
POLICY SUPPORT FOR AGROECOLOGY IN CANADA: LESSONS FROM THE GLOBAL SOUTH

*Jeannette M.E. Tramhel**

CONTENTS

I	Introduction	141
A.	What is Sustainable Agriculture?	141
B.	What is Agroecology?	142
C.	From Definition to Policy Framework and Law	143
II	Advancing the Policy Environment for Agroecology in Canada	146
A.	The Need to Develop a National AE Policy	147
B.	Design Integrated Policies Using a Food Systems Lens	148
C.	Adopt a National AE Research Agenda	150
D.	Support AE Knowledge Sharing and Extension Programs	152
E.	Protect Farmers' Rights to Seeds	153
F.	Financial Incentives for Change	155
G.	Shift From Export Mindset to Food Systems Lens	157
H.	Reduce Barriers to Entry: Land and Credit	158
I.	Simplify Regulation	160
III	Conclusion: Reflections and Lessons Learned	161

Abstract

This article considers findings from a recent assessment of the policy environment for agroecology (AE) in Canada as these correspond with the basic elements and principles of AE outlined in international guidance documents, namely, the ten elements of AE adopted by the Food and Agriculture Organization of the United Nations (FAO) and the thirteen principles developed by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. These findings are evaluated in relation to nine case studies from the Global South that illustrate the benefits of, as well as the challenges in, applying the elements and principles of AE in practice, such as in adopting a national strategy for AE (Tanzania); applying a suite of interrelated policies (India); developing a national research agenda (Cuba); encouraging farmer-to-farmer knowledge sharing (Haiti); protecting cultural heritage (Ecuador); using

* BScAg, LLB, LLM, MEdes, Member of the Bar in Ontario and New York. The author is grateful for assistance provided during the editorial process from staff at the *Lakehead Law Journal*, in particular, Assistant Professor Tenille E. Brown and Co-managing Editor, Hailey Hayes, and anonymous feedback provided during the blind peer review process.

incentives to encourage better practices (Costa Rica); appreciating the cultural shift and stakeholder engagement necessary for change (Philippines); acknowledging the need for a paradigm shift in policy measures (El Salvador); and implementing policy through clear and simple legislative tools and administrative processes (Colombia). Despite significantly different circumstances, these case studies from the Global South reveal lessons that are relevant for Canada as it embarks on the development of a sustainable agricultural strategy. The article advances the view that because AE entails the integration and balancing of all three components of sustainability—environmental, economic, and social—both in its definition and application, AE is the most consistent interpretation of sustainable agriculture and therefore must be considered in the redesign of Canada’s agri-food policy framework and our renewed legacy in international agricultural development.

I INTRODUCTION

Support for agroecology (AE) is rapidly mounting in many parts of the world, yet interest among policymakers in Canada seems more reticent. As Canada is about to develop a strategy for sustainable agriculture (SAg), an opportunity arises to embrace the fundamentals of AE and to signal endorsement of an ecocentric interpretation of SAg that supports AE in alignment with global trends and in response to global needs. This article considers findings from a recent assessment of the AE policy environment in Canada as it relates to the basic elements and principles of AE and in relation to nine case studies from the Global South with a view toward inspiring greater policy support for AE in Canada.

A. What is Sustainable Agriculture?

In 2015, the United Nations General Assembly (UNGA) adopted the *2030 Agenda for Sustainable Development*¹ of which the 17 Sustainable Development Goals (SDGs) constitute the core. Along with the goals “to end hunger, achieve food security and improved nutrition” SDG 2² aims “to promote sustainable agriculture,” which is defined by the Food and Agriculture Organization of the United Nations (FAO), as “the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. [SAg] conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable.”³ This broad definition is subject to various interpretations. Some maintain that “technocentric” approaches centred on biotechnology (such as the use of genetic engineering) and efficient use of inputs (such as water, fertilizer, and pesticide applications through precision agriculture) fall squarely within the scope of sustainability. Others reject such techniques in favour of “ecocentric” approaches that emphasize biodynamic farming techniques (such as

¹ *Transforming Our World: The 2030 Agenda for Sustainable Development*, UNGA, 70th Sess, UN Doc A/RES/70/1 (2015) GA Res 70/1 [*Agenda 2030*].

² *Agenda 2030*, *Ibid* at 14.

³ UN FAO, *Building a Common Vision for Sustainable Food and Agriculture: Principles and Approaches* (Rome: FAO, 2014), citing *Report of the Council of Food and Agriculture Organization*, 94th Sess, UN FAO, 2014, UN Doc CL 94/REP.

permaculture or regenerative agriculture), possibly in conjunction with changes in consumption patterns and low-growth levels of human development.⁴ Several approaches (e.g., climate-smart agriculture, organic agriculture, nature-based farming) fall somewhere along this continuum.

Confusion abounds, however, because some of these terms are used interchangeably, which is understandable given that certain practices are encouraged by more than one approach. For example, crop rotation and prohibition of the use of pesticides are common to organic agriculture, AE, and possibly other approaches as well. However, whereas agroecological methods yield organic produce, organic produce is not necessarily produced agroecologically.

This article does not attempt the impossible task of defining SAg but rather begins from the premise that AE clearly falls within the parameters of SAg and advances the position that as the definitions of sustainability and SAg continue to develop and become more clear, AE will emerge as the approach most consistent with the intended meaning of SAg and essential for the actualization of SDG 2.

B. What is Agroecology?

As interest in AE has grown, a number of definitions have emerged that “reflect articulations in line with the three constituent manifestations of AE as a science, a set of practices and a social movement.”⁵ Nonetheless, there are interlinkages and co-evolution among these manifestations that concurs with AE being “increasingly described as a transdisciplinary, participatory and action-oriented approach across ecological, agricultural, food, nutritional and social sciences.”⁶

Broadly defined, AE is “a holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of food and agricultural systems. It seeks to optimize the interactions between plants, animals, humans and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system.”⁷ Perhaps the most significant distinction from other approaches is the specific inclusion of the social aspect in its definition; this is a critical difference, because the integration and balancing of all three components—environmental, economic, and social—is fundamental to sustainable development. As this definition of AE is consistent with the above definition of SAg and as it is one approach that specifically includes the social component *in its definition*, it could be argued that AE is the only approach fully compliant with all aspects of SAg. While other methods may incorporate the socioeconomic component *in their application*, it is not inherent in the definition, for example, of either organic agriculture or precision farming.

⁴ Technocentric and ecocentric terminology as described by Guy M Robinson, “Towards Sustainable Agriculture: Current Debates” (2009) 3:5 *Geo Compass* 1757 at 1759.

⁵ Alexander Wezel et al, “Agroecological Principles and Elements and Their Implications for Transition to Sustainable Food Systems: A Review” (2020) 40:40 *Agronomy for Sus Devel* 39 at 39 [Wezel et al].

⁶ *Ibid.*

⁷ UN FAO, *The 10 Elements of Agroecology: Guiding the Transition to Sustainable Food and Agricultural Systems* (Rome: UN FAO, 2018) [10 *Elements*]. For an explanation of AE epistemology and ontology, see F Caporali, “History and Development of Agroecology and Theory of Agroecosystems” in Massimo Monteduro et al, eds, *Law and Agroecology: A Transdisciplinary Dialogue* (Berlin: Springer, 2015) 3 at 25 [Caporali].

C. From Definition to Policy Framework and Law

Is this definition sufficiently robust? Interestingly, as Wezel notes, the decision not to rigidly define the principles was an intentional one:

FAO made a deliberate decision not to attempt to define the principles of agroecology, which they considered had been done . . . but rather, to identify a set of salient “elements” that can guide intergovernmental work in support of agroecological transitions towards sustainable agriculture.⁸

Thus, the framework for analysis that will be used in this article is based on the outcomes from two initiatives, one being the global multi-stakeholder consultation that resulted in the adoption of the ten elements⁹ and the second being the development of a scientific experts’ report that led to the thirteen principles,¹⁰ two parallel processes that informed one another.¹¹ Table 1 lists the elements and corresponding principles in abbreviated form. These will serve as the basis for analysis of the case studies in Part II and as a lens through which to consider recent findings and policy recommendations for AE in Canada.

