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Report Highlights:

The arrival of the 2026/27 El Niño brings renewed uncertainty to Brazil's agricultural sector, with regional impacts varying widely. Central and Northern areas face higher risks of heatwaves and below-average rainfall, while the South is bracing for excessive precipitation. These shifts threaten to disrupt planting schedules for soybeans and second-season corn, reduce water availability for pastures, and strain livestock welfare. High temperatures may also jeopardize critical coffee and orange flowering periods as well as sugarcane yields. In response, Brazilian producers should be prepared for elevated input costs, rising insurance premiums, and recurring infrastructure vulnerabilities associated with severe weather events. These financial impacts may have lasting effects well into future harvests, heightening the strain on Brazil's agricultural sector.

The developing El Niño phenomenon stands as one of the biggest risks to Brazil's agricultural outlook during the 2026/27 growing season. Although initial meteorological effects had started to manifest during the southern hemisphere winter months (June to August), the phenomenon is projected to peak in late 2026 and early 2027.

This timeline directly coincides with the critical planting and vegetative development phases of Brazil's primary summer crops, presenting severe operational and yield risks for both first- and second-season crops.

For Brazilian agriculture and livestock farming, the intensity of El Niño's impact depends on the region affected and the timing of climatic changes within the crop calendar. This "when and where" dimension is particularly relevant in Brazil, where double-cropping is widespread. While heavy rainfall brought by the phenomenon in one region may benefit crop development, water scarcity and high temperatures in another can jeopardize harvests and pasture growth.

Delays or replanting caused by erratic rainfall can compromise soybean establishment and productivity, as well as narrow the ideal planting window for subsequent second-crop species like cotton and corn. For perennial crops such as coffee and oranges, risks arise primarily during the flowering and fruit set stages depending on moisture and temperature levels. Erratic rainfall also affects semi-perennial crops like sugarcane, disrupting vegetative growth, raw material quality, and harvesting operations. Simultaneously, high temperatures threaten animal health, well-being, and welfare and deplete soil moisture, compromising pasture quality.

Mitigating these adverse effects leads to higher production costs and lower farm margins. It also creates ripple effects across input suppliers, cooperatives, trading firms, and financial institutions by heightening default risks. For end consumers, this translates to reduced food supplies, compromised product quality, and elevated prices.

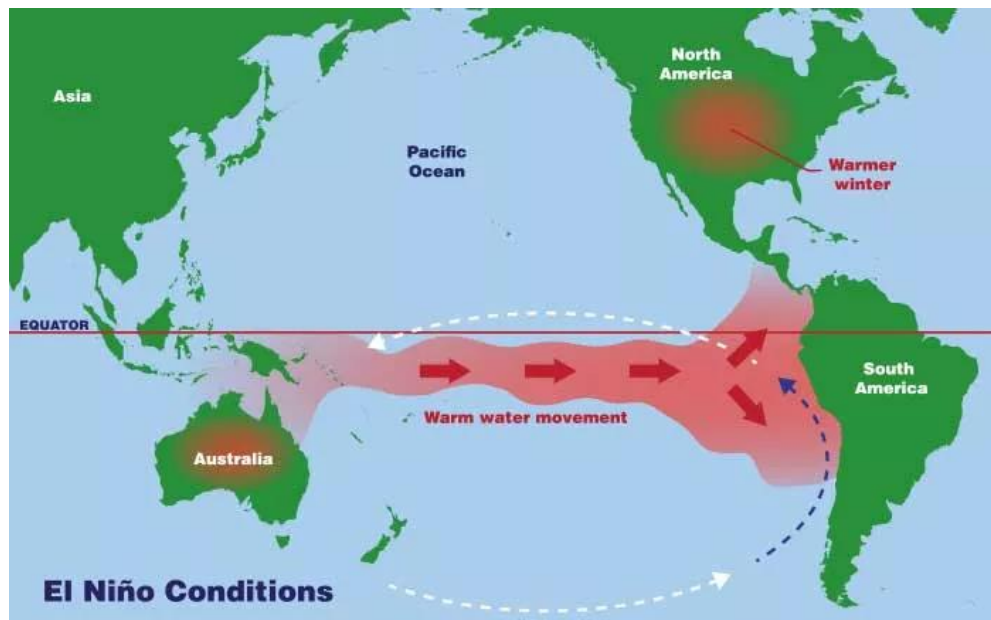
What is El Niño?

