



Fact Sheet on Climate Change and Canada's Meat Industry

Background:

As a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), Canada is obliged to submit an inventory of its greenhouse gas (GHG) emissions on an annual basis. Environment Canada, in consultation with a range of stakeholders, is responsible for preparing Canada's official national inventory.

Using an internationally agreed-upon format, Canada's Greenhouse Gas Inventory monitors six gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). It also provides an analysis of the factors underlying the trends in emissions since 1990. Emissions and removals are grouped into six sectors: Energy; Industrial Processes; Solvent and Other Product Use; Agriculture; Land Use, Land-Use Change and Forestry and Waste.

In 2006 the Food and Agriculture Organization of the United Nations published a report entitled "Livestock's Long Shadow, Environmental Issues and Options". The report concluded that the global livestock sector is a major player, responsible for 18 percent of greenhouse gas emissions measured in CO₂ equivalent - a higher share than global transport. The largest share of this derives from land-use changes - especially deforestation - caused by expansion of pastures and arable land for feed crops.

Canadian Animal Agriculture's Role in Green House Gas Emissions:

This United Nations Report of 2006 does not represent the reality in of what happens in Canada. According to Environment Canada's November 2008 Report on Green House Gas Emissions, Canada's animal production industry was responsible for the production of 42.2 metric tonnes of carbon dioxide CO₂ of the total Canadian production of 721 metric tonnes. That means that animal production in Canada represents only 5.9% of the total Green House Gas production in Canada and significantly less than the 159 metric tonnes from the transportation section in Canada that represents 22% of the total.

Canada's Agriculture Land Production:

Unlike the claims made in the 2006 United Nations Report especially deforestation caused by expansion of pastures and arable land for feed crops is not happening in Canada. According to Statistics Canada's 2006 Agriculture Census, the total agricultural land area reported to the census was stable between the two censuses.

(2001 versus 2006), at 167 million acres. Agriculture land in Canada represents just 7.3 percent of our total land area. As farm numbers dropped from 246,923 in 2001 to 229,373 in 2006, the average size of a Canadian farm has increased from 676 acres to 728 acres.

Animals in Canada

According to the Canadian Museum of Nature, between 30 and 70 million bison inhabited North America on the Great Plains before the arrival of the Europeans. Bison were ruminants, just like the cattle now on farms in Canada.

The 2006 Census of Agriculture reported that there were 15.7 million cattle, 15 million pigs, 1.1 million sheep and 125 million chickens on Canadian farms. In 2009 Statistics Canada reports those numbers had fallen to 13.2 million cattle and 12.2 million pigs.

Meat in the Human Diet

Meat has been a part of the human diet for thousands of years. Meat drying and preservation allowed humans to survive in many continents over the years. Meat is often the centre of plate focus of a meal. Meat is delicious and highly regarded by most people in the world. Farmers around the world have relied on raising ruminants such as cattle, sheep and goats to convert grasses -which humans cannot digest- to meat and milk that humans can thrive on.

Canada's new Food Guide, released in 2006, continues to recognize meat in the diet. The Food Guide recommends 1 to 3 servings of Meat & Alternatives per day (75 grams per serving). Meat combined with the recommended daily minimum servings of vegetables and fruit is an essential part of our diet. The World Health Organization recognizes meat as an important part of a balanced diet.

Canadian meat is lean and nutritious. Several cuts of beef and pork meet the criteria of the Heart and Stroke Foundation of Canada's Health Check™ program. Meat is nutrient rich with 14 essential nutrients making it an important part of a balanced diet. Meat is an excellent source of protein, zinc, vitamin B₁₂ and selenium. The Atkins and South Beach Diets both focus on meat consumption as a critical component of weight loss and control.

What is Canada's animal agriculture and meat industry doing about Climate Change?

The number of dairy cattle in Canada has fallen from over 2 million in 1976 to just over 996,000 in 2006. During that time milk production per cow has doubled through better animal nutrition, genetics and know-how.

Feed conversion rates have also continued to improve over the years. For instance, it now takes only 1.3 kilograms of feed to get 1 kilogram of weight gain for poultry; 2.5 kilograms of feed to get 1 kilogram of weight gain for hogs and 6 kilograms of feed to get 1 kilogram of weight gain for cattle. Canadian hog production has improved

significantly over the years due to excellent breeding, feeding and farm management with an average of 24 weaned piglets per sow per year.

Farmers in Canada have made great strides in energy efficiency improvements on the farm, from low watt fluorescent lighting in barns, to new barn design that allows large sections of barn walls to open for natural ventilation; to computer controlled tractors with newer fuel efficient engines and tires. Major environmental improvements include new manure handling equipment that allows for direct injection into soils along with GPS computer controlled guidance systems on tractors allowing for optimal fertilizer application on fields. Farmers grow feed crops for their animals that capture CO₂ from the atmosphere.

Meat processors have added waste water treatment facilities to their operations along with energy saving equipment such as modern refrigeration equipment and heat recovery systems, high efficiency lighting; and newer fuel efficient delivery trucks.

Feeding the World

Canada has the capacity to feed many more people than our 33 million Canadians and exports meat and many other food products to over 150 countries worldwide.

According to the United Nations, from the year 1900 to the year 2000 the world population increased from 1.65 billion to 6 billion. They predict that the world's population will climb to 9 billion by the year 2050.

Canada's meat industry will continue to make improvements to the efficiencies in food production to help feed the world's hungry growing population while reducing the overall impact on our environment.