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Report Name: India Forecasts Above Normal Southwest Monsoon for 2024

Country: India

Post: Mumbai

Report Category: Climate Change/Global Warming/Food Security, Agricultural Situation, Cotton and Products, Oilseeds and Products, Grain and Feed

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Report Highlights:

On April 15, the Indian Meteorological Department (IMD) forecasted a 31 percent chance of an above normal 2024 southwest monsoon. IMD will issue a end of May forecast for the Monsoon Core Zone (MCZ), which represents most rainfed agriculture regions in the country and is the critical forecast related to agricultural planning, planting, and production. Extreme temperatures were recorded throughout the country in April, with east India experiencing its hottest April since 1901, while south India recorded its second hottest April. Above normal high temperatures are forecast from May to June in most parts of the country.

***DISCLAIMER**: The information contained in this report was retrieved from the Ministry of Earth Sciences/India's Meteorological Department (IMD) website https://mausam.imd.gov.in/. The U.S. Consulate General Mumbai – Foreign Agricultural Service (FAS) Office of Agricultural Affairs (OAA), USDA and/or the U.S. government make no claim of accuracy or authenticity. The Government of India has not officially endorsed this report.*

On April 15, IMD forecasted a 31 percent chance of an above normal southwest monsoon (refer table 1) for 2024, suggesting June to September rainfall will likely be 106 percent of the Long Period Average (LPA), with a model error of plus/minus five percent. LPA is rainfall recorded over a particular region for a given average over a long period. According to IMD, normal to above normal seasonal rainfall is likely over most parts of the country except areas in the northwest, east and northeast India, where below normal rainfall is very likely. The next forecast will be published in the last week of May.

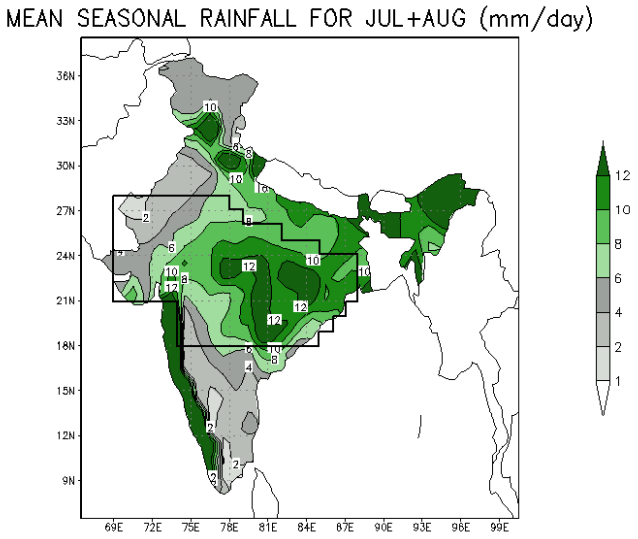
Table 1. Probability Forecast for 2024 Southwest Monsoon

Category	Rainfall Range (% of LPA)	Forecast Probability (%)
Deficient	Less than 90	2
Below Normal	Between 90-96	8
Normal	Between 96-104	29
Above Normal	Between 104-110	31
Excess	Greater than 110	30

Source: Indian Meteorological Department

IMD issues a long-range monsoon forecast in April, with an updated forecast at the end of May with a forecast for the MCZ, which represents most rainfed agriculture region in the country. In 2023, IMD correctly forecasted a normal southwest monsoon at 35 percent probability, however, rainfall over the MCZ was above normal and producers planning decisions were affected negatively, and poor yields were observed.

Figure 1. Monsoon Core Zone



Source: Indian Meteorological Department

Summer Sowing Higher Despite Deficit Rains

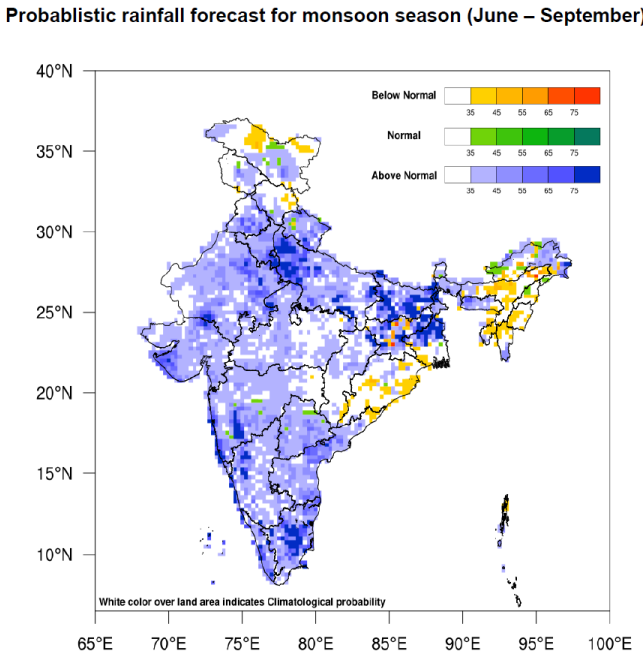
Despite 13 percent deficit rains during the pre-monsoon season of March, April, and May, and low reservoir levels, summer sowing -which was concluded the first week of May- is estimated six percent higher than the previous season. According to IMD, cumulative pre-monsoon rains through April 30 were deficit in east and northeast (-30 percent), and southern (-68 percent) parts of India, but higher in Central India by 82 percent. Consequently, overall planted area in central states of Madhya Pradesh, Uttar Pradesh, Odisha, and Telangana has increased. Rice, summer moong, maize, and sorghum are some of the major summer crops which have witnessed an increase in area.

