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# Linking Global Food Security with China's Food Security

*Summary Document*



The growth of developing economies, notably in Asia and Africa, has built the demand for food stuffs, especially proteins. However, even prior the war in Ukraine, the world was unable to build stocks and increase the global stocks-use ratio of cereals- a basic numeraire for a broad range of food products. This has occurred as increases in demand have outstripped growth in supply- due to lagging rates of agricultural productivity growth, weather extremes associated with climate change, groundwater disappearance, soil contamination, disease, geopolitical trade disruption, and gaps in infrastructure. Natural gas prices have increased to levels which make it unprofitable to produce nitrogen fertilizers in European plants, and the cost of fertilizer will ration usage, restraining agriculture production globally. Energy supply disruption is adding to the demand for biofuels, diverting increasing amounts of agricultural products from food to fuel.

These and other factors have revealed gaps in global food security, and food is increasingly an element of geo-politics. In many ways this environment has pushed the world back toward national rivalries and great power politics, and away from the multilateral rules-based interaction, especially on trade, that served as protection for small/medium-sized trading economies such as Canada.



In the decades following the Second World War, agricultural productivity was growing rapidly in the developed world, including Canada, and the challenge confronting agricultural policy was the problem of abundance- the worry that agricultural productivity would outstrip demand and generate surpluses, unstable farm prices, and low farm incomes.

Today, the problem of abundance has been eclipsed by the problem of scarcity- food demand exceeding supplies and generating food deficits, instability in farm and food prices, regional hunger, and the risk of social instability. Many countries have imposed forms of export restrictions on food to maintain their food security and affordability, adding to volatility in prices and global access. The pandemic and the war in Ukraine have badly disrupted global food shipments. The number of people facing acute food insecurity has soared from 135 million to 345 million since 2019, and 50 million people in 45 countries are approaching famine, while food affordability is a growing crisis in Canada.

Due to the size of its population and economy, China is a major factor in global food security. China is the largest net importer of food, with its demand set to increase with increasing wealth and more meat and dairy consumption. It also faces sharp constraints in increasing agri-food production from its natural resource base. China's geopolitical effort to diversify its food imports away from the West to suboptimal agricultural areas risks disrupting investment in sustainable intensification in regions of low carbon intensity agriculture, while risking serious environmental damage in other regions.

China has developed a food security plan which includes maintaining agricultural land acreages, increasing domestic production, investment in improved agricultural technologies, and increasing procurement of non-western sources of imports. However, each element of the plan faces challenges, such as collecting accurate data on land use, severely compromised soil and water, and vulnerability to animal and plant disease outbreaks, including zoonotic diseases. Notably, its diversification away from western countries as sources of agri-food imports has contributed to environmental degradation, such as tropical deforestation in South America to satisfy "new" demand from China.

At the same time, the exportable surpluses of major food staples originate in just a handful of net food exporting countries, mostly in North and South America, including Canada. These large food net exporters have the ability to enhance food security for China and the rest of the world, under the right conditions. These net food exporters, and the global agri-food system more generally, cannot readily respond to food crises when geopolitical/geoeconomic barriers disrupt growth of a sustainable food supply.

It is a considerable accomplishment when China can be fairly self-sufficient in many of its key staples from its domestic production. But when and where it cannot, the global markets cannot supply China without drastically shorting other net importers – unless the sustainable net exporters can confidently and securely invest to regularly supply China. It would seem in China's best interest to take a proactive role in the development of sustainable international trade – to guarantee their own food security, the security of their import suppliers, as well as the food security of other countries in a peaceful world.

