

British Columbia floods reveal fragile food supply chains: Four ways to manage the crisis

November 24 2021, by Feyza G. Sahinyazan, Serasu Duran



Credit: CC0 Public Domain

The COVID-19 pandemic has taught the world that our supply chains are fragile and vulnerable to disruptions. Panic-buying and product

hoarding, like the irrational run on toilet paper in the early stages of pandemic, cause shortages, a lesson Canadian consumers are learning again after recent extreme weather events in British Columbia.

The [heavy rainfall](#) caused severe flooding and mudslides, destroying portions of major highways, damaging railways and cutting access to the port of Vancouver.

The possibility of [supply chain](#) disruptions as a result of the flooding [put consumers in panic-buying mode again](#), almost two years since the onset of the COVID-19 pandemic.

The emotional trauma from product shortages in the early days of the pandemic is understandably fresh. Unfortunately, a new bout of surging demand could significantly stress our already strained [food supply chains](#) due to [ongoing global supply chain disruptions](#).

[Good news](#) is starting to emerge on the decongestion of ports, suggesting the end is near for the global supply chain crisis. But the B.C. floods have delayed this recovery for some domestic supplies as the Vancouver port is disconnected from the rest of the country.

Does this mean a food crisis is looming in the months ahead?

As researchers of food security and supply chain management, we outline the critical steps consumers, policy-makers and producers must take to manage supply chain disruptions and guarantee continued access to food in the wake of the B.C. floods.

Panic-buying challenges food security

Food supply chains are mapped out based on regular demand patterns. Very often, production is planned months ahead and commodities travel

a long path before reaching the end consumer. With a sequence of long, interconnected events, unplanned changes and delays can grow in impact.

[Adverse road conditions are one of the most significant reasons for delays in food supply chains.](#) Delays and minor shortages are expected when there are interruptions to the usual delivery paths. But unless the roads take ages to clear, these pressures can be relieved slowly but steadily.

The most significant risk in the short term is due to panic buying. In fear of a supply shortage, [people irrationally buy more than they can consume](#) in a reasonable time and before food expiry dates. Such unprecedented surges in demand can even break fully functioning supply chains, let alone strained and disrupted ones.

The problem is often not a supply shortage problem, but an excess demand problem. In other words, fear of shortages becomes a self-fulfilling prophecy due to hoarding.

Furthermore, excess purchases result in increased food waste, and disruptions can have a more significant impact on low-income people or those [with reduced mobility](#). Demand surges also create a vicious cycle of backlogs and delays by spreading the panic to retailers and their suppliers, hindering the recovery from supply chain crises even further.

4 ways to manage supply chain disruptions

Both the pandemic and the B.C. floods remind us that staying calm and being prepared for the next disruption is a necessity. Here are four essential steps we can take:

1. More responsible media coverage: The first step is to avoid panic-

inducing media coverage, such as doomsday images of empty grocery store shelves. Panic-buying should be discouraged immediately, not after the damage is done. The media should also report on effective and reliable retail policies, like [temporarily capping the number of items per household](#), to help prevent speculative hoarding in food markets.

2. Transparent and timely updates by governments: The next important step is to share timely information with all stakeholders in the supply chain. Information on product availability, pricing, delivery lead times and disruption recovery plans can help tremendously [in managing expectations](#). If the public is given frequent updates about the current situation, the potential shortages, how long they might last and how the government is addressing them, the impact of panic-inducing [media coverage](#) and social media posts can be lessened.

3. Distributed risks: Since the beginning of the pandemic, we've seen the risks from putting all of our eggs in one basket. An example is the massive microchip shortage. [Even if one tiny component cannot be produced due to the disruptions, the whole supply chain comes to a halt](#). Supply chains are as strong as their weakest links. For businesses and [policy-makers](#), the next logical step is to disseminate and thereby reduce the risks. Some options are diversifying suppliers (ideally from different geographical regions), reinforcing transportation networks, creating alternative delivery routes and using alternative modes of transportation.

4. Emergency preparedness protocols in place: [Climate-induced weather events are expected to be more frequent in the years to come](#). But besides natural disasters, supply chains are susceptible to other dangers like strikes, accidents or financial risk. We cannot afford to wait until the next disaster catches us by surprise and then respond, because reactive emergency relief efforts can delay the recovery significantly. Instead, companies and local governments should proactively prepare for future supply chain risks by developing multiple recovery plans.

There's an entire body of literature dedicated to developing disaster and emergency plans to minimize supply chain disruptions prior to calamitous events—namely, [humanitarian logistics](#), which involves organizing the delivery and warehousing of supplies during [natural disasters](#) or other emergencies to the affected areas and their citizens.

The public and private sector can also immensely benefit by collaborating with [supply chain management](#) experts so that the next time we face any type of supply chain [disruption](#), no one needs to fear they'll run out of [food](#) to feed their families.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: British Columbia floods reveal fragile food supply chains: Four ways to manage the crisis (2021, November 24) retrieved 10 May 2024 from <https://phys.org/news/2021-11-british-columbia-reveal-fragile-food.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--