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Ownership, Vulnerability and Access

Security
Dimensions
of the
Global Food
System

EXECUTIVE SUMMARY



Ownership, Vulnerability and Access

Security Dimensions of the Global Food System



Summary highlights from a
conference of the Canadian Security
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Food security is at the confluence of three major, and shifting, global vectors:

- **geophysical** (with large scale environmental change – including urbanisation and climate change – affecting food production)
- **geo-economics** (with the shift in the economic centre of gravity towards Asia and the emergence of nationalistic capitalism in the form of, for example, sovereign wealth funds investing in agricultural land)
- **geopolitics** (with an uneasy new dynamics amongst the west and 'the rest' exacerbated by agro-politics)

These three *geos* influence, and are influenced by, food security, something vividly illustrated in different contexts around the world. For example, record heat waves in Russia in 2010 contributed to drought and fires that devastated crops. For the sake of stability, Russia needed to ensure a sufficient domestic supply of affordable wheat, so it put in place a wheat export ban, making wheat a strategic asset necessary for domestic

security rather than a commodity to be traded in the open market. The withdrawal of Russian wheat from the market contributed to speculation and exacerbated already record-high global food prices.

One of Russia's biggest clients for wheat was Egypt. The Egyptian government also needed to provide affordable food for the sake of domestic security and had traditionally heavily subsidised bread. Cut off from Russia's supply and facing higher prices in the markets, Egypt was forced to raise bread prices. While the real cost of wheat on the global market increased approximately 80% in a year, bread prices in Egypt increased approximately 30% during the same period. It was enough to contribute to street-level discontent and played a part in the subsequent political uprising there and in the rest of the Arab world.

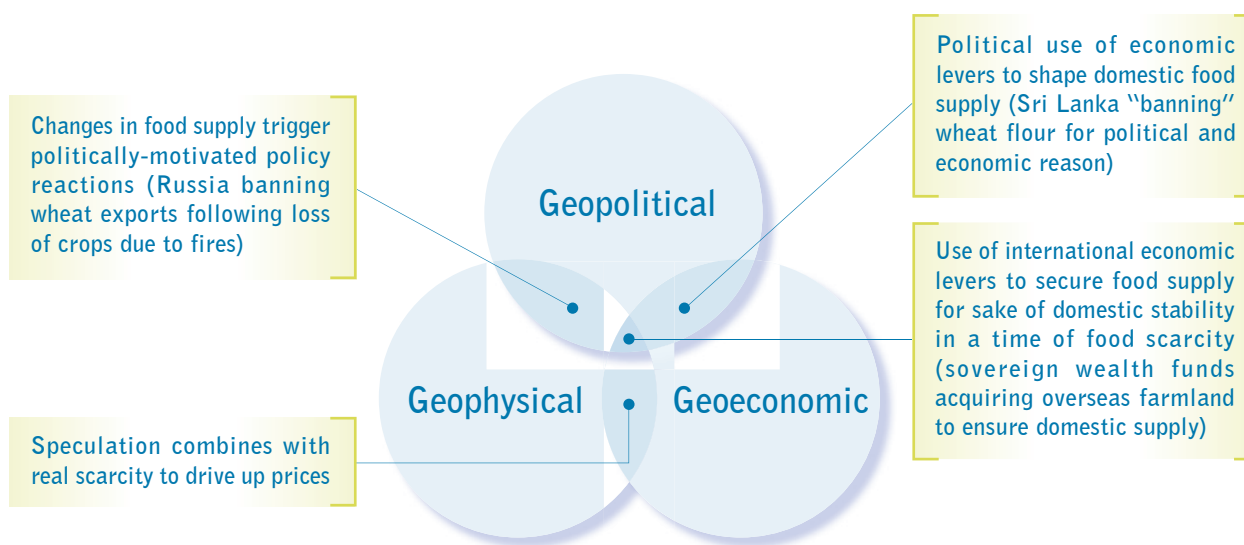
The uprising itself may weaken Egypt's position with its neighbours, leaving an opening for other nations along the Nile river system, including Sudan, to push for greater access to those critical waters, if only for their own domestic food security reasons. Sudan is already partnering with China to put in place dams that have the potential to trigger conflict. This, in turn, can have a substantial effect on stability in the region and beyond.

In this increasingly interrelated world, where countries are trying to find a stable footing as geopolitics and geo-economics shift, and a changing environment is (in some cases, literally) undermining critical national infrastructure, affordable food supply is quickly becoming one of the most visible, and vital, areas of potential conflict.

The west often thinks of itself as immune from the sort of food price-related unrest seen elsewhere. However, use of food banks in wealthy countries, like Canada, is increasing and food is becoming a political issue. Additionally, due to the sprawling, cascading effect of failures in the interconnected geopolitics, geo-economics and geophysics of the global food system, as seen with the Russian example above, fires in Russia can end up contributing to increased Chinese involvement in Sudan, and a whole new set of concerns for the west.

Food security is a pervasive and palpable manifestation of the proverbial butterfly effect. The effects of (even just perceived) food insecurity are not linear, nor necessarily driving or determining, but they can contribute to, and be affected by, some of the most critical elements of the three *geos*.

FIG. 1 Examples of first order impacts of the confluence of geopolitical, geoeconomic and geophysical aspects of food security



Already, even without a deliberate attack on the global food system, the security of the system, and the security provided by the system are wavering. Add in the potential for malicious attacks on critical nodes of the food production chain, and the usefulness of national food strategies become clearer.

A comprehensive strategy would take account of all three *geos* – and consider not only politics, economics, and the natural resources as they are now, but as they are projected to be in the future, at home and abroad.

Some countries already have a head start on developing food security strategies. China's one-child policy, for example, is in large part driven by the need for food security. Three decades ago, observing that China did not have access to enough resources (including food) for continued population growth, policy-makers there decided that the number of children allowed per couple would be forcibly restricted. This reduced demand on food and other resources. At the same time, the Chinese government has been attempting to secure reliable supply through the markets, facilitating foreign agricultural land acquisitions, sovereign wealth fund investments, and developing relations with nations such as Zimbabwe that, though politically isolated, are

markedly abundant in resources. The Chinese government is aware that, for it to feel secure, it must be able to provide the bulk of the population with affordable food. For China, as for Russia, food is increasingly being seen as a strategic asset as opposed to a standard commodity.

Industrialised food exporting nations, including Canada, still tend to view food as an 'ordinary' commodity (although declaring Saskatchewan's potash a strategic resource augurs change). This may result in a loss of geopolitical and geoeconomic leverage and understanding.

Additionally, the significant investments being made by Gulf and other countries in offshore agricultural production may, as an example, increase wheat price uncertainty, in turn affecting Canadian producers.

As more countries move forward with strategic assessment of ownership, vulnerability and access in the global food system, and the development of national food strategies (Russia officially launched its food security doctrine in January 2010), those left behind may find themselves with narrowing options leading to sudden shocks and crises. Without food security, there is no security at all.



This report is based on the views expressed by presenting experts and other participants at a conference organised by the Canadian Security Intelligence Service under the Global Futures Forum as part of its academic outreach program. Offered as a means to support ongoing discussion, the report does not constitute an analytical document, nor does it represent any formal position of the organisations involved. The conference was conducted under the Chatham House rule; therefore no attributions are made and the identity of speakers and participants is not disclosed. The full report can be downloaded from: www.csis-scrs.gc.ca

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