The National Index on Agri-Food Performance for Sustainability and its Value for Policy Making
Project 4

A RESEARCH PROJECT OF THE

NATIONAL INDEX ON AGRI-FOOD PERFORMANCE (PART 4)

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Executive Summary

Across Canada, in and out of government, policy makers and influencers are grappling with how to reflect sustainability in agriculture and food policy. Increasing attention from voters/consumers, investors, and international governments/markets has increased the need for a common, systematic definition and metric for "sustainability" policy in the sector. The National Index on Agri-Food Performance (the Index) has the potential to meet some of this need and has the potential to inform policy dialogue once it is completed.

To explore this potential, the Canadian Agri-Food Policy Institute (CAPI) was commissioned by the coalition of partners to **"conduct an assessment of how a National Index on Agri-Food Performance can inform the trade policy and innovation ecosystem by focusing on selected domestic and global policy priorities important for achieving sustainability of the Canadian agriculture and agri-food system."**

In early 2022, CAPI heard perspectives from over 30 stakeholders on the current state of evidence in policymaking, the role the Index could play in informing and influencing policy and program priorities, credibility and relevance of evidence in policymaking and its limitations. The dialogues also explored the potential in four priority areas: trade and market access, innovation, social and labour policy, and federal-provincial-territorial (FPT) relations and the agriculture policy framework. Feedback received during these dialogues is described in the report.

Outreach with policy influencers and makers underscored an important tension in policy development. While data and evidence can play an important role in developing options and considerations, decisions are often driven by other factors including public opinion and electoral calculus, funding availability, and precedence.

While evidence may compete with other factors in decision-making, there is a significant benefit having a common set of sustainability metrics, with clearly-defined indicators, for policy development. By establishing a mutually agreed-to "starting point," the Index could be part of the foundation for the increasingly complex and difficult process of delivering on governments' vision for Canada being "recognized as a world leader in sustainable agriculture and agri-food production into the future."[1]

Observations

Some of the key highlights that CAPI heard from industry and government stakeholders, including some of the limitations of the Index for policy making are summarized below.

- "For good policies we need good data and evidence," but ***"evidence-informed policy making"*** better reflects evidence's role than the oft-used "evidence-based policymaking."
- To maximize its impact on policy development, the Index should be accompanied with ***narrative and context*** that is used consistently by partners.
- The Index's role in policy development will be greatly enhanced IF it can ***identify where improvement is required*** by measuring performance against international competitors, past performance, other sectors, or agreed-to targets or objectives.
- There is a need for both high-level, ***aggregated***, national, whole-of-system data and metrics, but more ***granular*** indicators reflecting regional, sectoral and commodity-specific details have the potential to improve transparency, credibility and relevance.

- The Index's **co-development** process, with governments and stakeholders working together, has itself been a positive contribution. The work to develop a common understanding of agri-food sustainability has torn down silos, increased collaboration and may have a lasting benefit.

Limitations

There are cautions that should be understood when considering the role the Index could play in future policy making. Viewpoints on limitations of the Index often varied based on whether the respondent was in or out of government.

- The Index has a potential role in describing ***"what is"*** BUT cannot describe ***"what should be";*** it could serve as a ***starting point*** for policy development and the ***baseline*** against which to measure progress but may be limited in how it impacts decision-making.
- The Index must ***avoid*** the perception of ***"green-washing"*** to be a legitimate tool for policy development and this requires transparency and credible evidence.
- The Index may not be directly comparable with other **international frameworks**; nonetheless, Canada should be ready to provide a rationale where the Index does not align with other similar initiatives.
- A strength of the Index has been the collaborative co-development process used to develop it. However, once the Index is published it may be deployed for policy development in ways that do not include the same level of input and engagement that has existed to date.

Recommendations

By establishing a common "starting point," the Index has the potential to be part of the foundation for the increasingly complex and difficult process of developing agri-food sustainability policy in Canada. The following recommendations will maximize its value and address some limitations:

- Maintain the credibility of the Index by using science- and fact-based data and providing granular indicators where possible.
- Refresh the data as often as possible and commit to refreshing the Index itself regularly to maintain its relevance by seeking input as it evolves.
- Promote a governance model that continues the co-development and encourages ongoing collaboration between industry and government partners.
- Use the Index to support clear, concise, credible messages that could help connect the Index to policy development and assist with interpreting the indicators.
- Be transparent when the Index identifies areas of poor performance so these areas can be targeted for policy and program support.
- The Index has the potential to be a tool for measuring sustainability and identifying priorities for agriculture policy frameworks and could be a starting point for setting objectives and targets.
- The Index could be a tool for international advocacy and market access, even as the sustainable trade legal landscape continues to evolve.
- Make use of the Index to identify gaps in data and evidence to further elevate social policy priorities for the sector.
- Innovation policy is a complex ecosystem, but the Index's relevance can be increased by developing metrics that reflect enabling conditions and policies across disciplines (regulations, public/private R&D investments).

