Going West: Why the Canadian Prairies might hold the key to feeding a hungry world

Jean Lebel

More than two decades ago, southern Manitoba rancher and federal agriculture minister Charlie Mayer returned to Canada from a United Nations meeting in Rome troubled by what he had heard.

The topic at the UN Food and Agriculture Organization (FAO) meeting was the blight of chronic malnutrition, hunger, and starvation in a world of food plenty. Like poverty, hunger is always with us.

At the time, the UN pegged the number of people facing food instability or chronic hunger at 850 million.

Mayer, from a Prairie farm background where excess production and lack of market access often drove down prices for farmers, returned with a question: how can chronic food insecurity exist in a world of plenty and surplus?
More than two decades later, not much has changed.

The FAO says the number remains at about 870 million, a slight increase over the early 1990s, albeit in a world with an additional two billion people. Still, almost one in eight people on the planet are considered affected by food insecurity, almost a quarter-century since Mayer was in Rome.

Since then, crop varieties have improved, knowledge of good soil conservation practices has advanced, and investment in agriculture has increased in some countries, although not always by enough.

Yet the problem of world hunger remains with the consequence of human misery and squandered potential, health problems, poverty, and stunted economic growth.

And the reasons remain much the same as well — war and civil strife that displaces tens of millions of people, underinvestment, bad policy choices, inadequate infrastructure or marketing systems. Increasingly in recent years, there are also concerns about the impacts of climate change on food production.

However, there also are reasons to be hopeful.

Since the world food crisis of 2008, food production has been given a higher profile and increased investment in many countries. Private and public sectors are finding new ways to work together on food security issues. Some Asian and South American countries, including Brazil, have emerged as major surplus food producers.
In Africa, the most at-risk continent, donor focus and research and development are making a difference.

One of Canada’s key contributions is through the Canadian International Food Security Research Fund, launched in 2009 by Canada’s International Development Research Centre and the Department of Foreign Affairs, Trade and Development. The $124 million commitment by the Government of Canada twins Canadian and developing-country expertise to promote innovations in agriculture and nutrition, especially those that benefit smallholder farmers and women.

For example, University of Alberta researchers are collaborating with Indian, Tanzanian, and South African researchers on projects such as using traditional crops to reduce food insecurity in parts of India. They are also developing a vaccine that would protect cattle, sheep, and goats in sub-Saharan Africa from diseases that devastate essential livestock herds.

A project implemented by researchers at the University of Saskatchewan and Ethiopia’s Hawassa University is applying different types of rhizobium – a nitrogen-fixing bacterium – to lentil and chickpea seeds. This can increase crop yields by up to 60 percent and leave valuable nutrients in the soil for next season’s crop.

In this work and this vision of supporting research that can help feed a hungry world, Canada is able to draw on lessons learned from our own history, much of it rooted in western Canada.

Researchers past and present turned the Prairies into a food-producing superpower by developing seed varieties suitable to the region’s soil and growing seasons, machinery that works in western conditions, and soil conservation methods that turned millions of at-risk hectares into sustainable soil.
For more than a century, Canadian researchers have found practical farmer-friendly solutions to problems that had bedeviled the industry for many years.

We’re exporting that Canadian ingenuity and optimism, in collaboration with overseas research partners and in cooperation with Canadian universities and the private sector, in ways that can make a real difference in addressing the food security realities that face many developing countries.

With their long history of can-do inventiveness and a rich history of international outreach – helping neighbours, whether on the next farm or half way around the world – Prairie farmers, private sector organizations, and universities can be key players in meeting this pressing challenge.

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