SASKATCHEWAN CHAMBER of COMMERCE

Policy Resolution:

Fertilizer Emission Reduction Target

Issue

In December 2020, the federal government set a voluntary national fertilizer emissions reduction target of 30% below 2020 levels by 2030. Specifically, the government is focused on nitrous oxide (N_2O) emission reductions. The target applies to both direct (following fertilizer application) and indirect (from nitrogen leached from fields and volatilized to the atmosphere as ammonia) emissions from the application of nitrogen fertilizer. It does not address emissions associated with the manufacturing of fertilizers.

Canadian farmers are already among the most sustainable growers in the world; therefore, they have less room to easily lower fertilizer emissions without compromising food production. Since announcing the goal to reduce GHG emissions from fertilizer, significant concerns have been expressed about the impact it will have on Saskatchewan farm profitability and global food security. Additionally, while currently a voluntary goal, concerns also exist about the potential of mandating this reduction in the future.

Background

Saskatchewan's crop production is not only important to Saskatchewan's economy but also crucial to global food supply. Recognizing this, in addition to its goal to reduce GHG emissions from fertilizer, the federal, provincial, and territorial Ministers of Agriculture recently set targets for $250 billion in sector revenues and $95 billion in sector export revenues by 2028.[1] The province of Saskatchewan also has its own goal for crop production. The Saskatchewan Plan for Growth aims to increase crop production to 45 million metric tonnes. The increased use of fertilizer plays a significant role in increased crop production capacity.

The federal government's goal is also challenged by the diverse nature of crop production. A one size fits all plan is not feasible, within Saskatchewan alone there are multiple growing zones with specific considerations. In fact, each field offers a unique set of challenges that change from one year to the next. Fertilizer application is impacted by the changing natural variables of soil condition, and moisture volume.

Beyond the environmental considerations impacting fertilizer application decisions, the rate of change in agriculture practices has been significant. Major advancements in crop genetics,

[1] AAFC, 2022. Annual Meeting of Federal, Provincial and Territorial Ministers of Agriculture. https://www.canada.ca/en/agriculture-agri-food/news/2022/07/annual-meeting-of-federalprovincial-and-territorial-ministers-of-agriculture.html

equipment technology to mitigate waste, and best management practices (such as soil sampling, crop rotation and the 4Rs[2]) have materially changed the environmental impact of crop production. The federal government is basing its GHG emissions data modelling on provincial sales data which does not translate directly into emissions as all these variables are not accounted for. Unfortunately, very little data exists for Canada's on-farm practice to allow for correct modelling and proper evaluation of fertilizer reduction impacts.

Recommendations

The Saskatchewan Chamber of Commerce urges the Government of Canada to balance GHG emission reductions goals with farm profitability, economic growth, and global food security.

Specifically, the Chamber recommendations:

1) Avoid making the fertilizer GHG emission reduction goal mandatory
   Under current conditions, mandating the fertilizer GHG emission reduction goal would likely amount to an outright reduction in fertilizer use by farmers. This would lower both crop yields and farm profitability, impacting the ability for farm operations to make improvements in the future.

2) Improved data collection
   There is very little data regarding actual practices on Canadian farms which has been dramatically changing in recent years. The federal government needs to develop a data collection program specific to understanding emissions from fertilizer application and the impact best management practices have on mitigating emissions in each production region of Canada.

[2] 4Rs – The right fertilizer at the right rate in the right place at the right time.