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RE: 2023 Biodiversity Strategy for Canada

Keystone Agricultural Producers (KAP) is Manitoba's general farm policy organization, providing a unified voice for farmers on issues that affect agriculture. KAP represents and promotes the interests of all Manitoba farmers. KAP is pleased to provide comments to Environment and Climate Change Canada regarding the 2030 biodiversity strategy.

Biodiversity is an important topic for Manitoba farmers. As owners of large portions of private land farmers play an important role in biodiversity in the province. Thus, farmers are key stakeholders in influencing the success and outcomes of a biodiversity strategy. Success within the biodiversity strategy for farmers will largely be determined by the pathway taken toward specific policy goals. This means that success is more likely amongst farmers when an incentive pathway is followed along with tailoring programs to meet the needs of farmers. Consultation is another key pathway that will ensure the needs of farmers are understood when developing a biodiversity strategy. Lastly, the pathway towards a biodiversity strategy must emphasize measures that support on-farm productivity rather than hindering it. This means government must consider the economic, social and environmental aspects when developing and implementing the biodiversity strategy.

What are the key features of a successful 2030 Biodiversity Strategy?

- Goals and targets in a 2030 Biodiversity Strategy must be achievable and be science- and outcome-based.
- We are committed to engaging with Government of Canada in the development of a strategy that improves biodiversity without jeopardizing agriculture's value chain's productive capacity.
- Robust science and evidence are critical to translating high level international targets to the farm level and to ensuring farmers have the tools needed to respond to the complex challenges facing our climate, biodiversity and food systems.
- Government should consider the concept of biodiversity within an agroecosystem. There needs to be sufficient data to draft agroecosystem baseline decisions that are agreeable amongst farmers.
- A biodiversity strategy must also recognize the complex and uncertain backdrop of increased food insecurity, disruptive geopolitics, and changing climate.
- Any goals and targets in Canada's strategy should be based on scientific evidence and data to accurately identify threats to biodiversity, while avoiding both unintended consequences and misrepresentation of modern agriculture.
- A strategy must also consider that Canadian farmers produce more food than before on the same available land, thereby reducing the pressure on land use and change, which is the primary driver of biodiversity loss. More food produced from the same land in Canada also reduces pressures to clear more land for food production around the world, which is of particular importance for ecosystems of high ecological integrity globally.

- A robust biodiversity strategy must also consider land fragmentation including urban sprawl and other land use changes.

What are the most significant challenges and opportunities to achieving the Kunming-Montreal Global Biodiversity Framework targets in Canada? What successful initiatives could we build upon?

- While the Global Biodiversity Framework's target 7 to reduce pollution is laudable, Canada's response must be grounded in science and evidence, fully consider existing beneficial management practices, and be inclusive of modern agriculture.
- Target seven's numerical reductions in excess nutrients and pesticides by 50% are arbitrary and lack robust evidence in an agriculture context. If pursued, the potential for unintended consequences is high, and complying with these targets would require the removal of the tools that are allowing Canadian farmers to further improve sustainability.
- Language suggesting a blanket pesticide reduction does not take into consideration the role pesticides and nutrients play in agriculture production and food security including their different uses, risk patterns, stewardship practices, and interactions with the environment, as well as the significant differences in pest pressures and nutrient needs depending on geographical location.
- While the global biodiversity framework provides an opportunity to strengthen the fundamental role biodiversity plays globally, there are significant risks to arbitrary reduction targets or prescriptive language without a complete understanding of the underlying system.
- Any targets and goals should focus on outcomes, not practices. They should be achievable, based on science, and address important data gaps before implementation is considered.
- Outcome-based targets provide the flexibility for adoption of practices that best reflect individual circumstances, farm and business sizes, production systems and practices.
- The strategy should consider and build on Canada's existing sustainability practices including those targeted at biodiversity. Prescriptive targets developed through international consensus can also fail to recognize where countries like Canada have already taken bold steps to advancing sustainable agriculture and adopting innovative practices.

Are there targets where Canada is already making good progress and others where Canada should focus more attention?

- Canadian agriculture, particularly conventional agriculture, is highly sustainable on a global scale (and always improving, aided by innovation).
- Advancements in biotechnology and pesticides have resulted in increased food production on fewer acres thereby reducing the need for land conversion.
- Agriculture has an essential role in ensuring healthy biodiversity, yet environmental policy often does not seem to consider agriculture and policies often seem to hamper a sector committed to maintaining sustainable agriculture and food security.
- Good progress is already being made with the majority of land under zero-till in Canada which has resulted in higher biodiversity values compared to conventional tillage.
- Biodiversity conservation is a main pillar of farming. Canadian farmers depend on the natural landscape and its biodiversity for their livelihoods and employ various practices to safeguard and improve biodiversity at the farm and even field level.

- Food production depends on ecosystem services provided by biodiversity, such as healthy air, water and climate, soil health, pollination and reduction of disease risk and protection from natural disasters.
- The Habitat Winter Wheat eco-label is an example of good progress where habitat for birds is sustained while supporting farmers and helping consumers make sustainable choices.
- There should be more focus on the risks of arbitrary, numerical targets, which may limit farmers' use of tools that are facilitating agriculture's ability to respond to the varying challenges that food systems face. A full suite of tools and various production practices is required to sustainably intensify production, advance biodiversity conservation and address climate change.

What measures should be prioritized and implemented as soon as possible to ensure we meet the 2030 targets and are on track to reach the longer-term 2050 goals?

