

National Index on Agri-Food Performance



Centre for Agri-Food Benchmarking



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Indicator Scope Consensus

Refining scopes across indicators

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The findings, interpretations, and conclusions in this report are solely those of the author(s).

Table of Contents

1. Introduction.....	5
1.1 Context.....	5
1.2 Background.....	5
2. Objective.....	5
3. Index 2.0: Indicator Scope Refinement.....	6
4. Refined Block Scope in Index 2.0.....	7
Indicator Numbering Convention.....	7
A. Environment Block.....	8
B. Food Integrity Block.....	9
C. Economic Block	10
D. Societal Well-Being Block	12
5. Refined Indicator scope for Index 2.0.....	13
A. Environment Block.....	13
Indicator EN.1: Climate Change & GHG Emissions.....	13
Indicator EN.2: Soil Health.....	13
Indicator EN.3: Water Stewardship	14
Indicator EN.4: Biodiversity & Agrobiodiversity	15
Indicator EN.5: Crop Input Use / Management	16
Indicator EN.6: Food Loss & Waste	17
Indicator EN.7: Packaging & Waste	18
B. Food Integrity Block	19
Indicator FI.1: Safe Food	19
Indicator FI.2: Nutrition Information	19
Indicator FI.3: Antimicrobial Stewardship	20
Indicator FI.4: Zoonotic Disease Mitigation	21
Indicator FI.5: Traceability Implementation	21
Indicator FI.6: Transparency	22
C. Economic Block	23
Indicator EC.1: National Economic Contribution.....	23
Indicator EC.2: Financial Vibrancy & Resiliency	23

Indicator EC.3: Innovation	24
Indicator EC.4: Sustainable Finance	25
Indicator EC.5: Productivity	25
D. Societal Well-Being Block	26
Indicator SW.1: Decent Work for People	26
Indicator SW.2: Food Security	27
Indicator SW.3: Animal Care	27
Acknowledgement	29
Appendix A. Sub-Indicators/Dimensions per Indicator	30

1. Introduction

1.1 Context

The political and economic environment has changed significantly since the release of the pilot report of the National Index on Agri-Food Performance, with increased uncertainty, trade disruptions and extreme climate events leading to food insecurity and affordability issues around the world. Yet the Canadian agriculture and agri-food sector continues to aim to produce food products that are safe, nutritious and sustainable, while enabling the viability of farmers, food processors and agri-businesses. Being able to provide evidence with metrics demonstrating that Canadian products are environmentally, economically and socially sustainable remains essential to Canada's competitiveness, prosperity and resilience.

This was the original objective of the National Index when first developed three years ago, and it continues to be the objective today. As a result, the Centre for Agri-Food Benchmarking, in collaboration with over 165 coalition partners, has worked on refining the Index for publication of Index 2.0 over the past year, with this report providing a summary of the updated scope and dimensions that resulted.

1.2 Background

The first version of the National Index on Agri-Food Performance was published in 2023 as a pilot, developed in collaboration with a small coalition of partners. This coalition had grown from fewer than 20 in the early stages to over 160 partners, representing the full agri-food supply chain, from primary production to retail, government, industry and NGOs.

The 2023 [pilot](#) report described the 20 indicators and 130 metrics in four Sustainability Blocks: Environment, Food Integrity, Economic, and Societal Well-Being. Along with the pilot, four other reports were published, describing [What Was Achieved](#), [Sources and Methodologies](#), [How We Interpret them](#) and the proposed [Centre for Agri-Food Benchmarking](#) that currently governs the Index.

In 2025, the Centre updated the National Index's metrics (where possible) with more recent data, resulting in the publication of the 2025 Update to the [National Index report](#). No new metrics were added in this update; however, data gaps were identified, and opportunities to expand the National Index beyond the original 130 metrics were highlighted.

2. Objective

Although the Index was updated in 2025, no new metrics were introduced; the update consisted solely of refreshing existing metrics where more recent data were available. However, gaps were identified in both the pilot and updated versions of the Index.

Addressing these gaps is a central objective of Index 2.0. In particular, it is important to assess whether key topics are missing and to ensure a more comprehensive and relevant representation of the four sustainability pillars within the agri-food sector.

To support this effort, the Centre and its coalition of partners undertook a six-month review, from January to June 2026, to examine the National Index, including its current set of indicators and the topics (dimensions and sub-indicators) they cover.

This work was structured as a two-part indicator review process. The first part focused on reviewing, refining, validating, and standardizing the scope of each indicator (Steps 1–3), while the second part addressed identifying, evaluating, and recommending metrics (Steps 4–7).

As a critical first step, refining the scope of indicators ensured clarity in definitions and purpose, and established a consistent framework across all indicators. By applying a standardized process and template, this step improved comparability across sustainability pillars, clarified the dimensions and sub-indicators associated with each indicator, and facilitated early identification of data gaps and opportunities for new metrics.

This foundational work marks the first step toward strengthening the Index and establishing a more structured, comprehensive indicator review process for Index 2.0. Accordingly, this report presents the outcomes of this phase, including the refined indicator scopes developed through the review.

3. Index 2.0: Indicator Scope Refinement

During the 2025 update of the National Index, several gaps and opportunities for improvement were identified. These findings informed the refinement of Index 2.0 and underscored the need for a more structured and comprehensive indicator review process.

This process consisted of two main parts. The first focused on revising and strengthening the scope of indicators (Steps 1–3), while the second addressed the identification, evaluation, and recommendation of metrics (Steps 4–7) (Figure 1). This report presents the results of the first part of this work, the indicator scope revision process, covering: (1) review of indicator scope, (2) validation of scope definitions, and (3) recommendations on indicator structure, including sub-indicators and the purpose of the underlying data. The outcomes of the second part of the process will be shared following the finalization of Index 2.0.

To support the scope revision, a consistent approach was applied across all indicators to clarify their definitions and articulate the purpose of each data point, specifically, what the data is intended to demonstrate or inform. This step provided a critical foundation for ensuring alignment across indicators and enabling more focused and effective discussions.

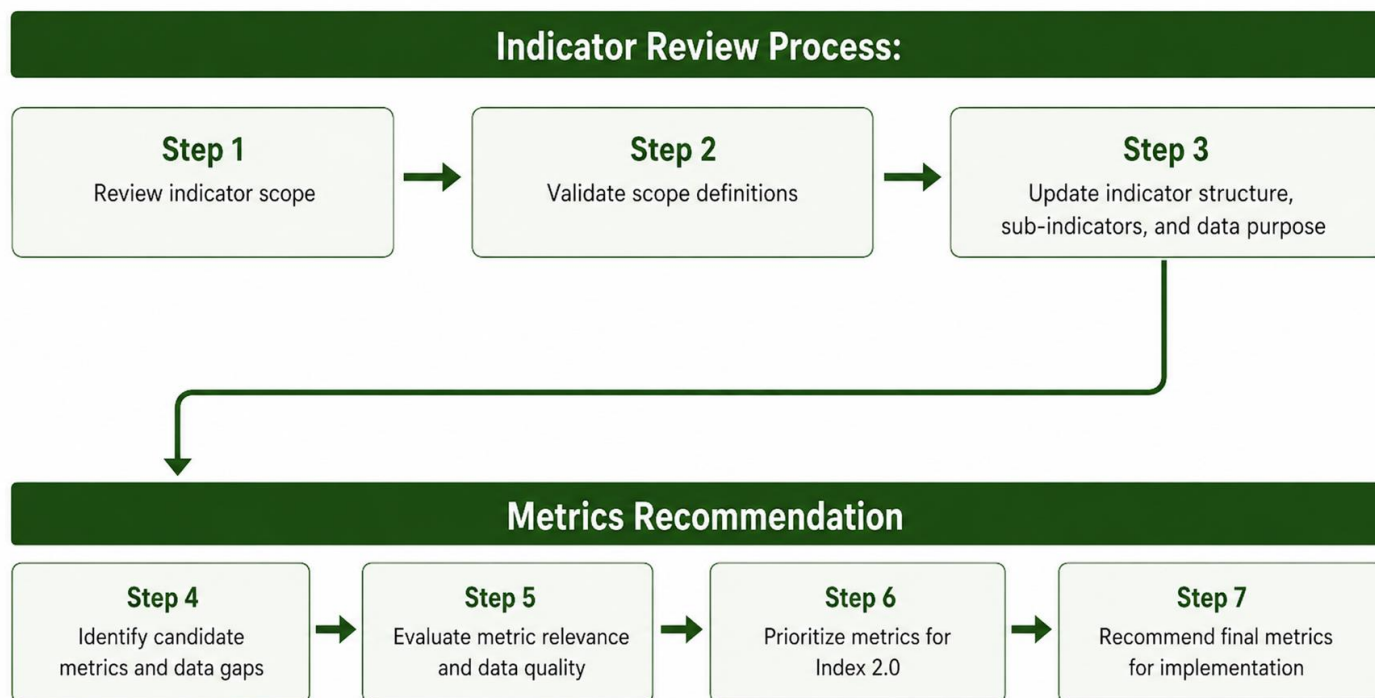


Figure 1. The Indicator Review Process

The scope refinement was carried out through a series of biweekly meetings held between February and June 2026, involving the Centre and its coalition partners. Discussions were organized around the four sustainability pillars and through dedicated working groups for priority indicators requiring deeper analysis. These priority areas included: Financial Vibrancy and Resiliency (Economic); Soil Health, Crop Inputs Use and Management, and Biodiversity and Agrobiodiversity (Environment); Nutrition Information and Safe Food (Food Integrity); and Decent Work for People (Societal Well-Being).

