

FEEDING THE 9 BILLION SUSTAINABLY



THE FACTS

9 BILLION It is estimated that the world's population will reach 9 billion by 2050.¹

3 BILLION The growing middle class will expand by 3 billion, mostly living in urban centres.²

60% INCREASE The United Nations Food & Agriculture Organization predicts a 60% increase in demand for meat, milk & eggs by 2050.³



CANADA'S OPPORTUNITY TO FEED GROWING POPULATIONS

As Canadians, we enjoy one of the world's most abundant, diverse, safe and affordable food supplies. Our health, quality of life and longevity are thanks to a host of factors: modern health-care, safe and affordable food and water, and our stability – economically and socially. Much of this quality of life is owed to advancements in food production. Livestock production over the last 50 years, has also benefited dramatically as a result of innovation, technological development and implementation.

WHAT IS SUSTAINABILITY?

It is often described as having three interrelated components



Critics stress livestock production's need to reduce our environmental footprint, and raise food sustainably. At the same time, we must optimize animal health and sanitation; disease detection; animal nutrition; comfort; breeding and genetics; vaccination; parasite control; animal housing and productivity. Continued use of existing and new animal health products in Canada and around the world are critical components of this sustainable production.

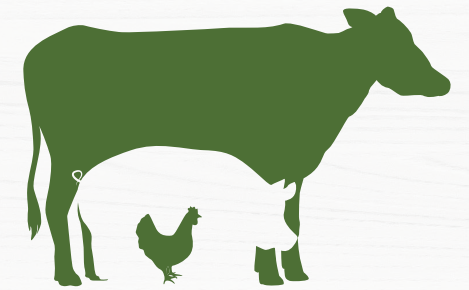
The Food and Agriculture Organization of the United Nations (FAO) reports that added farmland will help produce only 10 percent of the additional food the planet needs by 2050, and 20 percent of that food will come from increased cropping intensity.⁴ Accordingly, the FAO concludes that 70 percent of the world's additional food needs can only be produced with new and existing agricultural technologies.⁵

We believe that through the continued development and use of innovative crop protection and animal health products and technologies, a sufficient food supply can be ensured for a growing population. More food will be produced using less land, water and fossil fuels. Natural habitats will be conserved along with farmland, housing and parkland. Use of safe, and modern animal health management tools and practices will continue to contribute to sustainable agriculture while supporting animal well-being and food safety.

ANIMAL HEALTH TOOLS HELP PRESERVE NATURAL RESOURCES

With per capita meat consumption rising, global meat production has already tripled from the 1970s, and risen by 20% since 2000 alone⁶. By improving production efficiencies, for both crops and animals, less land, feed, water and fuel are required to produce our food. Animal health technologies while just one component of livestock management, provide a cumulative

health effect through disease prevention, control and treatment. The use of vaccines and animal pesticides lowers animal stress attributed to disease and pests. This combined with improved animal nutrition, comfort, housing and veterinary care all factor into improved production outcomes, animal well-being and a safe and affordable food supply.



MODERN LIVESTOCK MANAGEMENT PRACTICES REDUCE ENVIRONMENTAL IMPACT

BEEF Improvements in the way North American cattle are raised and fed have significantly reduced this sector's impact on the environment. A comparison of cattle production in 1977 and 2011 showed an increase of 13% more total beef from 30% fewer animals while yielding a reduced carbon footprint of 16%.⁷ Similarly, through improved genetics, feed, housing and the use of innovative animal health technologies (vaccines; hormones; antibiotics and production enhancers such as beta agonists) one pound of beef raised today (compared with 1977) uses 19% less feed, 33% less land, 12% less water and 9% less fossil fuels.⁸

DAIRY Despite a doubling of dairy cow productivity in the last 50 years, the industry is unable to keep pace with population growth, with 14% less milk available now per person globally, than in 1961.⁹ By embracing modern production tools and technologies, future demands can be met by increasing outputs per animal. Some estimates indicate that by using today's technologies to produce a half a glass more per cow, dairy farmers could annually save 66 million cows, 747 million tons of feed and 388 million acres of farmland — the size of Alaska and 618 billion gallons of water — the annual domestic use of Germany, France and the UK combined.¹⁰

SWINE In 1959 it took eight pigs — including breeding stock to produce 1,000 pounds of pork. Today, it takes just five pigs. And hog farmers today use 78% less land and 41% less water than they did 50 years ago.¹¹

POULTRY Due to innovative animal health techniques, a baby chick is vaccinated to prevent a number of diseases and illnesses that have the potential to be devastating to the bird's health before it is even hatched. However, the last decade of change in certain regions to egg production practices demonstrates how the removal of innovation, changing practices and social pressures have dropped global hen productivity. For decades, production increased 1% eggs/year. Since the late 1990s the productivity trend has reversed due to disease, changing practices and the removal of innovation. The decrease is 0.8 eggs per year. To compensate for these losses, demand is being met by adding hens. On this path, hen numbers will need to double to meet the anticipated demands in 2050. However, just one more egg per hen per year helps meet demand and requires 4 billion fewer hens. By using innovation, not adding hens, we would save 113 million tons of feed; 65 million acres of land and 74 billion gallons of water.¹²

The Path Forward...

Almost one billion households worldwide rely on livestock for their livelihood.¹³ With increased urbanization, this number will decrease, requiring increased outputs from fewer farmers. The time is now to make choices on how we want to grow, share and consume our food to ensure it is done in a cost effective and sustainable manner. Sustainable modern livestock production that incorporates innovation and acceptance of new technologies, can feed the growing global population.

Choice between organic and conventionally raised food is a luxury we as Canadians have. However, only through the efficiencies of modern production practices will we meet our environmental, social and economic commitment to ensure each of the 9 billion has sufficient protein in their diet.



*Source: For details in regards to the sources used for this document, please contact CAHI at www.cahi-icsa.ca

WE'VE ONLY GOT ONE PLANET. LET'S USE ITS RESOURCES WISELY!



WE CAN DO IT!