

Out of Hormuz Energy Shocks, the Ingredients for a Global Food Crisis

High costs and shortages of fertilizer and fuel – combined with the looming effects of El Niño – are becoming a threat to global food security, S&P Global Analysis says

NEW YORK, Oct. 19, 2026 /PRNewswire/ -- Beyond the more well-documented impacts from the disruption of transit through the Strait of Hormuz lies the beginnings of what could be a global food crisis, a new S&P Global [analysis](#) says.

S&P Global

In the first major [report](#) from the S&P Global Institute, authors Daniel Yergin, Shankari Srinivasan, Allan Pickett and Simon Blakey say that the reinforcing shocks of higher energy and fertilizer costs, resilient biofuel-linked demand and El Niño-related weather risk are starting to come into view.

"The world's food producers rely on a steady supply of natural gas and sulfur for fertilizer, diesel for machinery and transport, and open sea-lanes for trade," they write. "Conflict is now testing all of them at once, just as El Niño tests the harvest."

The paper – entitled [Energy disruption and El Niño: Leading to a global food crisis?](#) – points to "pressure building in fertilizer and diesel markets." The article reflects the combined expertise of S&P Global's agricultural and energy research services and research by S&P Global Ratings.

Fertilizer Bottlenecked

While it has become common knowledge that about 20% of global oil supply and 20% of global LNG trade flowed through the Strait of Hormuz prior to the war, less recognized is the Middle East's role as a major supplier of fertilizer, as well as the feedstocks that other countries rely on to produce it.

Roughly 29% of global trade of urea, the world's most widely used nitrogen fertilizer, normally passes through the Hormuz Strait, as does nearly half of the global sulfur trade and about 21% of the merchant trade of ammonia.

Yet, the fertilizer disruption is only the first channel through which the Iran war reaches global agriculture, the authors say. Fertilizer producers elsewhere depend on energy, mainly natural gas, for feedstock as well as fuel for their manufacture. By restricting oil and LNG flows through the Strait of Hormuz, the conflict also raises fertilizer production costs and farm operating costs far beyond the Gulf.

South Asia is particularly exposed to a double vulnerability of disrupted fertilizer supply from the Gulf and higher costs for the LNG used by domestic producers, the authors note. The Gulf producers are an important source of imported urea for India, while LNG supports around 85% of its domestic urea production. In Bangladesh, the lack of available LNG has resulted in four of the country's five urea fertilizer plants ceasing operation since March 2026.

Diesel Scarcity Tightens the Squeeze on Farm Economics

The global squeeze on diesel – a key operating cost for farmers – extends to those regions that may otherwise be better insulated from immediate fertilizer and LNG shocks.

The Middle East and Russia normally account for half of global net diesel exports. Middle Eastern diesel exports have fallen by more than half since July 2025 to less than 1 million b/d in July 2026. Meanwhile, Ukrainian drone attacks and an export ban have pushed Russian diesel exports from roughly 1 million barrels per day toward zero. China has tightened its restrictions on exports of diesel and jet fuel, also.

With remaining refining capacity already operating near operational limits, diminished supply and low inventories coinciding with seasonal harvest and winter heating demand has taken its toll. The price differential between a barrel of crude oil and a barrel of

diesel (historically between \$12 and \$20) rose above \$100 per barrel in the first week of September.

"The conflict has driven diesel prices up much faster than crude oil prices, exposing farmers to a sharp increase in operating costs," the authors write. "Faced with this increase, on top of more expensive fertilizer, farmers in the most affected regions either have to reduce fertilizer purchases and the rate at which they apply fertilizer to their crops, or they may choose to reduce the acreage that they plant. Either way, less food would be produced than would otherwise have happened."

Biofuels intensify the food-or-fuel trade-off

High oil prices also make biofuels more competitive with petroleum, which strengthens demand for the crops and vegetable oils used to produce them. For the first time in recorded history, biofuels became cheaper than oil-based shipping fuels in Europe in September 2026. The resilient demand and policy support for biofuels means that crop markets have less scope to rebalance toward food production.