⁸. Wezel et al, *supra* note 5 at 40.

⁹. *10 Elements*, *supra* note 7.

¹⁰. High Level Panel of Experts on Food Security and Nutrition, *Agroecological and Other Innovative Approaches for Sustainable Agriculture and Food Systems That Enhance Food Security and Nutrition* (Rome: Committee on World Food Security, 2019) [*13 Principles*].

¹¹. Wezel et al, *supra* note 5 at 3.

Table 1: Nine Case Studies from the Global South that Illustrate Key Elements and Principles of AE and Aspects Found Lacking in Canada's Current AE Policy Environment			
Case Study	FAO 10 Elements	HLPE 13 Principles¹²	Common Ground Findings
Tanzania	9. Responsible Governance	12. Land and natural resource governance	13; 21c. Clearly articulated National AE Strategy
India	3. Synergies	6. Synergy	7. Suite of inter-related policies with a food systems lens beyond agricultural production that includes environmental, social, health, energy, infrastructure and economic development policies and situates AE within the structures of the system. 11. Multisectoral policies at municipal and bioregional levels. 18. Multipronged, progressive change strategy.
Cuba	4. Efficiency	2. Input reduction	4. National research effort and support for AE 14. 'Fit for purpose' national research agenda for food systems redesign
Haiti	2. Co-creation & Sharing of Knowledge	8. Co-creation of knowledge	21b. AE research and knowledge co-creation and sharing
Ecuador	8. Culture & Food Traditions	9. Social values and diets	12. Inputs to advance AE
Costa Rica	1. Diversity	3. Soil health 5. Biodiversity 7. Economic diversification	9. Incentives and measures to encourage change 18. Incentives and disincentives ('push/pull') to advance AE; legislative and regulatory measures / incentives and rewards

¹² Columns two and three have been adapted from Wezel, *supra* note 5, Table 1, which lists the HLPE 13 Principles as these correspond to the FAO 10 Elements.

Table 1: Nine Case Studies from the Global South that Illustrate Key Elements and Principles of AE and Aspects Found Lacking in Canada’s Current AE Policy Environment			
Philippines	5. Recycling 10. Circular Economy	1. Recycling 7. Economic diversification 11. Connectivity 13. Participation	16. AE requires a deep cultural shift and change in mindset.
El Salvador	6. Resilience	3. Soil health 4. Animal health	8. Supportive policies for farmers and food producers as agents of change.
Colombia	7. Human & Social Values	10. Fairness 13. Participation	10. Regulatory measures, legislation & fiscal policy, to encourage a shift towards more sustainable practices.

While this article is concerned primarily with policy rather than law, it is important to acknowledge the role of law, both in its historical shaping of the current agri-food system as well as its limitations and potential as a tool for transformation. As the agri-food system has become fragmented, so too has the legal system become deconstructed into disjointed specializations—agricultural law, environmental law, land use and planning law, food law, and others—that are divorced from each other in theory and practice. As we try to reimagine and rebuild a more holistic agri-food system, it will also be necessary to rethink and reconstruct a supportive legal framework. This does not entail a “super-law” to replace existing fields but rather development of what might be called “a trans-law that, bottom up and progressively, attempts to link and coordinate regulatory measures between different legal fields, respecting their autonomy and distinction but, at the same time, emphasizing their common roots,”¹³ a necessary task within the realms of both domestic and international law.¹⁴ The premise of this article is that the development of AE policy is a critical first step to help knit together the sustainable agri-food system we imagine for the future and the road map for the requisite legal reforms that will give shape to that vision.

¹³ Massimo Monteduro, “From Agroecology and Law to Agroecological Law?” in Massimo Monteduro et al, eds, *Law and Agroecology: A Transdisciplinary Dialogue* (Berlin: Springer, 2015) 57 at 79.

¹⁴ Consider, for example, the disparate fields of international trade law and international environmental law in the treatment of issues related to global agri-food systems. For discussions on “whether space exists to advance AE through international law,” see Rob Amos, *Advancing Agroecology in International Law* (London: Routledge, 2023) at 15 [Amos].

II ADVANCING THE POLICY ENVIRONMENT FOR AGROECOLOGY IN CANADA

Growing Common Ground is a recent report that assesses the state of AE policy in Canada.¹⁵ Among its twenty-one findings, the report notes that although support is “still in its infancy,” AE is being considered in policy but requires “a deep cultural shift away from the long-held productivist mindset of Canada as an agricultural power geared to exporting food export as its main contribution to food security and prosperity in Canada and internationally. It also requires a shift away from the mindset of commodifying food and keeping it cheap.”¹⁶ This is not the first such call for a change in mindset: As early as 1992, after a two-year study, the Science Council of Canada released a report with twenty-seven recommendations that were eerily prescient of the challenges facing Canada’s agri-food system today.¹⁷ Several of the findings¹⁸ identified in *Growing Common Ground* as posing obstacles to an improved policy environment for AE in Canada are considered below, in conjunction with a discussion of how these or similar challenges have been addressed in the Global South. These findings have been included in Table 1 in relation to the particular element with which the ensuing recommendation most directly corresponds.

Nine case studies have also been included in Table 1 in relation to one of the corresponding elements, although each case could be used to illustrate several “interlinked and interdependent” principles, given the holistic nature of AE. While a more conventional approach might have been to select cases from countries having greater cultural and economic congruity with Canada and similarity in agricultural practices, the decision to showcase lessons from the Global South expands the range of examples with which policymakers may already be familiar and helps to debunk assumptions that only from among our industrialized peers will we find solutions. Second, there is merit in validating applicable lessons regardless of origin; for decades the presumption has been that innovations in agricultural development flow from industrialized economies to the Global South. Third, as sustainability in general requires an interdisciplinary approach that is often in stark contrast with the research silos that are prevalent in North America, in the course of the transition toward AE we may find ourselves turning more often to examples from traditional and Indigenous cultures, which tend to be more prevalent in the Global South. Although not all the initiatives in these cases have met with success, insights can be gleaned nonetheless for the development of AE policy in Canada.

¹⁵ Faris Ahmed, *Growing Common Ground: Pathways to Advance Agroecology Policy in Canada* (Waterloo: Laurier Centre for Sustainable Food Systems, 2022) at 1, online: <<https://researchcentres.wlu.ca/centre-for-sustainable-food-systems/news/2023/growing-common-ground-report>> [perma.cc/QE7S-Q8NN] [Ahmed].

¹⁶ *Ibid* at 1–2.

¹⁷ Science Council of Canada, “Sustainable Agriculture: The Research Challenge,” Report 43, Catalogue No SS22-1992/43E (1992) [SCC]. For example, following recommendation 1, which states that the Council “should commission an independent review of its committee structure and membership with a view to meeting the needs of agriculture-food system in the 21st century,” recommendation 3 reads: “The review should also consider how to shift the emphasis in modern agriculture from a narrow production orientation to a broader systems focus.”

¹⁸ As some findings constitute primarily observations (nos 1–6, 15–17, 19, and 20), those that are examined in this article are ones from which recommended action can be surmised.

A. The Need to Develop a National AE Policy

Many of the respondents interviewed for *Growing Common Ground* identified the biggest drawback within the Canadian agriculture sector to be the absence of a comprehensive national plan to make agriculture and food systems more sustainable, ecological, and climate friendly.¹⁹ Accordingly, the report considers “a clearly articulated National Agroecological Strategy” as essential and specifically one that is “embedded in a comprehensive . . . national food policy.”²⁰

Subsequently, in late 2022 Agriculture and Agri-Food Canada (AAFC) launched consultations to develop a Sustainable Agriculture Strategy (SAS), and in March 2023 a report was released outlining what had been heard in stakeholder feedback.²¹ Presumably, the next steps will entail identification and evaluation of relevant pillars within the existing policy framework and perhaps integration with the recently adopted *Food Policy for Canada*.²² Shared jurisdiction over agriculture between the federal and provincial or territorial (FPT) governments and their willingness to work together has been identified as one of the challenges in developing a collaborative SAS.²³ Perhaps the new Sustainable Canadian Agricultural Partnership (2023–2028),²⁴ that focuses on five key priorities identified in the Guelph Statement,²⁵ might ameliorate such concerns.