The National Index on Agri-Food Performance and its Value for Policy making

I. Introduction

This report is the result of the coming together of a broad coalition of partners from the Canadian agriculture and agri-food system who are concerned about Canada's reputation and rank on the domestic and global stages and "sustainability credentials" for Canadian food production.[2] Canada is the fifth-largest global exporter of agriculture and food products, and hence, Canada's success depends on its ability to compete and to market its products globally. More and more of Canada's trading partners and global organizations are developing rigorous agri-food sustainability metrics that are setting the bar, potentially threatening Canada's future access to their markets, but also provide opportunities. At the same time, the Canadian food industry needs to build trust at home for consumers in the domestic marketplace who want to be reassured that the food they are purchasing comes from a sustainable source. Hence it is important that Canada develop its own rigorous, science-based and data-driven metrics that are accepted domestically and internationally to promote Canada's "sustainability credentials." The coalition set out to "define Canada's own sustainability metrics in the form of a National Index on Agri-Food Performance."[3]

In the course of launching this project, questions arose on how the Index might be used in four thematic areas: the policy ecosystem for trade and market access, innovation, labour and social issues, and the more general federal/provincial/territorial (FPT) agricultural policy framework. To respond to these questions, the Canadian Agri-Food Policy Institute (CAPI) was contracted to lead Project 4 of the coalition's work plan with the objective of:

> conducting an assessment of how a National Index on Agri-Food Performance can inform the trade policy and innovation ecosystem by focusing on selected domestic and global policy priorities important for achieving sustainability of the Canadian agriculture and agri-food system.

Through a series of one-on-one interviews, personal correspondence, and small group meetings, CAPI was able to hear from government, industry, and NGO stakeholders on their views around this topic. Key findings from the discussion are provided below in response to five questions that were posed, asking for their views on the role the Index could play in informing and influencing policies, priority-setting, and the Index's limitations. There was a special focus on policies related to the four thematic areas mentioned above. The report concludes with a summary of CAPI's takeaways and recommendations on how the Index could be valuable for policy making.

II. Background and Context

Global Context

The development of a National Index on Agri-Food Performance is taking place in the context of the growing interest and need for sustainable food production expressed by governments, consumers, farmers, corporations, industry associations, investors, and major international competitors on both the domestic and international scenes. Canada has already committed to:

- meeting Paris climate change goals with a reduction in greenhouse gas emissions (GHGs) of 40 to 45% from 2005 levels by 2030[4];
- net zero carbon by 2050;
- taking part in setting goals in the United Nations Convention on Biological Diversity; and
- the UN's 17 Sustainable Development Goals (SDGs) by 2030.

Domestically, Canadian corporations are taking steps to source sustainable inputs from supply chain partners and to measure their environmental footprints as they develop their own strategies and targets for achieving net zero carbon (e.g., Maple Leaf Foods)[5] and complying with global sustainability standards (e.g., SAI platform), all in an effort to meet consumer demands, access markets, and appeal to shareholders and investors with strong environmental, social, and governance (ESG) scores.

Farmers with an interest in ensuring future access to markets and appealing to buyers requesting sustainable inputs are complying with certain standards such as the Canadian Roundtable for Sustainable Beef's (CRSB)[6] Certified Sustainable Beef Framework, codes of practice by the Canadian Roundtable for Sustainable Crops (CRSC)[7], environmental farm plans (EFP), and beneficial management practices (BMP) with the goal of preserving soil health, water quality, air quality and wildlife habitat, and producing sustainably.

However, Europe, with its Green Deal and Farm to Fork Strategy[8] and its role as both a key market destination and competitor for Canadian agri-food products, has made it clear it will require rigorous proof of sustainability to access their market. This is driving a lot of the concern by industry players as to the importance of verifying that their products are sustainable. At the same time, several global sustainability indicators comparing Canada to other countries are portraying Canada's sustainability performance in incomplete ways. Organizations such as the UN, the Organization for Economic Cooperation and Development (OECD), the World Benchmarking Alliance (WBA), and the Barilla Centre for Food and Nutrition Foundation[9] have ranked Canada using various indicators. However, often these indicators miss the geographic and agriculture realities and nuances that Canada faces. This is why the coalition of partners supports the development of a made-in-Canada sustainability benchmarking index that will take account of Canada's unique geographical and resource base in measuring and demonstrating its sustainability performance for marketing to the world.

The EU Green Deal and Farm to Fork Strategy

As mentioned above, the EU is an important destination for Canadian agriculture and agri-food exports. It is also a key competitor in global food markets and by introducing stringent sustainability requirements, EU strategies may impact Canada's future competitiveness and prosperity. Hence if Canada is able to demonstrate equally ambitious sustainability credentials through evidence provided by the Index, Canada's competitive position as a major player in global food markets may be maintained.