"Biofuel policy is thus doing more than supporting demand. It is influencing what farmers plant in the middle of an input-cost shock," the authors write.

El Niño compounds the input-cost shock

The anticipated strong El Niño would add further stress just as farmers face higher fertilizer and fuel costs, leaving crops less resilient to heat and disruptive rainfall. The National Oceanic and Atmospheric Administration (NOAA) projects sea-surface temperatures to reach at least 2 degrees C above normal — a threshold reached in only seven episodes since the 1950s.

S&P Global's agriculture modelling now indicates:

- Brazil's corn output forecast has been reduced by 6 million metric tons to 137 million metric tons, with a further decline of 10 million metric tons possible if El Niño intensifies.
- Australia's wheat production could fall to 22 million metric tons, compared with the current forecast of 28 million metric tons.
- India's rabi wheat crop faces increased downside risk if monsoon deficits persist; September rainfall was approximately 14% below average.
- Brazil's soybean output forecast has been lowered by 6 million metric tons to 177 million metric tons. A model incorporating El Niño severity and reduced phosphate application produces a probability-weighted estimate of 168 million metric tons, with a 65% probability that output falls between 160 million and 170 million metric tons. The effects will be felt globally: Brazilian soybeans are a major feed for Chinese livestock.
- Palm oil production in Indonesia and Malaysia faces downside risks of 5.8 million metric tons and 2.5 million metric tons, respectively.

Unlike changes in oil prices, which register immediately, the impact on food will take time to appear. The ultimate extent and severity are yet to be determined, the authors write:

"Farmers buy seed, fertilizer and fuel months before they sell a crop. The squeeze now bearing down on farm budgets may therefore not reach food markets in force until 2027.

"A global food crisis is not foreordained. But neither is it any longer a distant risk. If war continues to impede the movement of energy and fertilizer, and if weather cuts harvests across several major producing regions, the elements of such a crisis will be falling into place."

Media Contacts:

Isabel Allanwood
S&P Global
+44 7483 368 605
isabel.allanwood@spglobal.com

Jeff Marn
S&P Global Energy
+1 202 463 8213
jeff.marn@spglobal.com

Notes to Editors:

About the S&P Global Institute

The S&P Global Institute is S&P Global's new center for enterprise-wide thought leadership.

The Institute delivers insight on the complex and interconnected challenges facing today's global leaders. Geopolitics, artificial

intelligence, the energy transition, and capital flows can no longer be understood in silos.

They are colliding to fundamentally reshape the markets and the global economy.

To navigate this complexity, the Institute brings together data, research, and specialized expertise from across the entire S&P Global enterprise (Ratings, Energy, Market Intelligence, S&P Dow Jones Indices).

Operating at the intersection of capital markets, technology, and global policy, we are dedicated to connecting the dots on these structural transformations, delivering the forward-looking perspectives that clients and decision-makers need to lead with confidence.

To find out more and read the full report, visit: spglobal.com/en/research-insights

About S&P Global

S&P Global (NYSE: SPGI) enables businesses, governments, and individuals with trusted data, expertise and technology to make decisions with conviction. We are Advancing Essential Intelligence through world-leading benchmarks, data, and insights that customers need in order to plan confidently, act decisively and thrive in a rapidly changing global landscape.

From helping our customers assess new investments across the capital and commodities markets to navigating the energy expansion, acceleration of artificial intelligence, and evolution of public and private markets, we enable the world's leading organizations to unlock opportunities, solve challenges and plan for tomorrow – today. Learn more at www.spglobal.com.

SOURCE S&P Global

<https://press.spglobal.com/2026-10-19-Out-of-Hormuz-Energy-Shocks-the-Ingredients-for-a-Global-Food-Crisis>