1. Case Study: Tanzania—A National Strategy

Tanzania is one state that has opted for an overarching national strategy to promote AE. The National Ecological Organic Agricultural Strategy (NEOAS) 2023–2030 has as its overall goal “to accelerate development and mainstream ecological organic agriculture subsector into existing national frameworks for agricultural sector development in order to enhance sustainable environmental conservation for improved health, income and food security by

¹⁹ Ahmed, *supra* note 15 at 26.

²⁰ *Ibid* at 2, nos 13, 21(c).

²¹ Agriculture and Agri-Food Canada, “What We Heard Report: Sustainable Agriculture Strategy” (2023) online: <<https://agriculture.canada.ca/en/departement/transparence/public-opinion-research-consultations/sustainable-agriculture-strategy/what-we-heard-report-sustainable-agriculture-strategy>> [perma.cc/TS3P-GQ8B] [AAFC].

²² Agriculture and Agri-Food Canada, *Food Policy for Canada: Everyone at the Table*, Catalogue No A22-628/2019E-PDF (2019), online (pdf): <<https://www.canada.ca/content/dam/aaac-aac/documents/20190614-en.pdf>> [perma.cc/5XXQ-S6RC] [*Food Policy for Canada*].

²³ Grace Skogstad, “Towards a Collaborative Sustainable Agriculture Strategy for Canada (Perspective Report),” (Ottawa: The Canadian Agri-Food Policy Institute, 2023) at 6, online (pdf): <<https://capi-icpa.ca/wp-content/uploads/2023/05/2023-05-29-CAPI-FPT-Report-EN.pdf>> [perma.cc/AM9N-P8CH].

²⁴ Agriculture and Agri-Food Canada, “Sustainable Canadian Agricultural Partnership” (19 June 2023), online (pdf): <<https://agriculture.canada.ca/en/departement/initiatives/sustainable-canadian-agricultural-partnership>> [perma.cc/3MB8-8MTJ]. One of the cost-shared programs, RAFFP, is discussed below.

²⁵ Agriculture and Agri-Food Canada, “The Guelph Statement” (17 November 2021), online: <<https://agriculture.canada.ca/en/departement/initiatives/meetings-ministers/guelph-statement>> [perma.cc/CV93-CNY6]. The five priorities are building sector capacity and growth, climate change and environmental protection, science research and innovation, market development and trade, and resiliency to respond to risk.

2030.”²⁶ Therein it is pointed out that the NEOAS is aligned with national policies, specifically the National Agricultural Policy 2013 and the national livestock, fisheries, water, and environmental policies, among others, as well as specific regional and global policies.

NEOAS recognizes the potential and commercial value of AE but also identifies the challenges in making the transition to AE, which include inadequate coordination among stakeholders, weak regulation and certification, and inaccessible inputs.²⁷ As the NEOAS was only adopted in 2023, it is too early to evaluate its impact; however, endorsing AE by means of a national strategy is a strong signal to demonstrate commitment and guide the way forward.

a. Relevance for Canada: Responsible Governance

“Sustainable food and agriculture requires responsible and effective governance mechanisms at different scales—from local to national to global.”²⁸ Many countries have already adopted AE legislation or policy, and Tanzania is one such example. Canada is encouraged to develop a national AE strategy that can serve as an overarching framework for the integration of initiatives at provincial and local levels. Such a strategy would create the necessary enabling environment to support the transition toward AE and could be carried out in conjunction with current SAS consultations.

B. Design Integrated Policies Using a Food Systems Lens

As pointed out in *Growing Common Ground*, AE requires “a suite of inter-related policies that are beyond agriculture policy . . . A food systems lens is key to situating agroecology within the structures of the system, [identifies] synergies and tradeoffs, and [goes] beyond the discourse on ‘production’ and ‘efficient value chains’ to include environmental, social, health, energy, infrastructure and economic development policies.”²⁹ Such a holistic approach would require evaluation of a broad spectrum of policies and legislation at federal, provincial, and municipal levels as well as identification of outdated policies no longer consistent with a food systems perspective. Ironically, a holistic AE approach aligns with recommendations made by the Science Council over 30 years ago.³⁰ During recent SAS consultations, participants felt that Canada is behind globally in positioning its agricultural sector; while the current focus is on agricultural production, participants raised the importance of the entire supply chain, including

²⁶ United Republic of Tanzania, Ministry of Agriculture, National Ecological Organic Agriculture Strategy (2023–2030) (2023), s 3.5, online (pdf): <https://kilimokwanza.org/wp-content/uploads/2024/03/The_Tanzania_-_National_Ecological_Organic_Agriculture_Strategy.pdf> [perma.cc/K2JK-VHDA].

²⁷ *Ibid*, s 1.2.

²⁸ 10 *Elements*, *supra* note 7, Element 9; 13 *Principles*, *supra* note 10, Principle 12.

²⁹ Ahmed, *supra* note 15 at 2, no 7. See also nos 11, 18.

³⁰ SCC, *supra* note 17 at 9–10. Recommendation 5: “using some research stations for . . . agro-ecosystems research”; 8 & 9: promote greater understanding “of agricultural systems”; 10: promote long-term, interdisciplinary research in food and agriculture”; 15: identify “indicators for sustainable agriculture”; 18 & 19: decouple subsidies from production, “create incentives for the adoption of practices integral to sustainability” and redirect farm support from subsidies to payments designed to preserve environmentally and socially desirable resources.

consumers, as significant in the development of a sustainable sector, with the SAS seen as an opportunity for change.³¹

1. Case Study: Andhra Pradesh, India—An Integrated Approach

Andhra Pradesh community-managed natural farming (APCNF) is described as “the largest transition to AE in the world,” currently with 630,000 practising farmers and the aim to scale to 6 million.³² It is the successor to a series of programs that initially focused on non-chemical pest management and gradually expanded to include interventions to improve soil health and water conservation. Thereafter, Zero Budget Natural Farming was introduced with nine principles that correspond closely to several of the elements and principles of AE.³³ Although the socioeconomic component is not included among these nine principles, the program is farmer-centric and follows a farmer-to-farmer extension system that is driven by farmer innovations. It was to reflect this focus that the name was changed to *community-managed* natural farming.³⁴ The program is administered by Rythu Sadhikara Samstha, a non-profit company established by the state government, but despite a commitment considered as the official launch of the scaled-up program,³⁵ it is difficult to confirm whether CNF has been “codified” as state policy. In fact, it has been suggested that a definitive public policy statement to scale up CNF as a part of the overall National Agricultural Policy would provide clarity and direction.³⁶

Results are impressive. A recent impact assessment using The Economics of Ecosystems and Biodiversity for Agriculture and Food Systems (TEEBAgriFood) Framework compared the main economic, social, and health impacts of CNF with three other dominant farming systems in the state, namely tribal farming, rainfed dryland agriculture, and chemically intensive farming. It found that under CNF (1) yields averaged 11 per cent higher while crop diversity was higher; (2) net incomes averaged 49 per cent higher as a result of lower input costs and higher earnings; (3) social impacts included higher female workforce participation and higher levels of trust, cohesion, reciprocity, and enhanced social capital; and (4) there were fewer on-

³¹ AAFC, *supra* note 21, s 3.3.

³² Rhythu Sadhikara Samstha, “Andhra Pradesh Community Managed Natural Farming” (last accessed 15 October 2024), online (pdf): <<https://www.indiaspend.com/h-library/19th-august-ap-cnf-overview.pdf>> [perma.cc/KV7N-FZJM] [Samstha]. See also Harpinder Sandhu et al, *Natural Farming through a Wide-Angle Lens: True Cost Accounting Study of Community Managed Natural Farming in Andhra Pradesh, India*, GIST Impact Report (2023), online (pdf): <<https://gistimpact.com>> [perma.cc/DCY3-SS3H] [Sandhu].

