

SUMMARY

ALIGNED CLIMATE DRIVERS AND POTENTIAL IMPACTS ON FOOD SECURITY IN ETHIOPIA IN 2024

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Motivation

El Niño–Southern Oscillation (ENSO) and Indian Ocean Dipole (IOD) climate phenomena drive global seasonal rainfall anomalies. In Ethiopia, these anomalies are most pronounced when negative or positive ENSO and IOD phases align. The current El Niño and positive IOD phase alignment threatens heavy spring rains and flooding in Ethiopia’s southern pastoral areas, and drought in the central and northern highlands.

Purpose

To alert the authorities in Ethiopia and its development partners that previous El Niño and positive IOD alignment has resulted in severe drought conditions in the central and northern highlands, and the current alignment could result in a significant spike in the number of people in need of humanitarian assistance in 2024.

Approach and methods

Standard participatory rural appraisal techniques were used following the ENSO and IOD alignments of 2016 and 2023 to assess the impact on agricultural sector production, while the impacts of the ENSO and IOD alignments in 2002 and 2010 were explored using secondary data sources.

Findings

Seasonal rains play a central role in food production for smallholder farmers and pastoralists in Ethiopia. Significant rainfall anomalies that result in drought, widespread crop failure and high livestock mortality are driven by positive and negative ENSO and IOD alignments. Since 2000, this occurred in 2002–2003, 2010–2011, 2015–2016 and 2020–2022 and resulted in poor and failed rains in one or more of Ethiopia’s rainfall zones, poor crop and livestock production, reduced household food security, and greatly increased numbers of people needing humanitarian assistance.

Policy implications

Already facing millions of people in need of humanitarian assistance as a result of multiple conflicts, drought and floods, Ethiopia can ill-afford a further spike in numbers. Given the strong association between such spikes and previous ENSO and IOD alignments, this Policy Brief recommends that the Ethiopia Disaster Risk Management Commission (EDRMC) establishes a specialist ENSO–IOD facility. Supported by its international partners, this facility can plan for the impact of a drought in 2024 in the central and northern highlands and estimate and resource the additional amount of humanitarian assistance required.

Funded by



This material has been funded by UK aid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies.