ENSO Transition Alert

From La Niña Fade to Neutral Dominance

WMO Global Climate Assessment • February 2026

CRITICAL CLIMATE SHIFT UNDERWAY

Weak La Niña conditions are fading as tropical Pacific indicators signal transition toward ENSO-neutral state

CONTEXT

Sea surface temperatures and atmospheric patterns in mid-February 2026 show clear departure from recent La Niña dominance, creating uncertainty for global weather systems

March-May 2026 Probability Forecast

60%	30%	10%
ENSO-NEUTRAL	LA NIÑA CONTINUES	EL NIÑO DEVELOPS
dominant	**declining**	**emerging**

WMO Global Producing Centres Consensus

Period	Scenario	Probability	Confidence
Mar-May 2026	ENSO-Neutral	60%	Moderate
Mar-May 2026	La Niña	30%	Low
Mar-May 2026	El Niño	10%	Very Low

Source: WMO Global Producing Centres, February 2026

HIGH MODEL DIVERGENCE

Substantial uncertainty exists across tropical Pacific sea surface temperature forecasts, with widespread variation among models and ensemble members

ENSO System Fundamentals

- El Niño and La Niña drive but don't solely determine global climate patterns
- Magnitude of ENSO indicators doesn't directly correlate to impact severity
- Regional seasonal outlooks must assess multiple climate drivers beyond ENSO

- Atmosphere-ocean interactions in tropical Pacific alter worldwide weather systems
- Decades of research reveal complex feedback mechanisms between ocean and air
- Climate impacts vary significantly by geographic region and local conditions

ENSO Phase Characteristics

LIFE-AND-DEATH CONSEQUENCES

ENSO transitions kill people through extreme weather, displace millions through crop failures, and drive food prices beyond reach for vulnerable populations

CONTEXT

Climate pattern shifts create cascading humanitarian crises across agricultural, coastal, and food-insecure communities worldwide

Immediate Threats from Transition

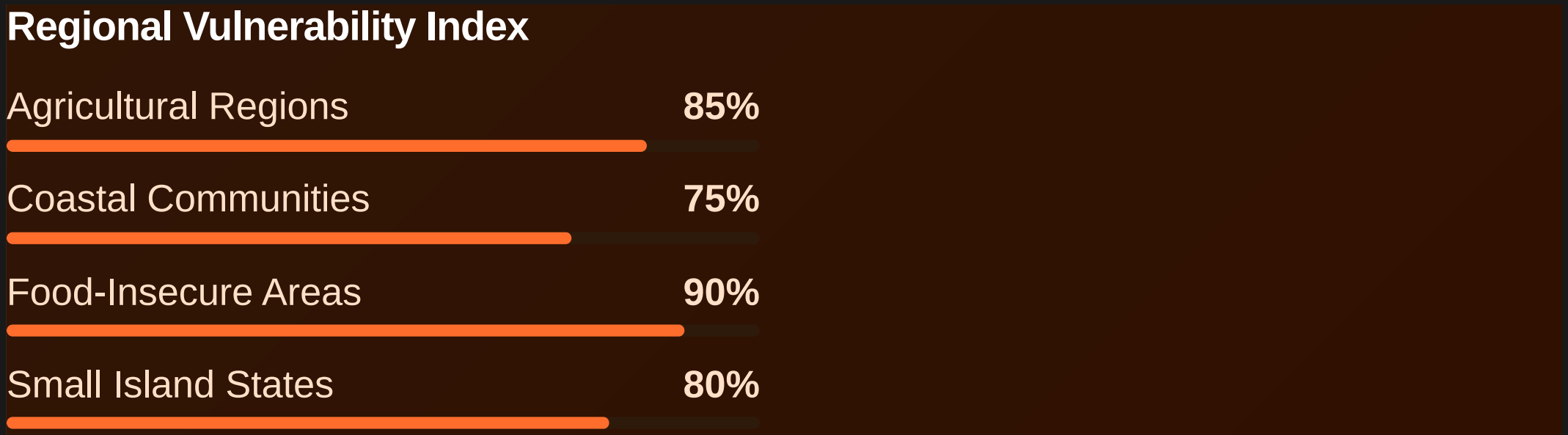
- Farmers face crop planning chaos as weather patterns shift unpredictably
- Coastal communities prepare for intensified storm systems and flooding
- Food-insecure populations confront affordability collapse as prices spike
- Agricultural systems destabilize globally during transition periods
- Disaster preparedness systems strain under pattern uncertainty
- Supply chains disrupted by extreme weather variability

EXPERT ASSESSMENT

> *“The shift from La Niña to potential El Niño represents one of the most challenging periods for global food security and disaster preparedness, as predictive models lose reliability during transitions.”*

— WMO Climate Assessment Team

Regional Vulnerability Index



TRANSITION PERIOD MAXIMUM RISK

Historical data shows ENSO transition periods produce the highest uncertainty and most severe humanitarian impacts as predictive systems fail and communities cannot adequately prepare

Key Indicators to Track

- Sea surface temperature anomalies in tropical Pacific regions
- Trade wind strength and direction patterns across the Pacific
- Atmospheric pressure differentials between Tahiti and Darwin
- Ocean subsurface temperature profiles and thermocline depth
- Precipitation patterns in ENSO-sensitive regions globally
- Agricultural commodity prices and food security indicators

WMO Update Schedule

- Monthly ENSO updates through transition period
- Weekly monitoring during critical threshold periods
- Emergency bulletins for rapid pattern changes
- Regional impact assessments every two weeks

Sources & References

- World Meteorological Organization (WMO) Global Producing Centres, February 2026
- WMO El Niño/La Niña Updates: https://wmo.int/publication-series/el-ninola-nina-updates
- WMO Climate into the 21st Century, 2003
- Tropical Pacific sea surface temperature analysis, multiple model ensemble
- Regional climate impact assessments from WMO member nations
- Historical ENSO transition impact data and humanitarian consequences