This process ensured active participation from partners and created space for detailed review and input. It also helped establish a clearer, standardized scope for each indicator, laying the groundwork for the next phase of work on data gaps and metric development. A summary of the revised indicator scopes is presented below.

4. Refined Block Scope in Index 2.0

Indicator Numbering Convention

In Index 2.0, indicator numbering has been revised from a continuous sequence of 1 to 20 to a block-based convention that aligns each indicator with its Sustainability Block (Table 1). Environment indicators are numbered EN.1 to EN.7; Food Integrity indicators are numbered FI.1 to FI.5; Economic indicators are numbered EC.1 to EC.5; and Societal Well-Being indicators are numbered SW.1 to SW.3. This change was important because the revised scope no longer follows the original continuous sequence: the former Indicator 13, which would have become FI.6, has been merged into FI.2 Nutrition Information, while a new Productivity indicator has been added to the Economic Block. Under the previous numbering system, these changes would have required reorganizing and renumbering all subsequent indicators. The block-based

convention improves clarity by making each indicator's block affiliation immediately visible and allows future refinements within a single block without disrupting the numbering of indicators in other blocks.

Table 1. Crosswalk between the indicator numbering used in the 2025 Update and the revised block-based numbering convention used for Index 2.0.

2025 Update Number	2025 Update Indicator	Index 2.0 Number	Index 2.0 Indicator / Change
1	Climate Change & GHG Emissions	EN.1	Climate Change & GHG Emissions
2	Soil Health	EN.2	Soil Health
3	Water Stewardship	EN.3	Water Stewardship
4	Biodiversity & Agrobiodiversity	EN.4	Biodiversity & Agrobiodiversity
5	Crop Input Use / Management	EN.5	Crop Input Use / Management
6	Food Loss & Waste	EN.6	Food Loss & Waste
7	Packaging & Waste	EN.7	Packaging & Waste
8	Safe Food	FI.1	Safe Food
9	Nutrition Information	FI.2	Nutrition Information (includes 13. Transparency)
10	Antimicrobial Stewardship	FI.3	Antimicrobial Stewardship
11	Zoonotic Disease Mitigation	FI.4	Zoonotic Disease Mitigation
12	Traceability Implementation	FI.5	Traceability Implementation
13	Transparency	FI.2	Merged into Nutrition Information
14	National Economic Contribution	EC.1	National Economic Contribution
15	Financial Vibrancy & Resiliency	EC.2	Financial Vibrancy & Resiliency
16	Innovation	EC.3	Innovation
17	Sustainable Finance	EC.4	Sustainable Finance
--	Not included	EC.5	Productivity added as a new indicator
18	Decent Work for People	SW.1	Decent Work for People
19	Food Security	SW.2	Food Security
20	Animal Care	SW.3	Animal Care

A. Environment Block

The Environment Block measures the environmental sustainability of the Canadian agriculture and agri-food sector. It does this by including indicators and metrics that measure the impact of climate change on Greenhouse Gas (GHG) Emissions and intensity for agriculture and food (Figure 2). It also measures the impact of sustainable farming practices on Soil Health, Water Stewardship, Crop Input Use, and Biodiversity and Agrobiodiversity. Coverage includes measures of Food Loss, Packaging, and Plastic Recycling.

Refined Scope

As a result of consultations focused on several of the indicators, specifically soil health, crop input use, & management, and biodiversity, the scope of the Index was expanded to refine metrics, develop more outcome-based measures as opposed to practices, and address gaps where key metrics were missing. This included adding additional GHG emission intensity metrics, more complete metrics measuring soil health

outcomes including soil loss (agricultural land losses), soil biology, soil infiltration (i.e. nitrogen and phosphorus residues) and soil organic carbon.

Additional metrics for efficient crop input use & management were added by a working group focused on this indicator, including identifying new measures of nutrient use efficiency, liquid manure application, and soil testing frequency, as well as metrics on the development of new plant and seed varieties and their registration.

A working group focused on biodiversity led to significant improvements in biodiversity metrics, especially in specific provinces. Provincial data also provided improved metrics on the extent of land conversion; however, identifying similar metrics for other provinces may be difficult. Enhanced metrics for food loss and waste resulted from recent consultations, a commissioned report by the CSA, and increased interest in the topic from other sources. The result was a more refined scope and metrics that measured more of the sector's environmental sustainability outcomes.

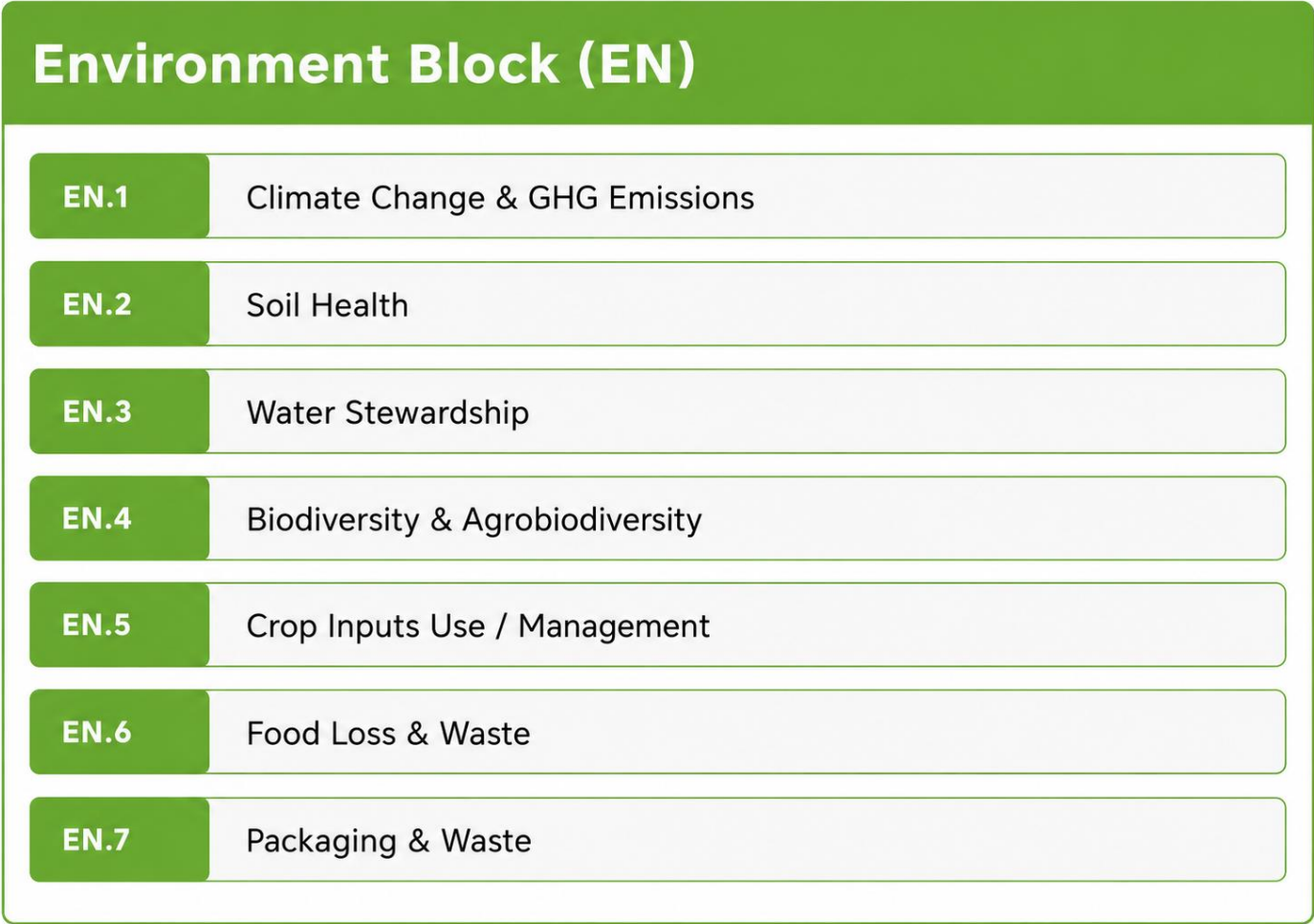


Figure 2. Environment Block Indicators

B. Food Integrity Block

The Food Integrity Block measures how well the Canadian agriculture and agri-food sector meets its obligations to produce safe, nutritious food free of disease, excessive antimicrobials, and contaminants

(Figure 3). Foods are to be properly labelled and provide nutrition information so consumers are well informed and can make sound decisions. This allows the sector to market Canadian products, both domestically and internationally, in a sustainable fashion, backed by effective government policies and regulations.