The EU is moving full steam ahead on implementing its ten-year Green Deal and Farm to Fork and Biodiversity Strategies as part of the next Common Agricultural Policy (CAP) for 2023 to 2030. The Green Deal focuses on the link between healthy people, healthy societies and a healthy planet putting sustainable food systems at the heart of the EU's sustainable and inclusive growth strategy, designed to boost the economy, improve people's health and quality of life, and care for nature.[10] As a result, the CAP is expected to address an increasing set of objectives, including contribution to the SDGs,

biodiversity and the Paris climate agreement. Some of those targets have been articulated already and signal a fundamental shift in EU food and agricultural policy. This includes commitments to:

- reduce pesticide use by 50%,
- reduce fertilizer use by 20%,
- reduce antimicrobial use for livestock by 50%,
- expand organic production to 25% of total agricultural area by 2030, and
- remove 10% of existing farmland from agricultural use by 2030.

There are also steps being taken to introduce a Border Carbon Adjustment tax (CBAM) on carbon intensive imports as part of their Emissions Trading System. Despite the fact that these measures threaten Europe's ability to produce and export to the world, the EU has taken the position that it will lead by example in sustainable food production into the future. [11]

The importance of data and evidence for policy making, including monitoring and evaluation is demonstrated by the fact that the Europeans have invested significant resources in data and evidence to evaluate their CAP policies with a Farm Accountancy Data Network (FADN). This database collects financial, economic and structural data on 85,000 farms on a yearly basis,[12] thereby creating "public benefits related to better policy decisions that contribute to better social outcomes for European society and private benefits for farmers and advisors making use of the database to improve farm performance through benchmarking"[13]. With the new focus on sustainability in the EU Farm to Fork strategy, the database is being expanded with a broader set of indicators on sustainability performance of farms. This will reportedly enable continued evidence-based policy making and monitoring of the CAP with the new focus on sustainability.

Australia's Sustainability Framework

Other countries have also been developing sustainability frameworks with indicators to both measure and market their sustainable agriculture and agri-food products. This includes New Zealand, Ireland and Australia. CAPI met with the Australian Farm Institute (AFI) to discuss Australia's Sustainability Framework and saw how it compares with Canada's National Index on Agri-Food Performance.[14]

The goal of the Australian framework is to ensure their farmers can communicate the sustainability status and goals of Australian agriculture to markets and to their broader community. Clearly Australia, like Canada, as a major global exporter of agriculture and agri-food products anticipates market access threats from countries such as Europe, and backlash from consumers and investors if it does not do a better job of producing, measuring and marketing its products as sustainable.

Australia's framework measures three elements of sustainability: 1) environmental stewardship, 2) people and community and 3) economic resilience. Under these three themes lie several principles or fundamental statements about desired outcomes. For example, one principle under environmental stewardship is "soil health and functionality are preserved." Criteria underlying these principles state the conditions that need to be met in order to comply with the principle. For example, "soils can support sustainable agricultural productivity." Finally, underlying it all are a series of indicators that assess whether a criterion has been met. While Canada's proposed Index covers these three sustainability

categories, it goes a step further with a fourth dimension to emphasize food safety and issues related to food integrity.

When comparing Canada's Index to Australia's framework, it is easy to see the similarities and differences.

- Australia's framework was supported and developed by a large coalition of farm groups and industry and is seen as "the light on the hill" to help identify where they want to be. By comparison, the National Index is supported by a broader coalition of food system partners.
- Australia's initiative is labelled a "framework" while Canada's is an index.
- Both initiatives are tracking work against global benchmarking standards, such as the Sustainable Agriculture Initiative (SAI).
- Neither the Australian framework nor the Canadian Index have evolved beyond the initial development stages. Australia focuses on using their framework to encourage market-driven behaviour change by farmers to improve their sustainable brand in global markets, while Canada focuses on improving the sustainability credentials of the entire Canadian agri-food system through industry and government collaboration in measuring sustainability.
- Neither country is seeking to set (lead on) standards in the global marketplace but are attempting to describe how Australian or Canadian agriculture and food is unique and is achieving sustainability in its own way; something that should be respected by international partners.
- Both initiatives intend to allow for regional and commodity diversity since both countries have extremely varied landscapes and regions. This diversity will be reflected at the metrics and indicator levels (although, data permitting, this would be a longer-term aspiration in Canada).
- Australia's focus is on helping industry step up with continuous improvement while the National Index is designed to benchmark the agri-food sector as a whole, with the potential to identify areas of improvement.
- Both countries are attempting to bolster country branding of sustainable agriculture and agri-food.