Table 2. Summer Crop 2024 Crops Sowing Progress

Crop	Area Sown as of Apr 26, 2024	Area Sown as of Apr 26, 2023	Y-o-Y Change	Absolute Change
Rice	2.99	2.74	8.89%	0.24
Pulses	1.64	1.62	1.24%	0.02
Coarse Cereals	1.19	1.11	7.71%	0.09
Oilseeds	1.00	0.97	3.08%	0.03
Total	**6.82**	**6.44**	**5.89%**	**0.38**

Source: Ministry of Agriculture and Farmers Welfare

Figure 2. Rainfall Forecast for 2024 Southwest Monsoon



Source: Indian Meteorological Department

Seasonal Outlook for Temperatures during April – June 2024

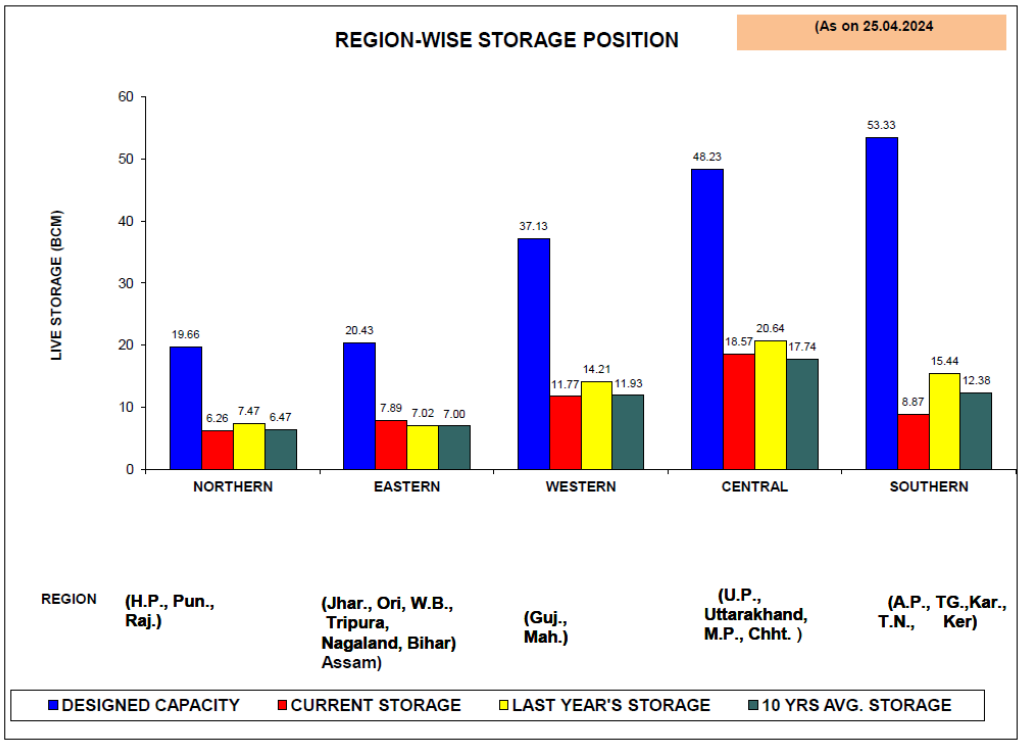
Extreme temperatures were registered throughout the country in April, with east India experiencing its hottest April since 1901, while south India recorded its second hottest April. IMD published an updated seasonal outlook for hot weather season for May to June with a forecast of above-normal maximum temperatures over most parts of the country, except some parts of east and northeast India and pockets of northwest India forecasted normal. Heatwave conditions coupled with low reservoir levels could impact production and yields of crops, particularly rice, fruits and vegetables.

Reservoir Levels at Alarmingly Low Levels

India's Central Water Commission monitors the live storage status of 150 reservoirs around the country on a weekly basis. The latest reservoir storage bulletin of April 25 puts live storage at 53.4 billion cubic meters (BCM), 30 percent of total live storage capacity. Storage levels for the corresponding period last year was 64.8 BCM (36 percent), and the average of the last ten years was 55.58 BCM (31 percent).

Reservoir storage levels in southern India are at 17 percent capacity, down from 29 percent last year. The states of Andhra Pradesh and Karnataka have storage levels of seven and 18 percent of total capacity respectively. The major kharif crops grown in these states are rice, pulses, and cereals and low water availability can delay planting and impact yields. South and central India typically benefit more from increased rainfall as the region receives more than 90 percent of the total precipitation during this period, while north India receives approximately 50-75 percent of their total annual rainfall during this time.

Figure 3. Regional Reservoir Storage (billion cubic meters - BCM) - April 25, 2024



Source: Ministry of Jal Shakti/Central Water Commission

Attachments:

No Attachments.