Refined Scope

Over the course of consultations, the scope of the Food Integrity Block was refined to focus on nutrition information and safe food, with input from two working groups. As a result, safe food coverage was expanded to include foodborne illness outcomes among the population, and new metrics were introduced by the CFIA to measure food safety compliance. The scope of nutrition-related metrics was expanded to include front-of-package labelling and additional information on mandatory and voluntary health claims. Additional detail was added to the antimicrobial resistance indicator and to the zoonotic diseases indicator. Transparency was included in the Nutrition Information indicator since it related to health claims. These changes improved coverage and updated results for recent regulatory changes affecting food safety, nutrition, health claims, antimicrobial resistance, and zoonotic health.

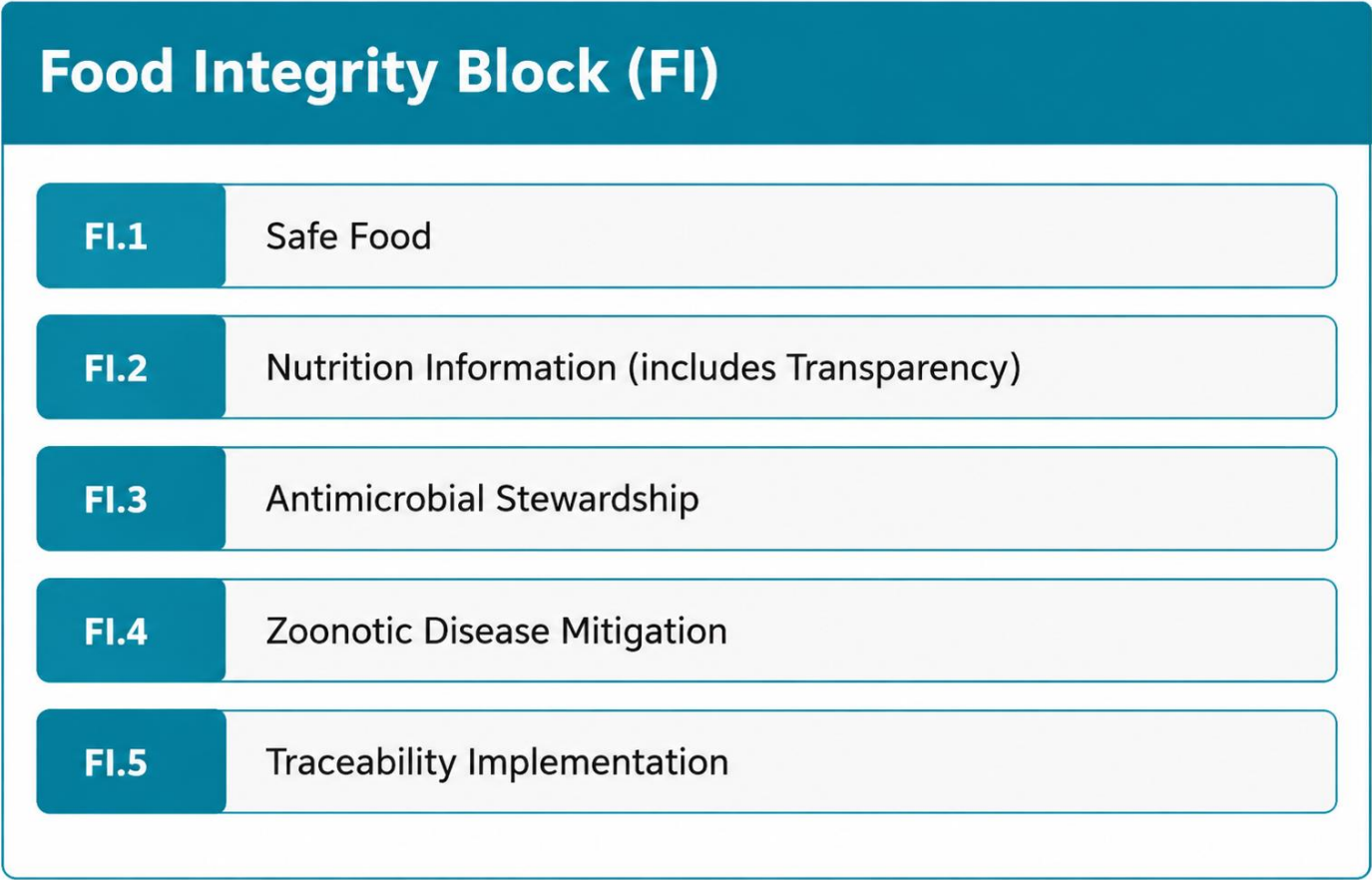


Figure 3. Food Integrity Block Indicators

C. Economic Block

The Economic Block measures the economic sustainability of the Canadian agri-food sector. It does this by providing indicators and metrics that assess the overall economic significance of the sector, its contribution

to national prosperity, employment and trade (Figure 4). It also provides measures of farm and agri-food industry financial vibrancy and profitability, as well as investments in capital and innovation, infrastructure, Indigenous businesses, and sustainable finance.

Refined Scope

The scope of this block was expanded for Index 2.0 to include metrics measuring productivity in both agriculture and food and beverage manufacturing. Productivity growth is an outcome of past investments in capital, infrastructure and R&D and the adoption of new farm and food industry management practices and new technologies. By enhancing efficiency and reducing input use, productivity growth leads to greater profitability and sustainability.

In addition, metrics measuring the economic contribution of the sector were expanded to include GDP and employment for the farm inputs sector, as well as the primary agriculture, food and beverage manufacturing, wholesale/retail and food service industries. Metrics for bankruptcies were also added to broaden the scope of financial vibrancy, and new measures of resilience were included to account for Canadians’ vulnerability to import dependency for fruit and vegetables and intermediate inputs. Several of the innovation metrics were revisited and clarified or eliminated, and research investments by commodity organizations were considered for inclusion. By adding these metrics, the scope of the Economic Block was improved and refined, coverage was expanded, and more performance-based outcome measures of economic sustainability were included.

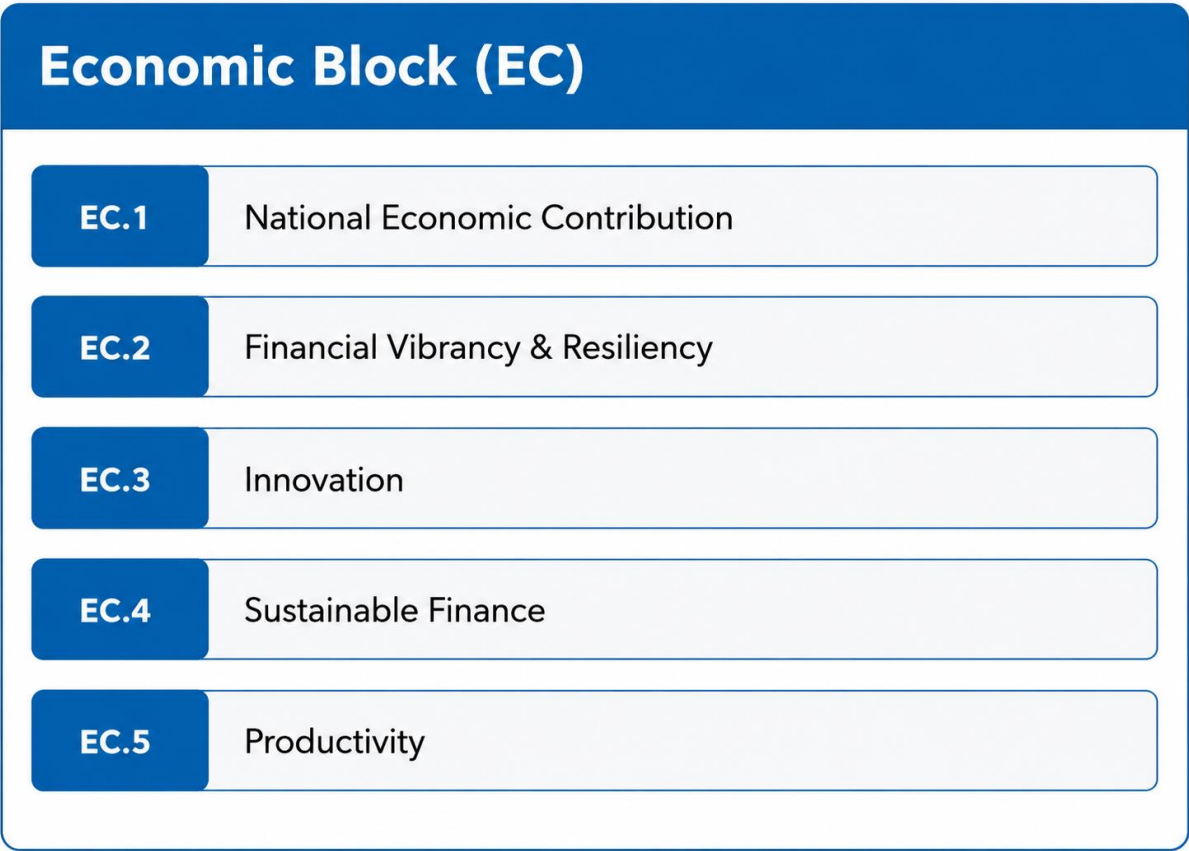


Figure 4. Economic Block Indicators

D. Societal Well-Being Block

The Societal Well-Being Block of the Index measures various aspects of social sustainability in the Canadian agriculture and agri-food sector. Indicators cover decent work for people, food security and animal care (Figure 5). These include metrics on fair wages and the fair treatment of temporary foreign workers; Indigenous and youth employment and opportunities; female, Indigenous, and minority representation on boards and in senior positions; and workplace safety and mental health.

