

Industry Update

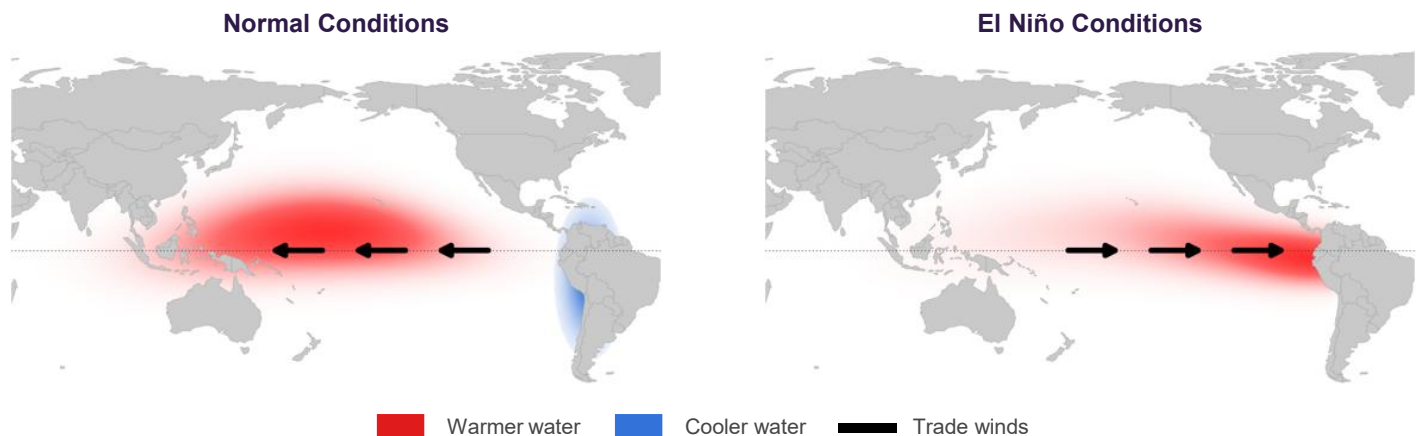
From El Niño to Super El Niño:

Impacts, Risks, and Outlook for Food & Agribusiness

In June, forecasters at the National Oceanic and Atmospheric Administration (NOAA) detected the sustained, rising ocean temperatures needed to declare that El Niño had arrived. In the U.S., this weather pattern typically brings cooler, wetter conditions to California, the Southwest, and the Southeast, and drier, warmer conditions to the Pacific Northwest, Midwest, and parts of the Northeast. Globally, drought risk can arise in Australia, Southeast Asia, and parts of India, while western parts of South America may see excess rain. For most people, news of shifting weather patterns comes with little fanfare.

But for anyone in food production, the news signals the thing that markets hate the most: uncertainty. It has the potential (or not) to disrupt planting schedules, impact yields, and change strategies for combating disease and pests. However, one thing is for certain. El Niño's arrival means that the weather patterns that drive global agriculture are shifting and will have mixed but meaningful impacts across the U.S. and key global crop regions. If the current trend continues, there is a strong possibility that El Niño could intensify into an extreme version, a Super El Niño.

Typical vs. El Niño Conditions in the Tropical Pacific



What Is El Niño?

El Niño is a natural climate pattern that occurs every few years, when the surface waters of the central and eastern tropical Pacific Ocean become unusually warm near the equator. These warmer waters weaken the normal trade winds that push warm water toward Asia, allowing heat to spread eastward toward the Americas.

This shift in ocean temperatures is transmitted to the atmosphere above it. Rising warm air changes global circulation patterns, rearranging rainfall, storm tracks, and temperatures worldwide. As a result, regions that are normally wet may become dry, while some drier regions may experience increased rainfall or flooding.



IN SHORT

El Niño is a periodic warming of the Pacific that shifts global weather patterns and has the potential to disrupt agricultural supply chains.

