colonial practices and indicated where and how policymakers needed to improve. Specifically, the report emphasized a distinctions-based approach when crafting food policy and programs to support Inuit communities. From this perspective, the report was less about actively vying for a Canadian national food policy and instead pushing for better Crown-Inuit relations through the reconciliation activities and institutional mechanisms that would support Inuit food sovereignty. The report highlighted long-lived examples of institutional discrimination imposed by the Canadian federal government, and localized solutions were posited as areas where Crown-Inuit collaboration could support reconciliation efforts. Key recommendations regarding a distinctions-based approach and local food infrastructure outlined in ITK's 2017 report were incorporated directly into WWH (AAFC, 2018) and FPC (AAFC, 2019) (see Table 1).

### Native Women's Association of Canada

The NWAC first engaged with its Board of Directors to determine how best to engage Indigenous women within the scope of FPC (NWAC, 2018). Then, NWAC developed a culturally relevant and gender-specific survey posted online and used during engagement sessions to gather input from Indigenous women and gender-diverse people (AAFC, 2018). *Food Policy The Native Women's Association of Canada Engagement Result* was released in May 2018, arguing that food is integral to Indigenous culture. Like AFN and ITK, the NWAC emphasized the importance of Indigenous Peoples' relationship to food as holistic and sustainably based on mutual respect for the land. However, NWAC called for a food policy that considered gendered power dynamics because "Indigenous women, their children and families face unique barriers to affordable, nutritious and safe food" (2018, p. 1). Further, NWAC (2018, p. 1) argued that policymakers must consider how "access to healthy and nutritious food differs for urban and rural communities" and the challenges associated with accessing food between northern and remote communities and southern communities. These claims suggested that a one-size-fits-all approach would not work and that community-led initiatives would require attention.

The NWAC based their discussion on AAFC's online survey for the public consultations. Informant A explained that this approach aimed to capture Indigenous women's lived experiences with food not yet heard by AAFC. Aligning with AFN and ITK, NWAC's data emphasized the need for a distinction-based approach in FPC while simultaneously highlighting the importance of attention to gender and family dynamics in food policy development.

## Framing of the final policy document

By 2019, the federal government had begun refining the content of FPC. While this research did not reveal forums where GoC engaged with Indigenous Peoples in 2019 about the final content of FPC, Budget 2019 and FPC revealed the GoC's framing. Budget 2019 presented the first tangible framework of what FPC would look like. Budget 2019 allocated $134.3 million to FPC with a conditional $100 million to be redirected from another programming (Finance Canada, 2019); the most funding was allocated to the action area Canadian Food, the Top Choice at Home and Abroad ($100 million). This was followed by Help Canadian Communities Access Healthy Food ($99.4 million), Reduce Food Waste ($26.3 million), and Support Food Security in Northern and Indigenous Communities ($15 million) (Finance Canada, 2019; see Table 1).

Interestingly, while reconciliation was a high priority for the federal government, the least funding was allocated to supporting Food Security in Northern and Indigenous Communities. Further, when comparing the two proposed programs, only the Northern Isolated Community Initiatives Fund was financially supported (see Table 1).

Table 1: Funding Allocated by Short-Term Action Areas in Budget 2019

| Theme Area | Proposed Initiatives | Funding | Total Funding |
|---|---|---|---|
| | | | |
| Help Canadian Communities Access Healthy Food | National School Food Program | $0 | $99.4 million |
| | Local Food Infrastructure | $50 million | |
| | Buy Canadian Promotion Campaign | $25 million | |
| | Tackling Food Fraud | $24.4 million | |
| Make Canadian Food The Top Choice at Home and Abroad | Support for Food Processors via Strategic Innovation Fund | $100 million | $100 million |
| | Export Diversification Strategy | $0 | |
| | Three-year Permanent Residency Pilot Project for Non-seasonal Agricultural Workers | $0 | |
| Support Food Security in Northern and Indigenous Communities | Northern Isolated Community Initiatives Fund | $15 million | $15 million |
| | Harvester's Support Grant | $0 | |
| Reduce Food Waste | Food Waste Reduction Challenge | $20 million | $26.3 million |
| | Federal Leadership in Food Waste Reduction | $6.3 million | |

Table 2: Comparing funding and program direction for the short-term action area Supporting Food Security in Northern and Indigenous Communities

| | Budget 2019 | | | Food Policy for Canada | |
|---|---|---|---|---|---|
| Short-term Action Area | Initiative | Funding Allocated | Description of Initiative | Initiative Referenced | Text Reference of Initiative |
| Support Food Security in Northern and Indigenous Communities | Northern Isolated Community Initiatives Fund | $15 million | "...to support community-led projects, with funding for equipment such as community freezers, greenhouses, local food production projects, and skills training for local and Indigenous food producers." (p. 163) | Indirectly | "Actions will advance efforts towards Reconciliation with Indigenous Peoples by strengthening First Nations, Inuit, and Métis food systems, recognizing the importance of food to Indigenous culture and well-being, and, in so doing, supporting Indigenous food self-determination." (p.9) |
| | Harvester's Support Grant | $0 | "Following the 2018 Fall Economic Statement regarding new investments to Nutrition North Canada, this new program aimed "to help lower the costs associated with traditional hunting and harvesting activities, which are an important source of healthy, traditional food" (2019: p. 101, 163). | Indirectly | |

Most contentious, funding allocated suggested reinforcement of the colonial approaches of land use acquisition for resource extraction and financial gain. Specifically, the Northern Isolated Community Initiatives Fund supported productive agricultural practices in Indigenous communities (e.g., transforming land for pasture and crop production, processing and storing commodities for sale). Comparatively, the Harvester's Support Grant was designed to "lower the costs associated with traditional hunting and harvesting activities, which are an important source of healthy, traditional food" (Finance Canada, 2019, p. 163). Budget 2019 demonstrated that the government supported initiatives familiar to the agricultural portfolio, reflecting colonialist approaches to resource extraction and land transformation for commodity production, compared to more innovative solutions that would support sustainable and traditional trapping, hunting, and foraging practices. Looking across FPC, references supporting Indigenous Peoples and an approach focussed on reconciliation were present (see Table 3).

Strong Indigenous food systems were a policy priority and supporting food security in northern and Indigenous communities was a short-term action area; however, there was a limited explanation of how the policy intended to support these priorities. Misalignment occurred where FPC did not reference or explain how a distinctions-based approach would be employed and why reconciliation was necessary. Furthermore, Indigenous Peoples nor reconciliation were mentioned in FPC's vision statement but were referenced in different sections of FPC. The vision statement presented broad language that cautioned away from specifying groups: "All people in Canada" and "diverse actors and stakeholders from across the food system" (AAFC, 2019, p. 5). In short, this approach suggested FPC was contradictive because the vision statement was not directly connected to FPC's principle of reconciliation, which specified "a distinctions-based approach to ensure that the unique rights, interests and circumstances of the First Nations, the Metis Nation and Inuit are acknowledged, affirmed, and implemented (AAFC, 2019, p. 10)

Table 3: References to Indigenous Food Systems and Reconciliation in Food Policy for Canada

| Section of FPC | Reference in FPC |
|---|---|
| Introduction | The Government of Canada also engaged in a dialogue with Indigenous Peoples and organizations to better understand opportunities and challenges unique to their communities. (p.3) |
| Why Does Canada Need a Food Policy? | Food systems are interconnected and are integral to the wellbeing of communities, including northern and Indigenous communities, public health, environmental sustainability, and the strength of the economy. (p.3) |
| Aligning Food System Action | -- |
| What is food Policy? | -- |
| Vision: Setting a Common Direction for the Future of Food | -- |
| Priority Outcomes: Achieving the Vision | 4. Strong Indigenous food systems: To be co-developed in partnership with Indigenous communities and organizations. The Food Policy for Canada will help advance the Government of Canada's commitment to Reconciliation with Indigenous Peoples, build new relationships based on respect and partnership, and support strong and prosperous First Nations, Inuit and Métis food systems – as defined by communities themselves. (p.7) |
| Foundational Elements: Supporting Implementation | Canadian Food Policy Advisory Council: The membership of the Council will include individuals with experience and knowledge of food system issues, with backgrounds in the food and agriculture industry, members of academia and civil society, as well as members of Indigenous organizations and communities. (p.8) |
| Action Areas: Taking Action to Address Key Gaps (2019-2024) | 3. Support Food Security in Northern and Indigenous Communities Actions will advance efforts towards Reconciliation with Indigenous Peoples by strengthening First Nations, Inuit, and Métis food systems, recognizing the importance of food to Indigenous culture and well-being, and, in so doing, supporting Indigenous food self-determination. (p.9) |
| Principles: Guiding the Approach | **Reconciliation**—First Nations, Inuit and Métis communities in Canada have distinct food systems that have been nurtured and developed over many generations. Reconciliation begins by acknowledging how historic Government policies have disrupted these food systems, and ensuring that decision-making going forward:<br>• Adopts a distinctions-based approach to ensure that the unique rights, interests and circumstances of the First Nations, the Metis Nation and Inuit are acknowledged, affirmed, and implemented.<br>• Supports Indigenous food self-determination, meaning the ability of Indigenous Peoples to define their own food systems.<br>• Takes a holistic approach that acknowledges that food is more than a product. For Indigenous Peoples, it is the medicine that ensures their wellbeing; it is a way of sustaining culture and community; and, it is a way of reconnecting to the land.<br>• Looks (seven) generations ahead to assess the impact of current actions on future generations, and support intergenerational knowledge transfer.<br>• Promotes traditional two-eyed seeing to ensure that Indigenous knowledge and practices are considered alongside other forms of knowledge and evidence. (p. 10-11) |

This was also evident under the section "Aligning Food System Actions." While the policy noted, "To tackle complex food issues, coordinated and coherent approaches are needed" (AAFC, 2019, p. 4), the different components of the food system(s) requiring alignment were not identified. Interestingly, the section directly before, "Why does Canada need a Food Policy?" identified components and made explicit reference to Indigenous communities (AAFC, 2019): "Food systems, including the way food is produced, processed, distributed, consumed, and disposed of, have direct impacts on the lives of Canadians. Food systems are interconnected and are integral to the wellbeing of communities, including northern and Indigenous communities, public health, environmental sustainability, and the strength of the economy" (p. 3).

Further, by not identifying historic challenges Indigenous Peoples face in the food system(s) in Canada, misalignment suggested the policy would fail in meeting the goals of reconciliation. If systematically embedded oppression and racism in Canada's agricultural and food systems were not referenced in FPC, then how would the policy address those issues?

Under the section "Targets", FPC missed further opportunities. Targets were presented as follows (AAFC, 2019): "Specific and measurable targets for each of the long-term outcomes will be developed with input from the Canadian Food Policy Advisory Council.[9] Evidence to measure progress toward the long-term consequences and supporting targets will be addressed with assistance from the Council…[sub-targets] include reduction in the number of food insecure households in Canada, reduction of food losses along the food supply chain, and reduction of food waste within federal government facilities and operations" (p. 13).

The proposed sub-targets suggested focusing on productivity and commodities, not individual or community choices around food. This did not align with calls for distinction-based targets. WWH (AAFC, 2018, p. 12) explained, "Concerns were raised that the themes do not sufficiently reflect Indigenous-specific issues and considerations—distinct cultural preferences and practices, the importance of country/traditional food, and Indigenous knowledge (including but not limited to traditional ecological knowledge)." In turn, FPC suggested predetermined targets were to be implemented before the Council was created, and proposed targets did not reflect distinctions-based elements.

FPC indicated that targets were to align with the United Nations Sustainable Development Goals (SDGs; United Nations, 2023; AAFC, 2019): zero hunger, good health and well-being, responsible production and consumption, and climate action. However, FPC did not reference other SDG goals that would support relations with Indigenous Peoples, for example, quality education, gender equality, reduced inequalities, life on the land, peace, justice and strong institutions, and partnerships for the goals. FPC did not identify how SDGs were relevant to the long-term outcomes, principles, and short-term action areas. For clarity, transparency, and cohesion across FPC, such an explanation would support accountability metrics and provide metrics for measuring the policy's success.

Finally, FPC referenced one federal commitment beyond SDGs: the Agri-Food Economic Strategy Table (AAFC, 2019). Unfortunately, FPC did not explain the

[9] Recognizing the need for collaboration to make meaningful progress, the federal government created the Canadian Food Policy Advisory Council as a central piece of FPC. This multi-disciplinary group brings together diverse social, environmental, health and economic perspectives to help address food system challenges and opportunities (AAFC, 2024).

relevance of this effort to FPC. Further, there were many other efforts between 2015 and 2019 that intersected with FPC and Indigenous People and were not mentioned: Poverty Reduction Strategy (2018), Healthy Eating Strategy (2016), Canada Food Guide (2019) (Andrée et al., 2021). The most important oversight related to prioritizing reconciliation in FPC was the fact that the RCAP (Library and Archives Canada, 2016), the *Action Plan on Aboriginal Consultation and Accommodation* (AANDC, 2011) and the *Principles Respecting the Government of Canada's Relationship with Indigenous Peoples* (DJC, 2018) were not referenced. In short, it was unclear how that ongoing work would support the implementation of FPC and reconciliation.

While FPC indicated, "Actions will advance efforts towards Reconciliation with Indigenous Peoples by strengthening First Nations, Inuit, and Métis food systems, recognizing the importance of food to Indigenous culture and well-being, and, in so doing, supporting Indigenous food self-determination" (AAFC, 2019, p. 9), this approached was not comprehensive or consistent across FPC. In short, FPC demonstrated important aspirations for reconciliation but did not take the guidance given during public consultations. Coupled with limited funding, the success of the policy was dismal. Altogether, vague language, misalignment of the policy's content, and the missed opportunity to incorporate information heard during public consultations were underwhelming.

## Discussion and recommendations: Continued colonial framing in food policy development

It was observed that AAFC's engagement with Indigenous Peoples was fruitful for FPC, and discussions brought consideration of a First Nations Food Policy to the fore. Furthermore, the depth and relevance of the information collected would otherwise not have been captured if AAFC had not taken the approach it did. However, Indigenous voices were "fit" into the process rather than central to the policy's design and development. Indigenous voices were heard not in nation-to-nation forums but in stakeholders and public forums. These forums emulated Canada's historical approach to research development and data extraction. Indigenous voices were subjects helping the GoC gather data, rather than Indigenous People helping develop and implement the research in partnership.

Indigenous voices were predominantly advisory, meaning the input could be disregarded. In short, the case study of FPC did not emulate nation-to-nation partnership because GoC continued to situate Indigenous Peoples as stakeholders and subjects rather than equal partners. In turn, it was observed that Canada was dancing around the concepts of nation-to-nation relations, reconciliation, and DC. In some areas of the policy's development, the federal government was taking necessary steps forward. However, they took steps back in other examples, reinforcing past practices and ideologies. While FPC demonstrated several challenges for meaningful and respectful nation-to-nation policy making, essential lessons must be learned.

