March 31, 2023

Agriculture and Agri-Food Canada
1341 Baseline Road
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Submitted via email: aafc.sas-sad.aac@agr.gc.ca

Re: Sustainable Agriculture Strategy Discussion Document

To whom it may concern,

On behalf of the Grain Growers of Canada (GGC), please find enclosed our submission regarding your department's proposed Sustainable Agriculture Strategy (SAS). GGC has been actively engaged in the SAS since it was announced in December 2022. As a member of the SAS Advisory Committee (SAS-AC), our organization has appreciated the opportunities provided by government to consult on the SAS.

As the national voice for Canada's grain farmers, GGC represents over 65,000 producers through our 14 national, provincial and regional grower groups. Our members are trade oriented, sustainable and innovative. As a farmer-driven association for the grains industry, GGC advocates for federal policy that supports the competitiveness and profitability of grain growers across Canada.

Crop production in Canada accounted for $26.3 billion in 2021, equivalent to approximately 1.6% of Canada's GDP. Canada is also one of the world's biggest producers and exporters of grain, with exports worth $24.5 billion in 2021. The role of Canadian grain in ensuring global food security cannot be understated.

Canadian farmers are leaders in sustainable global agriculture production, having sustainably intensified production through continuous improvement in crop genetics, crop protection products, and the adoption of beneficial management practices (BMPs) on farms. These ongoing improvements have collectively allowed us to reduce our emissions while increasing our production to feed a growing world population that relies on our high-quality grains, pulses and oilseeds.

Given that farmers play an important role in feeding and fueling our nation and the world, economic sustainability must be at the forefront of the SAS. We appreciate the government's acknowledgement that the SAS must be undertaken with economic considerations in mind but stress that the livelihood of farm families must be at the centre of all discussions regarding the sustainability of the agriculture sector.

Canadian grain farmers are committed to sustainable agriculture and finding new and better ways of growing more food with fewer inputs and less energy. Grain farmers know best what is possible on-farm and must be leaders in providing practical solutions that make sense for farmers and government. This extensive knowledge positions grain growers to lead the transition required to carry the industry on the journey toward Net Zero. With the right resources, policy and regulatory support, and innovative research, grain growers can play a significant role in helping Canada achieve Net Zero by 2050.

To that end, in 2022, GGC launched the development of the *Road to 2050 for Canada's Grain Sector*. This initiative is intended to guide government programming and policy development towards enabling the Canadian grain sector to sustainably intensify production to feed a growing world population while reducing carbon emissions and ensuring the long-term economic prosperity of grain farms in Canada.

We plan to unveil the full report in the coming weeks and discuss our findings and recommendations with government in the months ahead.

In the meantime, following up on the earlier engagement opportunities and the discussion document itself, we would like to share our feedback on the SAS and recommendations for how to best proceed.

1.0 Introduction

The world is looking to Canadian agriculture for assurances that our industry will be able to maintain and expand its current production level while ensuring high-quality and sustainable crops. As such, the proposed Sustainable Agriculture Strategy (SAS) must take a holistic approach that balances environmental, economic, and social considerations.

Farmers and the broader food industry have played a crucial role in establishing Canada's positive reputation as a reliable and consistent producer of high-quality, nutritious products. The SAS must recognize and build upon the efforts already taken to strengthen this brand. With a strong foundation in place, Canada is well-positioned to continue improving. Still, it's important to acknowledge and celebrate the contributions of those who have worked hard to establish Canada's reputation in the first place.

While reducing emissions is an important goal, it should not be pursued at the expense of unintended consequences in other areas of agriculture. For instance, political interference in science-based regulatory decisions can lead to the loss of vital pest management tools for farmers, resulting in unintended consequences on production and emissions. The advancements in carbon sequestration achieved through minimal till practices in Western Canada, for example, directly resulted from improvements in crop protection products.

The SAS must be farmer-focused, informed by scientific rigour, and practice-based. Government's ambitions for the SAS must be matched by new investment and enabling regulations for the sector. Further sustainability gains in Canadian agriculture must balance environmental performance with economic and social considerations. In addition, understanding the regional variations within Canada's agriculture industry is also critical for success, and the SAS must consider the unique landscape and practices of different regions.