Refined Scope

With significant input from coalition partners, the scope of this block was expanded and refined to include more metrics around food security, specifically affordability and the cost of a healthy diet, as well as access to food in the north and at food banks. Animal care metrics were expanded through contributions from several new coalition members representing animal health organizations. Mental health metrics improved thanks to contributions from experts in this field.

Metrics related to decent work for people were also the focus of a working group that led to significant updates to metrics through consultations with partners, including presentations by the International Labour Organization, leading to the development of more robust metrics to measure social sustainability in the sector.



Figure 5. Societal Well-Being Block Indicators

5. Refined Indicator scope for Index 2.0

A. Environment Block

Indicator EN.1: Climate Change & GHG Emissions

Definition

The Climate Change & Greenhouse Gases (GHGs) indicator assesses the contribution of Canada's agri-food sector to climate change, as well as its efforts to mitigate emissions and enhance carbon sequestration. It presents greenhouse gas emissions generated across agricultural production and food processing, the role of soil carbon sequestration in offsetting emissions, and the adoption of mitigation strategies within the sector.

The indicator captures three key components: absolute emissions, emissions intensity relative to production, and carbon sequestration in agricultural soils. It also considers mitigation measures such as the use of renewable energy sources and other practices that reduce emissions.

This indicator aligns with Canada's national and global climate commitments, including emissions reduction targets under the Paris Agreement and net-zero objectives by 2050. It reflects the sector's role in contributing to climate goals while maintaining productivity and economic viability.

The indicator focuses on sector-wide outcomes rather than individual producer or company performance. It does not assess adaptation to climate change or provide a full accounting of indirect (scope 3) emissions across the entire value chain.

Purpose of the Data: What It Should Help Demonstrate

- The contribution of the agri-food sector to national greenhouse gas emissions
- The extent and trends of emissions and emission intensity across production and processing
- The role of carbon sequestration in agricultural soils as a mitigation mechanism
- The implementation of measures that reduce emissions and support mitigation efforts
- The extent of renewable energy use and other mitigation-related initiatives
- Progress toward national and global emissions reduction targets
- Gaps and limitations in emissions measurement, including data availability and coverage
- Insight into the balance between emissions generation and mitigation within the sector

Indicator EN.2: Soil Health

Definition

The Soil Health indicator assesses the condition, function, and long-term sustainability of soils within Canada's agri-food system. It evaluates how agricultural practices influence soil's ability to support productivity, maintain environmental quality, and provide ecosystem services such as nutrient cycling, water regulation, and carbon storage.

Conceptually, soil health is the capacity of soil to function as a dynamic, living ecosystem that sustains plant and animal productivity, maintains or enhances water and air quality, and supports human health. It encompasses physical, chemical, and biological properties of soil, including soil structure, organic matter content, and biological activity.

The indicator captures both outcome-based measures (e.g., soil organic carbon, erosion risk) and practice-based indicators (e.g., soil cover, crop rotations) that influence soil condition. It reflects the sector's ability to maintain or improve soil productivity while reducing degradation, erosion, and nutrient loss over time.

This indicator aligns with the Environment Block through its focus on natural capital, ecosystem resilience, and sustainable land management. It relies on a combination of established AAFC agri-environmental indicators and emerging metrics due to current data limitations.

Purpose of the Data: What It Should Help Demonstrate

- The overall condition and long-term sustainability of agricultural soils
- Trends in key soil functions, including organic matter, erosion risk, and soil cover
- The impact of agricultural practices on soil health and productivity
- Progress in maintaining or improving soil condition over time
- The role of soil in supporting climate mitigation (carbon sequestration) and resilience to extreme weather
- Risks related to soil degradation, erosion, and loss of fertility
- Insight into the relationship between soil management and environmental outcomes (e.g., water quality)
- Gaps in soil monitoring, particularly biological and structural indicators

Indicator EN.3: Water Stewardship

Definition

The Water Stewardship indicator assesses the management, use, and quality of water resources within Canada's agri-food system. It evaluates how agricultural production and food processing activities influence water availability and water quality, as well as the systems in place to monitor and manage water use sustainably.

The indicator focuses on two primary dimensions: water quality and water use. It captures the condition of freshwater systems influenced by agricultural activities (e.g., watershed-level impacts, contaminants such as pesticides), as well as the volume of water withdrawn and consumed across crop production, livestock production, and food processing.

This indicator reflects the growing importance of water stewardship in the context of climate change, increasing variability in water availability, and rising expectations for sustainable resource management. It considers both environmental impacts (e.g., pollution, ecosystem health) and operational efficiency (e.g., water use intensity and withdrawal).

The indicator aligns with the Environment Block through its emphasis on resource efficiency, pollution prevention, and ecosystem protection. It does not directly measure water stress, climate adaptation outcomes, or consumer-level water use.

Purpose of the Data: What It Should Help Demonstrate

- The impact of the agri-food sector on water quality in Canadian ecosystems
- The extent and condition of freshwater quality influenced by agricultural activities
- The level of monitoring and surveillance systems tracking water quality and contaminants
- The volume and patterns of water use across crop, livestock, and processing activities
- The sector's reliance on water resources and its efficiency in water use
- The implementation of practices and systems to manage water sustainably
- Gaps in data, including limited visibility on water stress and regional variations
- Insight into the balance between water use and environmental protection within the sector

Indicator EN.4: Biodiversity & Agrobiodiversity

Definition

The Biodiversity & Agrobiodiversity indicator assesses the condition, trends, and changes in habitats within agricultural and marine landscapes as a proxy for overall biodiversity health. It evaluates the extent to which ecosystems that support species diversity, ecological functions, and long-term landscape resilience are conserved, restored, or altered over time.

The biodiversity component focuses on habitat availability, land-use change, and ecosystem condition across agricultural and adjacent natural systems. The agrobiodiversity component evaluates the diversity and quality of habitats and ecological features within working agricultural landscapes that contribute to species richness, ecosystem services (e.g., pollination, pest control), and resilient food production systems.

Conceptually, biodiversity refers to the variability among all living organisms, including diversity within species, between species, and across ecosystems. It underpins human health, food security, economic resilience, and climate mitigation/adaptation. Agrobiodiversity specifically refers to the diversity of plants, animals, and micro-organisms used directly or indirectly in agriculture, including crops, livestock, forestry, fisheries, and the broader ecological systems that support them.

This indicator aligns with the Environment Block through its focus on ecosystem integrity, habitat conservation, and biodiversity outcomes. It primarily uses habitat change and land-use dynamics as measurable proxies and does not fully capture species-level dynamics or genetic diversity due to current data limitations.

Purpose of the Data: What It Should Help Demonstrate

- The long-term sustainability of ecosystems influenced by the agri-food sector
- Trends in habitat condition and land-use change over time
- Biodiversity gains or losses within agricultural and adjacent landscapes

- Farmland and grassland (native and tame) conversion and loss
- The state of agrobiodiversity linked to agricultural production systems
- Crop diversity and resilience to environmental and market shocks
- Insight into landscape heterogeneity (e.g., field size, buffers, habitat features)
- Gaps in measurement, including species-level data and long-term biodiversity tracking

Indicator EN.5: Crop Input Use / Management

Definition

The Crop Input Use & Management indicator assesses the use, efficiency, and environmental impact of key agricultural inputs within Canada's agri-food system, including fertilizers, pesticides, and other crop protection products. It evaluates how these inputs are applied, managed, and optimized to support agricultural productivity while minimizing environmental risks.

The indicator captures both the intensity of input use and the adoption of management practices that improve efficiency and reduce negative impacts on soil, water, air quality, and biodiversity. It reflects the balance between maintaining crop yields and reducing environmental pressures associated with input overuse or mismanagement.

Conceptually, sustainable input management involves optimizing the type, timing, and quantity of inputs to maximize productivity while minimizing externalities such as nutrient runoff, greenhouse gas emissions, and ecosystem degradation. This includes approaches such as precision agriculture, integrated pest management, and nutrient stewardship.

This indicator aligns with the Environment Block through its focus on pollution reduction, resource efficiency, and sustainable production practices. It relies on a combination of proxy measures (e.g., application rates, risk indices) and practice-based indicators due to limitations in directly measuring environmental outcomes at scale.