First, the exact meaning of nation-to-nation partnerships was unclear in 2015. However, between 2017 and 2021, significant progress has been made in Canada's political institutions. Nevertheless, as of 2024, it remains unclear what nation-to-nation relations and DC look like when implementing FPC. It is recommended that the GoC take steps to more clearly define the roles and responsibilities of different actors

and political institutions to meet legal and mandated requirements regarding Indigenous engagement.

For one, the Working Group of Ministers should include the Minister of Agriculture to support horizontal coordination of food policy. Further, the central agencies (Privy Council Office, Treasury Board of Canada Secretariat and Department of Finance) must also be involved to ensure the information flows into central guiding documents each year. Second, suppose a similar body for horizontal coordination does not exist within the public service (e.g., led by CIRNAC). In that case, one should be established to ensure that the same flow of information and direction occurs at the ministerial level across actors implementing FPC. Furthermore, there are always vertical challenges in communication between department branches and the minister's office. Incorporating ministerial representation in horizontal coordination at different levels of decision-making will provide clarity and consistency. Finally, while the Canadian Food Policy Advisory Council (2024) includes Indigenous representation, the body is an advisory mechanism, which could be an opportunity or a hindrance for distinction-based approaches in food policy development and implementation.

Increasingly, public servants are reaching out to Indigenous communities to inquire if proposed policy changes will have an impact. While this approach rests on Indigenous voices as advisory, it allows for introductions and information sharing and can evolve into formal consultation. Ministries like AAFC, with less experience or legal obligations, can increase engagement between public servants and Indigenous Peoples to build rapport and relations. This approach is recommended as an interim for raising awareness and knowledge sharing. Further, it could lend to building relationship(s) between those experiencing the impacts of policy and the policy actors carrying out the majority of policy development and holding regulatory and legislative oversight. While some ministries like CIRNAC are already working towards/implementing reconciliation and DC frameworks, this approach can help other ministries still evolving in their roles, responsibilities and options regarding DC and reconciliation.

Furthermore, it is recommended that the federal government support and encourage opportunities like the Nishnawbe Aski Food Symposium and National Food Summit. For example, an annual national symposium on Indigenous food policy bi-laterally lead by Indigenous partners and the Working Group of Ministers. This forum rests on the conceptualization that a breadth of decision-makers would have the opportunity to come together and discuss issues specific to Indigenous food policy. It is also suggested that these efforts occur close to and within Indigenous communities so visitors can experience firsthand the challenges and opportunities at the community level. Such an approach would help reduce siloed policy making and increase collaborative solutions.

Finally, when the Trudeau Government came to office in 2015, they brought an ambitious agenda for Indigenous reconciliation. However, the distribution of funding to AAFC for reconciliation efforts remains unclear. It was observed that when the money ran out for developing FPC, AAFC's FPU moved toward culminating the policy process. Informants A and D explained this included re-focusing work and resources on other mandated priorities outside FPC and away from reconciliation. The re-focussing was not questioned because the networking and reconciliation efforts undertaken by AAFC's FPU were novel. For example, the time and attention towards reconciliation (e.g., Indigenous Engagement Strategy) was not previously part of AAFC's policy design framework. From this perspective, AAFC made great strides with

the little time and money provided between 2016 and 2017. However, asking for more money for reconciliation efforts was not a priority and was unlikely to be supported.

With this in mind, it is essential to consider the succession of policy champions and the turnover of policy knowledge. For new staff coming into AAFC's FPU after 2017, informants D and G explained there was a limited briefing on the FPU's previous efforts We recommend that to develop strong and meaningful relations with Indigenous Peoples, government staff should be encouraged to pursue different forms of training and education and provided with forums to process that knowledge for reconciliation to be genuinely supported.

It is surmised that such an approach will increase policy actors championing reconciliation and other efforts with Indigenous Peoples within federal food policy processes. While it is recognized that such an approach should not replace nation-to-nation relations and that not all Indigenous Peoples will want to engage in such a capacity, it is believed that support for this and the other approaches noted above will have broader positive impacts within and outside the federal government. Specifically, the federal government must lead by example in partnership with Indigenous Peoples.

## Conclusion

The GoC recognized the need for a national food policy to ensure that all people in Canada have access to healthy and sustainable food. However, developing such a policy is complex and requires research, negotiations and engagement across numerous sectors, peoples, and communities.

With the election of Prime Minister Justin Trudeau in 2015 came a stronger rhetoric of reconciliation. In turn, the GoC articulated dedication to working with Indigenous Peoples in the spirit of nation-to-nation, government-to-government, and Inuit-to-Crown relationships. The renewing of relationships between Indigenous and non-Indigenous Peoples is part of addressing the ongoing effects of colonialism. While this has translated into direct action on specific issues that impact Indigenous Peoples, such as the Truth and Reconciliation or the adoption of UNDRIP, it has not manifested in the context of food policy and food security. However, this approach has been couched in the language of engaging with stakeholders and loyal subjects of Canada rather than engaging with Indigenous Peoples based on partners and equals.

As demonstrated in the case study of FPC, Indigenous voices and perspectives continue to be marginalized when it comes to addressing food security and food policy. Indigenous perspectives and experiences are crucial to the discussions around food policy and security because Indigenous Peoples are more likely to experience food insecurity and food scarcity. This paper demonstrated the clear need for policy to ensure that access to healthy food is available and considers the diverse situations of Canada's populations. It is also clear that the process of incorporating Indigenous voices into policy development at the federal level is uneven; there is still an ongoing risk of marginalization and infantilizing those voices as stakeholders rather than as nations with their citizens and governments. Indigenous Peoples have long advocated for comprehensive work on food support and food policy, but not at the expense of

Indigenous sovereignty. There is an opportunity to continue developing respectful relationships with the Crown, federal government, and the First Peoples of the land to address this crucial issue we all face.

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**Mary Coulas**: a white, middle-class, cisgender, and neurodivergent individual, holds privilege as a member of Canada's dominant social group (white, English-speaking settler). Their upbringing in rural Ontario, academic success, and professional roles as an elected official and policy analyst inform their understanding of the need for deeper, critical engagement with Canada's agricultural and agri-food systems. In this research, their privilege extends to designing the project, collecting data for their dissertation, and shaping its interpretation. Initially written from a normative perspective, the paper was reconsidered due to concerns that it perpetuated the exploitative practices it critiqued. Committed to reconciliation and equitable collaboration, the first author partnered with the second author to rewrite the work, prioritizing meaningful partnerships with Indigenous Peoples.

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## References

Aboriginal Affairs and Northern Development Canada (AANDC). (2011). *ARCHIVED—Summary of input from Aboriginal communities and organizations on consultation and accommodation.*

Agriculture and Agri-Food Canada (AAFC). (2018). *What we heard report: Consultations on a food policy for Canada.* AAFC No. 12831E. Cat. No. A22-609/2018E-PDF https://agriculture.canada.ca/sites/default/files/legacy/pack/pdf/20181025-en.pdf

Agriculture and Agri-Food Canada (AAFC). (2019*). Food policy for Canada: Everyone at the table! AAFC No. 12969E Cat. No. A22-628/2019E-PDF.* Government of Canada. https://agriculture.canada.ca/sites/default/files/legacy/pack/pdf/fpc_20190614-en.pdf

Agriculture and Agri-Food Canada (AAFC). (2024). *Food policy advisory council.* Government of Canada. https://agriculture.canada.ca/en/department/initiatives/food-policy/advisory-council

Alfred, G. T. (2009). Colonialism and state dependency. *Journal of Aboriginal Health*, 5(2), 42–60.

Andree, P., Ballamingie, P. & Coulas, M. (2021). Integrative governance for ecological public health: An analysis of 'Food policy for Canada' (2015-2019). *Canadian Food Studies La Revue Canadienne Des études Sur l'alimentation*, *8*(2). https://doi.org/10.15353/cfs-rcea.v8i2.450

Assembly of First Nations (AFN). (2022). *About us.* https://www.afn.ca/about-afn/

Bhatia, V. & Coleman, W. (2003). Ideas and discourse: Reform and resistance in the Canadian and German health systems. *Canadian Journal of Political Science/Revue Canadienne de science politique, 36*(4), 715-739. https://doi.org/10.1017/S0008423903778822

Carstensen, M. B., & Schmidt, V. A. (2016). Power through, over and in ideas: Conceptualizing ideational power in discursive institutionalism. *Journal of European Public Policy, 23*(3), 318-337. https://doi.org/10.1080/13501763.2015.1115534

The Constitution Acts 1867 to 1982, Part 2: Rights of the Aboriginal Peoples of Canada. (2024) https://laws-lois.justice.gc.ca/eng/const/

Coulas, M. (2021). Discursive institutionalism and food policy research: The case study of Canada's national food policy. *Frontiers in Communication, 6*(749027), 1-16. https://doi.org/10.3389/fcomm.2021.749027

Coulthard, G. S. (2014). *Red skin, white masks: Rejecting the colonial politics of recognition*. University of Minnesota Press.

Crown-Indigenous Relations and Northern Affairs (CIRNAC). (2010, September 15). Highlights from the Report of the Royal Commission on Aboriginal Peoples. https://www.rcaanc-cirnac.gc.ca/eng/1100100014597/1572547985018

Crown-Indigenous Relations and Northern Affairs (CIRNAC). (2024a, January 29). *Aboriginal consultation and accommodation – Updated guidelines for federal officials to fulfill the duty to consult – March 2011.* https://www.rcaanc-cirnac.gc.ca/eng/1100100014664/1609421824729

Crown-Indigenous Relations and Northern Affairs (CIRNAC). (2024b, November 29). *Government of Canada and the duty to consult.* Government of Canada. https://www.rcaanc-cirnac.gc.ca/eng/1331832510888/1609421255810

Department of Justice Canada (DJC). (2018). *Principles respecting the government of Canada's relationship with Indigenous Peoples. ISBN 978-0-660-25093-9 Cat. No. J2-476/2018E-PDF.* https://www.justice.gc.ca/eng/csj-sjc/principles.pdf

Department of Justice Canada (DJC). (2023). *United Nations Declaration on the Rights of Indigenous Peoples Act Action Plan. J2-585/2023E-1-PDF.* Government of Canada. https://www.justice.gc.ca/eng/declaration/ap-pa/ah/pdf/unda-action-plan-digital-eng.pdf

Finance Canada. (2019, March 19). *ARCHIVED: Investing in the middle class: Budget 2019. Cat. No.: f1-23/3E-PDF. https://www.budget.canada.ca/2019/home-accueil-en.html*

Forester, B. (2023, March 28). Budget 2023 continues 'repetitive injustice' of underfunding First Nations, says national chief. *CBC News.* https://www.cbc.ca/news/indigenous/budget-2023-afn-archibald-1.6794077

Government of Canada. (2021). *Indigenous Knowledge Policy Framework for Project Reviews and Regulatory Decisions.* https://www.canada.ca/content/dam/iaac-acei/documents/programs/indigenous-knowledge-policy-framework.pdf

Green, H. (2017, July 12). *NAN Food Symposium!* Sustain Ontario. https://sustainontario.com/2017/07/12/nan-food-symposium/

Haida Nation v. British Columbia (Minister of Forests), 3 S.C.R. 511, 2004 SCC 73. (2004). https://decisions.scc-csc.ca/scc-csc/scc-csc/en/item/2189/index.do

Inuit Tapiriit Kanatami (ITK). (2017). *An Inuit specific approach for the Canadian food policy.* https://www.itk.ca/wp-content/uploads/2019/01/ITK_Food-Policy-Report.pdf

Inuit Tapiriit Kanatami (ITK). (2022). *Home.* https://www.itk.ca/

Init Tapiriit Kanatami (ITK). (2023, March 29). *Budget 2023 stops short of meaningful steps to advance reconciliation with Inuit.* https://www.itk.ca/budget-2023-news-release/

Jacob, F. (n.d). *Moving the NAN food strategy forward: Community people making a difference [Presentation].* https://nada.ca/wp-content/uploads/Moving%20the%20NAN%20Food%20Strategy%20Forward.pdf

Johnston, D. (2015, December 4). *Making real change happen, Speech from the Throne to open the first session of the forty-second Parliament of Canada. Cat. no. SO1-1 ISSN 1203-9268.* Government of Canada. https://www.canada.ca/content/dam/pco-bcp/documents/pm/speech_from_the_throne.pdf

Levi, E. (2017a). *Elisa Levi.* https://www.elisalevi.ca/

Levi, E. (2017b). *Meeting report (Draft): A national First Nations food policy information session October 23, 2017 [Unpublished Report].*

Library and Archives Canada. (2016, November 2). *Report of the Royal Commission on Aboriginal Peoples.* Government of Canada. https://www.bac-lac.gc.ca/eng/discover/aboriginal-heritage/royal-commission-aboriginal-peoples/Pages/final-report.aspx

Maracle, L. (1996). *I am woman: A native perspective on sociology and feminism*. Press Gang Publishers.

Mikisew Cree First Nation *v.* Canada (Minister of Canadian Heritage), 3 S.C.R. 388, 2005 SCC 69

Minister of Justice. (2020, December 3). *Bill C-15: An Act respecting the United Nations Declaration on the Rights of Indigenous People.* House of Commons Canada, Second Session, Forty-third Parliament. https://www.parl.ca/DocumentViewer/en/43-2/bill/C-15/first-reading

Mosby, I. (2013). Administering colonial science: Nutrition research and human biomedical experimentation in Aboriginal communities and residential schools, 1942–1952. *Histoire Sociale/Social History, 46*(91), 151–52. https://doi.org/10.1353/his.2013.0015

Native Women's Association of Canada (NWAC). (2018). *Food policy the Native Women's Association of Canada engagement results.* https://www.nwac.ca/wp-content/uploads/2018/06/NWAC_Food_Policy_Final_Report_May_2018.pdf

Native Women's Association of Canada (NWAC). (2023, March 28). *NWAC: It's time for federal government to walk the reconciliation talk.* https://nwac.ca/media/nwac-its-time-for-federal-government-to-walk-the-reconciliation-talk

Rotz, S., & Kepkiewicz, L. W. (2018). Settler colonialism and the (im)possibilities of a national food policy. *Canadian Food Studies La Revue Canadienne Des études Sur l'alimentation*, *5*(3), 248–258. https://doi.org/10.15353/cfs-rcea.v5i3.27

Schmidt, V. A. (2010). Taking ideas and discourse seriously: Explaining change through discursive institutionalism as the fourth new institutionalism. *European Political Science Review, 2*(1), 1–25. 10.1017/S175577390999021X

Schmidt, V. A. (2011). Discursive institutionalism. In B. Badie, D. Berg-Schlosser, and L. Morlino (Eds.), *International encyclopedia of political science* (pp. 684-686). SAGE Publications, Inc. doi.org/10.4135/9781412959636.n161

Simpson, L. (2011). *Dancing on our turtle's back: Stories of Nishnaabeg re-creation, resurgence, and a new emergence*. Arbeiter Ring Publishing

Standing Committee on Agriculture and Agri-Food. (2017, December 11). *Report 10: A food policy for Canada, report of the House of Commons Standing Committee on Agriculture and Agri-Food.* https://www.ourcommons.ca/DocumentViewer/en/42-1/AGRI/report-10/

Statistics Canada. (2022, January 7). *Food insecurity by selected demographic characteristics.* https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310083501.