- A 2030 Biodiversity Strategy should acknowledge that there's no single approach to supporting biodiversity in agriculture, and instead prioritize and empower famers to employ a diversity of practices best suited to their individual farms, including sustainable intensification.
- There are many synergies in advancing both biodiverse ecosystems and Canada's agricultural production capacity through improved soil health, carbon sequestration and other agricultural nature-based solutions, and increased resilience in the face of extreme weather events.
- Farmers are already undertaking a wide range of practices that are aligned with biodiversity objectives. Farmers are committed to the responsible use of crop nutrients and pesticides and to mitigating against adverse impacts on biodiversity and ecosystem functions. Targets based on practices are simplistic and often fail to recognize the many diverse agricultural practices that exist, and the full benefits of innovation applied across the agriculture sector.
- Farmers employ various biodiversity supportive practices through regular crop rotations, cover crops, buffer strips, shelter belts, and wetland/grassland management to maintain wildlife habitat and diverse species across Canadian farmland.
- Widespread adoption of no-till and conservation tillage practices promote carbon sequestration and maintain soil biodiversity; beneficial management practices protect the mutually beneficial relationship between crop and pollinators like bees; on-farm biosafety practices aim to prevent the introduction of plant pests and invasive species and strong Species at Risk legislation guards against extinction.
- A large and growing proportion of farmers also practice elements of integrated pest management (IPM), which is defined by the FAO as "the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations. It combines biological, chemical, physical and crop specific (cultural) management strategies and practices to grow healthy crops and minimize the use of pesticides, reducing or minimizing risks posed by pesticides to human health and the environment for sustainable pest management."
- Farmers employ various best management practices to ensure efficient use and to minimize loss such as 4R Nutrient Stewardship to improve fertilizer efficiency; precision agriculture and variable rate technology to reduce the crop inputs needed; and water monitoring programs to protect our waterways and diverse species within them.

No target is an island: What overarching tools and solutions are critical for making progress across multiple targets?

- A 2030 Biodiversity Strategy must have a strong and ongoing agricultural voice informing the development and implementation of plans, in conjunction with other policies on ecosystem services.
- An enabling mechanism would be to more broadly consider agriculture in government policy. At times, environmental and agriculture policy seem to be at odds, but in fact they could and should be complementary and find synergies to benefit the environment.
- It is critical to have constant interaction with agriculture stakeholders to understand and monitor the practices that influence biodiversity.
- A successful 2030 Biodiversity Strategy is also one that consults broadly with the agriculture sector but also within different Government departments and agencies to ensure policy coherence and reduce any duplicative efforts.

What additional knowledge and enabling mechanisms (e.g., networks, policies) are critical to inform implementation decision-making at all levels?

- Among the most significant challenges to achieving improved biodiversity outcomes is current knowledge and data gaps.
- Addressing these gaps will help improve our knowledge of the connections between modern agriculture and biodiversity, supporting targeted initiatives or building upon successful ones. Given the need for more data, it is hard to assess how well Canada is doing in a particular target.
- While some progress has been shown through the Government of Canada AAFC's Agri-environmental indicators (AEIs), there are challenges in the effectiveness of AEIs in measuring key environmental conditions, risks, and changes resulting from agriculture practices.
- The current limitations in establishing direct cause and effect also limit the meaningful actions based on causality rather than on correlations or assumptions, and unfortunately lead to the misrepresentation of modern agriculture as being counter to biodiversity conservation.
- Baseline measurements to assess current levels of biodiversity are still lacking across many animals and insects. Invertebrate species and amphibians are two examples where more public investment needs to be done to establish baselines in order to measure improvements.

In drafting the 2030 Biodiversity Strategy, what individuals', communities', or organizations' perspectives, knowledge, and skills should be meaningfully amplified to make progress on reducing threats to biodiversity?

- The development of a strategy has the potential to improve engagement with non-agriculture stakeholders on modern agriculture's capacity as a provider of nature-based solutions while countering prescriptive practices.
- The creation of a strategy provides the opportunity to advance sustainable agriculture and strengthen its close link with biodiversity, but if not implemented correctly, certain GBF targets could have a detrimental impact on our sector's contributions to domestic and global sustainability goals.

What does success look like?

- A biodiversity strategy should ensure that all members of the agriculture value chain are part of the conversation as there are many leading experts in the development and adoption of technologies which have proven to bring benefits for the environment.
- Success should be a win-win for the environment, agriculture, and society, where progress is made without compromising food production and other human needs.
- A clear example of this is the Canadian success story of adopting no-till or minimum tillage practices in many parts of the country. It is well-documented that no-till farming practices in Canada sequester several megatonnes of CO2 equivalent per year, but that this technology-based environmental accomplishment requires the use of nonselective herbicides to control weeds in place of tillage.
- If pesticide reduction targets were to ban or curtail the use of those herbicides, sequestered carbon from the millions of acres under zero-till could be released at scale. Reverting to tillage for weed control would discontinue each year's new carbon sequestered, as well as releasing carbon sequestered over zero-till's 25+ year success story.
- Other technological advancements in crop protection product applications include green on brown spray technology, pulse width modulation and other pesticide reduction innovations.
- No-till adoption has also resulted in improved soil health and lower GHGs emissions from tilling. Stories like this should be amplified to showcase the benefits of how technology, biodiversity and agriculture can co-exist and complement each other.

Thank you for the opportunity to provide feedback on the 2030 Biodiversity Strategy for Canada. If you have any questions about this submission, please contact KAP Policy Manager, Neil Van Overloop, at neil.vanoverloop@kap.ca.

Sincerely,

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