~97%

Probability El Niño lasts through Spring 2027

Sources: NASA, NOAA, Scientific American, The Weather Channel, U.S. Geological Survey, World Meteorological Organization.



**Food, Agribusiness, &
Beverage Industry
Specialty Team**

Matthew Greer | Specialist | matthew.greer@truist.com
Ben Roden | Specialist | ben.roden@truist.com
Nick Newton | Associate | nick.newton@truist.com
Bliss Gordon | Analyst | bliss.gordon@truist.com

What Is a Super El Niño?

A Super El Niño is simply a more extreme version of this process. It is defined by much larger ocean-temperature anomalies, typically 2°C (3.6°F) or more above average in the central Pacific. These events are rare but significantly more disruptive. Because the ocean holds more excess heat, the atmospheric response is potentially stronger, leading to more severe droughts, floods, heatwaves, and global weather extremes.

Reliable records since 1950 show more than twenty El Niño events, recurring every two to seven years. Yet only three reached “super” strength (1982-83, 1997-98, 2015-16). NOAA

has no official “super” category; its Climate Prediction Center officially classifies events as Weak, Moderate, or Strong.

As of August, NOAA estimates that there is over a 90% chance that a “very strong,” or Super El Niño, will develop between October-December. Depending on the severity, a Super El Niño has the potential to disrupt global food production and lead to increased food insecurity and higher prices, particularly in the developing world. However, due to the complex variables that create global weather, no two El Niño events are ever the same, and the only way to assess the likely impact is to watch the weather unfold in real time.

>90%

Probability the current El Niño reaches “very strong” or Super status
NOAA estimate, as of August

\$5.7 trillion

Estimated global multi-year losses following the 1997-98 event

Why it Matters

If Pacific Ocean temperatures continue rising at their current rate, the 2026-27 El Niño could rank among the strongest on record, prompting close monitoring by emergency managers, water agencies, and weather services globally. Still, forecasting remains extremely difficult. Short-term atmospheric variability, including shifting winds and rapid temperature fluctuations, often exerts a greater influence on the timing, intensity, and evolution of El Niño events than the slower, more predictable interactions between the ocean and atmosphere.

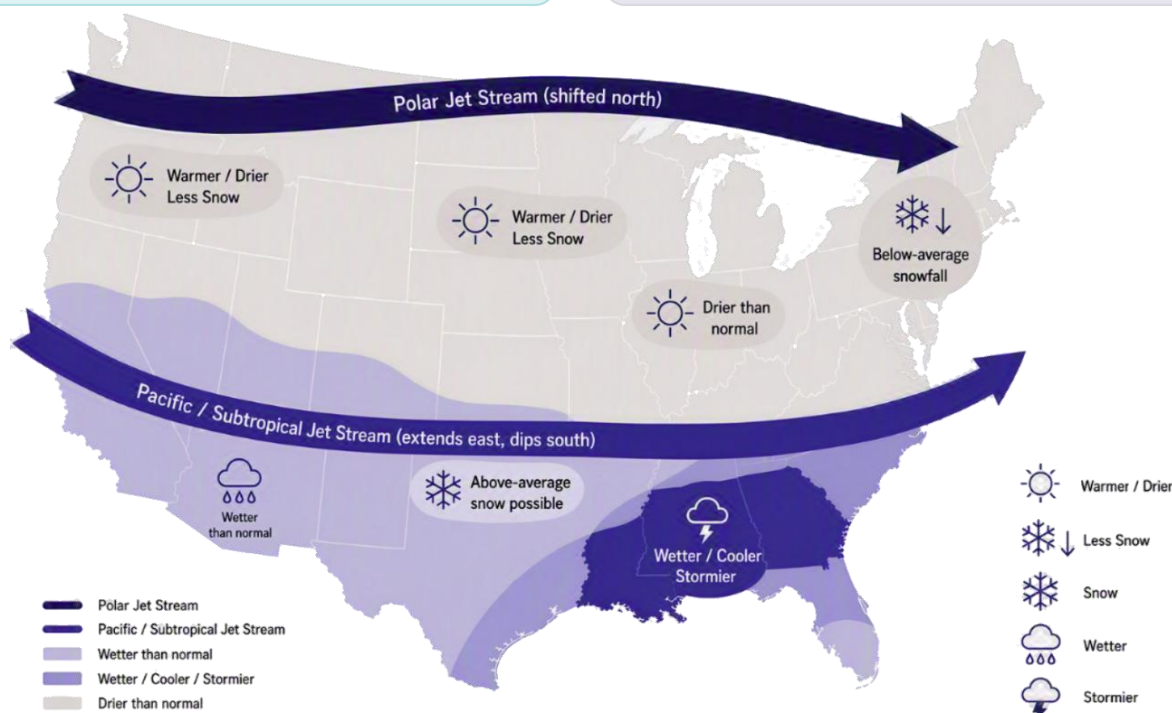
Typical El Niño Winter Impacts | December to March