Statistics Canada. (2022, September 21). *Indigenous population continues to grow and is much younger than the non-indigenous population, although the pace of growth has slowed.* https://www150.statcan.gc.ca/n1/daily-quotidien/220921/dq220921a-eng.htm?indid=32990-1&indgeo=0

Taku River Tlingit First Nation *v.* British Columbia (Project Assessment Director), 3 S.C.R. 550, 2004 SCC 74

Tarasuk, V., Li, T., & Farard St-Germain, A-A. (2021). *Household food insecurity in Canada: 2021*. Proof. https://proof.utoronto.ca/resource/household-food-insecurity-in-canada-2021/

Trudeau, J. (2015, November 12). *ARCHIVED—Minister of Agriculture and Agri-Food mandate letter.* https://pm.gc.ca/en/mandate-letters/2015/11/12/archived-minister-agriculture-and-agri-food-mandate-letter

Trudeau, J. (2017a, February 22). *Prime Minister announces working group of ministers on the review of laws and policies related to Indigenous Peoples.* https://www.pm.gc.ca/en/news/news-releases/2017/02/22/prime-minister-announces-working-group-ministers-review-laws-and

Trudeau, J. (2017b, August 28). *New ministers to support the renewed relationship with Indigenous Peoples.* https://www.pm.gc.ca/en/news/backgrounders/2017/08/28/new-ministers-support-renewed-relationship-indigenous-peoples

Tuck, E., & Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society,* 1(1), 1-40.

United Nations. (2007). *United Nations Declaration on the Rights of Indigenous Peoples.* https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

United Nations Declaration on the Rights of Indigenous Peoples Act, S.C. 2021, c. 14

United Nations. (2023). *Sustainable development goals.* Department of economic and social affairs. https://sdgs.un.org/g

# Appendix

Glossary of Acronyms

| Abbreviation | Definition |
|---|---|
| AAFC | Agriculture and Agri-Food |
| AAFC FPU | Agriculture and Agri-Food Food Policy Unit |
| AFN | Assembly of First Nations |
| CIRNAC | Crown-Indigenous Relations and Northern Affairs Canada |
| DC | Duty-to-Consult |
| FPC | Food Policy for Canada: Everyone at the Table! |
| ITK | Inuit Tapiriit Kanatami |
| NWAC | Native Women's Association of Canada |
| RCAP | Royal Commission on Aboriginal Peoples |
| SDGs | United Nations Sustainable Development Goals |
| UNDRIP | The United Nations Declaration on the Rights of Indigenous People |
| WWH | What We Heard Report: Consultations for a Food Policy of Canada |

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Research Article

# Optimizing stewardship of the land? Digital agriculture and the ideology of optimization in Canadian policy and media discourse

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## Abstract

This research considers the ways in which digital agriculture (DA) technologies (like robotic machinery, big data applications, farm management software platforms and drones) fit into discourses of sustainable agriculture in the Canadian political and media landscape. To undertake this research, I conducted a discourse analysis of relevant government and media materials published between 2016 and 2022. What became evident was an *ideology of optimization,* which works to communicate that environmental sustainability needs to and will be optimized using DA technologies. I then consider how these findings are related to the federal fertilizer emissions reduction target, aiming to reduce emissions arising from fertilizer application in agricultural contexts by 30% below 2020 levels by 2030. I argue that discourse regarding this target deploys the ideology of optimization to keep current systems of fertilizer use in place, solidifying further the industrial and productivist paradigm of agriculture in Canada.

**Keywords**: Digital agriculture; nitrogen fertilizer; optimization; sustainable agriculture

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## Résumé

Cette recherche examine la manière dont les technologies de l'agriculture numérique (comme les machines robotisées, l'utilisation des mégadonnées, les logiciels de gestion agricole et les drones) sont intégrées dans les discours sur l'agriculture durable dans le paysage politique et médiatique canadien. Pour entreprendre cette recherche, j'ai procédé à une analyse du discours des documents gouvernementaux et médiatiques pertinents publiés entre 2016 et 2022. Il en ressort une *idéologie de l'optimisation*, qui vise à faire comprendre que la durabilité environnementale doit être et sera optimisée à l'aide des technologies de l'agriculture numérique. J'examine ensuite la manière dont ces résultats sont liés à l'objectif fédéral de réduction des émissions d'engrais, qui vise à réduire les émissions découlant de l'application d'engrais dans les contextes agricoles de 30 % par rapport aux niveaux de 2020 d'ici à 2030. Je soutiens que le discours concernant cet objectif déploie l'idéologie de l'optimisation pour maintenir les systèmes actuels d'utilisation d'engrais, renforçant davantage le paradigme industriel et productiviste de l'agriculture au Canada.

## Introduction

The Canadian agricultural system is facing serious problems; it is both a contributor to climate change and other environmental problems, while simultaneously being heavily impacted by the consequences of these crises (Clapp et al. 2018). Globally, it is estimated that between 20-35 percent of anthropogenic greenhouse gas (GHG) emissions are from the agricultural sector (Clapp et al., 2018). In Canada, the National Inventory Report states that the Canadian agricultural sector currently contributes eight to ten percent of Canada's GHG emissions. Emissions of all three major GHGs (carbon dioxide, methane and nitrous oxide) are emitted through agricultural processes—with enteric fermentation from livestock production being a major contributor, and the release of nitrous oxide from synthetic fertilizer use being another (Environment and Climate Change Canada, 2023). Meanwhile, climate change is wreaking havoc on the agricultural sector across the country. The 2023 growing season was affected by severe drought in Alberta, Saskatchewan and Manitoba (Goodwein & Melgar, 2023), and British Columbia suffered severe droughts in 2021, followed by flooding events that affected hundreds of farms provincewide (Schmunk, 2021). With rising emissions, these impacts will likely continue and become worse (Kornhuber et al., 2023).

Many people believe that the adoption of digital technologies in agriculture may help address the sector's sustainability challenges. Digital agriculture (DA) can mean many things, but it ultimately involves the application of digital technologies—from sensors, drones and robotics to farm management software applications—that support farmer decision making. This paper assesses policy and media texts relating DA and sustainability in Canadian agriculture. Methods consist of a discourse analysis of relevant government and media materials published between 2016 and 2022, which refer to agricultural sustainability: the dataset includes relevant government reports, government media releases, and media articles from national and regional newspapers published in Canada. Discourse analysis of

these texts revealed an *ideology of optimization,* which does cultural work along three axes: first, the discourse communicates that environmental sustainability needs to be and will be optimized using DA. Second, the discourse forwards an argument that environmental sustainability will indirectly result via the "optimization" of other farm variables, notably profitability. Finally, the discourse embeds an argument that "optimization" will occur through the quantification and datafication of agricultural environments, a process that necessitates digital technologies. After the results of the textual analysis are presented, the findings are related to the fertilizer emissions reduction target announced by the Canadian federal government in 2020, which aims to reduce emissions arising from fertilizer application. This article demonstrates that discourse about the fertilizer emissions reduction target deploys the ideology of optimization to keep current systems of fertilizer use in place, further solidifying the industrial and productivist paradigm of agriculture in Canada. Furthermore, the article contends that the concept of optimization could be useful to critical food studies scholars, who for years have critiqued this productivist agricultural paradigm for its social and environmental consequences (Buttel, 2006). Lastly, the article concludes that data studies scholars who have critically assessed optimization in relation to digital platforms might find agriculture a useful site of study.

## Background: The role of digital technology in Canadian climate and agricultural policy

Canada's federal response to climate change began in a serious way when it signed onto the Paris Agreement in 2016, and committed to achieve "net-zero" emissions by 2050 (Vinco et al., 2023). This response has resulted in many different federal strategies, policies and new pieces of legislation. However, for the most part, the focus of legislation has been on the oil and gas sector, transportation, buildings and electricity (Vinco et al., 2023). At the same time, the federal government has established various programs to encourage more sustainable practices in the agricultural sector. For example, the Canadian Agricultural Partnership has recently evolved into the Sustainable Canadian Agricultural Partnership, which signifies Canada's desire to create more agricultural policy that is focussed not only on the economic growth of the sector but also on environmental sustainability (Agriculture and Agri-Food Canada, 2023). A focus within these recent policies is synthetic fertilizer use. While synthetic fertilizer boosts crop production, a global dependence on these inputs has led to contamination of surrounding bodies of water and the emission of a potent GHG, nitrous oxide (Houser & Stuart, 2020; Smil, 2004). In 2021, Canadian crop production was estimated to have been responsible for 19.4MtCO2eq, and 14.8 MtCO2eq was sourced from the application of synthetic fertilizers in crop agriculture (Environment and Climate Change Canada, 2023). Furthermore, the emissions associated with synthetic fertilizers have increased by 60 percent since 2005, as fertilizer use rose by 71 percent in the last two decades alone (Environment and Climate Change Canada, 2020; Robinson, 2023).

In response to broader climate change issues and fertilizer-related environmental impacts, the Government of Canada released an environmental

climate plan called "A Healthy Environment and a Healthy Economy" in 2020 which included a national target to reduce GHG emissions arising from fertilizer application in agricultural contexts by 30 percent below 2020 levels by 2030 (Environment and Climate Change Canada, 2020). The government is adamant that the mandate is and will continue to be voluntary, yet it is clear in media articles about the target that farmers are on the defensive, and they worry about the ways that this target could be regulated and/or legislated such that they are affected negatively; novel fertilizer-related regulations could possibly affect their yields, and hence their profit margins (Anderson, 2022). DA is, in this context, promoted by industry, government, and agricultural extension experts as a mechanism to help farmer's reduce emissions. It is assumed by proponents that these technologies will play an ever-increasing role in farming in the Global North (Minority World) (Weersink et al., 2018), and that digitization will facilitate a purported transformation of the food system in which enough food would be produced to feed a growing population, and, simultaneously, environmental impact would be reduced dramatically (Garnett et al., 2013). DA is argued to enable sustainable practices by allowing for precise management and thus more judicious use of inputs like fertilizers and fuel (Balafoutis et al. 2017; Finger et al. 2019; Hebert, 2022).

To some, the precise DA approach represents a paradigm shift in food production (Weersink et al. 2018). Meanwhile, a growing number of social science researchers are pointing out the social and ethical limitations of DA (see Bronson & Knezevic, 2016; Carolan, 2023; Carolan, 2017; Duncan et al. 2021; Klerkx et al. 2019; Montenegro de Wit & Canfield, 2024). Klerkx et al. (2019) conducted a review of this social science literature and identified the need for research that interrogates the link being made (or assumed) between DA and more ecologically sustainable agricultural systems, such as organic farming, agroecology, regenerative agriculture, and urban agriculture. Rotz et al. (2019) found that the available literature identified tensions between the use of DA technologies and sustainable approaches to land use in agriculture. Bronson (2022) found that in their current state, DA technologies contribute to a number of food system challenges, such as corporate concentration and productivist strategies that deepen environmental problems caused by agriculture (see also: Bronson & Knezevic, 2016). Wolfert et al. (2017) carried out a systematic review in the scholarship of DA and made the prediction, informed by the literature, that the future of DA may go in two separate directions—one in which technical systems are closed and benefit only a few entities in the sector, or open, collaborative systems that could enable farmer and stakeholder autonomy (See also: Bronson & Knezevic, 2016; Rotz et al., 2019). This paper adds to this academic debate by investigating how DA is discussed in relation to environmental sustainability within Canadian public and policy discourse.

## Theoretical framing and methods

The primary method for this research is critical discourse analysis. Discourse, according to Jørgensen & Phillips refers to the "particular way of talking about and understanding the world (or an aspect of the world)" (2002, p. 2). This "particular way" shifts depending on the source of the language, and the

audience consuming it. Discourse analysis is an attempt to interrogate representations of knowledge that are presented as if they are the objective truth. Discourses are systems of thought and demonstrations of power, expressed through different mediums, but often analyzed through text or speech (Van Dijk, 2013). Discourses are underpinned by ideologies, which are, according to Marx, the process "through which dominant ideas within a given society reflect the interests of a ruling class" (1977, as cited in Stoddart, 2007, p. 191). Ideology represents ways of thinking in which certain forms of social organization are represented as inevitable and rational (Stoddart, 2007). The "critical" piece of critical discourse analysis aims to uncover the ways in which certain types of discourse uphold or resist particular social relationships of power that reproduce dominant ideologies.

Other researchers have focussed on ideologies in the agricultural context and revealed how they can mask the tensions and contradictions that are core to the dominant industrial, capitalist agricultural system. Houser et al. (2020) found that this ideology of industrialized agriculture was being maintained by farmers themselves through belief systems around fertilizer pollution—many farmers in their study re-produced ideological positions of market fundamentalism and techno-optimism, ideas that new technologies can and will offer solutions to environmental problems in agriculture, especially having to do with pollution issues surrounding fertilizer use. The authors see this process to be reproducing an ideology that ultimately limits a more widespread emergence of agroecological practices and transitions to address environmental problems in agriculture. Furthermore, Canfield (2022) discusses the ways in which the ideology of innovation has become pervasive in global food discourse; it emphasizes the role of science, research and technology, and has strategically been deployed in international contexts to suppress calls for a transition to agroecology. This paper follows methodologically from these prior studies but takes up a research agenda put forth by Klerkx et al. (2019) who called for scholars to interrogate the role of DA technologies in transitions towards sustainability. Similarly, by focussing on the Canadian context, this paper complements other scholarly conversations about future imaginings of DA in international discourse (Lajoie-O'Malley et al., 2020), and in Sub-Saharan Africa, specifically (Abdulai, 2022). The dataset for this research project was interrogated through the lens of the research question: How is digital agriculture discussed in relation to environmental sustainability? The research question was left intentionally broad and high-level to capture different conceptualizations of environmental sustainability that might emerge inductively from the dataset itself.