³³ *Ibid.* APCNF encourages (1) continuous soil coverage (365 days); (2) minimal soil disturbance; (3) biostimulants as necessary catalysts to achieve good soil health; (4) use of indigenous seeds; (5) diverse cropping (trees & crops); (6) integration of livestock with crops; (7) organic residue (compost); (8) organic pest management through botanical methods; and (9) no synthetic inputs (fertilizers, pesticides, herbicides).

³⁴ Samstha, *supra* note 32.

³⁵ UN Environment Programme, “Andhra Pradesh to Become India’s First Zero Budget Natural Farming State” (2 June 2018), press release, online: <<https://www.unep.org>> [perma.cc/76WE-AQE4].

³⁶ D Narasimha Reddy, “Agroecology and Sustainable Smallholder Agriculture: An Exploratory Analysis with Some Tentative Indications from the Recent Experience of ‘Natural Farming in Andhra Pradesh’” (2022) 41:3 J Indian Soc Sci Inst 233 at 266, online: <<https://apcnf.in>> [perma.cc/437K-P3RU] [Reddy]. Reddy notes that to do so might also entail repurposing current agricultural subsidies, which illustrates the conundrum.

farm health risks and working days lost to illness.³⁷ The study “gives new evidence to support agroecological natural farming as a key approach to help feed communities and transition farmers to nature-positive outcomes in support of the SDGs.”³⁸

a. Relevance for Canada: Synergies

“Building synergies enhances key functions across food systems, supporting production and multiple ecosystem services.”³⁹ AE involves the design of diversified systems that selectively combine components (crops, livestock, trees, soils, water) on farms and agricultural landscapes to enhance synergies within the wider food system. The APCNF case was selected to showcase positive outcomes that can be achieved using an AE approach, but it also illustrates the challenges of scaling up a successful program. To integrate APCNF as a state-level initiative into India’s National Agricultural Policy would necessitate a review of other policy measures that run counter to AE, such as subsidies and other forms of support to conventional farmers.⁴⁰ Such a comprehensive review would also be required in Canada;⁴¹ facilitating a gradual transition to AE will require a multi-pronged strategy across many sectors and interrelated policies with a food systems lens that are integrated at the local, provincial, and national levels.

C. Adopt a National AE Research Agenda

As pointed out in *Growing Common Ground*, Canada needs a “national research agenda on agriculture and food systems . . . that produces transdisciplinary knowledge, spurs innovation, and fosters the kind of knowledge exchange that will support, rather than undermine, agroecological transition.”⁴² Under an export-oriented model of agriculture, which emphasizes commodity crops, research is largely industry funded, narrowly focused, and

³⁷ Samstha, *supra* note 32 at Executive Summary.

³⁸ Global Alliance for the Future of Food, “Groundbreaking Comparative Study Reveals Natural Farming Leads for Yields, Livelihoods and Health” (19 July 2023), press release, online: <<https://futureoffood.org/insights/natural-farming-leads-for-yields-livelihoods-and-health/>> [perma.cc/RE8N-23BV].

³⁹ *10 Elements*, *supra* note 7, Element 3; *13 Principles*, *supra* note 10, Principle 6.

⁴⁰ Reddy, *supra* note 36 at 266–267.

⁴¹ It is beyond the scope of this article to undertake such a review. By way of example, however, consider Canada’s federal AgriStability Program, which helps farmers manage risks by offering payments when incomes decline significantly due to production losses or market disruption. Although this can enable farms to remain viable, “current design and delivery favours larger operators.” see Agriculture and Agri-Food Canada, “Evaluation of AgriStability” (last modified 13 October 2022), online: <<https://agriculture.canada.ca/en/department/transparency/audits-evaluations/evaluation-agristability>> [perma.cc/4FCL-Y9HZ]. Unless reviewed through an AE food systems lens, programs such as this inadvertently support status quo conventional agriculture, such as in the meat industry, to maintain large, grain-fed feedlot operations (which have significant adverse environmental impacts and contributions to greenhouse gas emissions) at the expense of encouraging transition toward AE-like production methods, such as a regenerative grassfed model that is more often used by smaller operators. As another example, consider Canada’s environmental impact assessment and how it might be viewed through a food systems lens. See Jeannette ME Tramhel, “Assessing Impacts on Food Security—EIA, SIA, or Both?” (paper delivered at the 35th Annual Conference of the International Association for Impact Assessment, 20–23 April 2015) [unpublished], online: <<https://conferences.iaia.org/2015/Final-Papers/>> [perma.cc/8ART-6AM6].

⁴² Ahmed, *supra* note 15 at 2, no 14. See also 43, where AAFC staff are quoted as saying “there’s a crying need for a national agricultural research institute.”

fragmented, often yielding results that are proprietary and protected by intellectual property law. Here again, similar advice has been offered before.⁴³ Research was also a recurring theme during the SAS consultations, “with many participants noting the decrease in AAFC-led research and funding in recent decades.”⁴⁴ It is noteworthy that the recently adopted Strategic Plan for Science recommends that “AAFC . . . increase its capacity to quantify landscape-level trade-offs to clarify interconnected pathways toward better agro-ecosystem sustainability and resilience.”⁴⁵

1. Case Study: Cuba—Urban Organic Agriculture

After the collapse of the Soviet Bloc in the 1990s, domestic agricultural production in Cuba fell by half and food scarcity became acute because of the loss of the country’s main source of supply for agro-chemicals, fuel, and food imports. In response, the government introduced austerity measures that included a new phase of agrarian reforms with the distribution of available land for free usufruct.⁴⁶ Cubans began to grow food any place that was available and, in the absence of agrochemicals, the food so produced was “de facto” organic.

The transformation during this period was probably due in large measure to Cuba’s unique form of central government. An interesting observation, however, is that only after Cubans started taking action did the Cuban Ministry of Agriculture begin to offer support through the introduction of university research and expert extension services in the use of biopesticides.⁴⁷ Whether the impetus for research and development was bottom up or top down remains unclear; nonetheless, by the 2000s Cuba had become a world leader in research and development for organic and urban agriculture.

a. Relevance for Canada: Efficiency

“Innovative agroecological practices produce more using less external resources.”⁴⁸ Generating biological and socioeconomic diversity can result in greater efficiency, and reducing or eliminating dependency on external inputs can increase self-sufficiency. This can occur either out of necessity, as happened in Cuba, or by choice. The Cuban case study exemplifies how a national plan for research and development can support agricultural transformation. Effecting a shift toward AE in Canada will require initiatives to counterbalance research that continues to be dominated by commercial interests and is disproportionately weighted toward conventional agriculture. Canada needs a national research agenda for AE that is “fit for purpose.”

⁴³ SCC, *supra* note 17 at 21.

⁴⁴ AAFC, *supra* note 21.

⁴⁵ Agriculture and Agri-Food Canada’s Strategic Plan for Science, Catalogue No A59-91 (2022) at 17–18, online (pdf): <<https://agriculture.canada.ca>> [perma.cc/C7SY-YS4E]. Missions outlined therein are (1) mitigating and adapting to climate change; (2) increasing the resiliency of agro-ecosystems; (3) advancing the circular economy by developing value-added opportunities; and (4) accelerating the digital transformation of agriculture and agri-food.

⁴⁶ Braulio Machin Sosa et al, *Agroecological Revolution: The Farmer-to-Farmer Movement of the ANAP in Cuba* (Cuba: ANAP & La Via Campesina, 2013) at 153–157, online (pdf): <<https://viacampesina.org/en/wp-content/uploads/sites/2/2013/07/Agroecological-revolution-ENGLISH.pdf>> [perma.cc/ZK7T-KQD4].

⁴⁷ *Ibid.*

⁴⁸ 10 *Elements*, *supra* note 7, Element 4; 13 *Principles*, *supra* note 10, Principle 2.