Canadian Context

The importance of measuring sustainability of Canada's agriculture and agri-food sector was made even clearer when federal, provincial, and territorial Ministers of Agriculture met in Guelph, Ontario in November 2021 to present their shared vision for the next five-year agricultural policy framework, defining policies and programs over the period 2023 to 2028.[15] This vision positions Canada's agri-food producers, processors, and others in the sector for continued success as "world leaders in sustainable agriculture to enable a globally competitive sector."[16] Ministers agreed that this sustainable agriculture approach will include environmental, social, and economic considerations in five priority areas:

1) climate change and the environment;
2) science, research and innovation;
3) market development and trade;
4) building sector capacity and growth; and
5) resiliency and public trust.

Among the guiding principles governing the next policy framework are:

> 1) leading on ensuring a sustainable agriculture and agri-food sector by addressing climate risks and creating conditions for industry to succeed and compete globally;
> 2) ensuring shared jurisdiction of agriculture and international trade obligations are respected;
> 3) collaboration among stakeholders to leverage innovation, regional strengths, and diversity;
> 4) programs to respond to the realities of producers and participants and seek to reduce red tape;
> 5) maximize shared investments and contribute to collective outcomes through governments delivering measurable results; and
> 6) work to address barriers to underrepresented groups and strengthen relationships with Indigenous peoples.[17]

Clearly, the National Index on Agri-Food Performance, with a focus on developing metrics for environmental, economic, and social sustainability of the Canadian agriculture and agri-food system, could play a role in this context.

This is in addition to the current strategies, policies, and programs being administered at federal, provincial, and territorial levels by various departments and ministries to mitigate and encourage adaptation to climate change, such as Environment and Climate Change Canada (ECCC)'s "A Healthy Environment and Healthy Economy,"[18] Agriculture and Agri-Food Canada (AAFC)'s Agriculture Climate Solutions Living Labs and On-farm Climate Solution programs,[19] and provincial strategies such as Quebec's Sustainable Agriculture Strategy,[20] among others that will encourage the sustainable production of agriculture and agri-food products in Canada.

III. What Role for Data, Evidence and the National Index for Policy making?

Almost every public policy textbook has a chapter on the importance of evidence for policymaking. Glen Milne's book, *Making Policy: A Guide to the Federal Policy making Process*, is a prime example; he argues that "effective policy-making is dependent on effective information and intelligence as well as on the quality of people involved." [21] Similarly, Wayne Wouters, former Clerk of the Privy Council in his *18th Annual Report to the Prime Minister* (2011) stated that "excellence in policy means bringing ***evidence and analysis to bear*** in the development of advice to government. Mere information – from whatever source – is no substitute for knowledge and analytical rigour."[22]

As an important part of evidence, credible and relevant data is key. In 2020-21, Statistics Canada alone spent $745 million [23] developing and updating data; other data sources include federal and provincial program administrative data, private industry and other provincial data sources, and data from international agencies such as the OECD, the FAO and the World Trade Organization (WTO). A recent *Report to the Clerk of the Privy Council on A Data Strategy Roadmap for the Federal Public Service (2018)* stated that "data have the power to enable the government to make better decisions, design better programs and deliver more effective services". [24] Ultimately this will enable governments and others to unlock the value of data and provide better services, ***support evidence-informed decisions***, create internal efficiencies, and better understand the real impact of programs so that funds can be directed towards those interventions that have the greatest impact.[25]

In this context, Brink (2013) explained the distinction between ***policy advice or evidence*** and ***policy making***.[26] "Policy advice" is the **information** that feeds into the policy-making process, the result of data, information and analysis, while "policy-making" involves **the process** of taking decisions in legislative bodies, by ministers in cabinet or in agencies with decision-making power based on a host of other influences. After a policy is implemented, evidence is also needed to evaluate policy outcomes, to report for public accountability, and to adapt or change public policy. This provides context for the input CAPI received from stakeholders during the interviews and small group meetings to help determine the value and usefulness of a National Index for the Canadian agriculture and agri-food system. The results of these interviews from the responses to the five questions are provided in further detail below.

IV. Perspectives of Stakeholders: What We Heard from Interviews and Small Group Meetings

General Overview of Responses to Five Questions

1. *How is policy development, both generally and in the priority policy areas, driven by evidence, including benchmarks and data, and how can the Index be used to influence policy development?*

When discussing evidence and data, a dichotomy quickly emerged in the opinions of respondents: while some believed there is plenty of data (which is being used correctly or incorrectly), others were adamant that more data is needed. Many, many respondents expressed that data needs to be more granular; this is partly because Canada is geographically vast, and realities and needs differ greatly between jurisdictions. One participant remarked that we need more data that can help set benchmarks and targets; another pointed out that a great impediment to setting benchmarks is deriving calculations from the data.

Given its limitations, data is just one aspect within a broader context of policy making. Data can tell what is, but not necessarily what should be. Normative decisions move beyond the objective evidence, but it is important to have the data ready to answer questions or defend these normative decisions.

2. *What influences how credible or relevant evidence like the Index is to policy?*

The following factors are predicted to affect the credibility and reliability of evidence: who collects and owns the data; whether or not industry was involved; transparency; and whether or not international standards were considered. Although government is sometimes suspicious of industry-gathered data, government and industry must work together to develop indicators and objectives.