A systematic media analysis of the national and leading regional Canadian newspapers (such as the Globe and Mail, the National Post, the Calgary Herald and the Montreal Gazette) was conducted. Figure 1 shows the sources of all news articles included in this analysis. This was done through a Proquest database called Canadian Major Dailies, which provides current and historical content from more than 35 of Canada's major newspapers. Search terms included were: "digital agriculture", "digital farming", "smart farming", "precision farming", "ag-tech", "big data" and "farming" or "big data" and "agriculture". These terms were searched for in the context of their relationship to: "sustainability", "climate change"/ "climate", "environment", and/or "regenerative agriculture". Articles from 2016-2022 were examined, and 453 media articles were found. Ultimately, 256 were excluded due to irrelevance, and a further 19 were excluded because they did not address digitization in agriculture. Thus 178 articles were included in the analysis. Figure 1

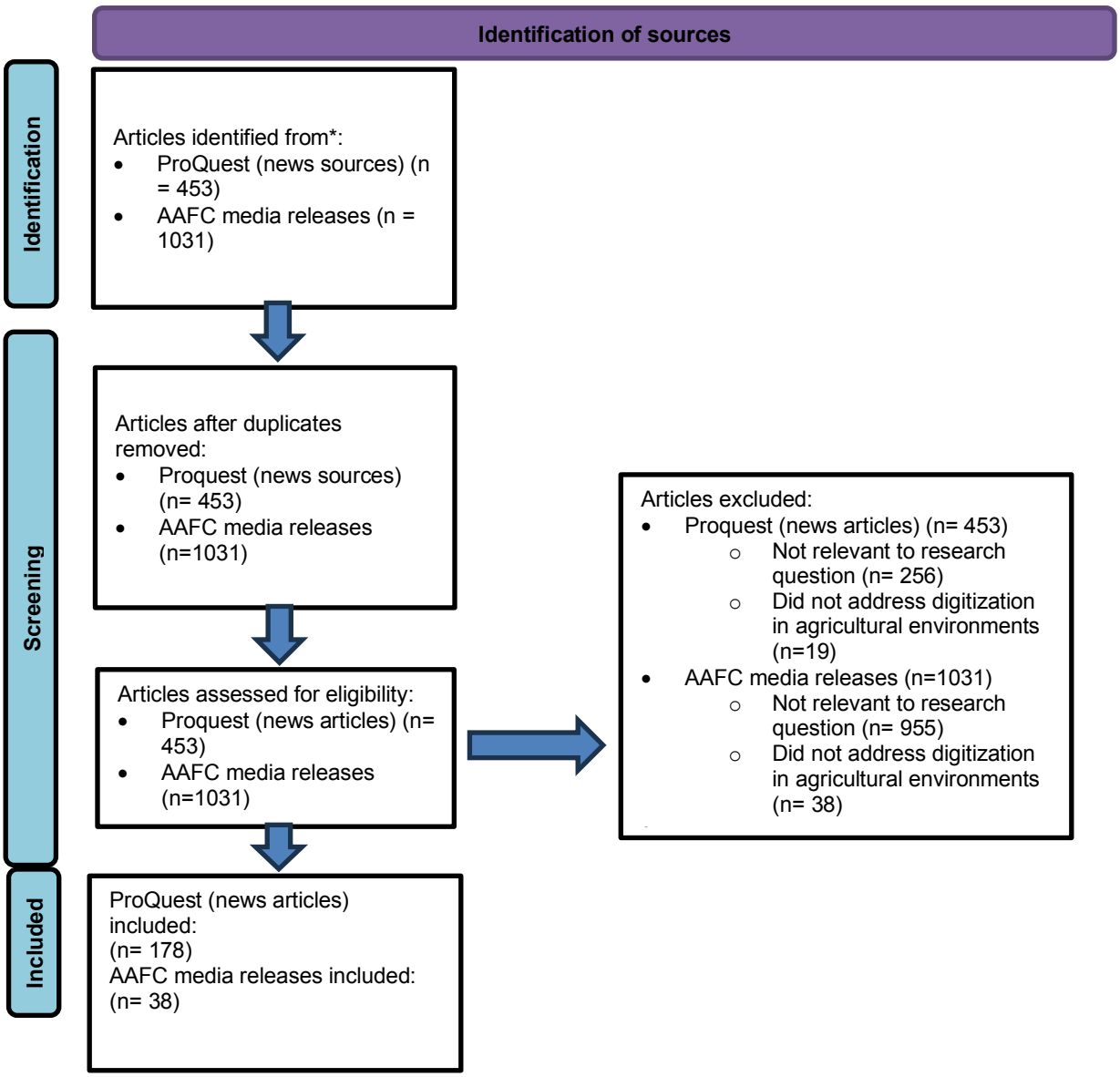
shows the sources of the news articles found. Winnipeg Free Press had the most coverage of these topics during that time period. These articles were mostly written by the same few reporters, who were covering the agriculture technology beat in Manitoba. The time frame was chosen because there has not been a major change in federal governance since Justin Trudeau's election in 2015. Furthermore, the Trudeau government has been more explicit about climate action than any government that has come before it (MacNeil & Paterson, 2017).

Figure 1: News article sources

| **Newspaper** | **Region** | **Number of Articles Analyzed** |
|---|---|---|
| Globe and Mail | National | 35 |
| National Post | National | 18 |
| Toronto Star | Toronto, Ontario | 6 |
| Winnipeg Free Press | Winnipeg, Manitoba | 49 |
| Regina Leader Post | Regina, Saskatchewan | 10 |
| Chronicle Herald | Halifax, Nova Scotia | 10 |
| Calgary Herald | Calgary, Alberta | 12 |
| Telegraph-Journal | New Brunswick | 6 |
| Star Pheonix | Saskatoon, Saskatchewan | 9 |
| Times Colonist | Victoria, British Columbia | 1 |
| Edmonton Journal | Edmonton, Alberta | 5 |
| Vancouver Sun | Vancouver, British Columbia | 3 |
| Whig-Standard | Kingston, Ontario | 2 |
| Montreal Gazette | Montreal, Quebec | 3 |
| Ottawa Citizen | Ottawa, Ontario | 3 |
| Sudbury Star | Sudbury, Ontario | 1 |
| Windsor Star | Windsor, Ontario | 3 |
| The Province | British Columbia | 2 |
| **TOTAL** | | **178** |

Media releases from Agriculture and Agri-Food Canada (AAFC) were also analyzed. AAFC is the federal department that is most heavily involved with providing funds to both farmers and ag-tech firms through various programs, like the Agricultural Clean Technology Program. These articles were accessed through the AAFC website and all articles that discussed the search terms above were included in the analysis. AAFC released 1031 media releases during the relevant time frame. After screening, 955 articles were excluded due to irrelevance, and a further 38 were excluded as they did not address digitization in agriculture (see Figure 2).

Figure 2: Screening process for news articles and AAFC media releases




Other relevant government documents were gathered as well. These documents included, for example, the 2030 Emissions Reduction Plan, and the National Adaptation Strategy. Documents relating to the Fertilizer Emissions Reduction Target were also gathered. These documents were targeted if they had been mentioned in the media, or mentioned in other relevant documents. Thirty-eight government reports were analyzed in total. Importantly, provinces are also heavily involved in the governance of agriculture.

Provincial policy documents were excluded as their analysis would have been beyond the scope of this particular research project. Research into the ideological positions of the Canadian provinces would be valuable as a *future* site of study—especially as agriculture is such a place-based and context-specific activity in Canada. For this project, choosing federal materials specifically is justified as, together, they effectively demonstrate the ways in which DA is framed on a country-wide scale.

Figure 3: List of Government Documents Analyzed

| | **Government Document** | **Year** | **Publisher** |
|---|---|---|---|
| 1 | Agri-Environmental Indicator Report Series: Report #4 | 2016 | Agriculture and Agri-Food Canada |
| 2 | Agricultural Innovations | 2017 | Agriculture and Agri-Food Canada |
| 3 | The Path to Prosperity: Resetting Canada's Growth Trajectory | 2017 | Advisory Council on Economic Growth |
| 4 | Unlocking Innovation to Drive Scale and Growth | 2017 | Advisory Council on Economic Growth |
| 5 | Investing in a Resilient Canadian Economy | 2017 | Advisory Council on Economic Growth |
| 6 | Learning Nation: Equipping Canada's Workforce with Skills for the Future | 2017 | Advisory Council on Economic Growth |
| 7 | Growing Opportunity through Innovation in Agriculture | 2017 | Statistics Canada |
| 8 | A Portrait of a 21st Century Agricultural Operation | 2017 | Statistics Canada |
| 9 | AgriInnovate Program | 2017 | Agriculture and Agri-Food Canada |
| 10 | Canadian Agriculture: Evolution and Innovation | 2017 | Statistics Canada |
| 11 | Report of Canada's Economic Strategy Tables: Agri-Food | 2018 | Innovation, Science and Economic Development Canada |
| 12 | Federal-Provincial-Territorial Ministers of Agriculture: Progress Report on the Pan-Canadian Framework on Clean Growth and Climate Change | 2018 | Agriculture and Agri-Food Canada |
| 13 | Agriculture Clean Technology (ACT) Program | 2018 | Agriculture and Agri-Food Canada |
| 14 | Living Laboratories: Collaborative Program – Applicant Guide | 2018 | Agriculture and Agri-Food Canada |
| 15 | Clean Growth and Climate Change in Canada: Forestry, Agriculture and Waste | 2019 | House of Commons |
| 16 | Advancements of Technology and Research in the Agriculture and Agri-Food Sector that can Support Canadian Exports | 2019 | House of Commons |
| 17 | Agriculture and Agri-Food Mandate Letter, 2019 | 2019 | Agriculture and Agri-Food |
| 18 | Canada's Changing Climate Report | 2019 | Government of Canada |
| 19 | Food Policy for Canada | 2019 | Agriculture and Agri-Food Canada |
| 20 | A Healthy Environment and a Healthy Economy | 2020 | Environment and Climate Change Canada |
| 21 | A Healthy Environment and a Healthy Economy [Annex: Climate-Smart Agriculture] | 2020 | Environment and Climate Change Canada |
| 22 | Agriculture and Agri-Food Mandate Letter, 2021 | 2021 | Agriculture and Agri-Food |

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|---|---|---|---|
| 23 | A Healthy Environment and a Healthy Economy: Update | 2021 | Environment and Climate Change Canada |
| 24 | Budget 2021 | 2021 | Department of Finance |
| 25 | The Guelph Statement | 2021 | Agriculture and Agri-Food Canada |
| 26 | Agricultural Climate Solutions: Grant Application Guide | 2021 | Agriculture and Agri-Food Canada |
| 27 | Sustainable Agriculture Strategy: Discussion Document | 2022 | Agriculture and Agri-Food Canada |
| 28 | Agriculture and Agri-Food Canada's Strategic Plan for Science | 2022 | Agriculture and Agri-Food Canada |
| 29 | Canada's Methane Strategy | 2022 | Environment and Climate Change Canada |
| 30 | Canada's National Adaptation Strategy: Building Resilient Communities and a Strong Economy [for comments] | 2022 | Environment and Climate Change Canada |
| 31 | 2023 Emissions Reduction Plan | 2022 | Environment and Climate Change Canada |
| 32 | Budget 2022 | 2022 | Department of Finance Canada |
| 33 | Discussion Document: Reducing emissions arising from the application of fertilizer in Canada's agriculture sector | 2022 | Agriculture and Agri-Food Canada |
| 34 | Canada's National Pathways document [consultation draft] | 2022 | Agriculture and Agri-Food Canada |
| 35 | Agricultural Clean Technology Program: Research and Innovation Stream | 2022 | Agriculture and Agri-Food Canada |
| 36 | Agricultural Clean Technology Program: Adoption Stream | 2022 | Agriculture and Agri-Food Canada |
| 37 | 2021-22 Consumer Attitudes Towards Innovative Agricultural Technologies Survey and Focus Groups: Final Report | 2022 | Agriculture and Agri-Food Canada |
| 38 | 2022 Qualitative Research on Consumer and Producer Views Towards Sustainability in Agriculture: Final Report | 2022 | Agriculture and Agri-Food Canada |

## Results: Discourses of optimization

Discourse analyses have been conducted by others in this area of research, and my work builds upon theirs (Duncan et al., 2021; Fleming et al. 2018; Karlsson et al., 2018; McCaig et al., 2023). Analysis for this project was conducted using MaxQDA. A first round of inductive open coding was very helpful in understanding the myriad perspectives of the producers of the texts in the dataset (Cope, 2010). Strauss (1987) describes this process as a close scrutinization of the data: "The aim is to produce concepts that seem to fit the data." (p. 28). A common theme that emerged throughout the dataset was that (implicitly or explicitly) DA is an enabler of environmental sustainability. A less common theme arose as well—that DA would *not* enable environmental sustainability (see Figure 4). Subsequently, a round of selective coding was done, which was more systematic in its approach. DA's role as a solution to environmental problems was the focus of this round. Many sub-themes arose during this round of coding, like "food waste" (DA is presented as a solution to high food waste), "fertilizer emissions" (DA is presented as a solution to high fertilizer emissions). An initial inventory of codes is shown in Figure 4. Through this round of coding, it became clear that a common theme among these codes was *optimization.* A third round of coding was conducted, which was again

selective, in which the question posed of the data was "How are DA technologies presented as technologies that optimize?" And a follow-up question included "What variables are assumed to be optimized by DA?" Through this analytic process, 'DA is a suite of optimizing technologies' was a common discursive theme that was deployed in both media and government materials that were analyzed. It was evident that this discourse was ideological when the belief systems, norms, assumptions and values central to the discourse were taken into consideration (Van Dijk, 2013). In the 254 documents analyzed, a predominant ideology of optimization emerged. This overarching ideology of optimization communicates three things: One, that **environmental sustainability needs to be optimized** through the uses of emerging technologies like DA. Two, that **environmental sustainability will inevitably benefit** from the optimization of parameters that aren't necessarily directly linked to environmental sustainability, like productivity. Three, that optimization will happen through the **quantification and datafication** of the agricultural environment—a process that necessitates the uptake of DA.

Figure 4: Initial Inventory of Themes

| | | |
|---|---|---|
| **How does DA relate to environmental sustainability? (positive)** | DA will enable environmental sustainability (Explicit) | DA will provide farmers the infrastructure [digital platforms] upon which they can sell carbon credits. A carbon credit market would reduce emissions. |
| | | DA will allow for the optimization of farming inputs like pesticides, herbicides and fertilizers. |
| | | DA will help farmers identify risk areas for greenhouse gas emissions. |
| | | DA will allow for the measurement of soil carbon. |
| | | DA will help the agricultural sector deal with climate change impacts. |
| | | DA would help overcome challenges in data collection which are needed to address sustainability problems. |
| | | DA will help to reduce food loss. |
| | | DA will enable transparency, so consumers will know the sustainability practices of the farms they are buying from. |
| | | DA will enable the identification of diseases, pests and nutrients early, allowing for more directed intervention which will benefit the environment. |
| | | DA will increase farm operators' predictive capacity, making them more resilient to climate change. |
| | | DA will enable 4R fertilizer application. This will optimize fertilizer use, reducing runoff into the environment. |
| | DA will enable environmental sustainability (Implicit) | DA is a clean technology. |
| | | DA is a climate-smart technology. |
| | | DA is a best management practice. |

| | | |
|---|---|---|
| | | DA will allow farmers to make informed decisions, which will benefit environmental sustainability. |
| | | DA will enable a 'digital twin' or a real time information about the farming environment. This will enable better decision making that considers the environment. |
| | | DA will enable productivity growth that is environmentally sustainable. |
| | | DA will improve the resiliency of Canada's agri-food sector. |
| | | DA will optimize the supply chain. |
| | | DA will help to produce more with less. |
| | | DA is required for better yield, quality and sustainability outcomes. |
| **How does DA relate to environmental sustainability? (negative)** | DA will *not* enable environmental sustainability | DA would help farmers make better, more environmentally friendly decisions, but they are expensive. |
| | | The decisions enabled by DA are not better than a farmer's intuition. |
| | | DA does not always enable the farmer to access actionable information. |
| | | DA would benefit sustainability, but it is not realistic for farmers without broadband. |
| | | Investments being made into DA are being made with productivity, not sustainability, in mind. |
| | | The outcomes of DA are uncertain. |

## Section 1: Optimizing Stewardship of the Land

Optimization emerged as the dominant theme during the textual analysis. For example, in a 2022 announcement of an investment into the Agricultural Clean Technology Program (a funding program focussed on three areas: green energy, precision agriculture and bioeconomy solutions), then Agriculture and Agri-Food (AAFC) Minister Marie-Claude Bibeau declared the following:

> Recent droughts and flooding across Canada are another stark reminder that Canadian farmers are on the front lines of climate change. This new wave of innovative green projects announced today under our Agricultural Clean Technology Program demonstrates our intention to help farmers optimize the stewardship of the land, while increasing their productivity and profitability. (Agriculture and Agri-Food Canada, 2022c [AAFC media release])

Bibeau's statements that this program will enable farmer's to "optimize stewardship of the land" is crucial in that it effectively demonstrates the ideological belief that there is an optimal way to achieve environmental sustainability in agriculture, and that "clean technology", of which DA is a key element, will help facilitate it.

