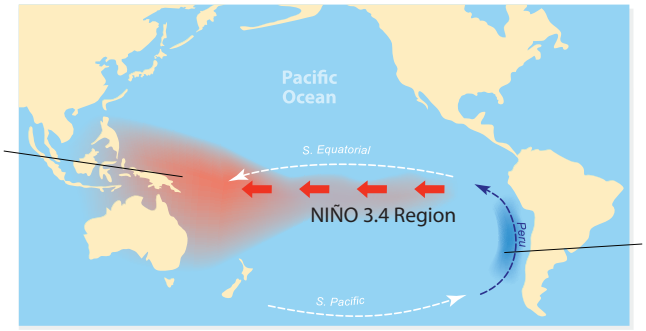
The El Niño Phenomenon

What is El Niño?

An El Niño state occurs when the central and eastern equatorial Pacific sea-surface temperatures (SSTs) are substantially higher than usual. The National Oceanic and Atmospheric Administration (NOAA) defines an El Niño event when the NIÑO 3.4 area has sea-surface temperatures at least 0.5 °C higher than normal for five consecutive three-month-averaged periods.

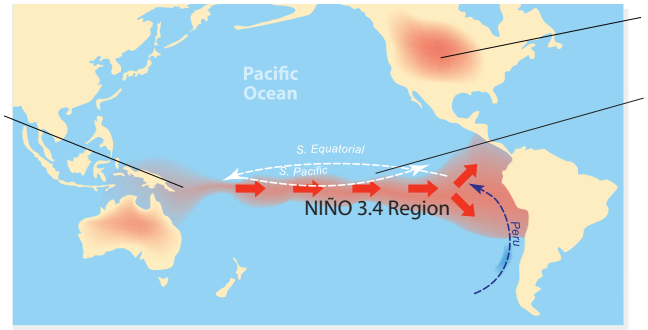
NORMAL YEAR



Equatorial winds gather warm water pool towards the west

Cold water along South American coast

EL NIÑO YEAR



Warmer winter

Easterly winds weaken & warm water moves towards the east

The sea-surface temperature (SST) anomaly has hovered around 1.2-1.4°C above average for the last several weeks

How El Niño will affect East/Horn of Africa

While some countries experience depressed rains during El Niño events, Somalia experiences heavier rainfall amounts that usually lead to flooding, disease, destruction and death.

How previous El Niños affected Horn of Africa

During the last 25 years, Somalia has been affected by six moderate-to-strong El Niño events: 1991-2, 1994-5, 1997-8, 2002-3, 2006-7, and 2009-10 in which floods of different magnitudes were reported. The 1997-8 was the strongest followed by that of 2006.

2 000

people were killed in the 1997-8 El Niño in the region, most of them in Somalia

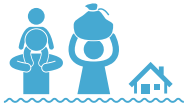
1.7 million

people were affected though displacement and loss of property and livestock during the 1997/8 and 2006 El Niño.

How the 2015 El Niño is likely to affect Horn of Africa

According to the International Research Institute (IRI), El Niño conditions in the east-central Pacific have intensified to moderate strength. There is now a greater than 85% probability of occurrence of El Niño in the October-December (Deyr) rainfall season through 2016.

Above normal rainfall, sustained throughout the rainfall season Oct-Dec 2015.



Large scale floods, extended flash floods and river breakages and displacement.

Direct livestock losses due to drowning and disease outbreaks.

Loss of crop yields and harvest stored in traditional underground pits.

900 000

An estimated 900 000 people, living in the Shabelle and Juba basins which are prone to flooding in a worst case scenario, are at high risk of being affected by the above conditions.

I4889E/1/08.15

Food and Agriculture Organization of the United Nations

fao.org/somalia