Potential Benefits

- CA & Southwest**
Higher snowpack and reservoir levels.
- Southern Plains**
Better soil moisture for wheat and forage.
- South**
Better pasture conditions.

Potential Challenges

- Northern Plains**
Spring wheat yield pressure.
- South**
Rice delays and fungal risk.
- Mid-South**
Cotton timing and quality risk.



Sources: Agriculture Dive, GeoGlam Crop Monitor, AgWeb, Columbia University International Research Institute for Climate & Society, CNN, Los Angeles Times, NASA, Newsweek, NOAA, The Weather Channel, U.S. Geological Survey.

Global Commodities and Potential El Niño Exposure

El Niño's effect depends both on where the weather lands and how tight an existing market already is. The commodities below are ranked by overall potential El Niño exposure, incorporating current global balance sheet inventories, geographic concentration of production, and expected weather-related impacts.

Commodity	Global Balance Sheet	El Niño Impact
<i>Key Geographies at Risk</i>		
Rice <i>India, Thailand, Vietnam, Indonesia, Philippines, Pakistan</i>	Comfortable but vulnerable to policy actions. Inventories are relatively healthy, with stocks concentrated in China and India. Record consumption is absorbing much of production, and export restrictions could quickly tighten supplies.	Increased drought and heat risk across Asia may reduce yields, especially in rainfed areas. Export restrictions become more likely during disruptions.
Palm Oil <i>Indonesia, Malaysia</i>	Moderately tight. Inventories are not excessive, and the market depends on Indonesia and Malaysia for 85%+ of global production — limited diversification.	Drought can cut fresh-fruit-bunch yields and oil-extraction rates. Losses often emerge 6–12 months after the weather event.
Fishmeal / Anchovy <i>Peru North-Central fishery, Chile, Ecuador</i>	Tight and highly concentrated. Supplies depend heavily on Peruvian anchoveta harvests; inventories are well below strong-season norms, leaving the market disruption-sensitive.	One of the most vulnerable to El Niño. Warming waters can sharply cut anchoveta catches and quotas; past episodes gutted global fishmeal output.
Sugar <i>India, Thailand, Brazil, Mexico</i>	Balanced. Strong Brazilian and improving Asian output have lifted availability. Inventories are more comfortable than a few years ago but remain weather-sensitive.	Monsoon weakness in India and drought in Thailand can quickly shift the market from surplus into deficit. El Niño could potentially limit rainfall in Brazil as well.
Wheat <i>Australia, India, Pakistan, North Africa</i>	Relatively comfortable. Global stocks are substantial despite recent draws; a large share sits in China and may not reach world markets.	Australian production is especially vulnerable to El Niño dryness; losses there tighten exportable supply even when global stocks look adequate.
Coffee <i>Vietnam, Indonesia, Brazil, Colombia</i>	Tight. Inventories are below historical norms after production challenges in several regions; the market relies on strong Brazilian and Vietnamese crops to rebuild.	Hotter, drier conditions can reduce flowering, bean development, and quality. Robusta regions are particularly exposed.
Cocoa <i>Ivory Coast, Ghana, Nigeria, Cameroon, Ecuador</i>	Very tight. Inventories are depleted after multiple poor West African crops; rebuilding has lagged, leaving the market highly weather-sensitive.	Heat and moisture stress can cut pod development and yields in West Africa. Even modest losses move prices sharply given low stocks.
Beef / Dairy <i>Australia, New Zealand, Brazil, India, Southern Africa</i>	Mixed. Beef is historically tight in several exporters on herd reductions, while dairy is broadly balanced with adequate milk-powder, butter, and cheese.	Impacts come via pasture stress, feed costs, water constraints, and heat stress. Dairy output can fall on lower milk yields.
Corn (Maize) <i>Southern Africa, India, Southeast Asia, Brazil, Mexico</i>	Adequate but tightening. Inventories remain sufficient, but recent ending-stock draws leave less cushion than a year ago. Large American crops support availability.	Southern Africa, SE Asia, and parts of India face elevated drought risk. Effects in the Americas can be mixed by timing and geography.
Soybeans <i>Brazil, Argentina, Paraguay, India</i>	Comfortable. Large South American output and healthy inventories provide a meaningful buffer; the oilseed complex is better supplied than most soft commodities.	Direct impacts are often milder than rice or palm oil. But soybean-oil demand can jump if palm-oil production falls.