The federal Emissions Reduction Plan (ERP) (though it focusses much more directly on sectors like oil and gas or transportation) states:

> Across the country, farmers are already demonstrating innovation and ambition in the adoption of sustainable practices and

> technologies…Moving forward, more ambitious action is needed to further reduce emissions in the agriculture sector, move towards net-zero emissions by 2050, and maximize the potential of agriculture soils to sequester carbon. (Environment and Climate Change Canada, 2022, p. 65 [government document])

Optimization means many things in different contexts, but in mathematical and computing contexts, it refers to the capacity "[to obtain] the best results under given circumstances" (Rao, 2009). The statements in the ERP might seem straightforward enough, but the key discourse being put forth here is that technologies, particularly DA (along with other types of innovation) will allow farmers to *minimize* their negative impact on the environment while *maximizing* environmental benefits of their practices (maximization and minimalization being directly related to ideals of optimization).

More specific environmental indicators are also invoked. For example, a DA platform called Ukko Agro is said to "help farmers optimize pesticide, water and fertilizer usage to operate more sustainably." (Bouw, 2020) In a 2020 media release, a digital food processing system called Onipro was said to reduce food waste (another environmental indicator) by using optimized sorting techniques: "A revolutionary internal and external optical sorting system will reduce food waste by optimizing the sorting of problematic onions." (Agriculture and Agri-Food Canada, 2020b [AAFC media release])

A specific environmental indicator is front-and-center when it comes to the optimization discourse: synthetic fertilizer. Often DA is presented as a mechanism to decrease inputs (like fertilizer), and so DA is used discursively as a proxy for environmental sustainability. For example, a representative of Farmer's Edge, a DA platform, was interviewed in a media article explaining how their technology could enable the optimization of fertilizer use:

> The platform collects and compiles data from a variety of sources—satellite imagery, soil testing, data analytics and computer modelling—to produce a "variable-rate prescription" for how farmers should apply fertilizer to their fields, among other things. That includes not only when to apply it, but also where to apply it, how much to use and even which fertilizer to use. The goal is to optimize the return on their fertilizer costs and minimize damage to the environment, said Dan Heaney, vice-president of research and development and agronomy for Farmers Edge. (McNeill, 2016 [news article])

Furthermore, government documents highlight the principles of 4R Nutrient Stewardship (the approach encourages farmers to select the "right type" of fertilizer, applying it at the "right time" of year, at the "right levels" in the "right place"); DA technologies of different types could seemingly help with all four "Rs", yet it is particularly focussed on for the "Right Rate" approach:

> Right rate matches the amount of fertilizer to crop needs. This entails only applying what can be taken up by the crop over the course of the growing season. This recommendation can include precision application technologies (including those that address in-field variability), and the use of soil tests to make nutrient management decisions accounting for existing soil nutrient levels. (Agriculture and Agri-Food Canada, 2022b [AAFC media release])

The 4R approach is another clear example of the ideology of optimization—it asserts the idea that in every agricultural system there is a perfect way to apply these inputs—if only farmers were applying fertilizer perfectly, then the environment would not be damaged irreparably. The data presented in this section demonstrates that DA is often discursively employed as a mechanism to facilitate the optimization of environmental sustainability, which will, ostensibly, solve the deep environmental problems of the current food system.

## Section 2: The Inevitability of Environmental Sustainability through Optimization

Frequently, the documents would imply that multiple factors, namely profitability, productivity and environmental sustainability, are being enhanced, improved and maximized simultaneously through the use of DA:

> By using big data, by using state of the art technology, by using "the Internet of Things," what you can do is develop a brand-new way of looking at climate-smart agriculture that is economically feasible and profitable, but also environmentally sound, Thompson said. At the bottom line of it all is a safe, secure, high quality food system. (Stephenson, 2017 [news article])

In another example, a farmer who was piloting a "digitally customized crop-plan package" developed by Nutrien, a multi-national fertilizer production company, explained: "It's about being smarter in the way we plant," he says. "We see agronomy, economic and environmental performance completely aligned" (Zary, 2020 [news article]).

Often, however, the element(s) or variables of the system that are actively being optimized through DA are synonymous with productivity or crop yields. The assumption that the optimization of these variables will in effect lead to improved environmental sustainability outcomes was common throughout the dataset. For example, in a 2016 report from AAFC, a segment on soil testing is illustrative:

> Soil nutrient testing provides valuable information that producers can use to match crop nutrient requirements with nutrient levels in soil and nutrients applied in the form of manure and commercial fertilizers. This can help to maximize productivity and make the most efficient use of resources while reducing the risk of losses to the environment. The more frequently soil tests are conducted, the more opportunities a producer has to fine-tune nutrient applications in order to optimize crop growth. (AAFC, 2016 [government document])

Now, in 2023, many DA companies have popped up in this market, claiming to provide farmers with, for example, real-time plant tissue analysis, providing them with knowledge about plant growth, nutrient deficiencies, etc. without the farmer having to send soil samples to an off-farm lab, eg. Picketa Systems (Picketa Systems, 2023). In the AAFC excerpt above, environmental sustainability is assumed to be a predestined outcome of the process of optimization. Optimizing "crop growth" is the predominant goal, while reduction of environmental risk is framed as a secondary outcome. In this text, it is indicated that DA (among other solutions) will uphold and sustain the environment, but more importantly, these technologies will sustain the status quo production system at the heart of the Canadian agricultural sector. A parallel

example was illustrated in the 2022 Federal Budget: "...farmers' resources, such as time and money will be optimized in a digitally enabled farming system." The document goes on to say that digital technologies can help reduce emissions (Department of Finance, 2022 [government document]).

The inevitability of DA and its supposed inherent sustainability factors is a key sub-theme of this discourse. A media article covering companies that were part of a Saskatchewan ag-tech accelerator program interviewed a farmer and asked him about his response to a DA robotics company:

> "What excites me the most is the potential efficiencies long term...the benefits to the environment and sustainability,' [the farmer] said, adding the technology's biggest appeal is its ability to turn reams of raw data into what he calls 'intelligent data' that informs better decisions. 'It's just a matter of time and it will look different, but I do believe we can get there...'" (Rance, 2022 [news article])

This excerpt also speaks to the assumption that DA, through a form of digital calculative reasoning, analyzes a set of varied inputs and reduces them into an "actionable" output that is "better" than prior decision-making strategies, perhaps ones based more on farmer intuition. Furthermore, by saying "it's just a matter of time", the farmer invokes the inevitability of DA as an element of social (and environmental) progress. This perspective was commonplace as early as 2016 as well—a then CEO of a John Deere dealership organization, believed that predictive weather modelling, a common DA technology, would "allow growers to make better business decisions that are going to lead to increased productivity in a more environmentally sustainable manner." (Cash, 2016 [news article]). Through these examples, it is easy to see the ways that DA (and its optimization capabilities) is understood as a necessary tool to make all aspects of farming better, more improved, and closer to some optimal point. In the dataset, optimizing technologies are assumed as capable of facilitating net positive outcomes—in terms of time, profits, crop quality, and productivity indicators. This ideology of optimization is clear throughout the dataset: technological innovation is inevitable and necessary in agriculture; it represents progress. Environmental benefits stemming from the use of these optimizing technologies are a beneficial consequence and a reliable solution to agriculture's environmental problems.

## Section 3: Achieving Optimization via Measurement

The process of optimization is enabled through the aggregation, measurement, standardization, and classification of data. According to McKelvey and Neves: "Optimization, firstly, presumes there is data, or should be data, to solve a new problem" (2021, p. 98). In the context of DA, the collection of boundless agricultural data is meant to enable more enhanced resource efficiency and management, as discussed in the previous section. In government documents like the Emissions Reductions Plan, there is a focus on the need to "develop metrics" (Environment and Climate Change Canada, 2022 [government document]), while the Guelph Statement, a government document related to the recently established Sustainable Canadian Agriculture Partnership highlights goals to "enhance data collection" and "performance measures" (Agriculture and Agri-Food Canada, 2021 [government document]). The AAFC's 2022 Strategic Plan for Science, the "application of data" will contribute to multiple facets of sustainability (Agriculture and Agri-

Food Canada, 2022a [government document]). The document stressed the need for agricultural data for the creation of a "sustainable and robust agriculture and agri-food system". In an AAFC media release about an ag-tech start-up from British Columbia, it is highlighted that the measurement of nutrients in the soil is expected to change agricultural practices:

> During a visit to Terramera Inc. in Vancouver, who received $2 million through the ACT Research and Innovation Stream, Minister Bibeau witnessed first-hand the work underway to provide more consistent and precise measurement of soil carbon. Through the adoption of clean technologies, it is expected that this project will help to encourage farmers and ranchers to adopt regenerative management practices and to be incentivized for the carbon they sequester. (Agriculture and Agri-Food Canada, 2022d [AAFC media release])

In this example, the measurement and reporting of soil carbon through a DA technology is delineated as a driver of "regenerative management practices". In many ways, the discourse simplifies the concept of sustainability down into specific variables like, in this case, soil carbon. Another example of this discursive practice is evident from Farmer's Edge; one media article from 2022 highlights the company's plan to continue to develop technology that helps farmers track their sustainability achievements:

> [Wade Barnes, the CEO of Farmer's Edge]... was one of the features speakers at a Tech Manitoba conference where he was extolling the value of the company's ability to track the carbon footprint on the farm, something that will become increasingly important as global food companies try to meet their zero carbon targets in the coming years. (Cash, 2022 [news article])

Implied here is that DA is necessary, and that not only is the measurement of carbon needed in efforts to reduce emissions, but soil carbon measurement is also a sustainability practice in and of itself. So-called "carbon-farming" has become a popular and much-discussed strategy to achieve GHG emissions reductions in agriculture (Sharma et al. 2021). Not only is it exemplary of strategies to perform environmental accountability, but it is also a mechanism through which the private sector is indicating that they do not need top-down interventions from the government in order to meet sustainability goals and avert the worst impacts of the climate crisis (Ghosh & Wolf, 2021).

Media discourse, however, can also highlight farmer skepticism with the idea that quantified agricultural systems are inherently better or more profitable than operations built on decisions informed by farmer intuition:

> The moneyball technique worked for baseball, but if I were to pit the human against the numbers, I wouldn't be able to pick a winner without considering the fact that my family's farm, which has been a successful operation since the late 1800s, has stayed alive and profitable because of the decisions people have made." (Dyck, 2017 [news article])

In this example, this farmer shows skepticism about the application of the "moneyball" technique, referring to the 2003 Michael Lewis book *Moneyball: The Art of Winning an Unfair Game* about the use of statistical techniques like sabermetrics to optimize performance of under-funded American baseball teams (Lewis, 2003). Notably, this farmer doesn't mention

sustainability. Sustainability, however, is being deployed as a justification for endless data collection. The desire for datafication, quantification and assessment of sustainability measures on the farm is also driving platformization in this sector. Platformization, according to Poell et al., is understood as the "penetration of digital platforms" economic, infrastructural, and governmental extensions in different economic sectors and spheres of life" (2019, p. 5-6; see also: Srnicek, 2017). McKelvey & Neves (2021) also contend that the turn towards "platforms-as-infrastructure" was a key point in the history of optimization, as they scale up and speed up the process [of optimization], enabling its proliferation into more facets of life. The following excerpt describes a digital platform being supported by the federal government:

> With this support, the CFA will create a single window for data on the sustainability of the Canadian agri-food supply chain. This will provide a forum where producers and processors can share information and connect with new networks interested in sustainability. This initiative will also serve as a hub to benchmark and track the sustainability of the Canadian agri-food industry compared to international standards. (Agriculture and Agri-Food Canada, 2020a [AAFC media release])

In such a way, the platform provides the infrastructure for data aggregation and the proliferation of quantifiable standards, as it works to demonstrate the achievement of certain sustainability "benchmarks". This is a key element of the process of optimization, as farmers can continually improve their practices in the attempt to achieve higher "levels of sustainability". This section has illustrated the ways that quantification of variables in the agricultural system is a key operation of the "optimization of sustainability" in agriculture. Quantification simplifies the complex realities of agricultural ecosystems into sustainability indicators like soil carbon. The analysis also revealed that assumptions are made with regard to the capabilities of DA (and the data it generates) to enable more optimal decision making.

## Discussion

### The impact of the ideology of optimization

This research has considered how DA is related to environmental sustainability in public and policy discourse in Canada. Through the research process, it became clear that DA is framed as pivotal to the optimization of agricultural practices. The sort of optimization processes that are positioned as being delivered by DA fit with the definition of optimization put forth by McKelvey and Neves (2021) as "a form of calculative decision-making embedded in legitimating institutions and media that seek to actualize optimal social and technical practices in real time" (p. 97). Though this "calculative decision-making" is related to concepts of rationalization (Weber, 1968) scientific management (Taylor, 1911), efficiency, industrial productivism (Montenegro de Wit & Canfield, 2024) or computationalism (Golumbia, 2009), optimization as a unique concept arose from disciplines such as engineering, game theory and computing (Halpern & Mitchell, 2023). The concept, in its disciplines of origin, referred to an "internally referential and relative" measure of performance: "for *this* system, given *these* goals and *these* constraints, the optimal solution is X"

(2023, p. 16 [emphasis in original]). This quest for optimality, however, permeated other disciplines, like economics, since the 1950's and especially since the onset of neoliberalism. This quest is premised on the foundational belief "that everything—every kind of relationship among humans, their technologies, and the environments in which they live—can and should be algorithmically managed" (p. 17). While productivism and logics of efficiency have shaped the agricultural system for a century, optimization is a novel and acutely mathematical approach, made possible by data collection and analytics enabled by digital tools, infrastructures and platforms.

