Is a Food Crisis the Next Big Hit for Humanity?

Julian Cribb FRSA FTSE

As the world reels under the coronavirus and the resulting economic meltdown, another crisis - far more serious - appears to be building: the potential collapse of global food supply chains.

For those who cry "We don't want any more bad news", the fact of the matter is we have landed in our present mess – climate, disease, extinction, pollution, WMD – because we steadfastly ignored previous warnings.

The first warning of a corona pandemic was issued in a scientific paper in 2007 and was blithely ignored for thirteen years. In it, the scientists explicitly stated "The presence of a large reservoir of SARS-CoV-like viruses in horseshoe bats, together with the culture of eating exotic mammals in southern China, is a time bomb. The possibility of the re-emergence of SARS and other novel viruses from animals or laboratories and therefore the need for preparedness should not be ignored."¹

Similarly, in 1979, the World Meteorological Organisation warned "... the probability of a man-induced future global warming is much greater and increases with time. Soon after the turn of the century a level may possibly be reached that exceeds all warm periods of the last 1000-2000 years."² And climate warnings have been coming thick and fast ever since, to scant avail.

"Ample food supply" rests on fragile assumptions

Now we have a new warning from the UN Food and Agriculture Organisation, a cautious body if ever there was one, that states "We risk a looming food crisis unless measures are taken fast to protect the most vulnerable, keep global food supply chains alive and mitigate the pandemic's impacts across the food system."³

Border closures, quarantines and market, supply chain and trade disruptions are listed as the chief reasons for concern. However, like many national governments, FAO insists "there is no need to panic" as world food production remains ample.

This, however, depends on fragile assumptions. It assumes that farmers and their families do not get sick. It assumes they will always be able to access the fuel, fertilizer, seed, and other inputs they need when supply chains disintegrate. It assumes the truck drivers who transport food to the cities do not get sick, that markets, cool stores, and food processing plants are not closed to protect their workers. That supermarkets continue to function, even when their shelves are stripped bare. All of which is starting to appear tenuous.

¹ Cheung VCC et al., Severe Acute Respiratory Syndrome Coronavirus as an Agent of Emerging and Reemerging Infection. Clinical Microbiology Reviews Oct 2007, 20 (4) 660-694; DOI: 10.1128/CMR.00023-07

² World Climate Conference 1979, <u>http://wmconnolley.org.uk/sci/iceage/wcc-1979.html#flohn</u>

³ FAO. Will COVID-19 have negative impacts on global food security? March 2020. <u>http://www.fao.org/2019-ncov/q-and-a/en/</u>

The looming food crisis and its three causes

There is never a 'need to panic' as it does not help in resolving difficult situations. But there is definitely a need to take well-planned precautions – as we have failed to do in the cases of climate and coronavirus.

The looming food crisis starts with three primary causes:

- 1. The global 'just-in-time' industrial food and supermarket system is not fit for purpose in guaranteeing food security. It is all about money, and not about human safety or nutrition. Its links are fragile and any of them can break, precipitating chaos especially in big cities.
- 2. The agricultural system we know and love is becoming increasingly unreliable owing to climate change, catastrophic loss of soils worldwide, shortages of water, and narrowing of its genetic base. Farmers are struggling with their own pandemics in the form of swine fever, armyworms, and locusts. This unreliability will become increasingly critical from the 2020s to the mid-century.
- 3. The predatory world economic system now punishes farmers by paying them less and less for their produce, driving them off their farms and increasingly forcing those who remain to use unsustainable methods of food production. This is causing a worldwide loss of farmers and their skills and destruction of the agricultural resource base and ecosystem at a time of rising food instability.⁴

The reason that a food crisis is far more serious than either the coronavirus or its economic meltdown, is that the death toll is generally far larger. More than 200 million people have died in various famines over the last century and a half, and many of those famines led to civil wars, international wars, and governmental collapses. That is why we need to pay attention now – before a new global food crisis arises. Not brush it aside, as so many inept world leaders have done with the virus.

"Civilization and anarchy are only seven meals apart"

The Spanish have a well-learned saying that "Lo que separa la civilización de la anarquía son solo siete comidas."⁵ The French and Russian Revolutions both arose out of famines. WWII arose partly out of Hitler's desire to capture Soviet farmlands in order to avoid another WWI famine in Germany. Many modern African wars are over food or the means to produce it. The Syrian civil war began with a climate-driven food crisis. Indeed, there is growing evidence that lack of food plays a catalytic role in around two-thirds of contemporary armed conflicts. As US former president Jimmy Carter has observed: "Hungry people are not peaceful people."⁶

Food failures bring down governments and cause states to fail. In 2012 a drought in Russia and the Ukraine forced them to cut grain supplies to Egypt and Libya – where governments

⁴ These issues are extensively analysed in my recent book *Food or War*, Cambridge University Press, 2019. https://www.cambridge.org/us/academic/food-or-war

⁵ Civilization and anarchy are only seven meals apart.

⁶ Carter J., First Step to Peace is Eradicating Hunger. International Herald Tribune, June 17, 1999.

promptly fell to popular revolutions. It was a strange echo of history: in the third century, a combination of climate change and a pandemic caused a failure in grain supplies from North Africa, an economic crash and, ultimately, the end of the Roman Empire.

While there is 'no need to panic' over food, there is a very clear and urgent need for plans to forestall major shortages around the world. Yet, there is very little evidence that governments worldwide are preparing to head off a food crisis, other than to reassure their citizens, Trumplike, that there isn't a problem. However, lack of trust by citizens in their governments has already prompted a global rush to stock up on staple foods which has 'upended' the vulnerable 'just-in-time' food delivery system in many countries.⁷

Cities are not prepared to feed themselves. What to do?

Over four billion people now inhabit the world's great cities – and not one of those cities can feed itself. Not even close. None of them are prepared for catastrophic failure in fragile modern food chains, on which they are totally reliant. It would appear almost nobody has even dreamed of such a thing. We are sleepwalking into something far larger and far more deadly than coronavirus. The delicate web of modern civilization is fraying.

What is to be done? The short answers are:

- Introduce emergency urban food stocks
- Compulsory reduction of food waste at all points
- Prepare for WWII-style rationing if needed
- Pay farmers a fair return
- Increase school meals programs and food aid to the poor
- Encourage local food production and urban food gardens
- Develop a global emergency food aid network as a priority
- Reinvent food on a three-tier global model encompassing: regenerative farming, urban food production (and recycling), accelerated deep ocean aquaculture, and algae culture.

There are few crises that cannot be avoided with careful forward planning, including the ten catastrophic risks now facing humanity as a whole.⁸

It is time we, as a species, learned to think ahead better than we do, and not listen to those who cry "no more bad news, please". They only lead us into further crisis.

⁷ Lee A, How the UK's just-in-time delivery model crumbled under coronavirus. Wired, 30 March 2020. ⁸ Cribb JHJ, "Surviving the 21st Century". Springer 2017.

https://link.springer.com/book/10.1007/978-3-319-41270-2

Julian Cribb is an Australian science author. His book Food or War describes what must be done to secure the world's food supply.

The <u>MAHB Blog</u> is a venture of the Millennium Alliance for Humanity and the Biosphere. Questions should be directed to <u>joan@mahbonline.org</u>