Other comments that were made include:

- Credible evidence will be science- or fact-based, meaningful and accurate, easy to understand, accessible, and available on a consistent basis.
- Timeliness is important since it helps if evidence is available when needed.
- Government data is considered the gold standard (e.g., Statistics Canada).
- While industry information is often considered suspect, a clear methodology will lead to transparency and trust. Industry insights from this information is important.

- Evidence supported by international studies, data and analysis helps builds trust and reinforces Canada's narrative.
- When policy makers hear it more often (*ad nauseam*), it becomes more credible.

3. *The Index will provide an integrated picture for Canada's agri-food system. How does national, whole-of-system data compare to regional or commodity-specific information in influencing federal and provincial policy development?*

- Both a National Index and more granular detailed indicators are needed for achieving sustainability outcomes in the Canadian agriculture and agri-food system.
- The National Index provides a high-level, broad framework for defining, measuring, and defending Canada's sustainability credentials that could serve as a trade advocacy tool to market Canada's products abroad.
- It reflects consensus developed from working together and developing a cohesive message for policy makers.
- On the other hand, regional, commodity and sector-specific indicators provide the granularity underlying the Index to help explain any progress relative to a baseline, to withstand scrutiny, provide transparency, and help identify data gaps.
- Detailed indicators also allow provinces, commodities and sectors to see themselves in the Index for stakeholder buy-in and developing consensus around the messaging.

4. *How can the Index play a role in setting policy and program priorities?*

Consensus must be reached on the appropriate targets and objectives, definition of terms, and whether existing data are sufficient. The Index could help achieve this consensus and inform the normative decisions which are policy and program priorities.

Other observations include:

- The National Index could provide a starting point and baseline from which to launch discussions and monitor progress around sustainability and policy priorities.
- It would allow each province to benchmark its performance against the National narrative and see how it measures up against it, providing flexibility for provinces to set their own priorities based on unique regional needs.
- The National Index has the potential to play a role in determining high level policy directions or strategies. Once this is done, more granular evidence would be able to answer some of the important questions when designing programs.
- Because sustainability includes economic, environmental and social considerations, policy decisions will be more balanced as they bring all three perspectives into the policy priority setting process.

5. *What are the limits on how the Index can be used to inform and influence policy development?*

- Data issues such as around the lack of timeliness of some of the data (e.g., census data is only available every five years) or lack of data for measuring key indicators and data that measures

outputs rather than outcomes and the improvements that have been made (e.g., Environmental Farm Plans (EFPs)).
- Some metrics are already defined by international commitments and may not be the best target for Canada (e.g., fertilizer targets).
- The growing burden from demanding more and better data around sustainability.
- Uncertainty in where the data will come from, who will resource it and who will manage it.
- The Index's value is in its interpretation, but who should or will interpret it and who is the audience?
- When there are no comparatives (international, sectoral, over time) against which to measure progress and to determine whether progress has been made.
- Uncertainty whether customers or competitors such as the EU will accept the National Index as evidence and adjust market access rules based on our narrative.
- The Index may have less relevance in some policy areas, e.g., measuring innovation.
- Political realities – evidence is often discounted.

CAPI's Key Takeaways on Responses to Questions around the Four Thematic Areas of Policy

1. *Trade and Market Access*

Canada is a leading exporter of food: In 2018, its net exports of all foods were 22% of its production (in tonnes), compared to 9% in the United States and a global average of -17%[27] (most countries are net importers). However, being a food-rich country is not enough; Canada must position its agri-food products as sustainable to continue to hold an important place in world markets, particularly in Asia and Europe. While Europe has developed its own standards and indices, participants felt that a Canadian-made index could become a "license to operate in Europe" and other markets. One participant remarked that the Index would position Canada as a good business partner when accessing global agri-food markets because it would show that Canada is among the most sustainable agri-food producers in the world.

Key observations:

- Trade policy around the environment and sustainability is an evolving landscape but where many countries are heading. Canada is behind and we need to catch up.
- Traditional tools are no longer as useful but a National Index could be used for advocacy and also provide part of the story to show countries Canada is moving in the right direction and developing strategies to make improvements.
- The Index could serve as a "license to operate" in foreign markets and as a "sword" to help forge relationships between governments by highlighting Canada's progress and commitment to sustainability
- The Index could help build high-level trust and serve as a foundation for trade negotiations
- As trade agreements are increasingly including environmental chapters, the Index could highlight Canada's compliance and provide an overview of agriculture and agri-food sustainability in Canada
- Commodity-specific indicators are important since Canada is still a major bulk exporter and marketer of agricultural products
- These indicators could be relevant for value-added exports and could provide rationale for scrutinizing imports that do not meet domestic standards

- Even if the National Index is not directly comparable to other countries, under scrutiny against other standards it could provide Canada's unique sustainability story.