Moreover, throughout the analysis of the discourse about DA technologies and environmental sustainability, a distinct *ideology of optimization* became clear; this ideology asserts that through processes of optimization which centrally depend on the use of DA, an ideal agricultural system will emerge—one that is described as maximizing profitability, productivity, as well as environmental sustainability. A close look at the texts which further this ideology of optimization, however, reveals that this discourse sustains the status quo agricultural system, and with it, the normative assumptions built into what is the "best" or "optimal" way to grow food and organize the whole agri-food sector. Below, it is argued that this ideology of optimization works to keep intact an environmentally destructive food system, along with the inequitable power concentration among a handful of actors that are central to this current system. The ideology of optimization within political and public texts on DA achieves this maintenance of the hegemonic food system in several key ways: it keeps "improvement" towards sustainability incremental, it draws attention away from more radical and transformative policies and pathways, and it rhetorically places solutions to environmental problems in the future. Below, the section demonstrates how political texts related to the fertilizer emissions reduction target in Canada provide an illustration of the deployment of the ideology of optimization via DA by positioning DA as the technical solution to political and environmental problems simultaneously. Finally, the last section explains how the concept of optimization could be useful to critical food studies scholars; and at the same time, how scholars considering the sociological impacts of optimization might benefit from a consideration of agriculture as a site of study.

## The Impact of the Ideology of Optimization on the Food System

Optimization embodies incrementality in many contexts; for example, the hill-climbing technique is a mathematical procedure in which an algorithm iteratively improves its solution to a problem until some specific condition is maximized (Norman and Verganti, 2014). In the context of agriculture, the ideology of optimization promises that the food system can systematically and incrementally be improved (using digital technologies) to the point at which environmental impact would be negligible or even positive. Goldstein illustrates how the ideology of optimization operates among "cleantech" entrepreneurs who subscribe to a kind of "planetary improvement imaginary", wherein the technologies they innovate are able to achieve incremental gains, which are then framed as the initial steps towards "major environmental transformation…that will ultimately help save the planet" (p. 2, 2018). He goes on to argue that these innovations result in technical solutions that do little to address environmental problems (p. 10). Fairbairn et al. (2022) have found these narratives to be common in the entrepreneurial world of DA. Likewise, Buttel discusses the ways that agricultural research and

development prioritizes "patching up" problems experienced by industrial farmers, while keeping intact the underlying conventional production system (2006, p. 218). Incremental change in agriculture is likely an inadequate solution for the uncertainties presented by catastrophic global climate change and biodiversity loss. Furthermore, the ideology of optimization and its techno-solutionist undertones re-direct attention away from other, more radical policies or changes that could be enacted in the Canadian food system, like for example, a shift towards a less export-oriented agricultural sector (Kanter et al. 2019).

The ideology of optimization also contributes to a problematic futuring of sustainability. As McKelvey and Neves contend: "optimization is never complete" (p. 107). If optimization is never complete—but optimization is a precondition for future sustainability—sustainability will never be achieved. The agricultural system may never be fully quantified and represented through data points, as such datafication becomes a never-ending process continuously in search of an ever more precise optimum (Halpern & Mitchell, 2023). The increasing unpredictability of a warming climate contributes to this phenomenon, as the mapping of agricultural variables will only become more complex in the future. Not only then does the ideology of optimization imply the continuous adoption of increasingly expensive and invasive DA technologies, but it always places the arrival at the optimum at some vague future point in time. Benessia and Funtowicz invoke the idea that we remain *waiting for sustainability* to be achieved in the future instead of making radical and necessary changes now (see also: Booth, 2023). They discuss the "need to shift from predicting and promising what to do (in the future) to a political resolution of how we want to live together (in the present)" (2015, p. 329).

Furthermore, as the food system faces layered crises, quantification (a key operation of optimization) of current conditions creates a sense of techno-optimism and security, re-enforcing the notion that increased data collection will lead to solutions to the agricultural sector's most catastrophic and urgent problems. Relevant here is Visser et al.'s (2021) work that complicates the narrative that the data generated by DA technologies is more precise than analogue data and farmer observation (due to lack of broadband coverage, weak GPS reception and sensor errors). Moreover, Krzywoszynska discusses the "farming by numbers" approach: "a biopolitical regime in which farmers' and advisors' subjectivity is that of calculating managers situated in calculable environments" (2024, p. 1). Scholars who consider the social consequences of the preoccupation with quantification consider the harms it can cause. Porter (1995), for example, elucidates the critique that the practice of quantification and standardization reinforces technocratic governance and devalues alternate forms of knowledge. The turn towards digital quantification in agriculture can leave out, for example, Indigenous ways of knowing that are crucial in sustainable and equitable agricultural systems (Laforge et al., 2021) Furthermore, the digital platforms that enable this scale of quantification have sociological consequences in and of themselves (see: Goldstein & Nost [2022] for their exploration of environmental data infrastructures), and it remains to be seen how the process of platformization shifts the politics and practices of agriculture (see also: Reisman et al., 2024).

## An Illustration of the Ideology of Optimization: The Canadian Fertilizer Emissions Reduction Target

Governments worldwide have begun recognizing the danger of high fertilizer-related emissions, and policies,

mandates and targets have become a common mechanism for decreasing the negative environmental consequences of high fertilizer use. In the Netherlands, the *stikstofcrisis,* or nitrogen crisis, has "shaken Dutch politics to its foundations" (Tullis, 2023), as the government is planning for the forcible closure of high-polluting farms. Farmer-led protests have become common across Europe in response to environmental regulations of agriculture (Mathiesen, 2023). In Canada, far-right protesters have signalled their solidarity with Dutch farmer-protestors, waving Dutch flags during the Ottawa Freedom convoy protests of 2022 to signal their displeasure with government overreach in Canada and abroad (Montpetit, 2022). In fact, the Canadian government may be keeping the emissions target voluntary to avoid more significant unrest. What the ideology of optimization does in this case is allow the government to demonstrate and perform their desire to reduce fertilizer emissions, seemingly stay within planetary boundaries (Richardson et al. 2023) and give farmers the resources, approaches, and technologies to do so. However, since this ideological paradigm continues to uphold status quo industrial agricultural practices, it will be difficult to meet Canada's 2030 fertilizer emissions reduction target without more drastic policy interventions (Vinco et al. 2023).

This section demonstrates how the fertilizer emissions reduction target deploys the ideology of optimization to keep current systems of fertilizer use in place, solidifying further the industrial and productivist paradigm of agriculture in Canada and the industry actors who are served by this paradigm. Many DA technologies have ostensibly been designed and are being promoted by industry and government in the name of, among other things, fertilizer use optimization. One tool that was mentioned numerous times in the dataset is a Canadian company called Farmer's Edge (Farmers Edge, n.d.). DA platforms like Farmer's Edge are critical in the application of the 4R approach to optimize fertilizer use. Again, this approach embodies the incrementality inherent in optimization techniques. Across the dataset analyzed above, the promise was present that evermore precise application will result in the achievement of the fertilizer target. It is important to reiterate here that scholars have found that these technological approaches have not yet proven themselves effective in the loss of synthetic fertilizer into surrounding environments (Blesh & Drinkwater, 2014). However, the ideology of optimization works to lock in the use of DA as the ultimate possibility for salvation. It presents the idea that the deeply rooted problem of high synthetic fertilizer pollution will be solved through expanded capabilities of datafication and quantification. Furthermore, it places the arrival at the target in the future (2030, to be exact), further reinforcing current processes of optimization to reach it.

To achieve fertilizer targets by 2030, there are other possible policy interventions that could be considered. Vinco et al. in their research on farmers' reactions to the 2030 fertilizer target found that monetary incentives could drive fertilizer use reduction in impactful ways (2023). Furthermore, a significant amount of nitrogen fertilizer losses is associated with crop production for livestock feed (Chatzimpiros & Barles, 2013), and so campaigns to reduce meat consumption may have a consequential impact in terms of emissions reductions. Kanter et al. (2019) discuss more policy interventions that could directly and indirectly improve nitrogen management: these policies include everything from more restrictive effluent standards for wastewater management to reduce water pollution to packaging regulation to improve food preservation. Furthermore, organizations from the National Farmers Union to the United Nations argue that policies that support and

fund small-scale agroecology and low-input production systems should be considered as well (Qualman & National Farmers Union, 2022; see also Frison & International Panel of Experts on Sustainable Food Systems, 2016). The NFU, in response to the fertilizer crisis, states:

> Rather than telling ourselves and each other that we have a plan, that we are moving toward sustainability, or that efficiency and technology and best-management practices will solve this, we must instead take up our roles as responsible, engaged democratic citizens and shoulder the very real worry that this is in no way solved. (pg. 69)

Their response puts forth the idea that more transformational change might be possible outside the realm of techno-solutionism and optimization (Qualman & National Farmers Union, 2022).

## At the Nexus of Optimization and Agriculture

Finally, this article contends that Critical Food Studies scholars and other social scientists critiquing DA can use optimization as a theoretical tool. The scholarly discussion of optimization in agriculture does have a precedent. Fitzgerald (2003) documents the transformation of American agriculture into the industrial project it is today in her book *Every Farm a Factory*, wherein she explains how the logic of efficiency drove the transformation that took place over the first part of the 20th century. She demonstrates the United States Department of Agriculture's role in quantifying agricultural life and production patterns in order to document U.S. farmers' capabilities to be "'efficient", productive, predictable, marketable, and reliable." (p. 34). Blanchette, too, in his book *Porkopolis* (2020), discusses the drive for efficiency in animal agriculture. The industry prides itself on using every part of the pig, and that the total use of the animal is a masterclass in efficiency (Blanchette, 2020). DA is considered by many scholars (Bronson, 2022; Klerkx et al. 2019; Rose et al., 2023; Duncan et al., 2021; Miles, 2019; Montenegro de Wit & Canfield, 2024), yet its role as an *optimizer* of these environments could be more thoroughly explored.

McKelvey and Neves (2021) critique the ways "our bodies, tools, and institutions are now understood as endlessly optimizable" (p. 95). This article has presented ways in which our agricultural environments, too, are understood in this way by powerful federal institutions in Canada. Optimization studies, a still-emerging scholarship, should take agriculture seriously as a site of study. Critique of the concept of optimization in the context of digital technologies is still just emerging, with work done by Halpern & Mitchell (2023), and Halpern (2021). Powell (2021) explores how the ideal of optimization is built into the design of the "smart city", and also, importantly, pervades the citizen efforts to resist these developments. McKelvey and Neves (2021) have introduced a critical perspective on the concept of optimization, and they consider the ways in which this logic is foundational to much of the technological infrastructure that undergirds society today. They engage with the ways that optimization has arranged society and has "deep historical roots in the management of bodies, capital and empire." They invoke Rosenthal's work (2018) on the capitalist organization of slavery in the United States, where plantation owners determined the optimum amounts of productivity that could be gleaned from each slave and pushed them to meet that maximum. McKelvey and Neves (2021) consider the ways that optimization techniques are rooted in white supremacy and colonialism, ideologies that have driven the expansion

of industrial agriculture in Canada (Rotz, 2017). In much the same way Critical Data Studies scholars should consider DA seriously (an argument that has been put forth by Bronson (2022) and others), those considering the societal impacts of optimization should consider the ways it's being operationalized in agricultural environments. McKelvey and Neves (2021) ask "optimal for whom, when and where?" to trouble the idea that optimization results in perfect outcomes for everyone—these questions are particularly important in an agricultural system that has already been captured by powerful agribusinesses and ag-tech corporations (Bronson, 2022).

## Conclusion

This paper has uncovered an *ideology of optimization* in political and public discourse on DA as it relates to environmentally sustainable agriculture. This ideology positions DA as the *best* method of agriculture in the face of the climate crisis, global food insecurity, and the biodiversity crisis. The ideology of optimization frames deeply rooted social and political problems as technical problems to be solved by the increased adoption of technologies that enable the quantification, datafication and standardization of agricultural environments. Food studies scholars could use the concept of optimization to study power in the food system as it intersects with environment and technology. At the same time, critical data studies scholars who think with the concept of optimization might do well to look beyond urban or online digital contexts to consider the ways that optimization might be used to study rural and agricultural environments. In the context of a catastrophically warming world, the ideology of optimization locks in an arguably narrow and problematic framing of our socio-environmental problems and limits our possible solutions. This ideology is doing a disservice to the imagination of radical new directions—ones that are capable of transformative change.

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## References

Abdulai, A.-R. (2022). A New Green Revolution (GR) or Neoliberal Entrenchment in Agri-food Systems? Exploring Narratives Around Digital Agriculture (DA), Food Systems, and Development in Sub-Sahara Africa. *The Journal of Development Studies*, 1–17. https://doi.org/10.1080/00220388.2022.2032673

Agriculture and Agri-Food Canada. (2016). *Environmental sustainability of Canadian agriculture: Agri-environmental indicator report series – Report #4*. Government of Canada. https://agriculture.canada.ca/en/environment/resource-management/indicators/environmental-sustainability-canadian-agriculture-agri-environmental-indicator-report-series-report

Agriculture and Agri-Food Canada. (2020a, February 25). *Investing in new initiative to support agriculture sustainability efforts*. Government of Canada. https://www.canada.ca/en/agriculture-agri-food/news/2020/02/investing-in-new-initiative-to-support-agriculture-sustainability-efforts.html

Agriculture and Agri-Food Canada. (2020b, August 14). *Quebec vegetable producers set to grow with investments in innovative technology and processes.* Government of Canada. https://www.canada.ca/en/agriculture-agri-food/news/2020/08/quebec-vegetable-producers-set-to-grow-with-investments-in-innovative-technology-and-processes.html

Agriculture and Agri-Food Canada. (2021). *The Guelph Statement.* Government of Canada. https://agriculture.canada.ca/sites/default/files/documents/2021-11/24172_fpt_policy_placemat_en_V15a.pdf

Agriculture and Agri-Food Canada. (2022a). *Agriculture and Agri-Food Canada's strategic plan for science.* (Report No. A59-91/2022E-PDF) Government of Canada. https://publications.gc.ca/collections/collection_2022/aac-aafc/A59-91-2022-eng.pdf

Agriculture and Agri-Food Canada. (2022b, October 4). *Discussion document: Reducing emissions arising from the application of fertilizer in Canada's agriculture sector*. Government of Canada. https://agriculture.canada.ca/en/department/transparency/public-opinion-research-consultations/share-ideas-fertilizer-emissions-reduction-target/discussion

Agriculture and Agri-Food Canada. (2022c, September 8). *Government of Canada invests more than $8.7 million to help farmers adopt clean technologies to reduce greenhouse gas*. Government of Canada. https://www.canada.ca/en/agriculture-agri-food/news/2022/07/government-of-canada-invests-more-than-87-million-to-help-farmers-adopt-clean-technologies-to-reduce-greenhouse-gas.html

Agriculture and Agri-Food Canada. (2022d, May 24). *The Government of Canada supports farmers in reducing greenhouse gas emissions with over $15.2 million in clean technology.* Government of Canada. https://www.canada.ca/en/agriculture-agri-food/news/2022/05/the-government-of-canada-supports-farmers-in-reducing-greenhouse-gas-emissions-with-over-152-million-in-clean-technology.html

Agriculture and Agri-Food Canada. (2023, June 19). *Sustainable Canadian Agricultural Partnership*. Government of Canada. https://agriculture.canada.ca/en/department/initiatives/sustainable-canadian-agricultural-partnership

Anderson, D. (2022, September 2). Canada's push to reduce fertilizer emissions is causing outrage and fuelling conspiracy theories. *The Narwhal*. https://thenarwhal.ca/nitrogen-fertilizer-emissions-reduction/

Balafoutis, A., Beck, B., Fountas, S., Vangeyte, J., Wal, T., Soto, I., Gómez-Barbero, M., Barnes, A., & Eory, V. (2017). Precision Agriculture Technologies Positively Contributing to GHG Emissions Mitigation, Farm Productivity and Economics. *Sustainability*, *9*(8), 1339. https://doi.org/10.3390/su9081339

Benessia, A., & Funtowicz, S. (2015). Sustainability and techno-science: What do we want to sustain and for whom? *International Journal of Sustainable Development*, *18*(4), 329. https://doi.org/10.1504/IJSD.2015.072666

Blanchette, A. (2020). *Porkopolis: American animality, Standardized Life & the Factory Farm*. Duke University Press.

