

# GLOBAL FOOD SYSTEM UPDATE

THE CURRENT STATE OF THE INTERNATIONAL FOOD  
SUPPLY AND CONSEQUENCES FOR NEW ZEALAND

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Insight Report- 29 July 2022



**Te Puna  
Whakaaronui**

# Current global food supply impacts

*In April 2022 Te Puna*

*Whakaaronui released a short insights report: Global Food System, the current state of the international food supply and the consequences for New Zealand. This report, the Global Food System - Update July 2022, picks up on further developments impacting the global food system.*

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Over the last three months stressors have continued to build and have weakened the global food system, the attention of the international community is focussed on global food shortages which will intensify through the Northern Hemisphere winter and into next year.

## Global food system pressures are converging and amplifying economic vulnerability

The macro drivers of change identified in April (geopolitical tensions, climate change, technology change and changes in consumer demand) continue to accelerate and increase stress beyond the global food system. The result is greater and more widespread economic uncertainty, especially for low and middle-income countries, due to three key risks:

1. rising food prices;
2. rising energy prices; and
3. tougher financial conditions.

Energy prices increased 50% in 2021<sup>1</sup>, the Food and Agriculture Organisation of the United Nations food price index is 23.1% higher<sup>2</sup> than in June 2021, fertiliser price is more than double the 2000-2020 average<sup>3</sup> and maritime transport costs are up three-fold<sup>4</sup>. Rising interest rates and growing investor uncertainty are eroding both the value of developing countries' currencies and their capacity to borrow in foreign markets which is adding up to tightening financial conditions<sup>5</sup>.

A record 323 million people are at high risk of food shortages worldwide<sup>6</sup>. There are one hundred and seven countries currently suffering from one or more of the three key risks. Two-thirds of these, sixty-nine countries, are experiencing all three key risks: twenty-five in Africa, twenty-five in Asia.

Pacific and nineteen in Latin America.<sup>7</sup> Cumulatively this represents 1.7 billion people, or about one-fifth of humanity<sup>8</sup>, facing these collective challenges.

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<sup>1</sup> <https://blogs.worldbank.org>

<sup>2</sup> <https://www.fao.org>

<sup>3</sup> <https://english.news.cn>

<sup>4</sup> <https://www.freshplaza.com>

<sup>5</sup> <https://www.unep.org>

<sup>6</sup> <https://www.nytimes.com>

<sup>7</sup> <https://news.un.org> and [Gravitas Plus](#)

<sup>8</sup> <https://thebftonline.com>

## Many populations are now vulnerable

Pressure is growing and the number of countries impacted is increasing:

**February 2022:** just prior to the current outbreak of the Russia-Ukraine conflict, the World Bank signaled that seventy low and middle-income countries were facing a looming debt crisis;

**March 2022:** the World Bank forecast a dozen economies were at risk of not being able to service their debt in twelve months – the largest debt crisis in a generation<sup>9</sup>; and,

**June 2022:** the World Bank estimated that low and middle-income economies owe a record US\$9.3 trillion to foreign creditors and that forty poor, and about half a dozen middle income countries, are either in debt distress or at a high risk of it.<sup>10</sup>

Unfortunately, the consequences of these economic pressures are being felt at a consumer level and some countries are experiencing civil unrest:

- Sri Lanka's ongoing political turmoil has come to a head in the past few weeks with the debt-laden economy unable to pay for food, fuel and medicine;<sup>11</sup>
- Egypt, the world's largest wheat importer, continues to struggle to make up for lost Russian and Ukraine imports (50% and 30% of imports respectively). At the end of June, the Egyptian General Authority for Supply Commodities tendered internationally to purchase 815,000 tonnes of wheat to be shipped between August-October 2022.<sup>12</sup> Egypt agreed to reduce its contracted 500,000 tonne order of Indian wheat to 180,000 tonnes as India moved to ban wheat exports, but made allowances for countries like Egypt.<sup>13</sup> At the end of June 2022 the World Bank approved a US\$500 million loan to bolster Egypt's efforts to strengthen its resilience to food crises and to support reforms in food security policies.<sup>14</sup>
- In Lebanon food prices have risen 1100% since the local pound began to drop in value in 2019,<sup>15</sup> the Lebanese pound has lost 90% of its value and public debt is at 360% of GDP.<sup>16</sup> Lebanon lacks the capacity to store enough grain due to a Beirut port explosion<sup>17</sup> destroying its largest stores in