D. Support AE Knowledge Sharing and Extension Programs

Among the priorities identified in *Growing Common Ground* is a knowledge sharing agenda for AE that would include a cross-Canada research network, national spaces for knowledge co-creation and sharing using transdisciplinary approaches, and AE schools.⁴⁹ This point is closely related to the previous one on research and development; as there currently appears to be little “institutionalized” AE research, it follows that informal networks and farmer-to-farmer knowledge sharing must fill the gap. Here, too, recommendations had been made along a similar line over 30 years ago.⁵⁰ In recent SAS consultations, numerous comments were made on this topic, with support for on-the-ground agronomic extension and a desire for *unbiased* information, demonstration farms, and “availability of publicly accessible online databases with information on sustainable practices.” Participants suggested that early adopters be recognized with rewards, publicity, and prizes and encouraged to serve as mentors.⁵¹

1. Case Study: Haiti—Knowledge Sharing and Extension Services

In Haiti’s northern plateau, farmers have said that no government agricultural extension worker has visited since the 1980s;⁵² consequently, farmers rely on support from international civil society organizations (CSOs). In furtherance of a sustainable model, such CSOs need to work in partnership with local entities, particularly small-scale farmer organizations, to rebuild a supportive social infrastructure. Groundswell International works in partnership with Partenariat pour le Développement Local (PDL) to create a network of local leaders and mentors through training in AE practices on model farms and farmer-to-farmer field schools.⁵³ A recent study into the impact of PDL’s work found that average net incomes for AE farmers were almost double that of conventional farmers; moreover, 98 per cent of farmers said they would continue using AE practices.⁵⁴

a. Relevance for Canada: Co-creation and Sharing of Knowledge

“Agricultural innovations respond better to local challenges when they are co-created through participatory processes.”⁵⁵ AE is very specific to the local context, unlike the “one size fits all” approach more common in conventional agriculture. As a result, it demands hands-

⁴⁹ Ahmed, *supra* note 15 at 3, no 21(b).

⁵⁰ SSC, *supra* note 17, Recommendation 6 (reintroduction of demonstration farms), Recommendations 16–17 (extension activities).

⁵¹ AAFC, *supra* note 21.

⁵² Personal notes of the author.

⁵³ Groundswell International, “Meet Our Partners” (last accessed 15 July 2024), online: <<https://www.groundswellinternational.org/our-partners/>> [perma.cc/329Y-PRZR].

⁵⁴ Vanja Westerberg, Toni McCann & Luis Costa, “An Assessment of the Economics of Agroecological Farming in Haiti” (2023) at 12, online (pdf): <<https://www.eld-initiative.org>> [perma.cc/HM5R-YGZT]. Average net income was in the order of US\$1,231 to US\$1,596 for AE farmers compared to US\$616 to US\$806 for conventional farmers. See Table 22 therein regarding continuation.

⁵⁵ *10 Elements*, *supra* note 7, Element 2; *13 Principles*, *supra* note 10, Principle 8.

on engagement with practitioners.⁵⁶ The Haiti case study illustrates the value and long-term benefits of farmer-to-farmer knowledge sharing; not only does this foster dissemination of knowledge and innovation, it also strengthens the social networks that are integral to AE and sustainability more broadly. While assurances of continued adherence by farmers in the Haitian example may be due to improved incomes, social support is undoubtedly also influential. Although the Canadian context is different, there is need here too for greater support of extension services, co-creation, and sharing of knowledge, not only to impart technical information and best practices but to strengthen the social fabric that is essential to a vibrant agri-food system.

E. Protect Farmers' Rights to Seeds

Another challenge for AE concerns the controversy over the right to seeds. As described in *Growing Common Ground*, “increasingly restrictive seed laws will give plant breeders (companies and patent holders) exclusive rights over seeds, while farmers will receive a mere recognition of their ‘privilege’ to save and reuse seed on their farms.”⁵⁷ The seed regulatory modernization (SRM) process currently being undertaken by the AAFC and the Canadian Food Inspection Agency⁵⁸ has prompted debates that reflect a clash of values reflected by two (possibly) competing regimes in the international legal order. One set of rules falls within the realm of intellectual property that seeks to protect patented seeds and plant varieties “with the aim of encouraging the development of new varieties of plants for the benefit of society.”⁵⁹ Another set of rules aims to protect traditional knowledge and rights to seeds.⁶⁰ Although efforts have been made to reconcile these competing interests and establish a global system that

⁵⁶. This has been described as “participatory research” that involves not only researchers but also farmers in the process from planning to implementation, and evaluation conducted on farm by an interdisciplinary team. See Caporali, *supra* note 7 at 44, citing CA Edwards et al, “The Role of Agroecology and Integrated Farming Systems in Agricultural Sustainability” (1993) 46(1–4) *Agric, Ecosys & Env't* 99.

⁵⁷. Ahmed, *supra* note 15 at 29.

⁵⁸. CFIA, “Seed Regulatory Modernization” (last modified 8 October 2024), online: <<https://inspection.canada.ca/en/plant-health/seeds/seed-regulatory-modernization>> [perma.cc/C34T-69Q7].

⁵⁹. International Union for the Protection of New Varieties of Plants, “What Is UPOV?” (last accessed 24 November 2024), online: <<https://www.upov.int/about/en/>> [perma.cc/LG2D-2CRC]. The UPOV was established by the *International Convention for the Protection of New Varieties of Plants*, 2 December 1961, TRT/UPOV/003 (revised 19 March 1991), online: <<https://www.wipo.int/wipolex/en/text/193358>> [perma.cc/L9UQ-GDLD].

⁶⁰. *Declaration on the Rights of Peasants and Other People Working in Rural Areas*, UNHRC 39th Sess, UN Doc A/HRC/RES/39/12 (2018) HRC Res 39/12, art 19 [UNDROP]. Article 19 states that peasants and other people working in rural areas have the right to seeds, including the right to the protection of traditional knowledge, to equitably participate in the benefits from plant genetic resources, to participate in decisions on conservation and use, and to save, use, exchange, and sell farm-saved seeds or propagating material. It also outlines the obligations on the part of states to take appropriate measures to support peasant seed systems and promote the use of peasant seeds and agrobiodiversity.

provides farmers as well as plant breeders and scientists access to plant genetic materials and a share in the benefits from the use of these genetic materials,⁶¹ differences remain.

1. Case Study: Ecuador—Right to Seeds

In Ecuador there is strong support for peasant rights and preservation of heritage seeds.⁶² Article 401 of the Constitution (2008) prohibits the cultivation of genetically modified (GM) crops, with certain exceptions.⁶³ The intention is to protect farmers' rights of access to GM-free seeds.⁶⁴ In 2018, however, the presence of transgenic soybeans was verified by CSOs whereupon a claim was filed and a judgment obtained that this constitutional right had been violated.⁶⁵ A year previously, under the constitutional exception, the National Assembly had approved the *Law on Biodiversity, Seeds and Promotion of Sustainable Agriculture*, Article 56 of which states that "(t)ransgenic seeds and crops are allowed to enter the national territory, only to be used for research purposes."⁶⁶ Litigation ensued, and the case came before the Constitutional Court in 2022, which declared those provisions of the law unconstitutional.⁶⁷

^{61.} See *International Treaty on Plant Genetic Resources for Food and Agriculture*, 3 November 2001, UNTS No 43345 (entered into force 29 June 2004), art 1.1 [*Treaty on Plant Genetic Resources*], which seeks to strike a balance with the objective of "conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use." Part III outlines farmers' rights, including the obligation of states to protect the same, and Part IV outlines the multilateral system of access and benefit sharing. Both Canada and Ecuador are parties. For further discussion on these conflicts and tools within the international legal regime that can be used to advance AE as well pose barriers, see Amos, *supra* note 14, at chs 1–2.

^{62.} Stephen Sherwood et al, "Tackling the New Materialities: Modern Food and Counter-Movements in Ecuador" (2013) 41 *Food Pol'y* 1.

^{63.} *Constitucion de la República del Ecuador 2008 (Constitution of the Republic of Ecuador 2008)*, art 401, online (pdf): <https://www.oas.org/juridico/pdfs/mesicic4_ecu_const.pdf> [perma.cc/G7LQ-RZX7]. "Exceptionally, and only in the national interest duly substantiated by the Presidency and approved by the National Assembly, may GM seeds and crops be introduced."

^{64.} As space does not permit consideration of the right to seeds in relation to the right to food in this article, see M Pierri, "Agrobiodiversity, Intellectual Property Rights and Right to Food: The Case of Andean Countries" in Massimo Monteduro et al, eds, *Law and Agroecology: A Transdisciplinary Dialogue* (Berlin: Springer, 2015) at 860 [Pierri].