Blesh, J., & Drinkwater, L. E. (2014). Retention of $^{15}$N-Labeled Fertilizer in an Illinois Prairie Soil with Winter Rye. *Soil Science Society of America Journal*, *78*(2), 496–508. https://doi.org/10.2136/sssaj2013.09.0403

Booth, R. (2023). Pathways, targets and temporalities: Analysing English agriculture's net zero futures. *Environment and Planning E: Nature and Space*, *6*(1), 617–637. https://doi.org/10.1177/25148486211064962

Bouw, B. (2020, August 17). *Software companies tap into export advantage amid covid-19 restrictions*. The Globe and Mail. https://www.theglobeandmail.com/featured-reports/article-software-companies-tap-into-export-advantage-amid-covid-1/

Bronson, K. (2022). *The Immaculate Conception of Data: Agribusiness, Activists, and Their Shared Politics of the Future*. McGill-Queen's University Press.

Bronson, K., & Knezevic, I. (2016). Big Data in food and agriculture. *Big Data & Society*, *3*(1). https://doi.org/10.1177/2053951716648174

Buttel, F. H. (2006). Sustaining the Unsustainable: Agro-food Systems and the Environment in the Modern World. In P. J. Cloke, T. Marsden, & P. H. Mooney (Eds.), *Handbook of Rural Studies* (pp. 213–229). SAGE.

Canfield, M. (2022). The ideology of innovation: Philanthropy and racial capitalism in global food governance. *The Journal of Peasant Studies*, 1–25. https://doi.org/10.1080/03066150.2022.2099739

Carolan, M. (2017). Publicising Food: Big Data, Precision Agriculture, and Co-Experimental Techniques of Addition. *Sociologia Ruralis*, *57*(2), 135–154. https://doi.org/10.1111/soru.12120

Carolan, M. (2023). The perilous promise of productivity: Affective politics of farming media and its consequences for the future of agriculture. *New Media*

*& Society*, *25*(8), 1913–1934. https://doi.org/10.1177/14614448231174521

Cash, M. (2016, November 10). *Tech firm partners with John Deere to provide farmers with weather info*. Winnipeg Free Press. https://www.winnipegfreepress.com/business/2016/11/10/forecast-sunny-skies-ahead#:~:text=Tech%20firm%20partners%20with%20John,with%20real%2Dtime%20weather%20info&text=Thanks%20to%20a%20partnership%20with,on%20screens%20in%20their%20cabs

Cash, M. (2022, March 29). *Wade barnes steps down as CEO of Farmers Edge*. Winnipeg Free Press. https://www.winnipegfreepress.com/business/2022/03/29/wade-barnes-steps-down-as-ceo-of-farmers-edge

Chatzimpiros, P., & Barles, S. (2013). Nitrogen food-print: N use related to meat and dairy consumption in France. *Biogeosciences*, *10*(1), 471–481. https://doi.org/10.5194/bg-10-471-2013

Clapp, J., Newell, P., & Brent, Z. W. (2018). The global political economy of climate change, agriculture and Food Systems. *The Journal of Peasant Studies*, *45*(1), 80–88. https://doi.org/10.1080/03066150.2017.1381602

Cope, M. (2010). Coding transcripts and diaries. In N. Clifford, S. French, & G. Valentine (Eds.), *Key Methods in Geography* (2nd ed., pp. 440–452). Sage.

Department of Finance. (2022). *Budget 2022: A Plan to Grow Our Economy and Make Life More Affordable.* (Report No. 1719-7740). Government of Canada. https://www.budget.canada.ca/2022/pdf/budget-2022-en.pdf

Duncan, E., Glaros, A., Ross, D. Z., & Nost, E. (2021). New but for whom? Discourses of innovation in precision agriculture. *Agriculture and Human Values*. https://doi.org/10.1007/s10460-021-10244-8

Dyck, T. (2017, October 23). *Why the ethics of farming are more important than ever*. Financial Post. https://financialpost.com/commodities/agriculture/why-the-ethics-of-farming-are-more-important-than-ever

Environment and Climate Change Canada. (2020). *A Healthy Environment and a Healthy Economy: Canada's strengthened climate plan to create jobs and support people, communities and the planet.* (Report No. En4-421/2021E-PDF). Government of Canada. https://publications.gc.ca/collections/collection_2021/eccc/En4-421-2021-eng.pdf

Environment and Climate Change Canada. (2022). *2030 Emissions Reduction Plan: Canada's next steps to clean air and a strong economy.* (Report No. En4-460/2022E-PDF). Government of Canada. https://publications.gc.ca/collections/collection_2022/eccc/En4-460-2022-eng.pdf

Environment and Climate Change Canada. (2023). *National Inventory Report 1990-2021: Greenhouse Gas Sources and Sinks in Canada: Part 1*. Government of Canada. https://unfccc.int/documents/627833

Fairbairn, M., Kish, Z., & Guthman, J. (2022). Pitching agri-food tech: Performativity and non-disruptive disruption in Silicon Valley. *Journal of Cultural Economy*, 1–19. https://doi.org/10.1080/17530350.2022.2085142

Farmers Edge Inc. (n.d.). *Farmers Edge | GROW. MORE. PRECISELY*. https://farmersedge.ca/

Finger, R., Swinton, S. M., El Benni, N., & Walter, A. (2019). Precision Farming at the Nexus of Agricultural Production and the Environment. *Annual Review of Resource Economics*, *11*(1), 313–335. https://doi.org/10.1146/annurev-resource-100518-093929

Fitzgerald, D. (2003). *Every Farm a Factory: The Industrial Ideal in American Agriculture*. Yale University Press.

Fleming, A., Jakku, E., Lim-Camacho, L., Taylor, B., & Thorburn, P. (2018). Is big data for big farming or for everyone? Perceptions in the Australian grains industry. *Agronomy for Sustainable Development*, *38*(3). https://doi.org/10.1007/s13593-018-0501-y

Frison, E. & International Panel of Experts on Sustainable Food Systems. (2016). From uniformity to diversity: a paradigm shift from industrial agriculture to diversified agroecological systems. *Food and Agriculture Organization of the United Nations*. http://www.ipes-food.org/_img/upload/files/UniformityToDiversity_FULL.pdf

Garnett, T., Appleby, M. C., Balmford, A., Bateman, I. J., Benton, T. G., Bloomer, P., Burlingame, B., Dawkins, M., Dolan, L., Fraser, D., Herrero, M., Hoffmann, I., Smith, P., Thornton, P. K., Toulmin, C., Vermeulen, S. J., & Godfray, H. C. J. (2013). Sustainable Intensification in Agriculture: Premises and Policies. *Science*, *341*(6141), 33–34. https://doi.org/10.1126/science.1234485

Ghosh, R., & Wolf, S. (2021). Hybrid governance and performances of environmental accounting. *Journal of Environmental Management*, *284*, 1-11. https://doi.org/10.1016/j.jenvman.2021.111995

Goldstein, J. (2018). *Planetary improvement: Cleantech Entrepreneurship and the Contradictions of Green Capitalism*. MIT Press.

Goldstein, J., & Nost, E. (2022). *The nature of data: Infrastructures, environments, politics*. University of Nebraska Press.

Golumbia, D. (2009). *The cultural logic of computation*. Harvard University Press. https://doi.org/10.4159/9780674053885

Goodwein, T., & Melgar, A. (2023, June 30). *Foothills County declares agricultural disaster*. CityNews Calgary. https://calgary.citynews.ca/2023/06/29/foothills-county-agricultural-disaster/

Halpern, O. (2021). Planetary Intelligence. In J. Roberge & M. Castelle (Eds.), *The Cultural Life of Machine Learning: An Incursion into Critical AI Studies* (pp. 227–256). Palgrave Macmillan.

Halpern, O., & Mitchell, R. (2023). *The Smartness Mandate*. MIT Press.

Hebert, C. (2022, September 19). *Agriculture, technology, and the path to net-zero*. Royal Bank of Canada Capital Markets. https://www.rbccm.com/en/insights/story.page?dcr=templatedata%2Farticle%2Finsights%2Fdata%2F2022%2F09%2Fagriculture-technology-and-the-path-to-net-zero

Houser, M., Gunderson, R., Stuart, D., & Denny, R. C. H. (2020). How farmers "repair" the industrial agricultural system. *Agriculture and Human Values*, *37*(4), 983–997. https://doi.org/10.1007/s10460-020-10030-y

Houser, M., & Stuart, D. (2020). An accelerating treadmill and an overlooked contradiction in industrial agriculture: Climate change and nitrogen fertilizer. *Journal of Agrarian Change*, *20*(2), 215–237. https://doi.org/10.1111/joac.12341

Jørgensen, M., & Phillips, L. (2002). *Discourse analysis as theory and Method*. Sage.

Kanter, D. R., Bartolini, F., Kugelberg, S., Leip, A., Oenema, O., & Uwizeye, A. (2019). Nitrogen pollution policy beyond the farm. *Nature Food*, *1*(1), 27–32. https://doi.org/10.1038/s43016-019-0001-5

Karlsson, L., Naess, L. O., Nightingale, A., & Thompson, J. (2018). 'Triple wins' or 'triple faults'? Analysing the equity implications of policy discourses on climate-smart agriculture (CSA). *The Journal of Peasant Studies*, *45*(1), 150–174. https://doi.org/10.1080/03066150.2017.1351433

Klerkx, L., Jakku, E., & Labarthe, P. (2019). A review of social science on digital agriculture, smart farming and agriculture 4.0: New contributions and a future research agenda. *NJAS - Wageningen Journal of Life Sciences*, *90–91*, 100315. https://doi.org/10.1016/j.njas.2019.100315

Kornhuber, K., Lesk, C., Schleussner, C. F., Jägermeyr, J., Pfleiderer, P., & Horton, R. M. (2023). Risks of synchronized low yields are underestimated in climate and crop model projections. *Nature Communications*, *14*(1), 3528. https://doi.org/10.1038/s41467-023-38906-7

Krzywoszynska, A. (2024). "You can't manage what you can't measure": Regenerative agriculture, farming by numbers, and calculability in soil microbiopolitics. *Environment and Planning E: Nature and Space*, 25148486241246498. https://doi.org/10.1177/25148486241246498

Laforge, J. M. L., Dale, B., Levkoe, C. Z., & Ahmed, F. (2021). The future of agroecology in Canada: Embracing the politics of food sovereignty. *Journal of Rural Studies*, *81*, 194–202. https://doi.org/10.1016/j.jrurstud.2020.10.025

Lajoie-O'Malley, A., Bronson, K., van der Burg, S., & Klerkx, L. (2020). The future(s) of digital agriculture and sustainable food systems: An analysis of high-level policy documents. *Ecosystem Services*, *45*, 101183. https://doi.org/10.1016/j.ecoser.2020.101183

Lewis, M. (2003). *Moneyball: The art of winning an unfair game*. W.W. Norton & Company.

MacNeil, R., & Paterson, M. (2017). Trudeau's Canada and the challenge of decarbonisation. *Environmental Politics*, *27*(2), 379–384. https://doi.org/10.1080/09644016.2018.1414747

Mathiesen, K. (2023, May 4). *Protecting nature, destroying lives: The chemist vs. the Dutch farmers*. POLITICO. https://www.politico.eu/article/johan-vollenbroek-netherlands-nitrogen-pollution-climate-change-farming/

McCaig, M., Rezania, D., & Dara, R. (2023). Framing the response to IoT in agriculture: A discourse analysis. *Agricultural Systems*, *204*, 103557. https://doi.org/10.1016/j.agsy.2022.103557

McKelvey, F., & Neves, J. (2021). Introduction: Optimization and its discontents. *Review of Communication, 21:2,* 95-112, DOI: 10.1080/15358593.2021.1936143

McNeill, M. (2016, September 27). *High-tech farming aims to boost yields, cut emissions*. Winnipeg Free Press. https://www.winnipegfreepress.com/business/2016/09/27/high-tech-farming-aims-to-boost-yields-cut-emissions

Miles, C. (2019). The combine will tell the truth: On precision agriculture and algorithmic rationality. *Big Data & Society*, *6*(1) https://doi.org/10.1177/2053951719849444

Montenegro De Wit, M., & Canfield, M. (2024). 'Feeding the world, byte by byte': Emergent imaginaries of data productivism. *The Journal of Peasant Studies*, *51*(2), 381–420. https://doi.org/10.1080/03066150.2023.2232997

Montpetit, J. (2022, August 25). Canada's convoy movement waved the Dutch flag. Then conspiracy theories swirled about fertilizer and bugs. *CBC*. https://www.cbc.ca/news/canada/freedom-convoy-farmers-protest-netherlands-dutch-flag-1.6558902

Norman, D. A., & Verganti, R. (2014). Incremental and Radical Innovation: Design Research vs. Technology and Meaning Change. *Design Issues*, *30*(1), 78–96. https://doi.org/10.1162/DESI_a_00250

Picketa Systems. (2023). https://www.picketa.com/

Poell, T., Nieborg, D., & van Dijck, J. (2019). Platformisation. *Internet Policy Review*, *8*(4). https://doi.org/10.14763/2019.4.1425

Porter, T. (1995). *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton University Press.

Powell, A. B. (2021). *Undoing optimization: Civic action in smart cities*. Yale University Press.