<sup>9</sup> <https://www.reuters.com>

<sup>10</sup> <https://www.reuters.com>

<sup>11</sup> <https://www.aljazeera.com>

<sup>12</sup> <https://www.zawya.com>

<sup>13</sup> <https://www.reuters.com>

<sup>14</sup> <https://www.egypttoday.com117292>

<sup>15</sup> <https://www.ndtv.com>

## The ability of countries to cope with crises is being eroded



**0.8–1%**  
downgrades due to the war  
expected GDP growth in 2022  
from 3.6% to 2.6%



**3 out of 5 workers**  
have lower real incomes  
than before the pandemic



**60% of the poorest countries**  
face rising debt levels  
and a high risk of distress



**\$1.2 trillion financing gap**  
in social protection  
in developing countries



**\$520 billion**  
is the annual cost of climate disasters  
to the global economy

Source: UN 8 June 2022 Briefing: Global Impact of War in Ukraine

2020. Lebanon imports 80% of its wheat from Ukraine and falling supplies have resulted in bread shortages and sunflower oil scarcity. It has recently secured a US\$150 million food security loan from the World Bank.<sup>18</sup>

- Argentina's inflation surpassed 60% in the last twelve months<sup>19</sup> and is expected to reach 70% before the end of 2022.<sup>20</sup> External debt is mounting and interest rates have risen to 52%.<sup>21</sup> Argentina is working to avoid defaulting on loans and has sought a US\$45 billion refinancing package from the International Monetary Fund.<sup>22</sup> Fears of civil unrest are mounting.
- In the Republic of Türkiye (previously Turkey), the currency is sliding and inflation is nearing 80%, a twenty-year

<sup>16</sup> <https://www.bloomberg.com>

<sup>17</sup> <https://www.theguardian.com>

<sup>18</sup> <https://www.reuters.com>

<sup>19</sup> <https://www.france24.com> and [Gravitas Plus](https://www.gravitasplus.com)

<sup>20</sup> <https://americasquarterly.org>

<sup>21</sup> <https://www.bloomberg.com>

<sup>22</sup> <https://www.reuters.com>

high.<sup>23</sup> The Producer Price Index (PPI) rose by 6.77% in June bringing the annual increase to 138.31%.<sup>24</sup> Turkish poverty levels are growing exponentially<sup>25</sup> resulting in increasing civil tensions.

#### Other countries at risk include:

- EL Salvador and Peru are experiencing hyper-inflation, tumbling bond rates, food shortages and mass unemployment.<sup>26</sup>
- Ghana is at growing risk of a debt crunch. Kenyan debt has climbed to US\$70 billion, 70% of its GDP, and has been approved for a US\$235.6 million International Monetary Fund loan to weather the economic storm.<sup>27</sup> South Africa has debt at 80% of GDP<sup>28</sup> and is concerned about recurrence of 2021 civil unrest.
- Tunisia's economy is overheating. Foreign debt accounts for 100% of GDP,<sup>29</sup> it has a trade deficit of US\$800 million, inflation is at 7% and fuel prices are at a record high with fears growing that these conditions will stoke civil unrest.<sup>30</sup>