Sources: Expana Markets, Farrelly Mitchell, Food and Agriculture Organization of the United Nations (FAO), Hectar Global, International Grains Council (IGC), USDA Economic Research Service (USDA ERS), The Marine Ingredients Organization (IFFO), StoneX, and World Bank industry reports; geographies per FAO and USDA.

The Bottom Line: Plan the Setup, Not the Forecast

It's worth repeating that there's a high degree of uncertainty surrounding how an El Niño event will ultimately play out. While the long-term, necessary conditions are present to create a Super El Niño (potentially the strongest on record), it's the short-term factors over the next several months that

will determine what the impact is. Since the outcomes are impossible to predict, management of potentially affected companies should focus more on the elements that they can control and have a plan in place for the elements that cannot be controlled.

What Food & Agribusiness Leaders Should Do Now



Supply Chain Assessment

Review direct exposure to commodities vulnerable to El Niño: rice, wheat, corn, palm oil, sugar, cocoa, coffee, fishmeal, etc. Also consider the potential indirect impact to commodities such as soybeans or beef/dairy.



Contingency Planning

Know what your options are if your business faces disruption. It may make sense to diversify your sourcing strategy and qualify a secondary supplier for critical inputs. For some businesses, a strategic buildup of inventory may be a better alternative.



Transportation & Logistics

T&L disruptions may produce larger impacts than direct supply shortages. Some prior El Niño events have caused flooding in important inland waterways, while others have caused extreme low-water dry spells. Either way, barge traffic, locks, and ports could be impacted.



Production Disruption Readiness

Facilities may face secondary challenges from extreme heat, power interruptions, water shortages or flooding, and workforce absenteeism. Management should consider facility-specific business continuity plans and identify alternate production processes if necessary.



Commodity Risk Management

For cost planning purposes, consider forward purchasing, hedging programs, and fixed-price supplier contracts. It may make sense to set up a quarterly commodity scenario analysis as expected weather patterns become more certain later in Q3 and Q4 2026.

Resilience is the advantage

For mid sized food and agribusiness companies, the prudent response to a potential Super El Niño is not to predict the exact weather impact, but to consider a wider range of outcomes and prepare accordingly. Firms that invest in resilience before disruptions emerge know their options and are typically able to protect margins, maintain customer service levels, and gain market share while competitors struggle to respond.