



## with **Bindiya Vakil** on food supply shortages



**1) Following the recent fresh produce shortages in UK supermarkets, is poor weather & climate change and its impact on supply, something that producers & retailers need to be worried about?**

We've seen extreme weather events stemming from climate change become a very real threat to supply chains in recent years. A significantly colder winter in Spain and Morocco has recently led to shortages of tomatoes, aubergines, lettuce and celery, causing some of the largest retailers to introduce limits on the number of items each customer can purchase. Unfortunately, these types of extreme weather events aren't slowing down.

We've witnessed year-on-year increases in weather-related supply disruptions here at Resilinc. Climate risk is a very real threat to supply chains, and not just for agriculture. For example, we saw a nearly 40% increase in weather-related disruptions in 2022 over 2021. From extreme droughts to severe flooding, the number of extreme-weather related supply chain disruptions continue to rise. And we anticipate seeing similar increases in the future. Most



concerning of all, a study we conducted with the University of Maryland's Supply Chain Management Center revealed that just eleven per cent of supply chain sites are fully prepared for extreme disruption weather events caused by climate change. So, whilst the effects of the current UK supply shortages are worrying, producers and retailers should heed the warning and be prepared for the possibility of it happening again - and more frequently. Fortunately, there are steps that businesses can and should take to limit the impact of future extreme weather events.

**2) What can retailers do to minimise supply chain disruptions caused by climate change?**

Retailers must increase visibility of their supply chain to minimise the chance of disruption. Undertaking supply chain mapping and monitoring are the two most effective ways to increase visibility. With true visibility across their supply chain, from greenhouse to supermarket shelf, retailers can take preventative steps to avoid further disruption to their supply chains, or even offset disruption altogether. Of course no supply chain can ever be completely risk-free, so companies must invest in a more resilient network that can withstand the impacts of extreme weather. Mapping everyone involved in your supply chain network is crucial because the supplier who has the relationship with the retailer will have several tiers of other companies below involved in fulfilling the order. It's usually these lower tier suppliers that can end up acting as a bottleneck to supply as this is where extreme weather events can cause the most damage. Multi-tier mapping is an essential step for retailers to fully understand their supply ecosystem and it's this insight that might save them from significant supply chain impact.

Retailers also need to pay attention to their current supply chain strategy, monitoring their working practices to further reduce risk. Thought about like this, supply chain

mapping and monitoring become two sides of the same coin - both working to pre-emptively mitigate disruption risk. For instance, retailers which rely more heavily on one region or a few sites in particular should invest in real-time event monitoring to identify any potential impact to their supply chain as early as possible. Through risk-monitoring technology, they will also gain invaluable knowledge into which sites in particular are likely to be at risk by tracking preparedness. They can then take the necessary steps to diversify their supply chain away from the impacted areas - in this case Spain and North Africa - securing supply from alternative producers, avoiding disappointing loyal customers and loss of revenue.

**3) What are the benefits of mapping supply chains in light of recent disruptions?**

In addition to ensuring continued supply, retailers who have visibility over their supply chains stand to avoid reputational damage and unnecessary additional costs if supply diminishes or dries up entirely. In the case of the current fruit and vegetable shortages, we are seeing the largest supermarkets quickly switch producers and suppliers to shore up supply. While ensuring customers get what they want, retailers' knee-jerk reaction puts them at risk. Oftentimes, when solving for one problem, another arises.

By rushing to keep customers happy and sales up, companies may not be able to secure as competitive prices as they would like and cannot take the time to carry out proper due diligence on new suppliers. In the long term, this approach could cost retailers more both financially and reputationally than the original issue. With a myriad of issues at play, the value of investing in mapping and monitoring supply chains cannot be understated, and this will be more important in the weeks, months and years to come as climate change, geo-political tension and a host of other potential risks remain.