#### Climate change events further disrupt food supply and threaten food security:

- The northern region of Italy, responsible for 40% of the country's agriculture, is facing its worst drought in seventy years.<sup>31</sup> Water flows into Italy's two largest rivers have dropped substantially; the Po River basin has dropped to 85% below normal, and the Tiber River is 50% below average level. This is the lowest that river flow has been in seventy years.<sup>32</sup> The estimated cost of lost production in 2022 to date has been €1 billion.<sup>33</sup>
- In France ten days of hail in early July damaged 30,000 hectares of grape vines.<sup>34</sup> At least 10,000 hectares of these vines in the Gironde region have lost more than 30% of their crop,<sup>35</sup> while other growers in the region have suffered crop losses above 70%. In Bordeaux summer temperatures

have hit 40°C negatively affecting the final grain-filling stage of the wheat crop season.<sup>36</sup> Analysts are projecting France's 2022 soft wheat crop (excluding durum) to total 33-34 million tonnes, down from 35.5 million tonnes last year.<sup>37</sup>

- Australian consumers have been warned to expect fruit and vegetable shortages at supermarkets with supply not expected to return to normal until September.<sup>38</sup> The shortages are linked to the devastating floods in northern New South Wales and Queensland.<sup>39</sup> While not all crops have been lost, the poor weather has resulted in supply shortages across a range of fresh vegetables.
- Drought in Somalia has caused significant and continuing food security issues.<sup>40</sup> An estimated one million people have left their homes in search of food, water and humanitarian assistance.<sup>41</sup>
- Extreme weather is hitting parts of the United States crop belt. In June, rainfall was so heavy that some farmers in North Dakota were able to plant only 75% of their planned corn and soybean crops.<sup>42</sup> In contrast, farmers in the Midwest have lost the top end of their yields and productivity due to heatwaves.<sup>43</sup> The US Agriculture Department expects September's end-of-season US corn stocks to be down 33% from pre-pandemic levels and down 37% in September 2023.<sup>44</sup>
- Temperatures in Germany have exceeded 40°C for the first time since 2019.<sup>45</sup> Climate change is expected to continue to cause changes to Germany's rainfall distribution and result in extreme heatwaves that will impact the country's crop production.<sup>46</sup>

#### Impact of climate change policies:

- Dutch farmers are protesting against the government's plan to reduce nitrogen compound use in late June, with some saying that it could lead to heavy livestock

<sup>23</sup> <https://www.politico.eu> and [Gravitas Plus](#)

<sup>24</sup> <https://ilkha.com>

<sup>25</sup> <https://atalayar.com>

<sup>26</sup> <https://www.gisreportsonline.com>

<sup>27</sup> <https://www.reuters.com>

<sup>28</sup> <https://www.reuters.com>

<sup>29</sup> <https://www.ceicdata.com>

<sup>30</sup> <https://www.reuters.com>

<sup>31</sup> <https://www.npr.org>

<sup>32</sup> <https://www.forbes.com>

<sup>33</sup> <https://www.reuters.com>

<sup>34</sup> <https://www.winebusiness.com>

<sup>35</sup> <https://www.thedrinksbusiness.com>

<sup>36</sup> <https://www.reuters.com>

<sup>37</sup> <https://www.reuters.com>

<sup>38</sup> <https://www.canberratimes.com.au>

<sup>39</sup> <theguardian.com>

<sup>40</sup> <https://blogs.worldbank.org>

<sup>41</sup> <https://www.aa.com.tr>

<sup>42</sup> <https://www.thestar.com>

<sup>43</sup> <https://www.marketplace.org>

<sup>44</sup> <https://www.reuters.com>

<sup>45</sup> <https://www.youtube.com>

<sup>46</sup> <https://www.thelocal.de>

reduction or even producers quitting the industry.<sup>47</sup> The plan outline a 50% reduction by 2030, which could result in some areas of the country being forced to cut fertiliser use by 70%, creating a 30% reduction in livestock. Protest activity is adding to supply chain issues with some supermarkets standing empty because distribution centres are blocked by farmers.<sup>48</sup> This is one of many global reactions to the imposition of climate change policy forcing production process change on farmers and food producers.<sup>49</sup><sup>50</sup>

## So, what does all this mean?

Globally the food system has been under stress for the last few years and economies are now experiencing increasing stressors, with climate change exacerbating the problem. Many of the poorest countries are facing some very tough decisions, and their worsening economic situation cannot help but impact domestic populations.