Purpose of the Data: What It Should Help Demonstrate

- The intensity and trends of fertilizer and pesticide use in crop production
- How effectively inputs are managed to minimize environmental impacts
- The adoption of best management practices (BMPs), including nutrient stewardship and integrated pest management
- Progress toward more efficient and sustainable input use
- Potential risks related to nutrient runoff, water contamination, and ecosystem impacts
- The relationship between input use, productivity, and environmental performance
- Gaps in data related to application practices and environmental outcomes
- Insight into opportunities to improve input efficiency and reduce externalities

Indicator EN.6: Food Loss & Waste

Definition

The Food Loss and Waste indicator assesses the extent, management, prevention and diversion of food loss and waste across Canada's agri-food system. It evaluates how food is lost throughout production, processing, and transportation stages, as well as the systems and initiatives in place to reduce avoidable (i.e. edible) and unavoidable (i.e. inedible) loss and maximize resource efficiency, with a primary focus on food loss occurring before the consumer level.

The indicator focuses on two key dimensions: preventing and/or diverting avoidable and unavoidable food loss and waste. It captures the volume of food loss and waste within the supply chain (excluding consumer-level waste), as well as the extent to which food or by-products are redirected for alternative uses such as animal feed, composting, or value-added products (e.g., upcycled food products or biofuels, anaerobic digesters).

This indicator reflects the environmental, economic, and social importance of minimizing food loss, including reducing greenhouse gas emissions, improving efficiency in the food system, and enhancing food availability. It aligns with national and global targets to reduce food loss, including commitments to halve food loss by 2030.

The indicator does not include consumer-level food waste or provide a fully standardized measurement methodology across all stages of the value chain, due to current data limitations.

Purpose of the Data: What It Should Help Demonstrate

- The scale and distribution of avoidable and unavoidable food loss and waste within the agri-food system
- Where food losses and waste occur across the supply chain, particularly in production, processing, and transportation
- The extent of food waste in the retail
- The implementation of initiatives aimed at preventing food loss
- The extent of diverting (via repurposing) avoidable (i.e., edible) and unavoidable (i.e., inedible) food loss
- The role of policy and funding programs in supporting food loss reduction efforts
- Progress toward national and global food loss reduction targets
- Gaps in measurement methodologies and data availability
- Insight into opportunities to improve efficiency and resource use across the food system

Indicator EN.7: Packaging & Waste

Definition

The Packaging & Waste indicator assesses the generation, management, and reduction of packaging and plastic waste across Canada's agri-food system. It evaluates efforts to reduce, recycle, and reuse materials used in agricultural production, food processing, and retail activities, with a particular focus on plastics and packaging.

The indicator captures activities related to waste diversion, recycling systems, and the adoption of circular economy practices. It considers both upstream (on-farm plastics such as pesticide containers and grain bags) and downstream (packaging used in processing and retail) stages of the value chain.

This indicator reflects national commitments to reduce plastic waste and transition toward circular packaging systems, including targets for recyclability, compostability, and reduced reliance on single-use plastics. It also highlights the role of innovation in packaging design to maintain food quality and safety while minimizing environmental impacts.

The indicator aligns with the Environment Block by focusing on waste reduction, resource efficiency, and pollution prevention. It does not comprehensively measure reuse at scale or fully capture all packaging types due to data limitations.

Purpose of the Data: What It Should Help Demonstrate

- The scale of packaging and plastic waste generated in the agri-food system
- The extent of recycling and waste diversion activities across production and processing stages
- The implementation of circular economy practices (reduce, reuse, recycle)
- The effectiveness of collection and recycling programs, especially for agricultural plastics
- Trends in plastic waste diversion and recycling volumes
- Industry and policy efforts to reduce packaging waste and improve sustainability
- Gaps in data, including limited tracking of reuse and processing/retail packaging
- Insight into the adoption of sustainable packaging practices and systems

B. Food Integrity Block

Indicator FI.1: Safe Food

Definition

The Safe Food indicator assesses the performance of Canada's food safety system, focusing on the outcomes of regulatory oversight, population health outcomes, compliance, and system response to food safety risks across the agri-food system.

The indicator measures system-level food safety safeguards that underpin trust in Canadian food and support access to domestic and international markets.

Purpose of the data: What it should help demonstrate

- Outcomes of food safety oversight
- Trends in compliance and system performance
- Responsiveness to food safety incidents
- Population-level food safety outcomes where data are available
- Data gaps or reporting limitations

Indicator FI.2: Nutrition Information

Definition

The Nutrition Information indicator assesses Canada's approach to providing transparent, standardized, and reliable nutrition information to consumers. It focuses on the availability, accessibility, and clarity of nutrition information provided through regulatory frameworks, disclosure requirements, and public guidance that support informed food choices and healthier diets at the population level.

The indicator captures key areas related to nutrition labelling, front-of-package labelling, nutrition information availability, and consumer transparency (formerly Indicator 13). It evaluates the extent to which consumers have access to consistent and understandable nutrition information across the food system.

While the indicator aligns strongly with the Food Integrity Block through its focus on transparency and consumer access to information, it does not directly measure nutrition or health outcomes, dietary behaviours, or the overall nutritional quality of diets.

Purpose of the data: What it should help demonstrate

- The existence and coverage of mandatory nutrition information and labelling systems
- The extent to which nutrition information is standardized, transparent, and accessible across the food supply
- The implementation of front-of-package labelling and other consumer nutrition disclosure requirements
- How nutrition information frameworks support informed food choices and consumer awareness

- The consistency and comparability of nutrition information across food categories and products
- Gaps, limitations, or changes in nutrition information availability, transparency, and regulatory frameworks
- Insight into the implementation, monitoring, or compliance of nutrition information requirements

Indicator FI.3: Antimicrobial Stewardship

Definition

The Antimicrobial Stewardship indicator assesses Canada's approach to promoting the responsible, prudent, and sustainable use of antimicrobials across the agri-food system. It focuses on the policies, practices, monitoring systems, and stewardship measures implemented to reduce antimicrobial resistance risks while supporting animal health, food system integrity, and public health protection.

The indicator considers antimicrobial use oversight, surveillance systems, veterinary governance, stewardship initiatives, reporting frameworks, and risk mitigation measures related to antimicrobial use in food-producing animals and livestock production systems. It also captures efforts intended to encourage appropriate antimicrobial use, reduce unnecessary reliance on antimicrobials, and strengthen accountability and transparency within the food system.

The indicator aligns with the Food Integrity Block through its focus on risk prevention, responsible production practices, transparency, and long-term food system resilience. It also reflects efforts to strengthen long-term resilience and public confidence in food production systems through responsible antimicrobial management.

The indicator is not intended to assess clinical healthcare system performance or broader human health outcomes. Where relevant, antimicrobial resistance surveillance data may be used as a proxy indicator to reflect emerging resistance risks and stewardship trends associated with the agri-food system.

Purpose of the data: What it should help demonstrate

- The existence and implementation of antimicrobial stewardship frameworks and responsible use policies across the agri-food system
- The extent of antimicrobial use monitoring, surveillance, and reporting mechanisms within food production systems
- The implementation of stewardship practices intended to promote prudent and responsible antimicrobial use
- The role of veterinary oversight, governance, and professional guidance in antimicrobial management
- The extent of industry and regulatory adoption of antimicrobial stewardship measures and standards
- Efforts to reduce unnecessary antimicrobial use and mitigate antimicrobial resistance risks
- Gaps, limitations, or emerging challenges related to antimicrobial stewardship implementation and oversight
- Insight into transparency, accountability, and risk management mechanisms supporting responsible antimicrobial use

Indicator FI.4: Zoonotic Disease Mitigation

Definition

The Zoonotic Disease Mitigation indicator assesses Canada's capacity to prevent, monitor, manage, and mitigate zoonotic disease risks across the agri-food system. It focuses on the systems, frameworks, and practices implemented to reduce the transmission of diseases between animals, humans, and the environment, while supporting food system integrity, public health protection, and animal health management.

The indicator considers surveillance systems, biosecurity measures, disease monitoring and reporting mechanisms, emergency preparedness, inter-agency coordination, and risk mitigation strategies related to zoonotic diseases within agricultural and food production systems. It also captures efforts aligned with One Health approaches that recognize the interconnectedness of human, animal, and environmental health.

The indicator aligns with the Food Integrity Block through its focus on prevention, transparency, preparedness, and system resilience related to zoonotic disease risks. It does not directly measure human health outcomes, disease prevalence outcomes, or broader healthcare system performance.

Purpose of the data: What it should help demonstrate

- The existence and implementation of zoonotic disease prevention and mitigation frameworks across the agri-food system
- The extent of surveillance, monitoring, and reporting systems related to zoonotic disease risks
- The implementation of biosecurity and disease control measures within animal production and food systems
- The level of preparedness and response capacity for zoonotic disease incidents and outbreaks
- The extent of coordination and information-sharing among public health, animal health, and food system stakeholders
- The integration of One Health approaches within zoonotic disease mitigation efforts
- Gaps, limitations, or emerging risks related to zoonotic disease prevention and management
- Insight into system resilience and risk management mechanisms intended to protect animal and public health

Indicator FI.5: Traceability Implementation

Definition

The Traceability Implementation indicator assesses the extent to which traceability systems, practices, and frameworks are implemented across Canada's agri-food system to support product identification, tracking, transparency, and accountability throughout the supply chain.

