

A .1st Stage long Range : Ist Stage Forecast For the Southwest Monsoon Seasonal Rainfall (June -September) during 2026 for the country as a whole.

1. Main Highlights

a) The 2026 southwest monsoon seasonal (June to September) rainfall over the country as a whole is **most likely to be below normal (95-90%)** of the Long Period Average (LPA)). Quantitatively, the seasonal rainfall over the country as a whole is likely to be **92% of LPA** with a model error of $\pm 5\%$. The LPA of the seasonal rainfall over the country as a whole based on the period of 1971-2020 is 87 cm. Monsoon season rainfall likely to be **below normal over most parts of Punjab & Haryana including Chandigarh during monsoon 2026. LPA of Seasonal rainfall (June-September) over Punjab, Haryana and Chandigarh are 439.8, 426.0 & 844.9 mm respectively.**

b) At present, Weak La Niña-like conditions are transitioning to ENSO-neutral conditions over the equatorial Pacific. Atmospheric circulation features across the tropical Pacific remain consistent with weak La Niña-like conditions. The Monsoon Mission Climate Forecast System (MMCFS) suggests the development of El Niño conditions during the SW Monsoon season.

c) At present, neutral Indian Ocean Dipole (IOD) conditions are present over the Indian Ocean and the latest Climate models forecast indicates that the positive IOD conditions are likely to develop towards the end of the southwest monsoon season.

d) The northern hemisphere snow cover extent during the last three months (January to March 2026) was slightly below normal. Winter and spring snow cover extent over Northern Hemisphere as well as Eurasia has a general inverse relationship with the subsequent southwest monsoon seasonal rainfall over the country.

2. Probabilistic Forecast for the 2026 Southwest Monsoon Season (June-September) rainfall over the country as a whole.

The five-category probability forecast for the Seasonal (June to September) rainfall over the country as a whole is given below. The forecast indicates that the **probabilities for both below normal and deficient rainfall categories are higher than their respective climatological probabilities.** The forecast probabilities for the "Above Normal" and "Excess" rainfall categories are lower than their respective climatological probabilities. Overall, the Southwest Monsoon seasonal rainfall over the country is most likely to be below normal (90–95% of LPA).

Category	Rainfall Range (% of LPA)	Forecast Probability (%)	Climatological Probability (%)
Deficient	< 90	35	16
Below Normal	90 - 95	31	17
Normal	96 -104	27	33
Above Normal	105-110	6	16
Excess	> 110	1	17

The MME forecast for the 2026 southwest monsoon seasonal rainfall was prepared based on the April initial conditions and using a group of coupled climate models that having highest prediction skill over the Indian monsoon region.

The spatial distribution of probabilistic forecasts for tercile categories (above normal, normal and below normal) for the seasonal rainfall (June to September) is shown in Fig.1. The spatial distribution suggests that the below-normal seasonal rainfall is most likely over many parts of the country except some areas over Northeast, Northwest and South Peninsular India, where normal to above-normal rainfall is likely. The white-shaded areas within the land area represent no signal from the model.

Tercile Probability rainfall forecast for 2026 southwest monsoon season.

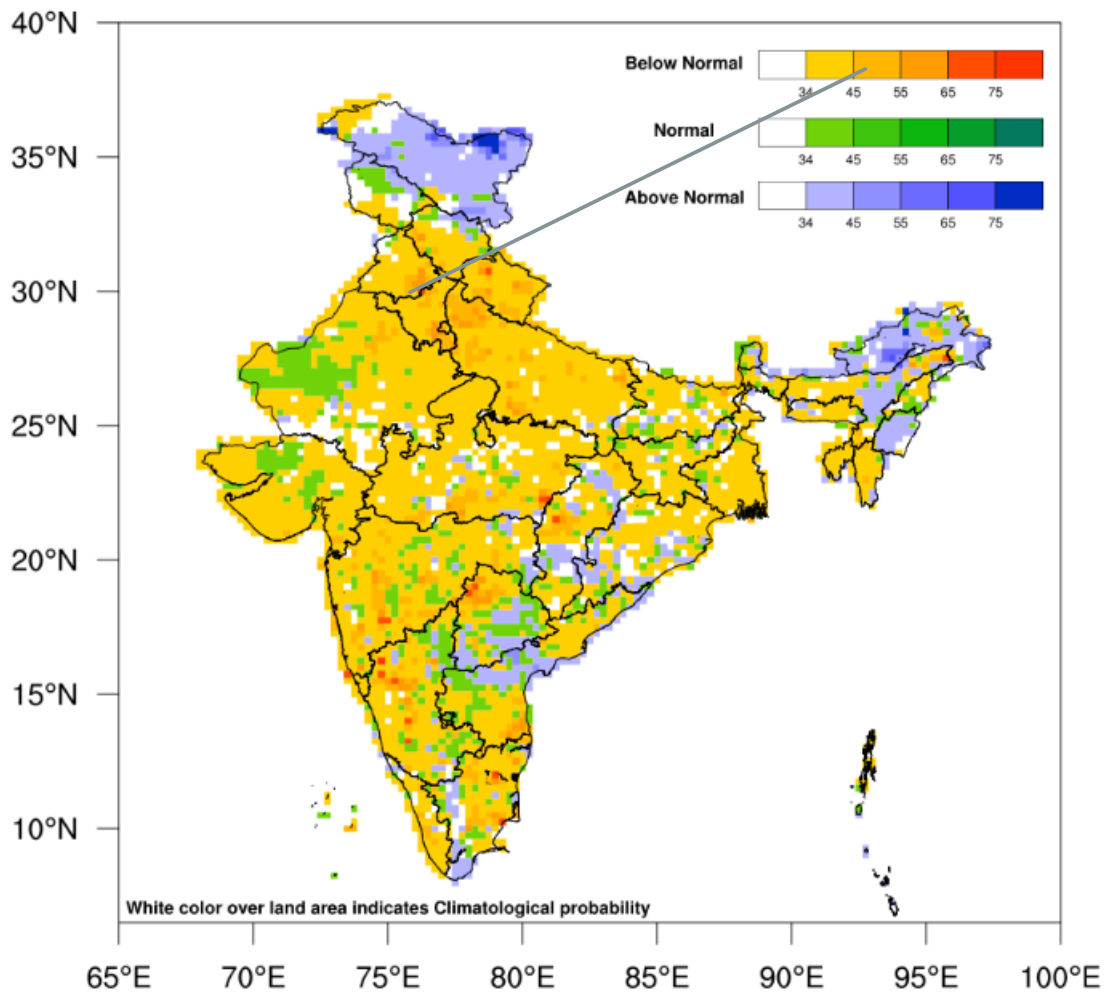


Fig.1. Probability forecast of tercile categories* (below normal, normal, and above normal) of the seasonal rainfall over India during the 2026 southwest monsoon season (June -September). The figure illustrates the most likely categories as well as their probabilities. The white shaded areas represent no signal from the model. (*Tercile categories have equal climatological probabilities, of 33.33% each)

B. 2nd Stage Forecast : IMD will issue 2nd stage forecast around end May which contains update for Monsoon Seasonal rainfall issued in April 2026 , along with probabilistic forecast for monsoon season (June-September) for four broad homogenous region of the country including Northwest India which contains Punjab, Haryana including Chandigarh.

In continuation to above forecasts IMD will also issue monthly rainfall forecast around end of June, July, and August respectively for subsequent one month. IMD will also issue forecast for second half of Monsoon 2026 in the end of July.