2.0 Economic Sustainability

We appreciate that AAFC has recognized the importance of economic considerations in the SAS. However, the SAS must prioritize yield and food security for Canada and the world while safeguarding farmers against financial risks that could jeopardize their businesses. Failing to do so could result in dire economic and social consequences for the country and its people, as well as a potential carbon leakage if grain production shifts to jurisdictions with higher carbon footprints, leading to a global increase in GHG emissions. Given the global nature of climate change, Canada should be ramping up our production to displace it from regions with lower environmental standards rather than the other way around. The SAS must ensure that economic and environmental considerations work together in synergy, not in opposition, for a sustainable and prosperous future.

While it is essential to note the importance of economic considerations, to meet the ambition of the SAS's goals, the government will need to undertake new and substantial investments in monitoring for and generating new data. Several priority areas of the SAS, including soil health, adaptation and resilience, and biodiversity, are areas of academic study in agriculture which are either still developing in Canada or underfunded. Goals related to these priority areas should not move forward without proper academic grounding and related data.

In implementing this proposal, our industry will look to accomplish these goals that keep us economically viable. Examining and building out the economic considerations associated with the SAS is essential as government moves forward with this proposal.

To effectively manage the inherent uncertainty of grain production, farmers need reliable and predictable business risk management (BRM) programming that mitigates and protects against production risk. BRM programming shouldn't be made to be cross-compliant with environmental or sustainability goals, and BRM programs should be used as they are intended– as production risk management tools.

3.0 Innovation

The grain sector faces a unique challenge: with 65,000 grain growers across Canada, unlike some sectors, no single BMP can help reduce emissions. The diversity of soil types, climatic conditions, and moisture levels means no one-size-fits-all solution exists.

For the oil and gas sector, their best silver bullet is carbon capture utilization and storage (CCUS). The closest thing our sector has to something with that same level of potential is the advancement of gene editing technologies, which we were pleased to see mentioned within the strategy.

Selective plant breeding or genetic engineering to enhance characteristics that reduce inputs is our most significant generational advancement to help ensure we increase our production while reducing our emissions profile as a sector. This could include developing nitrogen-fixing plants, larger root development, and/or pest resistance. Plants that are non-traditionally nitrogen-fixers would then be able to produce their own nitrogen and therefore need fewer fertilizer inputs. Plants with larger root systems will be able to obtain nutrients and moisture deeper in the soil, thus reducing the need for inputs or irrigation. Pest-resistant plant breeds will need fewer pest control inputs, while plants bred to optimize harvesting (designed for the right height and reduce lodging) increase yield potential, thus reducing the waste of inputs and energy. Breeding plants to tolerate changing climate stresses can also improve yields. This will become critical for Canadian farmers to continue supplying the global market with high environmental standards.

Supporting advances in conventional and new plant breeding techniques is crucial to the growth and sustainability of the Canadian agriculture sector. However, we still await the Canadian Food Inspection Agency's announcement on its guidance on Plants with Novel Traits. Without a predictable, risk-based regulatory pathway, Canada is falling behind our global competitors like the United States, Australia, New Zealand, Japan, Argentina, Brazil, Paraguay, Chile, Philippines and India, who have all completed their guidance updates and are benefiting from increases in investment and innovation as a result.

It's time for the federal government to prioritize good policy over politics. We urge the government to allow CFIA to release the regulatory guidance regarding Plants with Novel Traits (PNTs) immediately, aligning with the guidance already provided by Health Canada and our global competitors. This is in keeping with the government's goals and priorities, including the Guelph Statement agreement between the federal government and federal, provincial, and territorial partners, where "accelerate the development and adoption of new technologies" was highlighted, alongside "reducing red tape." Let's make sure Canada's agriculture sector remains competitive and sustainable on the global stage.

Grain farmers can only achieve net zero with better plant varieties and crop inputs. The government must ensure access to these tools and defend them as safe and essential to emissions reduction and sustainable grain production.