2. Innovation Agenda

The World Trade Organization recognizes that international cooperation will ultimately enable international markets to "function more predictably" through innovation[28]. It is therefore important to consider Canada's innovation ecosystem when developing tools such as an agri-food sustainability index.

Agri-food businesses, like any other private firms, are profit-seeking organizations which are continually innovating to generate revenues by expanding markets, adding value, maximizing efficiencies and profits while balancing the internal and external costs – and the sustainability – of their activities. Particularly in the agri-food sector, innovation and sustainability go hand in hand, for no agricultural or bioproduct producer or agri-food processor, retailer or distributer can maximize profits without ensuring the health and sustainability of key inputs, including raw materials, energy, labour or soil, water, and air.

Key observations:

- A national index could be used to enable innovation, but only if it highlights the parameters which will promote innovation.
- Having robust data is important for driving innovation, particularly if this data measures the outcomes of innovation and provides insight about what consumers want or need. In contrast to a solutions-based index, an outcomes-based index can help channel innovation efforts towards outcomes that will be embraced by the market.
- Without gainsaying the role of the Index, it could be important for industry and governments to agree on what innovation entails, the impact and objectives of particular policies, and how innovation contributes to the outcomes.
- Governments have committed to climate change and so they need to ensure the innovation agenda drives those outcomes to achieve the goals that Canada has made on the international stage.
- Frameworks, while good high-level tools for measuring overall sustainability outcomes, can constrain innovation since when rules are placed around innovation, creativity is constrained.
- Collaboration, knowledge sharing, and inclusion of diverse perspectives of stakeholders are essential in the innovation ecosystem, but are not easy to measure
- In setting policy priorities, it is important to use carrots (incentives) rather than sticks (penalties) to reward farmers and businesses for creating and adopting new products, processes, technologies and practices that can lead to more sustainable outcomes.
- National data are useful for identifying trends which inform policies that encourage creative thought, new products, processes and practices, entrepreneurialism, commercialization and adoption in agriculture and agri-food.
- An index that tries to be a broad measure can only show overall trends, which are not as useful for informing policy in specific areas such as rural and social well-being and innovation. On the other hand, data which are too specific will fail to identify the overall trends which show where to introduce policies which remove barriers to innovation.
- Instead of choosing between broad or specific data, the Index should be flexible and agile enough to respond to changing needs and priorities over time.

3. Labour and Social Policy

Labour issues have emerged front and centre during COVID as a key factor impacting Canada's sustainability, resilience and competitiveness. This is because labour availability, quality (i.e., skills) and health contribute to the risks, vulnerabilities and cost pressures for agricultural producers and employers in the agri-food system who are marketing agriculture and food products in Canada and abroad. There is a strong and growing need for more detailed labour data and related social data, according to interview participants. Labour shortages in agri-food processing tend to be driven by rural housing affordability or availability, infrastructure quality, and working conditions. Many of these issues extend beyond the capacity of the agriculture and agri-food system to address alone; hence, labour issues are inextricably linked to social issues and are often addressed by social policies at the local or regional level. The Index could play a role by identifying gaps, data needs, and areas for horizontal collaboration in policy development.

Key observations:

- ***Good data, benchmarking, and evidence are essential for social and labour policy making*** because when you are developing policy, you want to have as much data as possible to come up with the best evidence. This is particularly the case for social policy where societal issues and values evolve and change quickly over time and data is often lacking.
- ***It is important to have comparative data.*** This includes comparisons with other countries – since international comparisons can clarify objectives and challenges; with other sectors, since agriculture and food processing compete with them for labour; and over time, because "looking at the past and the present will tell us where we are headed."
- ***It is important to accompany any data and evidence with a narrative for interpretation.*** This allows for nuances and providing context for policy development. For labour data in particular, a full story is needed that can explain the context, the methodology, and the factors determining regional or sector differences. This story is key to defend against scrutiny, to provide transparency and help the policy area evolve.
- ***Both a national-level Index and more granular data are essential.*** The National Index provides a high-level sustainability picture of the sector to help advocate and restore its negative image. This is key for attracting skilled professions into the sector (e.g., engineers, IT) and student recruits. The National Index also illustrates scale which can be a useful communication tool when demonstrating the sector's contribution to jobs and overall economic performance. National level labour and social indicators are also easier to get as they are traditionally funded by the federal government. However, nuances come from more detailed data at the regional level. Social and labour issues are unique to specific regions or sectors where more tailored policies and programs are needed, such as identifying areas where labour is in demand (i.e., outside of urban centres).
- ***Limitations with the National Index and labour and social policies relate to the large amount of data missing*** in this area primarily because it is a new priority area. While certain progress has been made producing labour market information for agriculture and food and beverage processing,[29] there are still limitations from not being able to capture the regional (even municipal) and sector differences that need to be addressed. However, this can be dealt with by strengthening the quality of the underlying indicators that support the aggregate Index.