^{65.} UN FAO, "Views, Experiences and Best Practices as an Example of Possible Options for the National Implementation of Article 9 of the International Treaty" (2022) at 3, online: <<https://www.fao.org/3/cc0994en/cc0994en.pdf>> [perma.cc/N4PP-XJ9E].

^{66.} *Ibid.*

^{67.} Corte Constitucional Del Ecuador, Judgment No 22-17-IN (12 January 2022). In its written decision, the Court referred to UNDROP, *supra* note 60, art 3 (which contains the general duty of states to guarantee equality and non-discrimination in the formulation of policies), art 16 (the right to an adequate standard of living and access to means of production), the *Declaration on the Rights of Indigenous Peoples*, UNGA, 61st Sess UN Doc A/Res/61/295, (2007) at art 31 (the right to maintain, control, protect, and develop knowledge), the *Convention on Biological Diversity*, 5 June 1992, UNTS 1992 and the *Cartagena Protocol on Biosafety to the Convention on Biological Diversity*, 29 January 2000, UNTS No 30619 (in respect of the definitions on GMOs), but did not mention the *Treaty on Plant Genetic Resources*, *supra* note 61. The Court found that to fulfill its obligation to promote and guarantee ancestral knowledge, the state must adopt measures so that this type of knowledge is adequately valued and enhanced. Otherwise, to ignore the potential of such knowledge would imply privileging only those who produce certified seed and omitting the guarantee and protection of collective rights, thereby generating a disincentive for the production of peasant and traditional seeds.

a. Relevance for Canada: Culture and Food Traditions

“By supporting healthy, diversified and culturally appropriate diets, AE contributes to food security and nutrition while maintaining the health of ecosystems.”⁶⁸ With agriculture and food as core components of human heritage, AE seeks to build food systems that are based on the culture and tradition of local communities. As illustrated by the Ecuadorean case study, control over seeds is of critical importance to farmers. For AE practitioners, this is an essential way to preserve genetic diversity and build greater resilience against diseases and pests, which in turn enable diversified and healthier diets for consumers. Moreover, in many Indigenous communities seeds also have cultural and spiritual significance that cannot be separated from their economic value and that foster variety in food traditions and heritage. In Canada, similar positions are evident from the debates currently taking place in the SRM process and that indicate the dilemma facing policymakers. Nonetheless, an effective transition toward AE will entail supporting farmers as agents of change, and that will necessitate ensuring their right to seeds. Canadian policymakers will need to find a way to bridge the divide.⁶⁹

F. Financial Incentives for Change

It is noted in *Growing Common Ground* that “farmers across Canada, whether ecological or conventional, have not felt supported in their efforts to make agriculture more sustainable” and that “incentives and support measures are essential in order to move farmers and society towards AE.”⁷⁰ One such mechanism is payment for ecosystem services (PES),⁷¹ used primarily for mitigation of greenhouse gas emissions (sequestration of carbon), watershed protection, biodiversity protection, and preservation of landscape beauty.

The Resilient Agricultural Landscape Program, introduced across Canada as a cost-shared program with FPT governments, uses a PES approach “to help producers conserve and enhance the resiliency of agricultural landscapes” and complements other programs such as the on-farm climate action fund.⁷² In recent SAS consultations, producers emphasized that adopting environmentally sustainable practices must provide financial benefits, especially given that many practices take time to show a return on investment, which can create additional financial burdens for small and medium-scaled producers.⁷³

⁶⁸ 10 *Elements*, *supra* note 7 at Element 8; 13 *Principles*, *supra* note 10 at Principle 9.

⁶⁹ For suggestions on how divergent views might be reconciled, such as pro- and anti-GMO positions, see Amos, *supra* note 14, ch 3. It is difficult to foresee a similar outcome in Canadian courts to that of this case; as noted by Pierri, *supra* note 64 at 875, the preamble of the Ecuadorean Constitution celebrates the “Pacha Mama” and the essential relationship of humans with nature, unlike the utilitarian doctrine underpinning European societies on which Canada’s legal tradition is also founded.

⁷⁰ Ahmed, *supra* note 15 at 48, no 9.

⁷¹ Sven Wunder, “Revisiting the Concept of Payments for Environmental Services” (2015) 117 *Ecological Econ* 234 at 236, DOI: <<https://doi.org/10.1016/j.ecolecon.2014.08.016>>. PES is defined by Wunder as a voluntary transaction in which a well-defined environmental service, or form of land use likely to secure that service, is bought by at least one ecosystem service buyer from a minimum of one ecosystem service provider, if and only if the provider continues to supply that service.

⁷² Agriculture and Agri-Food Canada, “Resilient Agricultural Landscape Program (RALP)” (last modified 16 July 2024), online: <www.canada.ca/en/agriculture-agri-food/news/2024/07/resilient-agricultural-landscape-program-ralp.html> [perma.cc/U2LB-5EWV].

⁷³ AAFC, *supra* note 21.

1. Case Study: Costa Rica—Payment for Ecosystem Services

In 1996, Costa Rica found that its forest cover had dropped from 75 per cent in 1940 to 25 per cent.⁷⁴ To arrest this trend, the government introduced Forestry Law No 7575 and created a National Forestry Financing Fund with the following objective outlined in article 46:

[T]o finance, for the benefit of small and medium producers, through credits or other mechanisms to promote forest management, intervened or not, the processes of afforestation, reforestation, forest nurseries, agroforestry systems, recovery of denuded areas and technological changes in the use and industrialization of forest resources.⁷⁵

Under the program, landowners receive direct payments when adopting sustainable land use and forest management techniques. While the original focus was forestry conservation, the program has since expanded to include agroforestry and silvopastoral practices. It is funded through fuel taxes, water charges, carbon credits, and alliances with the public and private sector. As a result of this program, forest cover in Costa Rica has recovered; it stood at 52 per cent by 2010 and 60 per cent by 2020 (unofficial figure).⁷⁶

a. Relevance for Canada: Diversity

“Diversification is key to AE to ensure food security and nutrition while conserving, protecting and enhancing natural resources.”⁷⁷ AE systems optimize diversity through practices such as agroforestry, intercropping, crop rotation, crop and livestock integration, mixed grazing, and choice of livestock and crop varieties. AE starts “rooting in society when a field or a farm is viewed first as an ecosystem.”⁷⁸ The case study from Costa Rica is a dramatic illustration of how biodiversity can be re-established through incentives such as PES, which indirectly also contributes to economic or on-farm income diversification. While some forms of PES are already operational in Canada, these could be amplified and expanded with the benefit of lessons learned from PES programs around the world.⁷⁹

⁷⁴ Ina Porras, “Payments for Ecosystems Services: Costa Rica Case Study—Ina Porris” (14 June 2021) at 00h:02m:29s, online (video): <<https://www.youtube.com/watch?v=opNNxn7Y4fw>> [Porras].

⁷⁵ Fondo Nacional de Financiamiento Forestal (FONAFIFO), “Objectives” (last accessed 5 December 2024), online: <<http://www.fonafifo.go.cr/en/conozcanos/objetivos/>> [perma.cc/9Z2K-MURN], citing Forestry Law No 7575, (Legislative Assembly Republic of Costa Rica, 1966), art 46.

⁷⁶ Porras, *supra* note 74; World Bank Group, “Costa Rica’s Forest Conservation Pays Off” (16 November 2022), online: <<https://www.worldbank.org/en/news/feature/2022/11/16/costa-rica-s-forest-conservation-pays-off>> [perma.cc/V8E6-WX8Q].

⁷⁷ 10 *Elements*, *supra* note 7, Element 1; 13 *Principles*, *supra* note 10, Principles 3, 5, and 7.

⁷⁸ Caporali, *supra* note 7 at 5.

⁷⁹ Developing effective PES programming is challenging; certain aspects of Canada’s programs could be beneficially incorporated into those of Costa Rica, and vice versa, particularly in monitoring and evaluation of their effectiveness for carbon capture and engagement of support from the private sector.