The indicator focuses on the capacity of the food system to trace products, ingredients, and production inputs across different stages of the value chain, including production, processing, distribution, retail, and import/export activities. It considers regulatory requirements, industry practices, digital traceability systems,

and mechanisms that support product recalls, food safety investigations, supply chain transparency, and consumer confidence.

The indicator aligns with the Food Integrity Block through its focus on transparency, accountability, risk management, and the ability to track food products and related information across the food system. It does not directly measure food safety outcomes, environmental impacts, or supply chain efficiency outcomes.

Purpose of the data: What it should help demonstrate

- The existence and implementation of traceability systems and frameworks across the agri-food supply chain
- The extent to which food products and inputs can be identified and tracked throughout different stages of the value chain
- The level of traceability coverage across commodities, sectors, and supply chain actors
- The role of traceability systems in supporting product recalls, food safety investigations, and risk management
- The extent of regulatory and industry adoption of traceability requirements and standards
- The integration of digital systems, recordkeeping practices, and information-sharing mechanisms supporting traceability
- Gaps, limitations, or inconsistencies in traceability implementation across the food system
- Insight into transparency and accountability mechanisms that strengthen consumer and stakeholder confidence

Indicator FI.6: Transparency

This indicator and the metrics that measure it are now included in nutrition information.

C. Economic Block

Indicator EC.1: National Economic Contribution

Definition

The National Economic Contribution indicator assesses the overall economic significance of Canada's agri-food sector by measuring its contribution to the national economy. It evaluates key economic outputs such as gross domestic product (GDP), employment, and trade performance, providing a consolidated view of the sector's role in driving economic activity and national prosperity.

The indicator captures the size, scale, and economic impact of the agri-food system across the value chain, from primary production through processing, distribution, and retail. It reflects how the sector contributes to economic growth, job creation, and international competitiveness.

This indicator aligns with the Economic Block by emphasizing measurable economic outcomes and national-level performance. It does not assess profitability at the firm level or regional disparities, nor does it evaluate environmental or social trade-offs associated with economic growth.

Purpose of the Data: What It Should Help Demonstrate

- The economic contribution of the agri-food sector to Canada's GDP
- The scale of employment generated across the agri-food value chain
- The sector's importance to national trade, including exports and trade balance
- The role of the sector in supporting economic growth and competitiveness
- Trends in economic performance across production, processing, and retail
- The contribution of agri-food to manufacturing and broader economic systems
- Gaps or limitations in measuring economic contribution at more granular levels
- Insight into the sector's role in supporting livelihoods and national prosperity

Indicator EC.2: Financial Vibrancy & Resiliency

Definition

The Financial Vibrancy & Resiliency indicator assesses the financial performance, stability, and long-term viability of Canada's agri-food sector. It evaluates the sector's ability to generate income, attract investment, manage financial risk, and maintain resilience amid economic and market fluctuations.

The indicator captures multiple dimensions of financial health, including profitability, debt levels, investment capacity, labour dynamics, bankruptcy rates, infrastructure, and supply chain resilience. It reflects how well the agri-food system is positioned to sustain operations, adapt to challenges, and support future growth.

This indicator aligns with the Economic Block by focusing on financial sustainability and the sector's capacity to remain competitive and resilient over time. It does not assess individual firm performance in detail, nor does it directly measure environmental or social externalities associated with financial outcomes.

Purpose of the Data: What It Should Help Demonstrate

- The financial performance and stability of the agri-food sector
- The sector's ability to generate income and maintain profitability over time
- Levels of investment and capital availability within the sector
- Resilience to economic shocks and supply chain disruptions
- Labour-related pressures, including workforce gaps and productivity challenges
- Infrastructure and capacity constraints that affect sector performance
- Financial risks and vulnerabilities across the agri-food system
- Insight into the sector's ability to support long-term growth and competitiveness

Indicator EC.3: Innovation

Definition

The Innovation indicator assesses the capacity of Canada's agri-food sector to develop, adopt, and scale innovations that enhance productivity, sustainability, and competitiveness. It evaluates research and development (R&D) activity, regulatory processes that enable innovation, and the extent to which new technologies and practices are adopted across the sector.

The indicator captures how innovation supports improvements in production efficiency, environmental performance, and value creation across the agri-food system. It considers both public and private investment in innovation, as well as the ecosystem that facilitates the development and commercialization of new solutions.

This indicator aligns with the Economic Block by focusing on long-term growth, competitiveness, and system transformation. It does not directly measure innovation outcomes (e.g., productivity gains or environmental impacts) but instead focuses on the enabling conditions and adoption of innovation.

Purpose of the Data: What It Should Help Demonstrate

- The level of investment in research and development within the agri-food sector
- The sector's capacity to generate and scale innovation
- The efficiency and effectiveness of regulatory systems supporting innovation
- The adoption of new technologies and practices by producers and processors
- The role of innovation in supporting productivity and sustainability improvements
- Gaps in innovation capacity and barriers to adoption
- The balance between public and private sector contributions to innovation
- Insight into the sector's readiness for future challenges and opportunities

Indicator EC.4: Sustainable Finance

Definition

The Sustainable Finance indicator assesses the extent to which financial resources are mobilized to support sustainability objectives within Canada's agri-food sector. It evaluates both market-based and public funding mechanisms that enable investments in climate-smart practices, environmental improvements, and broader sustainability outcomes across the value chain.

The indicator captures financial flows directed toward sustainability, including private capital, investments aligned with environmental, social, and governance (ESG) criteria, and government or NGO funding programs. It reflects how financial systems are evolving to support the transition toward more sustainable agri-food production and supply chains.

This indicator aligns with the Economic Block by focusing on the financial foundations that enable sustainable transformation. It does not assess the effectiveness of individual investments or quantify sustainability impacts directly but rather emphasizes the availability and direction of capital toward sustainability goals.

Purpose of the Data: What It Should Help Demonstrate

- The availability of financial capital directed toward sustainable agri-food practices
- The role of private sector investment in advancing sustainability outcomes
- The contribution of public funding and policy-driven finance mechanisms
- The level of financial support for climate-smart and environmentally beneficial practices
- Trends in sustainable finance adoption within the sector
- Gaps in financial tools, mechanisms, and data availability
- The evolution of ESG-related financial practices
- Insight into the sector's readiness to meet sustainability investment needs

Indicator EC.5: Productivity

Definition

The Productivity indicator assesses the efficiency with which the Canadian agri-food sector transforms inputs, such as labour, capital, land, and intermediate inputs, into economic output. It captures the sector's ability to generate more output with the same or fewer inputs, reflecting improvements in efficiency, technology adoption, and resource use.

This indicator includes both partial measures of productivity, such as labour productivity, and comprehensive measures, such as total factor productivity (TFP) or multifactor productivity (MFP), which account for the combined use of multiple inputs. Productivity growth reflects the extent to which output increases relative to inputs, often driven by innovation, improved management practices, economies of scale, and investments in research and development.

This indicator aligns with the Economic Block by focusing on efficiency, competitiveness, and long-term economic performance of the agri-food system. It does not measure profitability at the firm level, nor does it directly assess environmental or social outcomes, although productivity improvements may have implications for both.

Purpose of the Data: What It Should Help Demonstrate

- The efficiency with which the agri-food sector converts inputs into output
- Trends in productivity growth across agriculture and agri-food industries
- Improvements in technology adoption, innovation, and resource use efficiency
- Competitiveness of the sector through productivity performance
- The difference between input-driven growth and efficiency-driven growth
- Insight into long-term drivers of economic growth in the agri-food system
- A comparison of productivity performance across industries within the value chain
- The strengths and limitations in current productivity measurement

D. Societal Well-Being Block

Indicator SW.1: Decent Work for People

Definition

Decent Work for People refers to the extent to which Canada's agri-food sector provides opportunities for women and men to obtain productive work in conditions of freedom, equity, security and human dignity and contributing to the social sustainability of the agri-food system.

The indicator also examines how labour conditions contribute to the long-term social sustainability, resilience, and attractiveness of the agri-food sector.

Purpose of the data: What it should help demonstrate

- The quality and level of productive employment opportunities across the agri-food value chain
- Working conditions in the agri-food sector regarding freedom, equity, and human dignity, including fair treatment, equity, and respect for labour rights
- Trends in workplace safety, occupational health, mental well-being, and income security, reflecting the level of protection available to workers
- The extent to which workers, government and industry dialogue pathways provide opportunities for representation, participation, and voice in workplace decisions
- Data gaps, limitations, and emerging issues affecting decent work and assessing how labour conditions contribute to the social sustainability of the agri-food sector

Indicator SW.2: Food Security

Definition

Food Security refers to the extent to which individuals and households in Canada have consistent and reliable access to sufficient, safe, nutritious, and culturally appropriate food, enabled by a food system that makes food affordable, accessible, and stable over time.

