CANADA

Panel Statement

UNFCCC – SBSTA 44
In-session workshop on:
Identification and assessment of agricultural practices and technologies to enhance productivity in a sustainable manner, food security and resilience, considering the differences in agroecological zones and farming systems, such as different grassland and cropland practices and systems

May 23, 2016 – 10:00-13:00
Bonn, Germany

Question 1: What experience does your country have with the identification and assessment of agricultural practices and technologies to enhance productivity in a sustainable manner, food security and resilience?

Thank you very much Mr. Co-Facilitator.

Mr. Guest Speaker from the FAO, Fellow Panelists, Colleagues and Observers,

Good morning.

Canada welcomes the opportunity to share some of its experience with the identification and assessment of agricultural practices and technologies to enhance productivity, food security and resilience in a sustainable manner.

Agricultural greenhouse gas emissions account for 8 percent of Canada's national total emissions, and have been relatively stable at around 60 million tonnes of carbon dioxide equivalent since the year 2000.

At the same time, fifteen years ago, our agricultural soils have started to turn from a net source of carbon to a net sink, removing carbon from the atmosphere now at a rate of 11 million tonnes a year.[1]

In other words, with emissions remaining relatively stable and removals increasing, net agricultural emissions have been slightly declining over the last fifteen years in Canada.

The key factor that has allowed for the stabilization of agricultural emissions and the enhancement of our carbon sink on agricultural landscapes is the adoption by Canadian farmers of practices and technologies that have improved productivity in both cropping and livestock systems.

Let me briefly discuss in a bit more details what has happened here.

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[1] For the most recent estimates of emissions and removals for Canada, see the *National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada* here.

Agricultural soils have turned from source to sink because better seeds, improved fertilizers and pesticides, changes in machinery and farm equipment, and more options to include in crop rotations have allowed Canadian farmers to reduce reliance on summer fallow, enrich the overall crop mix with perennials and more diversified rotations, and move away from conventional tillage.

Currently, around 80 percent of all land prepared for seeding in Canada is under some form of conservation tillage, no-till or zero-tillage being the most predominant tillage regime in use.

In the beef cattle sector, Canadian farmers have made significant improvements in feeding and breeding practices. As a result, cattle reach slaughter weight sooner, and spend fewer days eating, ruminating, producing methane and generating manure.

In 2011, Canada produced 32 percent more beef than in 1981. And producing the same amount of beef in 2011 required 29 percent less breeding stock, 27 percent fewer slaughter cattle and 24 percent less land. These gains in productivity have also translated into 15 percent less greenhouse gases being emitted from beef cattle production than in 1981.[2]

Similar declining emission intensities (i.e., lower emissions per unit of product) have also been observed and measured for dairy and swine production.[3]

In that context, greenhouse gas emissions associated with agricultural production can be seen as being indicative of inefficiencies, indicative of feed not being converted into meat or nutrients not being used by crops.

It has been Canada's experience that clear synergies between enhanced agricultural productivity and mitigation of greenhouse gases do exist, that they provide overall net benefits to the agriculture sector and the whole economy, and that efforts to foster them should therefore be maintained.

It has also been our experience that focusing on enhancing agricultural productivity is contributing to build resilience in the Canadian agriculture sector.

Today and going forward, innovation will be fundamental to the sustainable growth of the sector, as we will have to produce more with existing resources.

Innovation and international trade will both be vital to food security.

As the world's fifth largest agricultural exporter, Canada recognizes that growth in production will have to be decoupled from corresponding increase in risk to agricultural resources and the surrounding environment. This decoupling will require the continuing improvement, development and adoption of innovative technologies and management practices.

Canada is thus committed to helping the agriculture sector adjust to climate change by addressing water and soil conservation and supporting investments in clean and sustainable technology and processes.[4]

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[2] See the complete research paper here.

[3] See *Agri-Environmental Indicators Report #3* here for further details.

[4] See Agriculture and Agri-Food Canada's Agro-Ecosystem Productivity and Health Science Strategy here for further details.

As such, the recent renewal of the Agricultural Greenhouse Gases Program (AGGP), which supports the development and transfer of greenhouse gas reduction opportunities for the agriculture sector, is one example of current efforts to further support practice change.[5]

Sustainable agriculture contributes to food security by safeguarding the land's productive capacity.

Fifteen years after COP 7 in Marrakech, where Canada was instrumental in the inclusion of agricultural soils as carbon sinks, and few months from another session in Morocco, there is wider recognition of the role that agriculture can play to help address climate change.

Canada looks forward to the discussion during this in-session workshop with the hope that this will help build momentum and understanding toward a more formal program of work on agriculture under the SBSTA.

Thank you,

[5] Details on the Agricultural Greenhouse Gases Program can be found here.