G. Shift From Export Mindset to Food Systems Lens

Another challenge identified in *Growing Common Ground* is “the long-held productivist mindset of Canada as an agricultural power” that is primarily a food exporter.⁸⁰ However, breakdowns in supply chains during the COVID-19 pandemic prompted many Canadians to become concerned over the fragility of the global food system and the need for change. Shifting toward AE will require a food systems lens and policy support for the redesign of regional, local, and urban food sheds with shorter supply chains grounded in a more circular economy. Such reconfiguration will necessitate extensive participatory consultation and engagement across the spectrum of stakeholders at various levels. While it might not seem that Canadian society is ready for such dramatic shifts as those underway in the Global South, the recent SAS consultations that have already been referenced provide interesting evidence to the contrary.

1. Case Study: Philippines—Community-Based Participatory Urban Design

In the Philippines, vacant land can sit idle for years, often immediately adjacent to very dense urban settlements where food insecurity is rampant. In Cagayan de Oro City, an innovative way was found to provide access to such land through the use of a tripartite agreement among the barangay (village) council, the landowner, and urban farmers, the terms of which restrict use of the land to food production. With several such community gardens in place, a subsequent project considered the possibility of integrating organic waste management into existing and new garden spaces.⁸¹ This was in furtherance of the *Ecological Solid Waste Management Act of 2000*, a piece of national legislation intended for implementation at municipal levels that aims to maximize the use of valuable resources and encourage resource conservation and recovery (including through composting and recycling).⁸² With participation from all levels of government, this project engaged local residents from three barangay in a participatory process of designing their own system to “close the nutrient loop”—an integrated food production and organic waste management system. Not surprisingly, stakeholders who had been involved right from the outset were much more likely to support policy change and subsequent design implementation, a process that can be described as participatory law reform.⁸³

a. Relevance for Canada: Recycling and the Circular Economy

“Circular economies that reconnect producers and consumers provide innovative solutions for living within our planetary boundaries while ensuring the social foundation for inclusive

⁸⁰ Ahmed, *supra* note 15 at 2, no 16.

⁸¹ Jeannette ME Tramhel, “Using Participatory Urban Design to Integrate Organic Solid Waste Management into Urban Agriculture: A Case Study from Cagayan de Oro City in the Philippines” in Mélanie Robertson, ed, *Sustainable Cities, Local Solutions in the Global South* (Ottawa, ON: Practical Action Publishing & The International Development Research Centre, 2012) 147.

⁸² Republic Act No 9003, *Ecological Solid Waste Management Act of 2000* (26 January 2001), s 2(b), online: <officialgazette.gov.ph/2001/01/26/republic-act-no-9003-s-2001/> [perma.cc/M8X5-X22N].

⁸³ See IDRC, “MALAKAS! Using ABCD for the Design of Sustainable Cities” (2010), online (video): <https://youtu.be/BEts_EhXPok?si=InrNl_vg8vWFQpA> [perma.cc/39RW-MZU2].

and sustainable development.”⁸⁴ AE reinforces biological processes and the reconnection of producers and consumers by re-embedding food systems into local economies. Social capital is thereby also strengthened through greater participation in decision making and to support local implementation of agri-food systems. All of these concepts are amply illustrated in the case study from the Philippines, which is presented to demonstrate the importance of participatory processes in effective system change. Although the practice of recycling, for example (including organic materials), is widespread across Canada, the extensive and numerous transitions necessary to create a circular food economy may require a significant cultural shift. Developing an overarching national AE strategy integrated with policies at regional and municipal levels will require extensive engagement of the Canadian populace at these various levels. The SAS process is an important start to support policy reform for the redesign of agri-food systems and subsequent implementation, but it should be considerably amplified and integrated with similar efforts at all levels of government.⁸⁵

H. Reduce Barriers to Entry: Land and Credit

The high cost of land and the need for credit are significant barriers to anyone seeking to enter the farming sector.⁸⁶ However, as pointed out in *Growing Common Ground*, AE farmers face additional challenges, including steep costs of certification, marketing, and transition and increased risks.⁸⁷ At the same time that aspiring young farmers are seeking entry, Canada is facing “an agricultural skills crisis” with a shortage of agricultural workers and many farmers close to retirement.⁸⁸ During recent SAS consultations, participants shared that “more support needs to be given to the sector to encourage the transition of land ownership to a new generation of producers” and expressed concerns over the rising inequality between producers who own land and those who lease.⁸⁹

1. Case Study: El Salvador—Access to Credit

While important for all farming enterprises, large and small, access to credit in the Global South can be particularly difficult for micro, small, and medium-sized (MSME) agri-businesses, especially those run by women, youth, and other marginalized groups because lenders still prefer traditional forms of collateral (“immovables” such as land). Those without such assets

⁸⁴ 10 *Elements*, *supra* note 7 at 12, *Elements* 5 and 10; 13 *Principles*, *supra* note 10, *Principles* 1, 7, 11, 13.

⁸⁵ It should also incorporate and build upon previous processes that engaged Canadians in the development of the *Food Policy for Canada*, *supra* note 21, which followed efforts that date back to the People’s Food Commission. See People’s Food Commission, *The Land of Milk and Money: The National Report of the People’s Food Commission* (Ontario: Between the Lines, 1980), online (pdf): <https://foodsecurecanada.org/wordpress/wp-content/uploads/2023/06/1980-The-Peoples-Food-Commission-22Land_of_Milk_and_Money22.pdf> [perma.cc/R6M4-823C].

⁸⁶ Agriculture and Agri-Food Canada, *2009 Dialogue Tour on Young Farmers and Farm Transfers*, Catalogue No A34-16/2010E-PDF (2010) at 10, online (pdf): <https://publications.gc.ca/collections/collection_2011/agr/A34-16-2010-eng.pdf> [perma.cc/5LCQ-LRV5].

⁸⁷ Ahmed, *supra* note 15 at 2, 29.

⁸⁸ Mohamad Yaghi et al, “Farmers Wanted: The Labour Renewal Canada Needs to Build the Next Green Revolution” (02 April 2023), online: <<https://thoughtleadership.rbc.com/farmers-wanted-the-labour-renewal-canada-needs-to-build-the-next-green-revolution/>> [perma.cc/AB2G-ZZKS].

⁸⁹ AAFC, *supra* note 21.

are either unable to access credit at all or only in “unsecured” form at very high rates of interest. By expanding the range of acceptable collateral to include movable assets, access to credit can be improved. Accordingly, the Organization of American States (OAS) developed the *Model Inter-American Law on Secured Transactions*.⁹⁰

However, the type of legislative reform that is required by OAS member-states to implement the model law at domestic levels necessitates what can be described as a paradigm shift and change in mindset among lenders and borrowers to effect a new “culture of lending.” To encourage this shift, the government of El Salvador engaged in an extensive process of stakeholder consultation and capacity building during the reform of its domestic lending regime.⁹¹ As a result, the use of movables as collateral has become possible, which has democratized access to credit.⁹²

a. Relevance for Canada: Resilience

“Enhanced resilience of people, communities and ecosystems is key to sustainable agricultural and food systems.”⁹³ Just as biologically diverse systems are more resilient than monocultures, on a socioeconomic scale, producers with diversified income sources also have greater resilience. For MSMEs, a major vehicle for developing economic resilience is through improved access to credit. The case study from El Salvador illustrates the kind of significant change that can be effected through law; such major reforms, however, require an extensive consultation process that is inclusive of all stakeholders and, ideally, should be undertaken right from the outset of the reform process (in El Salvador, consultations began after the law had been enacted but prior to development of the registry).

Many farmers in Canada have “the desire and will to transition away from a system that entraps them. However, they need supportive policies . . . to move in a different direction.”⁹⁴ Canada needs to find innovative ways to reduce barriers to entry for young farmers and introduce policies to enable the next generation to gain access to the “factors of production”—land and credit. Policymakers should remain open to ideas that will emerge during SAS consultations, even if implementation might entail a major paradigm shift to build greater resilience into Canada’s agri-food system.