Pesticide approvals must be based on science and risk-based decision-making. Real-world observations must be given priority over modelling. Agronomic factors (e.g., disease pressures, alternatives, etc.) must be acknowledged, understood and reflected in decision-making at the PMRA.

Ultimately, sustainable agriculture policies must enable and facilitate action, not prescribe it or stifle innovation. Rather than predetermining outcomes and what farmers should do, the government should work with producers to set a target and support growers and the value chain as they develop a plan to achieve it.

4.0 Research Priorities

To succeed, our industry needs more government investment in plant breeding and agronomy research. Those research priorities should be driven by farmers who spend millions of dollars a year through various crop commissions on research. The fact that AAFC recently shifted policy priorities within the Science Strategy and several Sustainable Canadian Agriculture Partnership programs set a concerning precedent.

The SAS cannot be funded by re-assigning, reallocating or re-tooling existing programs and budgets. For the SAS and our industry to become more resilient and ultimately continue to succeed, government must understand that farm groups have a much better understanding of where investments should flow and must be the arbiter of how to allocate that research funding to best enable success for farmers.

Sustainability cannot be measured in 5-year timeframes, so long-term strategic investments need to be considered, regardless of the current government's policies. To do that, government must and should engage with farmers and industry stakeholders to determine where the entire industry sees itself 5, 10, and 15 years down the road and ask what strategic investments need to be made to get there.

Canada must be a world leader in grain innovation. As part of the SAS, Canada should set a target to be the largest investor in grain-related research per GDP. In order to achieve that, government will need to make serious efforts towards improving our nation's regulatory and investment climate to encourage greater private investment.

5.0 Market-Based Solutions
While considering policy mechanisms to accomplish the SAS, it should be noted that GCC supports market-based solutions whenever possible.

Several of the goals of the SAS related to adaptation and resilience, biodiversity, mitigation, and soil health directly align with market-based solutions. Undertaking new research to value associated practices and outcomes will strengthen the imperative of the SAS. The Canadian agriculture industry is built around commodity markets, and aligning the SAS with successful and established market dynamics would greatly assist its development and goals.

The development of federal offset protocols focused on fertilizer emissions reductions, enhanced soil organic carbon, wetlands, and biodiversity, available for use and credit within the federal offset market, and other offset markets, will assist the aims of the SAS. Our organization is prepared to support and assist with developing these initiatives.

6.0 Knowledge and Technology Transfer
There is a general lack of resources, knowledgeable labour, and agronomists available to assist with knowledge transfer, especially as new technology and practices are introduced at an increasingly rapid pace. There is an opportunity for the SAS to support not only the development but also the introduction of new technology (e.g., machinery, mapping, and plant breeding innovations) that will be required to further improve the agriculture sector's environmental sustainability by focusing on knowledge transfer and an overall increase in learning opportunities for farm businesses.

Ensuring the SAS stresses the importance of knowledge transfer will assist farmers with understanding how to use new technologies to their full potential and ensure that new practices and technologies are fully leveraged. In addition, this focus area must be flexible as this Strategy is meant to be evergreen, taking the agriculture sector out to 2050. Therefore, there will be technologies we are not even aware of now. This means flexibility will be key in funding and support as new technologies become available and must be mobilized on the landscape at likely accelerated timelines.

7.0 Improved Data Collection, Coordination and Protection
To succeed, improved data collection, modelling and coordination are necessary for the SAS and its encompassing goals, targets, and outcomes. Without a baseline starting point from which to measure improvements, it is difficult to improve farmer acceptance and willingness to participate in the SAS. The SAS, acting as an overarching umbrella strategy to house all agriculture sector-related data and programs, will allow for a more common understanding of the data gaps and improvements needed in the sector. The SAS should focus on using newer, more robust data sources and methods to measure meaningful progress toward sustainable production appropriately.