Within the National Index on Agri-Food Performance, the Food Security indicator is primarily focused on:

- Affordability as a core driver of food access
- Physical access and availability
- System-level supports and stability

The Food Security indicator is:

- Outcome-focused, anchored in household experience
- Driver-informed, with a strong emphasis on affordability
- System-aware, capturing the conditions that enable or constrain access

Purpose of the data: What it should help demonstrate

- How food prices, income levels, and cost-of-living pressures affect the ability of households to access adequate food
- Evidence on the prevalence, severity, and trends of food insecurity across households in Canada
- How economic or supply disruptions impact households' ability to consistently access food over time
- The differences in food access across income groups, regions (including northern and remote communities), and populations, including where culturally appropriate food may be limited
- How public programs, income supports, and affordability measures contribute to improving access to adequate and culturally appropriate food
- Credible, evidence-based insights to inform decision-making, track progress, and guide interventions to improve food security outcomes

Indicator SW.3: Animal Care

Definition

Animal Care refers to the systems, practices, and outcomes associated with ensuring the humane treatment, health, and well-being of animals used within the agri-food system. This indicator focuses on how animals are raised, managed, transported, and processed, and the extent to which conditions support:

- Good physical health and low incidence of disease, injury, and mortality
- Appropriate living conditions and housing systems
- Humane handling across all stages of production
- Application and enforcement of recognized animal care standards and codes (e.g., those developed by National Farm Animal Care Council)

The indicator captures both:

- Observed outcomes (e.g., animal health and welfare indicators), and
- System-level enablers (e.g., regulatory frameworks, compliance mechanisms, traceability systems, and industry adoption of standards)

Purpose of the data: What it should help demonstrate

- Evidence on the actual conditions experienced by animals, including indicators of health, injury, mortality, and overall welfare
- How regulatory frameworks, industry standards (e.g., codes developed by National Farm Animal Care Council), and compliance mechanisms contribute to protecting animal welfare
- The extent to which producers and supply chain actors are applying recognized animal care standards and continuous improvement practices
- Areas where animal care outcomes or system performance may be insufficient, inconsistent, or lacking data
- Basis for tracking progress over time and comparing performance against national and international expectations

Acknowledgement

A. Sustainability Block Committees and Working Groups

We extend our sincere appreciation to the members of the four Sustainability Blocks (Environment, Food Integrity, Economic, and Societal Well-Being) for their invaluable support throughout this update. As well as the Working groups for the prioritized indicators:

- Biodiversity and Agrobiodiversity
- Soil Health
- Crop Input Use & Management
- Safe Food
- Nutrition Information
- Financial Vibrancy & Resiliency
- Decent Work for people

Their collective expertise, commitment, and thoughtful contributions were instrumental in reviewing and refining the scope.

The time and effort generously contributed by each Committee member have been vital to advancing this collaborative initiative. We are deeply grateful for their dedication and continued engagement in shaping a stronger, evidence-based framework for agri-food sustainability in Canada.

B. Authors and Contributors

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Appendix A. Sub-Indicators/Dimensions per Indicator

Table A1 – Environment Block, Indicators and Sub-Indicators

Indicator EN.1: Climate Change & GHG Emissions	
Dimension / Sub-indicator	What it covers
GHG Emissions (Absolute)	Total greenhouse gas emissions from agricultural production and food processing sectors
Emissions per GDP	Agri-Food sector emissions per GDP produced
Emissions Intensity	GHG emissions relative to production output across commodities and sectors
Carbon Sequestration	Amount of carbon captured and stored in agricultural soils
Soil Carbon Change	Trends in soil carbon storage or release due to land management practices
Mitigation Measures	Practices and technologies implemented to reduce emissions
Renewable Energy Use	Production and use of renewable fuels and energy sources within the sector
Indicator EN.2: Soil Health	
Dimension / Sub-indicator	What it covers
Soil Organic Carbon / Matter	Levels and trends in soil organic carbon as a key proxy for soil health and productivity
Soil Erosion Risk	Extent and risk of soil loss due to water and wind erosion
Soil Cover	Extent of land protected by crops, residues, or cover throughout the year
Soil Biological Activity	Microbial activity (e.g., active carbon) indicating biological function of soils
Nutrient Losses	Potential for nutrient losses impacting water quality
Agricultural Land losses	Conversions of agricultural land over time
Indicator EN.3: Water Stewardship	
Dimension / Sub-indicator	What it covers
Freshwater Quality	Condition of water bodies influenced by agriculture, including compliance with quality guidelines
Water Quality (Ag Sites)	Water quality at sites primarily impacted by agricultural activity
Contaminant Monitoring	Presence of pesticides and other residues in water systems
Water Use – Crops	Water withdrawals for irrigation and crop production activities
Water Use - Efficiency	Water use efficiency to mitigate losses
Water Use - Productivity	Water use to improve crop productivity and reduce use
Water Use – Livestock	Water use associated with animal production systems
Water Use – Processing	Water intake and usage in food manufacturing and processing

Table A1 – Environment Block, Indicators and Sub-Indicators (Continued)

Indicator EN.4: Biodiversity & Agrobiodiversity	
Dimension / Sub-indicator	What it covers
Habitat Availability & Change	Extent and trends of habitat suitable for species within agricultural landscapes
Farmland / Grassland Conversion	Loss or conversion of cropland, pasture, and natural grasslands
Composite Biodiversity Index	Integrated view of habitat condition and land-use change across the sector
Wildlife Habitat Capacity	Ability of agricultural land to support terrestrial vertebrate species
Marine Biodiversity (Harvest Controls)	Sustainability of fish and marine stocks through managed harvest limits
Agrobiodiversity (Production Systems)	Diversity within crops, livestock, and ecological functions supporting production
Species-Level Indicators	Population levels of birds, pollinators, and other indicator species
Landscape Heterogeneity	Field size, buffers, and ecological features influencing biodiversity
Indicator EN.5: Crop Inputs Use and Management	
Dimension / Sub-indicator	What it covers
Nutrient Balance	Difference between nutrient inputs and outputs
Nutrient Management Practices	Adoption of practices such as 4R nutrient stewardship
Responsible PCP practices	Residues of PCP in water, and Fresh fruit and vegetables
Organic fertilizer sources and application methods	Use of technologies to optimize input application and efficiency
Indicator EN.6: Food Loss and Waste	
Dimension / Sub-indicator	What it covers
Environmental Impact Indicators	Proxy measures of impacts such as runoff, leaching, and emissions
Avoidable Food Loss (Production & Processing)	Estimated volume of avoidable food loss and waste in production, processing, and manufacturing
Food Loss in transportation	Estimated volume of avoidable food loss and waste in transportation
Diversion of Avoidable Food Loss	Means of diverting avoidable food loss for purposes such as food charities or value-added use (e.g., upcycled food products). Excludes consumption stage (waste)
By-Product Utilization	Reallocation of non-food-grade outputs (e.g., grains, oilseed by-products) to secondary uses
Policy and Funding Initiatives	Government programs and funding mechanisms aimed at reducing food waste
Indicator EN.7: Packaging and Waste	
Dimension / Sub-indicator	What it covers
On-Farm Plastic Waste	Generation and management of agricultural plastics such as containers, wraps, and bags
Recycling and Collection Systems	Programs and systems used to collect and recycle packaging materials
Container Recycling	Recovery and recycling of pesticide and fertilizer containers
Plastic Waste Diversion	Volume of plastics diverted from landfill through recycling or recovery
Processing & Retail Packaging	Packaging use and waste generated in food processing and retail sectors
Circular Economy Practices	Efforts to reduce, reuse, and recycle packaging materials

Table A2 – Food integrity Block, Indicators and Sub-Indicators

Indicator FI.1: Safe Food	
Dimension / Sub-indicator	What it covers
Food safety compliance (domestic and imported foods)	Measures the proportion of food products placed on the Canadian market that comply with federal food safety requirements, based on routine sampling and testing. Captures compliance across key hazard types (microbial, chemical, physical) for both domestically produced and imported foods.
Oversight and enforcement outcomes	Reflects how the food safety system identifies, investigates, and addresses non-compliance. Focuses on enforcement or investigation outcomes that signal system effectiveness, rather than inspection volumes.
Food recalls	Assesses the responsiveness and effectiveness of the food safety system when risks are identified, including the occurrence, classification, and timeliness of high-risk food recalls. Recalls are interpreted as indicators of system response, not system failure.
Chemical residue monitoring (pesticides, veterinary drugs, other contaminants)	Measures compliance of foods with science-based maximum residue limits (MRLs) for pesticides, veterinary drugs, and other chemical contaminants, based on national surveillance and monitoring programs. Applies to both domestic and imported foods.
Foodborne illness and outbreak outcomes	Captures population health outcomes linked to food safety, including trends in reported foodborne illness, outbreaks, or other available public health measures. This dimension helps connect regulatory performance with public health outcomes, where data are available.
Indicator FI.2: Nutrition Information	
Dimension / Sub-indicator	What it covers
Provision of Nutrition Information	Availability, accessibility, and standardization of nutrition information provided to consumers, including Nutrition Facts Tables, ingredient lists, and nutrition disclosure requirements.
Front-of-Package and Nutrition Labelling	Implementation and coverage of front-of-package labelling systems and other mandatory nutrition labelling requirements intended to support informed food choices.
Health and Nutrition Claims	Regulation, use, and oversight of nutrition and health claims on food products, including claims related to nutrient content, health benefits, and functional attributes.
Mandatory Fortification Frameworks	National requirements and policies related to mandatory vitamin and mineral fortification across specific food categories.
Consumer Transparency and Misrepresentation (Formerly Indicator 13: Transparency)	Measures intended to improve transparency, reduce misleading nutrition information, and prevent false or deceptive nutrition-related representations to consumers.
Monitoring and Compliance	Monitoring, enforcement, and compliance mechanisms related to nutrition information, labelling, health claims, and fortification requirements.