El Niño is a climate phenomenon characterized by the periodic warming of surface sea temperatures across the central and eastern tropical Pacific Ocean. It represents the warm phase of a broader climatic cycle known as the El Niño-Southern Oscillation (ENSO), which can also present neutral and colder (La Niña) variations. These phases significantly alter global atmospheric circulation patterns and ocean-atmosphere interactions.

Under normal conditions, strong winds push warm ocean water toward Asia and Australia, allowing cold, nutrient-rich water to rise along South America's coast. During El Niño, these winds weaken or reverse direction, sending that warm water back toward South America. This prevents cold water from rising and creates a large area of warm ocean that disrupts global weather.

Figure 1

South America under El Niño Conditions



Data source: U.S. National Oceanic and Atmospheric Administration (NOAA)/JPL-Caltech

Although the phenomenon occurs in the Pacific Ocean, thousands of kilometers from Brazil, its effects alter atmospheric circulation on a global scale. In practice, this modifies wind patterns, moisture transport, and the formation of rain systems, fostering weather extremes such as floods, prolonged droughts, heatwaves, wildfires, and severe storms.

How does El Niño affect the main Regions of Brazil?

In Brazil, the phenomenon causes starkly contrasting effects between the country's South and North, redefining rainfall patterns and agricultural planning. Although it began in the first few months of 2026, El Niño was officially declared by the U.S. National Oceanic and Atmospheric Administration (NOAA) in June. Nevertheless, the phenomenon's impacts tend to occur gradually, as atmospheric changes can take months to manifest across different regions. NOAA estimates that the phenomenon will reach very strong intensity between November 2026 and January 2027.

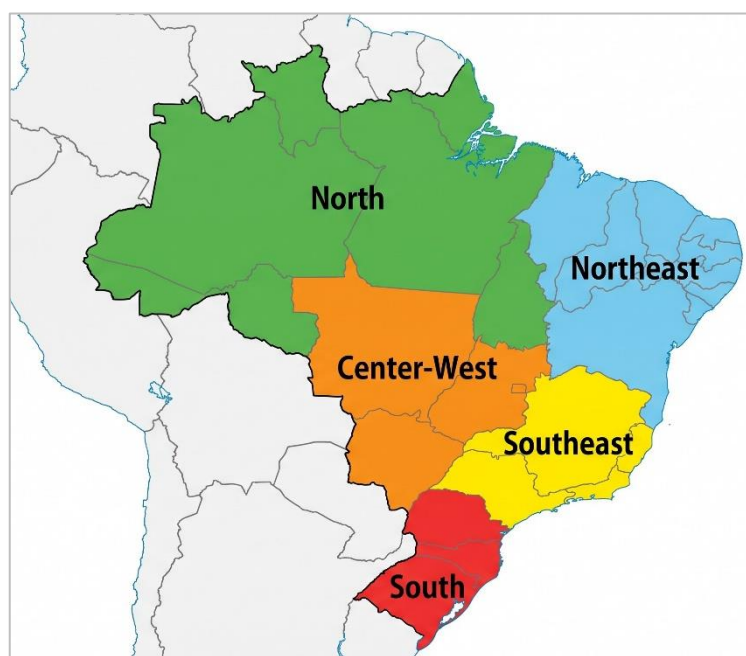
The current climate cycle has been commonly referred to as a "super El Niño" due to projections of very strong intensity and a rapid, persistent transition expected to last into early 2027. Brazil has a documented history of severe impacts from such cycles, as seen during the 2015–2016 and 2018–2019 crop seasons when extreme droughts severely hit the Amazon and semiarid Northeast, causing significant soybean and corn failures in Maranhão, Tocantins, Piauí, and Bahia area (i.e. the MATOPIBA region), while simultaneously triggering excessive rainfall in the South.

