GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 461
TO BE ANSWERED ON WEDNESDAY, 22ND JULY, 2026

IMPACT OF EL NINO CONDITIONS ON THE SOUTHWEST MONSOON

461. PROF. SOUGATA RAY:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Government has assessed the impact of El Niño conditions on the southwest monsoon during the current year and if so, the details thereof;
(b) whether several States have experienced deficient rainfall on account of El Niño and if so, the details thereof;
(c) the details of likely impact of the rainfall deficit on agriculture, drinking water availability and hydroelectric power generation; and
(d) the details of measures taken by the Government to mitigate the adverse effects of deficient rainfall?

ANSWER
THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR
MINISTRY OF SCIENCE AND TECHNOLOGY
AND EARTH SCIENCES
(DR. JITENDRA SINGH)

(a) Yes. The Government continuously monitors the possible impact of El Niño conditions on the Southwest Monsoon through scientific assessments carried out by the India Meteorological Department (IMD) under the Ministry of Earth Sciences. For the current year, IMD assessed that the ongoing and expected El Niño conditions are likely to weaken the Southwest Monsoon, resulting in below normal rainfall over the country. In its First Stage Long Range Forecast issued on 13 April 2026, IMD predicted seasonal rainfall at 92% of the Long Period Average (LPA) (±5% model error). In the Second Stage Long Range Forecast, the seasonal rainfall forecast was revised to 90% of the LPA (±4% model error). In addition, the Indian Institute of Tropical Meteorology (IITM) under the Ministry of Earth Sciences, using its experimental seasonal prediction system, indicated that India may receive 10–12% below-normal rainfall, with the deficiency being mainly attributed to the prevailing El Niño conditions. These forecasts and assessments are issued well in advance to help governments, farmers, and other stakeholders plan and take necessary preparedness measures.

(b) Yes. Several States have experienced deficient rainfall, and El Niño has been one of the contributing factors. El Niño generally leads to drier-than-normal conditions over much of India, although its impact varies from region to region. Other weather systems, particularly the Indian Ocean Dipole (IOD), can influence and sometimes reduce the impact of El Niño. Current weather model guidance indicates the possibility of a positive IOD developing during the later part of the monsoon, which may help improve rainfall in some regions. The India Meteorological Department (IMD) monitors rainfall

across the country every day, week, month, and throughout the monsoon season. Rainfall is compared with the Long Period Average (LPA), which represents the normal rainfall based on historical data. Rainfall during the Southwest Monsoon naturally varies across different regions and at different times because of the monsoon's changing weather patterns. As a result, some areas may experience temporary rainfall deficits during certain periods.

(c) India Meteorological Department (IMD) under the Ministry of Earth Sciences provides regular weather forecasts and agro-meteorological advisories to help farmers manage rainfall variability. The Ministry of Power has reviewed the likely impact of El Niño on the power sector and has assessed that, while rainfall variability may affect hydropower generation and electricity demand, the country's overall power supply remains adequate. The Ministry of Power has also issued advisories to States and power utilities to strengthen preparedness, optimize power generation and transmission, and ensure reliable electricity supply during the monsoon season under evolving El Niño conditions.

(d) The Government has taken comprehensive measures to ensure reliable electricity supply and minimise the impact of deficient rainfall and possible El Niño conditions. The Ministry of Power is regularly reviewing the power situation and has assessed electricity demand, hydroelectric generation and fuel availability in view of likely rainfall variations. An advisory has also been issued to all States/UTs and power utilities to strengthen preparedness through preventive maintenance of power infrastructure, optimal operation of hydro and thermal power plants, adequate coal stock, improved transmission and distribution reliability, demand-side management, promotion of renewable energy and battery storage, efficient power procurement, and close coordination among grid operators to ensure uninterrupted power supply and maintain grid stability during deficient rainfall conditions.

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