Preparing for Supply Chain Disruptions due to COVID-19
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Supply chain disruptions pose significant threats to businesses of any size, particularly agriculture related businesses involved with live animal production and those that solely provide for a family. Disruptions also pose great risks to restaurants and food service industries. Risks can arise from any sources, including natural disasters, political actions, and more recently, the viral outbreak of COVID-19 causing chaos across the world.

Unfortunately, the COVID-19 outbreak – and actions taken to reduce its impacts on human lives – have resulted in low commodity prices, tightened labor markets, trade policy issues and bans, and activism targeting agricultural operations, especially the livestock operations and those involved with GMO’s. This leaves agricultural businesses in a tough situation that is going to progress for the unforeseeable future.

As a farm or ranch business manager or operator, it is very important, now more than ever, to be prepared for the current and after effects of the outbreak, including potential supply chain disruptions.

Keys to Recognizing Supply Chain Threats
To assess the impacts of potential threats to your business, you should determine how long it will take you to recover from a disruption, and also how long you can continue to survive after the disruption. This means that you will need to understand the flow of products from beginning-to-end. From there, you can estimate how long your business could survive if inputs did not arrive as scheduled or were unavailable.

If you are a livestock producer, or have necessary inputs for the health and well-being of live animals, it may be a good management decision to prepare for shortages and longer days on feed due to closed auctions and transportation, to minimize your days of supply chain disruption.

It is impossible to predict the magnitude of supply chain disruption caused by the virus. However, you can take measures to manage for risk and threats that arise from the pandemic.

Unreliable Transportation + Delays
The reliability of transportation and the delivery of goods is declining with limited travel and the closures of many businesses, restaurants, and service facilities. As an ag producer, it is important that you know your transportation partner. It’s important that you work with someone capable of meeting your needs, even if delivery avenues are disrupted.

If transportation of stock and commodities becomes impossible, it is important that you assess whether you have space and available

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inputs to retain your commodities for longer than expected.

**Market Price Fluctuations**

With the shutdown and disruption of many foreign countries, raw materials may become scarce, which can drive prices up for those materials dramatically.

The market for beef is subject to drop due to both foreign and domestic factors. African Swine Fever in 2018 wiped out roughly a quarter of the world’s hog supply, causing pork prices in China to spike. The resulting increases in demand for beef caused a ramp up in Chinese imports. However, the outbreak of coronavirus in Wuhan caused demand to drop, pushing the cattle market lower.

Domestically, US beef demand rises and falls with the state of the economy. When consumers feel financially squeezed, as they do currently with the looming pandemic, they turn to cheaper alternatives. Consumers are also facing a fear of shopping for anything but emergency prep items, including canned goods, dry goods, and paper products.

Corn prices are also subject to drop, due to many factors, including the reduction consumption of ethanol in fuel sources. Due to recent quarantine orders and social distancing, most travel has been interrupted or suspended to help stop the spread of the coronavirus.

In preparing for the future price fluctuations, it’s very important to have the ability to analyze trends and predict fluctuations. Take time to study market trends from previous events and be aware of shifts in labor to prepare for a likely fall. Understanding this data can help you plot the best strategic times to buy at lower and sell at higher costs.

Businesses must develop a marketing plan, which identifies triggers and price points for when you should sell or retain your commodities. For more information and guidelines on developing a comprehensive marketing plan visit: [http://wr.colostate.edu/ABM/agplanningworkbook.pdf](http://wr.colostate.edu/ABM/agplanningworkbook.pdf).

**Political Changes**

With the recent imposed tariffs and possible approaching lack of availability of goods, significant political changes could be coming down the pipe. Political influences on pricing and availability of goods can originate from any country and could happen at any time. Other disturbances from this pandemic threaten work availability and worker safety. Business closures and temporary shutdowns have caused massive operational changes, threatening the sustainability of many businesses.

To best prepare for changes politically, broaden your supplier network. Research and vet suppliers from different geographic areas, and bear in mind shipping routes from these suppliers. Monitor the effects of the outbreak in areas where your product is produced or delivered, and be sure you have alternative plans prepared for transportation rerouting and other delays that will require more time and inputs from you and your business.

**Contamination or Loss of Product**

Whether through actions of a third party or a weather event, commodity and input quality and value can deteriorate or be lost. Recent frost conditions in the upper end of the Grand Valley in western Colorado have devasted the early season fruit crops for this year, including cherries, apricots, pears, and peaches. This below freezing event is not only causing drastic economic losses, but also eminent supply chain disruptions.

Crop and livestock insurance is an essential part of a farm or ranch production and marketing plan. Both yield protection and revenue protection can safeguard farmers against production losses for crops and offers replanting security, as well as guarantee a certain level of revenue rather than just production. Preparing written and sound
production contracts can protect against actions instigated by a third party. It is also wise to have these contracts reviewed by a legal consultant or third party.

**The Bottom Line**
The key to protecting your business during these disruptions is business intelligence. It is critical for business owners to stay on top of both industry and market trends, political analysis, and identifying potential supply chain threats. Demand can be very unpredictable, especially during a disruptive event such as COVID-19, and it is important that producers are able to track and analyze it in real time. The demand cycle and subsequent shifts are delayed compared to disruptive events, so it’s imperative to keep an eye on current trends and consumer behavior so you can anticipate and implement changes to your business relatively quickly. The effects of the virus are still unfolding and the full impact is yet unknown, but you can begin taking steps to develop your contingency plans to protect the livelihood of business.

For more tools and resources relevant to risk and risk management for your operation, please visit our agricultural and business management website: [https://wr.colostate.edu/ABM/](https://wr.colostate.edu/ABM/).