Severe conditions during the strong El Niño registered in 2023–2024, triggered a humanitarian crisis as major rivers in the North and Northeast dropped to historic lows. The Center-West faced prolonged dry

spells, forcing producers to replant crops and suffering reduced soybean yields that ultimately delayed second-crop corn planting.

Meanwhile, catastrophic flooding in Rio Grande do Sul in the South of Brazil severely disrupted national infrastructure, marking one of the most critical practical impacts of the cycle (see GAIN: [Brazil: Unprecedented floods in Rio Grande do Sul threaten Brazil's agricultural output](#)). For this reason, the South Region warrants greater caution. Unlike in 2023, however, the area currently does not show a significant water deficit, making rivers more prone to overflowing during new episodes of heavy rainfall.

Figure 2
Regions of Brazil



Data source: Post Brasilia

North Region: El Niño brings a high probability of reduced rainfall, increasing the risk of water stress for crops and potential damage to pastures. Prolonged dry spells are common, exacerbating wildfires. River levels in the Amazon drop, creating significant logistical impacts by hindering crop transport and hydroelectric power generation.

Northeast Region: The phenomenon can lead to prolonged droughts and low soil moisture. This is expected to compromise water supplies, causing losses in both crops and livestock.

Center-West Region: The Center-West region sits on the inflection point between which extreme heat and lack of rainfall and minor climatic impacts meet. Some regions, especially in the northwest such as in the Pantanal, are expected to experience more intense heatwaves, water deficits, and increases in incidences of wildfires. This lack of soil moisture may delay the initial soybean planting window (traditionally commencing September 7 in Mato Grosso), triggering a critical domino effect for the subsequent corn cycle. Rising temperatures may intensify water scarcity at the end of the dry season, affecting pastures and water resources for livestock. The areas in the southeast along the border of the Southeast Region are expected to experience reduced effects of El Niño.

Southeast Region: While this region tends to be the least affected by the El Niño, irregular rainfall has historically provided increased risk for agriculture in the region. While near-average rains may favor coffee and some winter crops, the unpredictable level of precipitation will provide an uncomfortable level of uncertainty for producers in the region. The main signs of the phenomenon are generally higher-than-normal temperatures, including occasional spikes of extreme heat. Rainy seasons can improve the

yield of perennial crops such as sugarcane, but in excess can hinder the flowering stages of corn and soybean crops.

South Region: Historically, El Niño significantly increases precipitation levels. Rainfall tends to be frequent and intense; while this favors the restoration of reservoirs and the early development of various crops, it requires extra caution regarding soil drainage, increased pest and disease mitigation measures, and the risk of excessive moisture and humidity. River overflows and flooding are common, as are occurrences of cyclones in the region.

Table 1
Summary of El Niño Effects in Brazil, by Main Regions

Region	Rainfall	Temperature	Main Risk	Risk Level
North / Amazon	Very below-average	Above-average	Severe drought Wildfires	HIGH
Northeast (Maranhão, Tocantins, Piauí, Bahia)	Below-average	Very Above-average	Severe drought	HIGH
Center-West (Mato Grosso)	Irregular	Above-average	Water deficit at planting	MEDIUM-HIGH
Center-West (Goiás, Mato Grosso do Sul)	Close to Average	Above-average	Excessive heat	MEDIUM
Southeast	Irregular	Above-average	Heatwaves	MEDIUM-HIGH
South (Rio Grande do Sul, Santa Catarina, Paraná)	Above-average	Above-average	Excess water Floods	HIGH

Data source: Itaú BBA, Table Post Brasília

What are the Possible Effects of El Niño on the Main Commodities in the 2026/27 Harvests?

Coffee

Coffee production, mainly situated in the Southeast Region, faces significant risks during strong El Niño years, as it is heavily influenced by variations in rainfall and temperature. The coffee harvest relies on dry spells followed by periods of continuous rain to support flowering. El Niño years tend to bring irregular precipitation patterns. These sporadic rains affect flowering, fruit formation and filling, and bean weight. Additionally, excessively high temperatures can lead to uneven flowering, flower abortion, and a loss of both yield and quality.

