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# Impact of the Agricultural Supply Chain on Society: A Post-Covid Analysis

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## **Abstract**

Over the past few years, the global agricultural supply chain has been shown to be extremely vulnerable to disruptions as a result of the Covid pandemic that has occurred over the last few years. Due to the COVID-19 pandemic, companies around the world have faced unprecedented challenges as well as the cross-border flow of components and materials in the agriculture industry as a result of the outbreak. Due to the ongoing challenges of climate change as well as the changing geopolitical landscape, such disruptions seem to be more frequent and intense than ever before. By leveraging digital technologies to find new ways to protect supply chains in an uncertain climate, farming is able to flourish in this dynamic environment of constant change and find new ways to secure their supply chains in an uncertain climate by leveraging digital technologies. In the context of the agriculture sector, the recent pandemic has had an impact on every aspect of the value chain, from the raw material sourcing in the farming sector to the final customer. Many small and marginal farmers around the globe are being tested in terms of their commercial, operational, financial, and organizational resilience, and this has highlighted the risks and resiliency gaps for many of these farms. It is impossible for any of us to predict what will happen in the future, but what we can do is learn from the past and prepare for the uncertain future. In spite of the fact it is clear now that many supply chains had become complacent in recent years, the urgency to create a supply chain which is able to adapt to the future is greater than ever. It is important to note that one silver lining of this situation is that we have the experience, the intelligence, and the technology at our disposal to resolve supply chain disruptions. Farmers should be able to use those pieces to create a solid strategy and execute on a supply chain transformation plan that makes the most sense for the farming community as a whole to be able to put the pieces together, come up with a solid strategy, and execute on it.

## **Introduction**

There has been a fundamental shift in the way supply chains function globally in the agricultural sector as a result of the onset of new technology. The demand of consumers in the rural areas is increasing, and supply chains in these areas are changing at a faster rate as a result. As a result of modern operations focusing on technology and innovations, supply chains for the far-reaching rural areas are becoming more

complicated. As a result of these factors, the lines between the skillsets of blue collar and white collar professionals working in rural supply chains and farming operations are becoming increasingly blurred. In order to be able to sustain and grow at present, and in the future, this combination of physical and technological skills is required. Many farming communities have suffered from a loss of focus on existing transformation mandates as a result of these aforementioned supply chain issues in the farming sector dominating discussions in the sector. A number of issues are driving discussions and requiring attention at this time, including driver shortages, logistics provider capacity issues, inflation, shipping delays, increases in freight costs, depleted inventory levels, labor shortages and demand spikes. The agricultural operational leads have been asked to shift their focus from large change projects to the day-to-day operations and staff of the farm. As a result, farmers are now learning how to balance the oversight of crisis response with the strategic thinking that is needed beyond these immediate setbacks.

During COVID-19, there has been a significant amount of news coverage about agricultural production delays. It has been reported that farmers are competing for a limited supply of key commodities and limited logistical capacity, resulting in empty shelves and long lead times for consumers to purchase agriculture products. There is, however, some good news as well. There has been an increase in the focus on supply chain evaluation and evolution as a result of the pandemic. The agriculture industry is evaluating and investing in long-term supply chain strategies in order to prepare for a new post-pandemic normal following the devastating pandemic.

In the aftermath of the ongoing global logistics disruptions caused by the COVID-19 pandemic, farmers and rural areas continue to be affected, as the flow of consumer goods into key markets, such as the USA, Europe, Japan and India, is restricted by the closure of major international ports and airports, primarily in Taiwan, South Korea, and the United States.

In the 1980s, supply chain management was one of the hottest topics in the agriculture industry. There has been a trend in the agricultural sector in recent years to move farming to countries that are more affordable in terms of costs as globalization becomes the new normal. The implementation of business technology was focused on integrating and providing visibility to these new global supply chains in order to gain a competitive advantage. In the 2000s and 2010s, however, it is fair to say that most of the world's attention was turned towards newer technologies. In the early days of these exciting new technologies, supply chain management was largely left behind in the shadows.

### **New Strategies to Solve Supply Chain Issues in Agriculture**

There is no such thing as a static environment when it comes to a farm. Farmers, as well as the agricultural sector as a whole, are employing a strategy known as nearshoring in order to increase competitiveness in the market. The main purpose of this is to increase

profitability and efficiency by establishing manufacturing capacity closer to the end consumer, target market, or even the farm itself in order to improve profitability and efficiency. As well as being useful in the agricultural sector, it has also proven to be very useful in many other fields. To maximize the logistical, operational, and cost benefits of nearshoring, it is crucial to consider not only the location of farms, but it is also important to consider how the farms are likely to evolve their farming operations in the future in order to maximize the benefits of nearshoring. Industry 4.0 applications, technologies and processes, as well as the connectivity that makes them possible, are some of the ways in which the use of Industry 4.0 can maximize agility, planning capacity and output as a result of Industry 4.0.

It should be noted that nearshoring facilities do not operate in a vacuum and a high-performance, on-premises wireless network is only one of the requirements for a farming facility to be able to operate successfully. To be able to have a high level of efficiency on the part of farmers and rural workforce, they will need access to information and specifications regarding production, as well as resources for essential activities such as basic supply and demand of agricultural products in order to operate efficiently. Corporate agro corporations have been placing offshore farming facilities for a very long time in order to take advantage of lower production costs, as well as readily available labor. When they became single modalities, however, this operating model proved to be under pressure to become a logistical liability in the rural regions once they became single modalities.

There are more benefits to nearshore farm production than just supply chain resilience. Due to the proximity of the company to the customers, it is able to provide faster response times and is easier to adapt to evolving regional requirements and regulations. It is easier and more cost-effective to ship, and it takes less time for products to reach their intended markets. The advantages of local farmers are that they are able to eliminate customs and duty charges to their customers, and also reduce the impact of currency fluctuations on their income. In order to ensure that their supply chains are protected from future disruptions, more and more farms are turning to nearshoring.

## **Conclusion**

As a result of increased awareness and a need to maintain competitiveness, the agricultural industry is being forced to address some long-standing supply issues and re-engineer farm products to address these issues in order to remain competitive. As a result of these developments, in order to position the respective rural sectors in this new era of rural development, more resilient and cost-effective supply chains are being developed in order to ensure that they are positioned to meet this growing need. It is no surprise that many supply chain managers in the agro sector are currently experiencing problems related to a lack of visibility across extended supply chains. In an effort to improve visibility and enhance response to major disruptions and variables within their domestic, regional, and global supply chains, leading farming companies and farmers are using advanced technologies to significantly improve visibility and boost response.

A large part of the solution to these challenges lies in the use of digital technologies and digital transformation, so that farmers can facilitate a seamless flow of information across the value chain and make better informed decisions based on insights. It is becoming increasingly important for agro companies to make use of spend analytics tools and software packages in order to gain more visibility into their spending. By consolidating spending, you are able to improve your buying leverage and negotiating power, enabling you to drive value for your organization or push for improvements. Spending consolidation is often a prelude to farmer consolidation in the rural sector and reduces the variation in quality and price for the same type of product and service across multiple geographies.

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