Table A2 – Food integrity Block, Indicators and Sub-Indicators (Continued)

Indicator FI.3: Antimicrobial Stewardship	
Dimension / Sub-indicator	What it covers
Antimicrobial Use Monitoring and Surveillance	Systems and mechanisms used to monitor, collect, and report data on antimicrobial use and related risks within agricultural and food production systems.
Stewardship Policies and Frameworks	National regulations, policies, standards, and stewardship initiatives promoting responsible antimicrobial use.
Veterinary Oversight and Governance	Veterinary supervision, prescription requirements, professional guidance, and governance mechanisms related to antimicrobial use.
Responsible Use Practices	Practices intended to support prudent antimicrobial use, reduce unnecessary use, and encourage preventive animal health management approaches.
Antimicrobial Resistance Surveillance Trends	Surveillance-based indicators reflecting emerging antimicrobial resistance risks and stewardship-related trends associated with the agri-food system.
Transparency and Reporting	Public reporting, information-sharing mechanisms, and transparency related to antimicrobial stewardship activities and antimicrobial use.
Monitoring and Compliance	Oversight, verification, enforcement, and compliance mechanisms related to antimicrobial stewardship requirements and standards.
Indicator FI.4: Zoonotic Disease Mitigation	
Dimension / Sub-indicator	What it covers
Zoonotic Disease Surveillance and Monitoring	Systems and mechanisms used to monitor, detect, and report zoonotic disease risks and outbreaks across animal and food systems.
Biosecurity and Prevention Measures	Biosecurity practices, containment measures, and prevention strategies implemented across agricultural and food production environments.
Emergency Preparedness and Response	Preparedness plans, outbreak response protocols, and mitigation capacity related to zoonotic disease events.
Regulatory and Governance Frameworks	National regulations, policies, standards, and governance mechanisms related to zoonotic disease management and control.
One Health Integration	Collaboration and coordination across human health, animal health, food safety, and environmental sectors to address zoonotic disease risks.
Transparency and Reporting	Public reporting, information-sharing mechanisms, and transparency related to zoonotic disease monitoring and response activities.
Monitoring and Compliance	Oversight, verification, compliance, and enforcement mechanisms supporting zoonotic disease prevention and mitigation requirements.
Indicator FI.5: Traceability Implementation	
Dimension / Sub-indicator	What it covers
Product Identification and Tracking	Systems and practices used to identify, document, and track food products, ingredients, and inputs across the supply chain.
Supply Chain Traceability Coverage	Extent of traceability implementation across production, processing, transportation, distribution, retail, and import/export activities.
Regulatory Traceability Frameworks	National regulations, standards, and policies related to traceability requirements and implementation.
Digital Traceability Systems	Use of digital technologies, electronic records, interoperable systems, and data management tools supporting traceability.
Recall and Risk Management Capacity	Traceability mechanisms supporting product recalls, incident response, food safety investigations, and supply chain risk management.
Transparency and Accountability	Measures supporting supply chain transparency, information accessibility, verification, and stakeholder confidence.
Monitoring and Compliance	Monitoring, verification, enforcement, and compliance mechanisms related to traceability requirements and standards.

Table A3 – Economic Block, Indicators and Sub-Indicators

Indicator EC.1: National Economic Contribution	
Dimension / Sub-indicator	What it covers
Gross Domestic Product (GDP)	Contribution of the agri-food sector to national GDP
Sectoral Contribution to Manufacturing	Role of food processing within Canada's manufacturing sector
Employment	Number of jobs generated across production, processing, retail, and food service
Labour Participation	Extent of workforce engagement in the agri-food system
Trade Performance	Exports and imports of agri-food products
Trade Balance	Net contribution of the sector to Canada's trade balance
Global Market Share	Canada's share of global agri-food trade
Indicator EC.2: Financial Vibrancy & Resiliency	
Dimension / Sub-indicator	What it covers
Financial Performance	Income levels, profitability, and return on investment across the sector
Investment	Capital investment in machinery, infrastructure, and processing capacity
Debt and Financial Structure	Debt levels and financial ratios indicating financial stability
Labour Conditions	Labour shortages, vacancy rates, and workforce dynamics
Infrastructure Capacity	Physical infrastructure and capacity supporting agri-food operations
Supply Chain Resilience	Exposure to disruptions and vulnerabilities across supply chains
Operational Efficiency	Indicators of productivity and efficiency within production and processing
Indicator EC.3: Innovation	
Dimension / Sub-indicator	What it covers
Research & Development	Public and private investment in innovation and research activities
Innovation Ecosystem	Institutions, programs, and partnerships supporting innovation development
Regulatory Environment	Processes and approvals that enable or constrain innovation
Innovation Adoption	Extent to which new technologies and practices are implemented across the sector
Technology Uptake	Use of digital tools, precision agriculture, and advanced production technologies
Commercialization Capacity	Ability to translate research into market-ready solutions

Table A3 – Economic Block, Indicators and Sub-Indicators (Continued)

Indicator EC.4: Sustainable Finance	
Dimension / Sub-indicator	What it covers
Market-Based Sustainable Investment	Private capital and investment aligned with sustainability objectives
Public and NGO Funding	Government and non-government funding programs supporting sustainability
Climate-Smart Investment	Financial flows targeting climate mitigation and adaptation practices
ESG Integration	Adoption of environmental, social, and governance considerations in financing decisions
Access to Capital	Availability of financial resources for producers and companies to invest in sustainability
Financial Instruments	Use of tools such as grants, loans, incentives, and investment products
Indicator EC.5: Productivity	
Dimension / Sub-indicator	What it covers
Labour Productivity (LP)	Output (value-added) per hour worked; measures efficiency of labour use
Total Factor Productivity (TFP) – Agriculture	Output relative to combined inputs (land, labour, capital, materials) in primary agriculture
Multifactor Productivity (MFP) – Manufacturing	Efficiency of capital and labour inputs in food and beverage manufacturing
Capital Intensity / Contribution	Role of capital inputs in driving productivity improvements
Productivity Growth Rates	Changes in productivity over time (e.g., index or CAGR)
Cross-sector Productivity Comparison	Comparison between agriculture, food manufacturing, and related industries

Table A4 – Societal Well-Being Block, Indicators and Sub-Indicators

Indicator SW.1: Decent Work for People	
Dimension / Sub-indicator	What it covers
Rights at work and inclusive workplaces	Fair treatment, equity, representation, inclusion, diversity, Temporary Foreign Workers, Indigenous Peoples, women, youth, labour rights, non-discrimination
Social protection, workplace safety and well-being	Workplace injuries, fatalities, occupational health, mental health, stress, worker protection, income security proxies
Social dialogue and workforce participation	Representation, participation, engagement pathways, worker voice, industry/government dialogue mechanisms
Indicator SW.2: Food Security	
Dimension / Sub-indicator	What it covers
Food Insecurity	Measures the prevalence and severity of food insecurity among the Canadian population (e.g., marginal, moderate, severe), reflecting the lived experience and ability to consistently meet food needs.
Food Access & Affordability	Assesses the economic and physical ability to access sufficient and culturally appropriate food, including food prices, cost of food, food expenditure as a share of budgets, geographic access, and the role of policies and supports.
Indicator SW.3: Animal Care	
Dimension / Sub-indicator	What it covers
Animal Health and Welfare Outcomes	Measures the actual conditions experienced by animals, including mortality rates, incidence of disease and injury, and overall indicators of animal health and well-being. Focuses on outcome-based evidence of welfare across production systems.
Living Conditions and Housing Systems	Assesses the environments in which animals are raised, including housing types, space allowance, stocking density, and access to feed, water, and appropriate environmental conditions that support natural behaviours and reduce stress.
Handling, Transport, and Slaughter Practices	Evaluates how animals are treated across key stages of the value chain, including on-farm handling, transport conditions and duration, and slaughter practices, with a focus on minimizing stress, injury, and suffering.
Standards, Regulations, and Compliance	Assesses the presence, adoption, and enforcement of animal care frameworks, including recognized codes of practice (e.g., National Farm Animal Care Council), regulatory oversight, and compliance or audit outcomes.
Monitoring, Traceability, and Accountability Systems	Examines systems used to track and report on animal care, including traceability mechanisms, data collection processes, and transparency in reporting, supporting accountability and continuous improvement.