Qualman, D. & the National Farmers Union. (2022). *Nitrogen Fertilizer: Critical Nutrient, Key Farm Input, and Major Environmental Problem.* National Farmers Union. https://www.nfu.ca/wp-content/uploads/2022/08/nitrogen-fertilizer-report-nfu-2022-en.pdf

Rance, L. (2022, April 18). *Opinion: Making farming smarter*. Winnipeg Free Press. https://www.winnipegfreepress.com/business/2022/04/14/making-farming-smarter

Rao, S. (2009). *Engineering optimization: Theory and practice* (4th Ed.). Wiley.

Reisman, E., Fairbairn, M., & Kish, Z. (2024). Agrarian Platform Capitalism: Digital Rentiership Comes to Farming. *Antipode*, anti.13107. https://doi.org/10.1111/anti.13107

Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., Drüke, M., Fetzer, I., Bala, G., Von Bloh, W., Feulner, G., Fiedler, S., Gerten, D., Gleeson, T., Hofmann, M., Huiskamp, W., Kummu, M., Mohan, C., Nogués-Bravo, D., ... Rockström, J. (2023). Earth beyond six of nine planetary boundaries. *Science Advances*, *9*(37), 1-16 https://doi.org/10.1126/sciadv.adh2458

Robinson, A. (2023, June 20). *How farmers can break free of their synthetic fertilizer addiction*. Corporate Knights. https://www.corporateknights.com/category-food/farmers-can-break-free-synthetic-fertilizer-addiction-nitrogen/

Rose, D. C., Barkemeyer, A., De Boon, A., Price, C., & Roche, D. (2023). The old, the new, or the old made new? Everyday counter-narratives of the so-called fourth agricultural revolution. *Agriculture and Human Values*, *40*(2), 423–439. https://doi.org/10.1007/s10460-022-10374-7

Rosenthal, C. (2018). *Accounting for slavery: Masters and management*. Harvard University Press.

Rotz, S. (2017). 'They took our beads, it was a fair trade, get over it': Settler colonial logics, racial hierarchies and material dominance in Canadian agriculture. *Geoforum*, *82*, 158–169. https://doi.org/10.1016/j.geoforum.2017.04.010

Rotz, S., Duncan, E., Small, M., Botschner, J., Dara, R., Mosby, I., Reed, M., & Fraser, E. D. G. (2019). The Politics of Digital Agricultural Technologies: A Preliminary Review. *Sociologia Ruralis*. https://doi.org/10.1111/soru.12233

Schmunk, R. (2021, November 18). *Thousands of animals have died on flooded B.C. farms in "agricultural disaster"*. CBC/Radio Canada. https://www.cbc.ca/news/canada/british-columbia/bc-flooding-2021-livestock-deaths-abbotsford-1.6252774

Sharma, M., Kaushal, R., Kaushik, P., & Ramakrishna, S. (2021). Carbon Farming: Prospects and Challenges. *Sustainability*, *13*(19), 1-15. https://doi.org/10.3390/su131911122

Smil, V. (2004). *Enriching the earth*. The MIT Press. https://doi.org/10.7551/mitpress/2767.001.0001

Srnicek, N. (2017). *Platform Capitalism*. Polity.

Stephenson, A. (2017, March 25). Werklund gives olds college $16m for "smart agriculture." *Edmonton Journal*.

Stoddart, M. C. J. (2007). Ideology, Hegemony, Discourse: A Critical Review of Theories of Knowledge and Power. *Social Thought and Research*, 28, 191-225. https://doi.org/10.17161/STR.1808.5226

Strauss, A. (1987) Qualitative Analysis for Social Scientists. Cambridge: Cambridge University Press.

Taylor, F. W. (1911). *The Principles of Scientific Management*. Harper & Brothers.

Tullis, P. (2023, November 16). *Nitrogen wars: The Dutch Farmers' Revolt that turned a nation upside-down*. The Guardian. https://www.theguardian.com/environment/2023/nov/16/nitrogen-wars-the-dutch-farmers-revolt-that-turned-a-nation-upside-down

Van Dijk, T. A. (2013). Ideology and Discourse. In M. Freeden, L. T. Sargent, & M. Stears (Eds.), *The Oxford Handbook of Political Ideologies* (pp. 175–196). essay, Oxford University Press.

Vinco, E., Morrison, N., Bourassa, J., & Lhermie, G. (2023). Climate policy and Canadian crop production: A qualitative study of farmers' attitudes and perceptions towards nitrous oxide reductions. *Journal of Cleaner Production*, *418*, 1-11. https://doi.org/10.1016/j.jclepro.2023.138108

Visser, O., Sippel, S. R., & Thiemann, L. (2021). Imprecision farming? Examining the (in)accuracy and risks of digital agriculture. *Journal of Rural Studies*, *86*, 623–632. https://doi.org/10.1016/j.jrurstud.2021.07.024

Weber, M. (1968). Economy and society. Totowa, NJ: Bedminster. (Original work published 1921)

Weersink, A., Fraser, E., Pannell, D., Duncan, E., & Rotz, S. (2018). 43—Opportunities and Challenges for Big Data in Agricultural and Environmental Analysis. *Annual Review of Resource Economics*, *10*(1), 19–37. https://doi.org/10.1146/annurev-resource-100516-053654

Wolfert, S., Ge, L., Verdouw, C., & Bogaardt, M.-J. (2017). Big Data in Smart Farming – A review. *Agricultural Systems*, *153*, 69–80. https://doi.org/10.1016/j.agsy.2017.01.023

Zary, D. (2020, December 11). *Large-scale farming operation in Kindersley area part of Nutrien's global carbon pilot*. Saskatoon StarPheonix. https://thestarphoenix.com/news/saskatchewan/large-scale-farming-operation-in-kindersley-area-part-of-nutriens-global-carbon-pilot

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Book Review

# The Political Economy of Agribusiness: A Critical Development Perspective

## By Maria Luisa Mendonça

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Review by Nil Alt*

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Maria Luisa Mendonça's *The Political Economy of Agribusiness: A Critical Development Perspective*, published by Fernwood Publishing in 2023, is a significant contribution to our understanding of the concrete historical developments that underpin the concept of agribusiness. Locating the birth of the agribusiness concept in the US food and farm policy landscape of the late 1950s, Mendonça challenges the idea that "transformation of agriculture into 'business' [is] an evolutionary and inevitable process caused by ongoing technological development" (p.31), popularized by Davis and Goldberg in their influential book *A Concept of Agribusiness* (1957). Rather, Mendonça regards agribusiness as a historical development rooted in capitalism and colonial patterns. Therefore, instead of taking the model as given, the author proposes that we disentangle and evaluate its consequences from a Marxist political economy perspective, drawing attention to the uneven nature of such "development" and the dependencies created among farming communities of the economic south (pp.54-56), particularly in Brazil.

In the first chapter, Mendonça criticizes the expansion of the agribusiness model in Latin America, which was facilitated by government subsidies to multinational corporations at the expense of small farmers. According to Mendonça, the internationalization of the agribusiness model, carried out in the name of the "green revolution," forced small farmers to spend a significant portion of their resources on commercial inputs, such as mechanization and petrochemicals, due to the so-called developmentalist state policies and market pressures, damaging soil health and productivity. Small farmers, burdened by debt and facing declining productivity due to reliance on

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commercial inputs, often lose their land. Many become low-wage farm workers on large plantations owned by transnational corporations or serve as contract producers, whose surplus labour is exploited and who bear the risks associated with agriculture and volatile global markets.

The second chapter shifts its focus to land as the key analytic of economic and geopolitical consequences of agribusiness internationally. Theoretically, the chapter focusses on Marx's land rent theory as scaffolded by other key Marxian concepts including commodity fetishism and primitive accumulation. Taken together, commodity fetishism and primitive accumulation "enable capital reproduction through the appropriation of abstract labour converted into land rent" (p.41), and this process is presented as central to the current dynamics of the crisis of overaccumulation (p.42). Mendonça also unpacks the historical and dialectical materialist perspective and highlights its methodological significance for understanding the theoretical foundations of modern, capital-intensive industrial agriculture and its cyclical relationship between accumulation and crisis within the global food system. The most important takeaway from this chapter is that the deregulation of financial markets since the 1980s allowed financial capital to circulate in the periphery of the global economy, where land is increasingly seen as a commodity that can be bought, sold, and traded. This shift has led to the creation of financial mechanisms that separate the value of land from its physical existence, allowing for the free circulation of value around the globe.

Chapter three explains how the flow of financial capital into farmland markets not only leads to the dramatically escalating land and food prices, but it also allows for land grabs by financial tools such as international pension funds. Since the 2008 global economic crisis, pension funds have become a major source of capital for agribusiness corporations in Brazil, particularly as financial capital's role in farmland markets has intensified. Despite the growing debt of these corporations due to financial capital's increased mobility, the Brazilian state continues to provide them with cheap loans, allowing for the deepening of labour exploitation and predatory use of natural resources in the country. As illustrated by the violence against rural communities in the fertile Cerrado region, concentration of land (and hence power) in the hands of agribusiness corporations wreaks havoc on Brazil's socio-economic and environmental systems as well as the country's capacity to feed itself.

The last chapter uses the example of ethanol production to highlight the role of agrofuels in the globalization of land speculation and the significant role of international financial capital in driving the expansion of industrial and export-oriented agriculture in Brazil, including sugarcane plantations and the ethanol industry. Pension funds from various European and North American countries including Canada, have invested heavily in the Brazilian agrofuel industry. Consequently, the influx of foreign financial capital into the Brazilian agribusiness landscape has led to concentration of land and power in the hands of a few large corporations. More specifically, financial investors' purchase of large tracts of farmland (land grabbing) has displaced and proletarianized Indigenous and peasant communities. In addition, the volatility of financial markets has created unprecedented levels of uncertainty for farmers, making it difficult for them to plan as farmland prices fluctuate significantly.

The last two chapters effectively contrast the negative consequences of financialized agriculture on rural communities in Brazil with the involvement of Canadian pension funds in Brazilian agribusiness. Here, Mendonça does a great job of demonstrating the highly uneven and interconnected nature of the contemporary global food

system. The link between the exploitation of rural communities and workers in Brazil and the Canadian pension fund investments (financial capital) in farmland markets suggest that Canadian food scholarship and activism can benefit from having more conversations at the global scale about the role and responsibilities bound up with pension funds.

The book's dense theoretical discussions may be challenging for some readers, but its comprehensive review of key Marxist agrarian political economy concepts offers valuable insights for academic audiences. The empirical evidence from Brazil, illustrating the detrimental impacts of land grabbing on rural communities and the environment, is particularly noteworthy. While the book provides examples of resistance strategies and the potential for agroecological transitions, further elaboration on the steps towards implementing agroecology and integrating it into the broader food policy landscape would be beneficial. This would help readers think about the practical challenges and opportunities associated with transitioning to more sustainable agricultural systems in Brazil and elsewhere.

**Nil Alt** received her master's degree in Geography, Planning and Environment from Concordia University, Montreal in 2017. In the same year, she started her doctoral studies in Human Geography in the Department of Geography & Planning at the University of Toronto. Her doctoral research focusses on uneven development, political economy of food and agriculture, rural change, and feminist labour studies.

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# Choux Questionnaire: Lenore Newman

A riff on the well-riffed Proust Questionnaire, the CFS Choux Questionnaire is meant to elicit a tasty and perhaps surprising experience, framed within a seemingly humble exterior. (And yes, some questions have a bit more *craquelin* than others.) Straightforward on their own, the queries combined start to form a celebratory pyramid of extravagance. How that composite croquembouche is assembled and taken apart, however, is up to the respondents and readers to determine. Respondents are invited to answer as many questions as they choose.

The final question posed—*What question would you add to this questionnaire?*—prompts each respondent to incorporate their own inquisitive biome into the mix, feeding a forever renewed starter culture for future participants.

Our Choux Questionnaire respondent for this issue Lenore Newman. Lenore is the director of the Food and Agriculture Institute at the University of the Fraser Valley, where she holds a Research Chair in Food and Agriculture Innovation. She is a professor in the Faculty of Science at UFV, and is an emeritus member of the Royal Society of Canada's New College.

### What is your idea of a perfect food?

Sweet and umami. A buttery pecan pie for example.

### Of what food or food context are you afraid?

Eggplants. I have a deadly allergy, and they lurk in things. Otherwise, I've eaten everything.

### What word or concept describes an admirable food system?

Efficient.

### What word or concept prevents many food systems from becoming admirable?

Fragile.

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### Which food person do you most admire?

Anthony Bourdain. He was my hero.

### Which food innovation do you try to ignore?

Eating insects.

### What is your greatest gastronomic extravagance?

Hot chocolate made with ambergris in the style of the French kings.

### What is your current state of hunger?

Full.

### What do you consider to be the most overrated food or food context?

Thirty-course tasting menus. They are an ordeal.

### On what occasion do you feign satiety?

Business meetings.

### What do you most dislike about dinner tables?

When I'm seated by the leg and I keep jostling the entire table. This happens weirdly often.

### What is the quality you most like in a fruit?

I adore all fruit. Ripeness is key.

### What is the quality you most like in a cut of meat?

I'm vegan these days so I'm going to say, "made from plants."

### Which condiments do you most overuse?

Truffles. Love those little guys. Even the shady oil.

### What kinds of gardens make you happiest?

Ones that allow foraging.

### Which culinary skill would you most like to have?

My wok skills are a bit weak. I overcrowd the pan.

### If you could change one thing about nutrition, what would it be?

Sugar would be as healthy as a good workout.

### What do you consider your greatest edible achievement?

A friend and I once recreated an entire Delmonico's meal, including the weird staging. It was a blast.

### If you were to die and come back as an (edible) animal, vegetable, or mineral, what would you like it to be?

Absinthe. The price of euphoria shall be madness.

### Where (and/or when) would you most like to dine?

There is a night market in Taipei I have my eye on.

### When do you have no appetite?

That's a thing?

### What is your most treasured kitchen implement?

My chef's knife. I'd grab it before my laptop if there was a fire.

### What do you consider to be the most processed kind of food?

All food is processed, and the weirder the better. But then again, I've eaten salmon grown in a vat, so I'm the wrong person to ask.

### What is your favourite aroma?

In the kitchen? Roasting onions. In the world? Petrichor.

### What spice, kitchen implement, or cookbook do you use most rarely?

I always think I will use cloves and somehow, I never do.

### What do you most value in your friends?

I like it when they are chefs and feed me. Chefs are also handy if you need help with weird food adventures.

### Who are your favourite food scholars?

Dan Bender. He knows how to eat.

### Who is your hero of food media?

Aside from Anthony Bourdain? Cat Cora has my heart.

### With which cuisine do you most identify?

Szechuan. It's like life. Somehow spicy and numb at the same time.

### What is your most powerful sense?

Smell.

### What are your favourite agricultural, culinary, or gastronomic words?

California breakfast buffet.

### What is it about composting that you most dislike?

No fire. I like fire.

### What would you eat as your last meal?

Well, given that it would literally kill me, I could do eggplant. Cross two things off my list at once!

### What foodish epitaph would you assign to yourself?

"I think this mushroom is safe."

What question would you add to this questionnaire?

*What is the worst meal you've ever had?*

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