⁹⁰ OAS, Secretariat for Legal Affairs, Department of International Law, *Model Inter-American Law on Secured Transactions*, OEA/Ser.K/XXI.6, CIDIP-VI/RES.5/02 (08 February 2002). In many states in Latin America, it is common to find a multiplicity of registries, each of which is dedicated to a particular type of collateral (e.g., vehicles). This creates both gaps and overlap, resulting in complexity and high costs of registration. By contrast, the secured transactions regime introduced by the OAS model law is based on a single security interest and one comprehensive secured transactions registry with priority based on registration sequence (similar to the personal property security legislation common across Canadian provinces).

⁹¹ OAS, Secretariat for Legal Affairs, Department of International Law, *El Salvador: Seminario de Capacitación sobre la Reforma de Garantías Mobiliarias (Training Seminar on the Reform of Movable Collateral)*, OEA/Ser.D/XIX.17.1 (2014), online (pdf): <https://www.oas.org/en/sla/dil/docs/secured_transactions_seminar_el_salvador_2014.pdf> [perma.cc/GB23-TMZX].

⁹² Organization of American States, “Secured Transactions (El Salvador)” (13 August 2021), online (video): <https://www.oas.org/en/sla/dil/private_international_law_Secured_Transactions_Documentary_Video.asp> [perma.cc/LZS9-F7LT].

⁹³ 10 *Elements*, *supra* note 7, Element 6; 13 *Principles*, *supra* note 10, Principles 3, 4.

⁹⁴ Ahmed, *supra* note 15 at 2, no 8.

I. Simplify Regulation

As pointed out in *Growing Common Ground*, improved regulatory measures are also essential in the shift toward more sustainable practices.⁹⁵ Legislation, regulations, and administrative measures should be clear, less burdensome, and user friendly. Participants in SAS consultations have expressed confusion about the overlap of FPT programs, noting that the number of programs make it unclear “which programs offer what benefits and what they are eligible for, making it difficult to navigate, [and that] cost-shared programming can also be prohibitive for small scale producers and new entrants who do not have the capital to participate.”⁹⁶

1. Case Study: Colombia—Simplified Business Formation

In many countries in the Global South, formal business “start-up” is complex, which necessitates either a certain skill set or assistance by a third party, making the process time consuming and cost prohibitive. If formal business registration is out of reach, many individuals have no choice but to conduct their business activities anyway—in the informal sector—which then precludes access to formal credit.⁹⁷ Efforts have been ongoing at international levels to reduce legal obstacles faced by MSMEs throughout their life cycle and to facilitate formalization.⁹⁸ Along a similar line, in the Americas the *Model Law on the Simplified Corporation* was developed on the basis of successful advances made in Colombia, and OAS member states have been encouraged to follow this model in the course of their own domestic reforms.⁹⁹

Colombia has offered the possibility of a simplified corporate form since 2008 when Law 1258 was enacted.¹⁰⁰ As of 2017 nearly half a million such companies had been incorporated, and about 98 per cent of companies being incorporated were using the simplified form.¹⁰¹

^{95.} *Ibid* at 2, no 10.

^{96.} AAFC, *supra* note 21.

^{97.} In broad measures, nearly 2 billion individuals, accounting for around 60 per cent of the global workforce, are employed in the informal sector. See OECD, *Informality and Globalisation: In Search of a New Social Contract* (Paris: OECD Publishing, 2023) at 3, 95. DOI: <10.1787/c945c24f-en>.

^{98.} *UNCITRAL Legislative Guide on Key Principles of a Business Registry*, UNGA 54th sess, UN Doc A Res 76/229 (2021), UNGA Res 76/229.

^{99.} OAS, Inter-American Juridical Committee, *Project for a Model Act on Simplified Stock Corporation*, CJI/RES. 188 (LXXX-0/12) (2012); OAS, General Assembly, *Model Law on the Simplified Corporation*, AG/RES. 2906 (XLVII-O/17) (2017). The model law has also been evaluated alongside a similar initiative in Quebec to find ways to facilitate incorporation for small businesses and reduce the administrative load afterwards. See Robert M Yalden, “Québec’s Sole Shareholder Regime and the Rise of Simplified Corporations: Innovation, Implementation and the Challenges Ahead” in Stéphane Rousseau, ed, *10e anniversaire de la Loi sur les sociétés par actions du Québec: rétrospective, perspective et prospective* (Montreal: Wilson & Lafleur Martel ltée, 2021) 70.

^{100.} *Sociedad por Acciones Simplificada* (Law on Simplified Corporations), L 1258, The Congress of Columbia, (2008), online: <<https://www.suin-juriscol.gov.co/viewDocument.asp?ruta=Leyes/1676307>> [perma.cc/SPB8-D3CU].

^{101.} OAS, Inter-American Judicial Committee, *Model Law on the Simplified Corporation: Status of Reforms in the Region*, OEA/Ser.Q CJI/Doc. 634/21 (2021) at 25.

a. Relevance for Canada: Human and Social Values

“Protecting and improving rural livelihoods, equity and social well-being is essential for sustainable food and agricultural systems.”¹⁰² AE places a strong emphasis on dignity, equity, inclusion, and justice and supports empowerment of people and communities. This case study demonstrates the connection between law and livelihood; as inspired by Colombia, the OAS model law was developed to offer a simplified form for business start-up that facilitates formalization and thereby enables more people to earn a livelihood with dignity and within the protection of the law. It also demonstrates the impact of a simplified regulatory framework and supports demands for less burdensome, user-friendly administrative measures. In Canada, the SAS process currently underway will undoubtedly lead to policy review and subsequent reformulation; policymakers should bear in mind this need for simplification and accessibility.

III CONCLUSION: REFLECTIONS AND LESSONS LEARNED

These case studies illustrate the relevance of lessons from the Global South in the furtherance of AE policy in Canada. Despite differences in circumstances, many of the challenges discussed in this article are common to both Canadians and our neighbours in the Global South. As we forge a path “to promote sustainable agriculture” that encompasses AE, let us consider the lessons learned. Can we be visionary like Tanzania, and adopt a national AE strategy? As AE emerges incrementally “from the ground up,” as in Andhra Pradesh, India, will we have the courage to re-evaluate outdated measures in favour of AE policies? Do we have the foresight to forge a national AE research agenda, or will it take a (Cuban) crisis? Are we willing to support emerging AE knowledge sharing among farmers and to restore extension programs, after noting what this has achieved in Haiti? Are we creative enough to encourage innovation while also ensuring the farmers’ right to seed? Will we encourage the shift to AE by expanding PES and similar incentives, inspired by successes in Costa Rica? Will we engage Canadians in designing integrated local food systems using a participatory process, drawing ideas from the Philippines? Are we sufficiently humble to recognize that a paradigm shift might be required to introduce the kind of law reform that will support a new AE policy direction, as did El Salvador? Can we step up to the challenge and develop a sustainable agricultural strategy that embraces AE, one that might become a global model for change, as Colombia’s legislation has inspired others?

Today, despite tired promises over decades from an industrialized global agri-food system, more than 825 million people are hungry and over 2 billion people are malnourished. In its efforts to produce increasing quantities of “cheap food,” conventional agriculture contributes to accelerated biodiversity loss and climate change, among other adverse environmental impacts. The most immediate task that faces the global community is to ensure food security for all those alive today as well as future generations and to do so while respecting planetary boundaries; as reflected in SDG 2, sustainable agriculture is a top priority, and we know this requires transformation of the current agri-food system. As AE entails the integration and balancing of all three components of sustainability—environmental, economic, and social—AE is the approach most consistent with the interpretation of SAg. Accordingly, as Canada

^{102.} 10 *Elements*, *supra* note 7, Element 7; 13 *Principles*, *supra* note 10, Principles 10, 13.

embarks upon the development of a sustainable agricultural strategy, it is imperative that AE be considered part of that process.

Canada has a long-standing tradition as a leader in agricultural development. Now we must step up to the challenge as we shape a new vision for the agri-food system in Canada and the world. Countries that have a fraction of the resources available to us and double the challenges are making huge advances toward AE. We need only our imaginations coupled with courage and wisdom to take these lessons from the Global South to heart and present a bolder legacy for Canadian leadership—in sustainable agriculture and agroecology.