The regionality of Canadian agriculture and the diverse farm size, agronomic conditions and geographies throughout our country make it difficult to develop a one-size-fits-all approach and complicates data aggregation stressing the need for access to more robust public and private data. The timeliness of existing data, the lack of disaggregation by region and crop type, or missing data altogether are significant barriers to setting metrics and realizing progress.

For example, the fertilizer emissions reduction target has been set without sufficient data to measure it. Over-reliance on fertilizer use rates (linked primarily to sales data) and models that do not consider on-farm improvements, such as 4R-related practices, despite being the key practices recommended to reduce emissions, results in an overly simplistic picture of related emissions. Engaging farmers in targets, goals, and outcomes becomes extremely difficult when they can't manage what isn't currently being measured. Any outcomes associated with the goals of the SAS must consider farm realities and ensure that methods to improve environmental sustainability are being accurately accounted for in the data to ensure improvements can be recognized appropriately.

Increased funding is needed to improve landscape-level data, capture the benefits of on-farm practices accurately, and improve data coordination across the work that many researchers are completing throughout the country. Coordinating the projects underway will provide a better understanding of data gaps and assist with knowledge mobilization from the research level to the farm gate.

In addition, current data sets, indexes, metrics platforms, such as the Canadian Roundtable for Sustainable Crops Metrics Platform, Fertilizer Use Survey, The National Index on Agri-Food Performance, and other federal and provincial data sources should be leveraged to ensure work is not duplicated when legitimate sources have collected the data already. Improving data collection and coordination should not come at the expense of farmer time by significantly increasing their administrative burden.

Finally, data protection is key for improving data availability, collection, and coordination. As data collection through technology, surveys, and other methods is increasing, a significant focus must be on protecting and safeguarding personal information and ensuring that data will only be used for its intended purpose.

8.0 Carbon Intensities

It is a fact that carbon is emitted when producing crops that feed Canadians and the world. These emissions can be reduced, but they cannot be eliminated. Accepting these truths, one must ask what level of emissions reductions within the current production model is reasonable and achievable.

The robust study of emissions associated with crop production is guided by ISO standards for Lifecycle Analysis (LCA). Considering LCA studies that do not follow ISO standards when building a SAS does a disservice to Canadian agriculture and public policy.

When looking to reduce emissions inherent in Canada's world-class cropping systems, it is important to consider our existing competitive advantage regarding emissions intensity and ensure that the SAS's work is focused on areas that will yield meaningful sustainability outcomes.

Lowering emissions will increase the Canadian advantage for the sector as lower emission intensity means the world benefits when Canadian grain replaces grain from other higher emission intensity producing countries.

9.0 Global Food Security

In the last year, global food insecurity has increased at rates not seen in a century. Countries around the world are looking to Canada as a safe, reliable supplier of staple foods such as cereals, pulses and oilseeds. Much of the world relies on our commodities as their primary source of protein. Nitrogen is the primary source of plant protein, and with nitrogen, Canadian farmers can maintain the protein content and yield of their crops. The Canadian agriculture industry is ready to help feed the world. To continue this work, our industry needs continued access to nitrogen fertilizers and new technologies that enable our sector to grow abundant and nutritious food sources for the world.

Conclusion

The Canadian agriculture sector has welcomed the government's new goal of $95 billion in agriculture and agri-food exports by 2028. In order to continue feeding the world and exporting high-protein, safe, reliable staple foods, our industry requires a SAS that highlights and enables our capacity to succeed.

Canada's grain farmers are proud of their ever-improving sustainability record and remain committed to lowering emissions. Government must understand that there is no one-size-fits-all solution and commit to working with farmers across the nation to tailor programs and policies that make agronomic and economic sense.

Government must consider the diverse nature of our sector and the unforeseen impacts of policies and programs. A whole of government approach is required to ensure we protect the viability of the family farm and the rural communities they support.

Thank you for considering this submission on behalf of the Grain Growers of Canada. Canadian agriculture and the members we represent are important contributors to the Canadian economy. We are committed to working with you to ensure our sector remains competitive while making meaningful contributions to emissions reduction efforts.

Please contact us if you require additional information.

Sincerely,

Andre Harpe, Chair
Grain Growers of Canada