Therefore, Post expects that El Niño will negatively impact production and be exponentially impacted by how irregular rainfall is during critical points during the production cycle.

Brazil’s [Coffee Annual](#) report provides important information on the 2025/26 and 2026/27 harvests, including the main producing regions, forecasts for area, production, yield, and relevant consumption and trade data.

Corn

The primary threat of the 2026/27 El Niño cycle is concentrated on the second-season (*safrinha*) corn production, since the weather phenomenon tends to negatively impact productivity. If irregular rainfall delays soybean planting, the harvest may also be delayed, narrowing the optimal window for sowing the second-season corn crop. Consequently, corn becomes more exposed to the end of the rainy season and to high temperatures during the grain-filling stage.

Data compiled by the Mato Grosso Institute of Agricultural Economics (IMEA) analyzing the last three El Niño events since 2010 highlights a stark decrease in crop resilience in comparison to years without the weather phenomenon. Historical data underscores that second-season corn is significantly more vulnerable to El Niño disruptions than the initial soybean crop, mainly due to the delays in the double-cropping system and greater exposure to water deficits in the Center-West and the MATOPIBA Region. Should the phenomenon intensify and delay soybean planting, Post expects impacts on the second-season corn area and yield.

Brazil's [Grain and Feed Update](#) report provides important information on the 2025/26 and 2026/27 harvests, including the main producing regions, forecasts for area, production, yield, and relevant consumption and trade data.

Cotton

During El Niño years, high temperatures and reduced soil moisture can compromise cotton crop yields. Like corn, cotton is often grown by producers in a double-cropping system following the soybean harvest. This leaves cotton vulnerable to adverse weather conditions: if irregular rainfall delays the soybean planting and harvest, the cotton planting window may also be shortened.

However, despite second-crop cotton accounting for a bigger share of national production, the impact might not be substantial. The 2025/26 cotton harvest experienced significant delays in planting due to the soybean harvest but managed to achieve high production volumes.

Dairy & Livestock

During El Niño events, impacts on beef cattle farming, cattle raising, and dairy farming typically affect pasture development, water availability, silage production and preservation, and thermal comfort of the herd. Increased temperatures tend to reduce feed intake, production, and reproductive efficiency in cows, in addition to requiring superior infrastructure for water supply, shade, ventilation, and cooling. Heat can also bring parasite infestations, such as ticks and horn flies.

In breeding systems, a decline in the body condition of breeding cows can reduce fertility and pregnancy rates. In pig farming, heat stress can impair weight gain, fertility, and the performance of breeding sows and animals in the early stages of rearing.

Delayed or irregular rainfall can slow pasture recovery, reduce weight gain, and prolong the time required for animals to reach slaughter weight. Without pasture, producers may be forced to sell animals early, increasing short-term supply but hindering future herd rebuilding.

On the other hand, excessive rainfall and humidity may lead to mud accumulation and a decline in silage quality. Furthermore, a damp, waterlogged environment may foster the development of conditions such as hoof rot and respiratory infections. In dairy farming, the greatest disease risk is mastitis, an infection of the mammary gland.

In practical terms, the most immediate result of this scenario is a substantial rise in operating costs, which squeezes producers' margins and is worsened by higher feed charges, severe transportation logistics bottlenecks, and increased retail prices. Problems with forage availability caused by irregular rainfall can lead to supplementation needs, which in turn make the end-product more expensive, potentially affecting sale, retention, and confinement decisions.

Fruits and Vegetables

In various regions, high temperatures can accelerate plant development but reduce fruit size and disrupt the flowering patterns of perennial crops.

High temperatures and lack of rain caused by El Niño in the Southeast, if occurring during the flowering period, can reduce the productive potential of the orange crop, affecting both productivity and fruit quality. Orange blossom setting is very sensitive to heat, and high temperatures tend to cause flower abortion and the dropping of young fruit. Historically, El Niño events have led to such reductions in yield potential.

In the South, excessive rainfall can delay the planting of various fruits and vegetables, such as apples, grapes, potatoes, tomatoes, carrots, and onions. Humid weather can also increase the occurrence of rot and disease, delay harvesting, and reduce fruit quality.