4. Federal Provincial Territorial Relations and the Agriculture Policy Framework

Current federal and provincial government priorities are focused on climate change, biodiversity and the environmental, economic and social impacts of agriculture and agri-food production. The new vision agreed to by FPT ministers of agriculture for future policy positions Canada's agriculture and agri-food sector as "a world leader in sustainable agriculture…to enable a globally competitive sector."[30] It is clear that future agricultural and agri-food policy priorities will focus increasingly on sustainability, which will likely include engagement with stakeholders and development of performance measures. This work could be informed by the National Index's sustainability metrics, and hence the Index could help governments by providing both the high-level picture (and potentially in the future) more granular regional, sectoral and commodity data and evidence underlying it for reporting and delivering on measurable results for policies and programs that aim for sustainable outcomes.

Key observations:

- ***With evidence, decisions are more informed compared to when made in the absence of evidence***.
- ***Data, evidence and analysis can help answer questions routinely asked in the FPT policy sphere*** such as around international comparability and competitiveness issues, and cost and effectiveness of programs. It can convince others in government (e.g., senior officials, political staff), of the merits of those policy options and help determine if program money was well spent.
- ***The Index could help inform Canada's future agricultural policies and help deliver on measurable results given the Index's focus on sustainable outcomes.*** Should a future iteration of the Index reflect more detail by regions, commodities, and sectors, then this would help ensure a consistent story with no double counting. The Index may also guard against "greenwashing" if indicators underlying the Index are credible, transparent and substantiated.
- ***The Index could serve as a starting point and benchmark (or baseline) by providing common language to all parties (***i.e., federal and provincial governments, industries, associations) around current data and ways to measure sustainability outcomes for Canada in the FPT context, streamlining administration and burdensome reporting at national and provincial levels. It could allow for better coordination, when all 10 or 11 PT disparate voices come together on the sustainability strategy for Canada.
- FPT dynamics are complex. Political and regional differences may limit the impact the Index and its components can have on policy decisions within policy frameworks.
- ***Provinces need the regional or commodity detail that reflects their individual situations, capacity and programming*** to provide regional flexibility in demonstrating outcomes at the provincial level and determining provincial policy priorities within the framework. Provinces also benefit from the sharing of knowledge, access to data and methodologies, metrics and benchmarks that the National Index provides including the high-level story for marketing internationally.

V. Summary and Recommendations

Sustainability of the agri-food system is of increasing importance; however, with gaps in evidence and the lack of a framework that takes a systematic, holistic approach to sustainability, the Index has the potential to fill these gaps and define a common starting point for policy development.

Based on an assessment of the findings from outreach and interviews CAPI held in February 2022 with industry and government stakeholders, CAPI proposes the following recommendations to address limitations, help with design and implementation and maximize the value of the Index for policy making:

- Ensure the Index is based on as credible, science- and fact-based data and evidence as possible, drawing on less robust sources if necessary (for instance, when no other information is available). Prioritize progress over perfection. Ensure it includes both aggregate and granular indicators where possible.
- Develop a data strategy to operate, complete, and regulate the Index and a governance model that maintains the credibility and relevance of the Index through collaboration between industry, government, and civil society partners who participate in updating the Index and indicators to meet evolving priorities.
- Use the Index to support clear, concise, and credible messages that connect the data to policy development, trade and market access, and public discourse.
- Acknowledge the continuing evolution of the definition of sustainability, sustainability metrics and how to capture these in the Index by seeking regular feedback from industry and government partners.
- Be transparent with the outcomes of the Index by identifying areas of poor performance and communicating those so that they can be targeted for policy and program support.
- The Index has the potential to build on existing provincial and federal sustainability efforts by being a tool to track progress toward sustainability benchmarks.
- Encourage using the Index for trade policy and market access efforts since it has the potential to be a valuable tool for trade advocacy and negotiations and to help resolve access issues where sustainability is in question (i.e., sword and shield).
- Make use of the Index to identify data and evidence gaps necessary to further elevate social policy priorities for the sector.
- Acknowledge that innovation is a more challenging policy area given the difficulty measuring innovation outcomes and the need for more data granularity. Nevertheless, the Index could still be a tool for enabling innovation if it focuses on the parameters that promote innovation and gives an overview of developing trends.
- The innovation ecosystem is complex and chaotic, requiring the right enabling conditions and policy elements across disciplines and mandates with competing priorities (regulations, public/private R&D investments) that can remove barriers that limit the uptake of new ideas and practices but still encourage creative thought, new products, processes and practices, entrepreneurialism, commercialization and adoption in agriculture and agri-food.

By establishing a common “starting point,” the Index has the potential to be part of the foundation for the increasingly complex and difficult process of ensuring Canada will be recognized as a world leader in sustainable agriculture and agri-food production into the future.

