LETS
TALK
ABOUT

El Niño

A climatic event that disrupts global weather patterns due to the warming of surface waters in the Pacific Ocean.

An El Niño weather pattern has taken hold and will strengthen through the end of this year and the first months of 2024.

TECHNOLOGY FOR IMPACT

El Niño: Significance of the name

It originated from the observations of Peruvian and Ecuadorian fishermen who noticed the warm ocean currents around December, thereby linking it to the birth of "the boy child."

El Niño: Understanding the phenomenon

El Niño is a climate pattern that refers to the unusual warming of surface waters in the eastern tropical Pacific Ocean. El Niño is the “warm phase” of a larger phenomenon called the El Niño-Southern Oscillation (ENSO).

El Niño: Frequency of occurence

El Niño events occur irregularly at two- to seven-year intervals. It is not a regular cycle, or predictable in the way that ocean tides are. It leads to increased sea surface temperatures in the Pacific, affecting atmospheric circulation and weather systems worldwide.

El Niño: Impact on rainfall

El Niño causes droughts in some regions and intensified rainfall in others, impacting ecosystems, agriculture, and water resources. Rainfall increases drastically in Ecuador and northern Peru, contributing to coastal flooding and erosion.

El Niño: Extreme weather events

El Niño contributes to more frequent and intense storms, hurricanes, and heatwaves, posing risks to lives, infrastructure, and habitats. Stronger El Niño events also disrupt global atmospheric circulation - the large-scale movement of air that helps distribute thermal energy (heat) across the surface of the Earth.

El Niño: Impact on marine ecosystems

El Niño disrupts ocean currents, affecting fish populations and coral reefs, leading to consequences for fishing and biodiversity. The thick layer of warm water does not allow normal upwelling to occur. Without an upwelling of nutrient-rich cold water, the euphotic zone of the eastern Pacific can no longer support its normally productive coastal ecosystem. Fish populations die or migrate.

El Niño: Global climate influence

El Niño affects temperatures, precipitation, and atmospheric circulation worldwide, influencing weather patterns on a global scale. Strong El Niño events contribute to weaker monsoons in India and Southeast Asia. ENSO has even contributed to increased rainfall during the rainy season in sub-Saharan Africa.

El Niño: Impact on economy and business

It may cost the global economy about **$3.4 trillion** over the next 5 years. Some ways in which businesses get affected are:

- Supply chains, operations, and consumer demands may get affected by the uncertainty.
- Production, productivity, and resource disruptions may require strategic intervention.
- Input costs may increase due to sourcing and transportation challenges.
- Risk management and insurance coverage to mitigate potential damage must be revisited.
- Environmental regulations and policies related to water and energy consumption may change.

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Find out how El Niño impacts your business, and what you can do about it.

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