In the Northeast, drier weather can benefit certain irrigated fruit crops, such as melons and watermelons. However, a prolonged dry season can compromise water reservoir levels and jeopardize crop management. In addition, high temperatures can also hinder the development of various fruits, including papayas, mangoes, and grapes.

Oilseeds

Overall, the effects of El Niño on soybeans tend to be more positive in terms of productivity in comparison to other crops. In the 2025/26 season, soybeans have demonstrated resilience to climate impacts. However, the effects tend to vary across producing regions. In the Center-West and the MATOPIBA region, irregular rainfall and high temperatures could delay planting, require replanting, and compromise yields. Conversely, in the South, greater water availability could favor crop development and partially offset potential losses in other areas.

Nevertheless, although a harvest increase is expected for 2026/27, under an extremely adverse scenario, Brazilian soybean production could drop by as much as six percent.

Poultry

High temperatures can decrease feed intake and weight gain, reduce feed efficiency, and increase poultry mortality. Increased humidity may lead to infections, parasites, respiratory problems, and a drop in immunity. These variations in temperature can also affect egg quantity and quality.

However, the primary impacts of El Niño are expected to manifest as instability in animal feed prices, which can squeeze producers' margins due to rising costs for corn and soybean meal, as well as increased logistical costs, such as those related to energy consumption and infrastructure.

Rice

In the South, where most of Brazil's rice production is concentrated, excessive rainfall caused by El Niño may delay sowing, while reduced solar radiation due to cloud cover could compromise yields.

In the North and Northeast, the primary risk is associated with reduced rainfall and water deficits in rainfed crops. Historically, during El Niño years, rice yields drop by approximately 11 percent in the Northeast and four percent in the North compared to neutral years and the performance seen in the Southeast.

Sugarcane

During El Niño years, the quality of raw materials, the pace of harvesting, and milling can be compromised, affecting industrial yield, especially in the Center-South region, which concentrates most of the production. This is because the weather phenomenon historically presents cycles with irregular rainfall during the winter, which is traditionally a dry season, and water scarcity during the summer, usually a rainy season.

Precipitation can interrupt harvesting and slow down milling operations at the plants. Furthermore, excess moisture can delay the sugar concentration in the plant, impairing both quality and yield. Conversely, periods of drought and above-average heat, especially in the North and Northeast regions, can compromise planting, crop development, and overall productivity.

Wheat

The forecast for above-average rainfall in key wheat-producing states could compromise Brazil's wheat production potential, repeating a historical pattern associated with El Niño years. While water is essential for crop development, an excess can have various negative impacts throughout the plant's growth cycle.

Reduced solar radiation can hinder crop development, while high humidity fosters the spread of fungal diseases. Concerns are heightened by the fact that nearly 80 percent of Brazilian wheat is grown in the South, a region traditionally prone to excessive rainfall during El Niño winters. Consequently, weather conditions in the region over the coming months will be a decisive factor for Brazil's wheat supply.

Can Proactive Adaptation Safeguard Brazil's Agriculture From El Niño?

Previous experiences and firsthand exposure to the natural uncertainties brought about by the El Niño weather phenomenon highlight the need to strengthen risk management, prevention and mitigation measures, aside from constant monitoring. It has caused innumerable disruptions in past harvests throughout Brazil, affecting crops, livestock, wildlife, individuals' wellbeing and economic, social, and infrastructure welfare.

Nevertheless, although projections of a "super" El Niño increase the likelihood of climate impacts, the phenomenon does not in itself determine a negative impact on crops or livestock production.

Past events demonstrate that preventive measures tend to be more efficient and less costly than responses based on damage mitigation and emergency actions. Economists surveyed by Brazil's Central Bank expect El Niño to increase inflation in Brazil by 0.5 percentage points in 2027.

As such, adapting to and managing the risks associated with such severe weather events must also be treated as a priority economic agenda. The response to El Niño involves investments in soil conservation, the restoration of degraded areas, access to agricultural insurance, efficient water use, the diversification of crops and pastures, and the adoption of technologies to enhance agricultural resilience and animal welfare.

Attachments:

No Attachments.