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[1] The Guelph Statement. https://agriculture.canada.ca/en/about-our-department/key-departmental-initiatives/meetings-federal-provincial-and-territorial-ministers-agriculture/guelph-statement

[2] The work on developing a National Index on Agri-Food Performance was first launched in 2020 with a small public-private coalition of partners that has grown to nearly 80 partners by February 2022. A series of workshops, webinars, consultations and meetings with input from industry, government, NGOs and academia resulted in several case studies, presentations and reports that led to consensus on a definition of sustainability, data gaps and issues and potential metrics for an Index that can describe Canada's sustainability performance. See the website here for more information on the National Index.

[3] "Business Case for Establishing the National Index on Agri-Food Performance- Affirming Canada's Agri-Food Sustainability Leadership," June 2021. Retrieved from 616de1c4538e011592b5e5c4_2021_CanAgri-BusinessCaseReport_EN_WEB.pdf (webflow.com).

[4] Government of Canada's Climate Change Commitments. Available here: Canada's Climate Actions for a Healthy Environment and a Healthy Economy - Canada.ca

[5] Maple Leaf Foods is Carbon Neutral Now – Blog – Maple Leaf Foods

[6] CRSB Information is available here: Home (crsbcertified.ca)

[7] CRSC Information is available here: Canadian Roundtable for Sustainable Crops - Home

[8] Farm to Fork Agriculture and the Green Deal | European Commission (europa.eu)

[9] Economist Impact and the Barilla Centre for Food and Nutrition, Food Sustainability Index. Retrieved from Food Sustainability Index (economist.com).

[10] Ibid.

[11] Analysis by the USDA has estimated that these ambitious goals could lead to a dramatic reduction in EU agricultural production (and global production if other countries follow suit) and a loss in competitiveness of European agricultural and food products in domestic and export markets. It would also lead to tightened EU food supplies and price increases that would impact consumer budgets. If similar strategies are adopted globally, the production and price impacts would be even more dramatic leading to reduced trade and increased food security.

[12] Vrolijk, H. and K. Poppe. "Cost of Extending the Farm Accountancy Data Network to the Farm Sustainability Data Network: Empirical Evidence." Sustainability. 2021, 13, 8181.

[13] Ibid.

[14] Australian Farm Institute and the Australian Agricultural Sustainability Framework. Accessed here: AASF: Australian Agricultural Sustainability Framework - Australian Farm Institute

[15] AAFC News Release, November 10, 2021. Retrieved from Canada's federal, provincial and territorial Ministers of Agriculture set the direction for the next agricultural framework - Canada.ca.

[16] Ibid.

[17] The Guelph Statement. Rf healthy_environment_healthy_economy_plan.pdf (canada.ca).

[18] ECCC. "A Healthy Environment and a Healthy Economy". Retrieved from healthy_environment_healthy_economy_plan.pdf (canada.ca).

[19] AAFC. Climate Solutions programs. Accessed here: Agricultural Climate Solutions - agriculture.canada.ca

[20] MPAQ. " Agir, pour une agriculture durable- Plan 2020-2030. Accessed here : Agir, pour une agriculture durable - Plan 2020-2030 (quebec.ca)

[21] Milne, G. 2009. Making Policy: A Guide to the Federal Government's Policy Process. May 2009. Pg. 9.

[22] Government of Canada. 2011. "Eighteenth Report to the Prime Minister on the Public Service of Canada." Retrieved from: Microsoft Word - Clerk's 18th Annual Report-Final-Eng with Web cataloguing page.DOC (publications.gc.ca) (pg. 9).

[23] Public Accounts of Canada, Vol. II. Retrieved from: Public Accounts of Canada 2021 - PSPC - Canada.ca (tpsgc-pwgsc.gc.ca)

[24] Government of Canada. 2018. "Report to the Clerk of the Privy Council: A Data Strategy Roadmap for the Federal Public Service". Accessed at: Report to the Clerk of the Privy Council: A Data Strategy Roadmap for the Federal Public Service - Canada.ca

[25] Ibid. pg. 2.

[26] Brink, L. 2013. "Making Agricultural Economics Research Relevant for Policy Advice." Canadian Journal of Agricultural Economics 61 (2013) 15-36. Pg. 16.

[27] "Crops and livestock products." (2022). Food and Agricultural Organization of the United Nations. Retrieved from FAOSTAT.

[28] "Government policies to promote innovation in the digital age." (2020). World Trade Organization. Retrieved from WTO | Publications.

[29] The Canadian Agricultural Human Resources Council (CAHRC) and the Food Processing Skills Canada have produced some excellent data and analysis. Available here: CAHRC – CCRHA |and here: Homepage - Food Processing Skills Canada (fpsc-ctac.com)

[30]AAFC News Release, November 10, 2021 accessed here: Canada's federal, provincial and territorial Ministers of Agriculture set the direction for the next agricultural framework - Canada.ca