When we look at the broad trends, we see cascading effects:

- the impact of inflation and monetary policy is dampening demand for higher value foods and removing poorer people's ability to buy or access essential foods; commodity prices peaked in the Northern Hemisphere in mid-June.
- there will be ongoing shortages of "staple foods" (grains, oils, fruits and vegetables) as climate change, war and weakened distribution networks combine to exert sustained pressure on food security and prices over the longer term.
- globally, we should see some price relief in the short term due to eroding purchasing power and a subsequent drop in demand across non-essential product categories. We will also see those governments in developed countries, able to provide food price relief, alleviate some pressure. In low to middle income countries, who are in a more precarious economic condition, hunger and famine represent a real risk in the short-medium term.

- over the next six to twelve months, we should expect to see price increases in some staple foods as the Northern Hemisphere's reduced crop volume comes to market and winter takes hold. Trade-offs will need to be made between energy for heating and energy used in food production, added to which ongoing climate impacts will continue to stress parts of the food system.
- Russia has agreed to unblock grain exports from Black Sea ports, which should allow for last season's crops (tens of millions of tonnes of grain) to be exported from Ukraine.<sup>51</sup> This could alleviate some of the most immediate and acute shortages in a few Middle Eastern and African countries. However, uncertainty remains over if, and when, the grain exports will reach their destinations. While war and other pressures continue, this singular agreement does not materially improve the medium to long term outlook for the global food system.

In summary, food shortages, high food and energy prices and tough financial conditions will increasingly impact on the ability of low and middle income economies to cope; the knock-on effects of civil unrest and political instability will become widespread and acute. Co-ordination and global free trade of foods will be essential to minimise deprivation. The United Nations should consider moving now to secure food supplies and move them into the regions most at risk. The writing is on the wall, nations that can act should do so now before the need is overwhelming.

<sup>47</sup> <https://www.farminguk.com>

<sup>48</sup> <https://abcnews.go>

<sup>49</sup> <https://abcnews.go.com>

<sup>50</sup> <https://www.aa.com.tr>

<sup>51</sup> <https://www.odt.co.nz>

## Will anything change for New Zealand?

Te Puna Whakaaronui stated in the April 2022 the *Global Food System* report that the mid-to-longer term domestic impacts of global food system stress would include more supply-chain vulnerability, increased import and production input costs, as well as more pressure on households and national food security.

Since April, New Zealand's annual inflation hit a 32-year high of 7.3% in the June 2022 quarter on the back of higher food, fuel and housing cost.<sup>52</sup> <sup>53</sup> The cost of labour and fertiliser inputs have also been driving higher food prices in 2022. While we may see some relief in oil prices in the short term, costs for labour and fertiliser look set to stay high.

In our April *Global Food System* report we:

1. identified the need for New Zealand to simultaneously manage affordable access to nutritious foods domestically, while sustaining demand in key international export markets;
2. advocated for open trading relationships and the removal of export and import restrictions; and,
3. advocated for increasing targeted investment in the research, science, innovation and technology system to develop new goods that meet the demands of growing consumer segments.

These three imperatives remain. In addition, support for the development of regional and community driven food initiatives could be increased over the medium term. The gaps in New Zealand's food innovation system need to be plugged if we are to create a sustainable competitive advantage as the global food system transforms.

Identifying and focusing on a number of national 'missions' such as high-value extracts, low carbon building materials/products and redesigned value chains to create new industries are areas of opportunity to consider.

Global system stress as a result of rising food and energy prices, increased debt and financial hardship, plus multiple climate events has been building exponentially for some time. We are now at an inflection point – we must decide now which 'mission' to launch and act on it, the wellbeing of New Zealand's people and economy depend on it.



<sup>52</sup> <https://www.foodticker.co.nz>

<sup>53</sup> <http://www.voxv.co.nz>

## DISCLAIMER

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