

## **Monsoon and Sowing: Update**

*Advancement of South-West monsoon across the entire country has resulted in above normal rainfall at 2% (above LPA) till 9 Jul 2023. Due to excessive rainfall in some regions, IMD has even issued red alert to remain cautious of the rising water levels. There also have been warnings of flash floods in some regions. IMD expects post 13 July 2023, extremely heavy rainfall conditions will slowly start dissipating. Sown area of kharif crops has declined by 8.7% compared with last year with rice and pulses remaining in red. 15 subdivisions (out of 36) and 12 states have received deficient rainfall during this period. The storage levels remain robust with 96% of live storage capacity to corresponding period last year.*

### **Where does Kharif sowing stand?**

Overall sown area of kharif crops have declined by 8.7% compared with last year as of 7<sup>th</sup> Jul 2023. Total sown area of rice (23.9%) and pulses (25.8%) have dropped significantly. Within pulses, lower acreage of Arhar and Urad was noted for the same period. Even the sown area of oilseeds (14.3%), cotton (10.9%) and Jute and Mesta (15.3%) have fallen sharply. However, higher acreage has been registered for sugarcane (4.7%) along with Jowar and Bajra crops.

**Table 1: Kharif Sowing**

|                | Area sown in<br>2023-24 (Lakh ha) | Area sown in<br>2022-23 (Lakh ha) | Change (YoY %) |
|----------------|-----------------------------------|-----------------------------------|----------------|
| Coarse Cereals | 73.4                              | 61.3                              | 19.7           |
| Jowar          | 6.1                               | 4.2                               | 44.8           |
| Bajra          | 38.5                              | 23.9                              | 60.3           |
| Rice           | 54.1                              | 71.1                              | (23.9)         |
| Pulses         | 32.6                              | 43.9                              | (25.8)         |
| Oilseeds       | 61.1                              | 71.3                              | (14.3)         |
| Cotton         | 70.5                              | 79.1                              | (10.9)         |
| Sugarcane      | 55.8                              | 53.3                              | 4.7            |
| Jute and Mesta | 5.8                               | 6.8                               | (15.3)         |
| All Crops      | 35.3                              | 38.7                              | (8.7)          |

Source: CEIC, Bank of Baroda | Data as of 7 Jul 2023

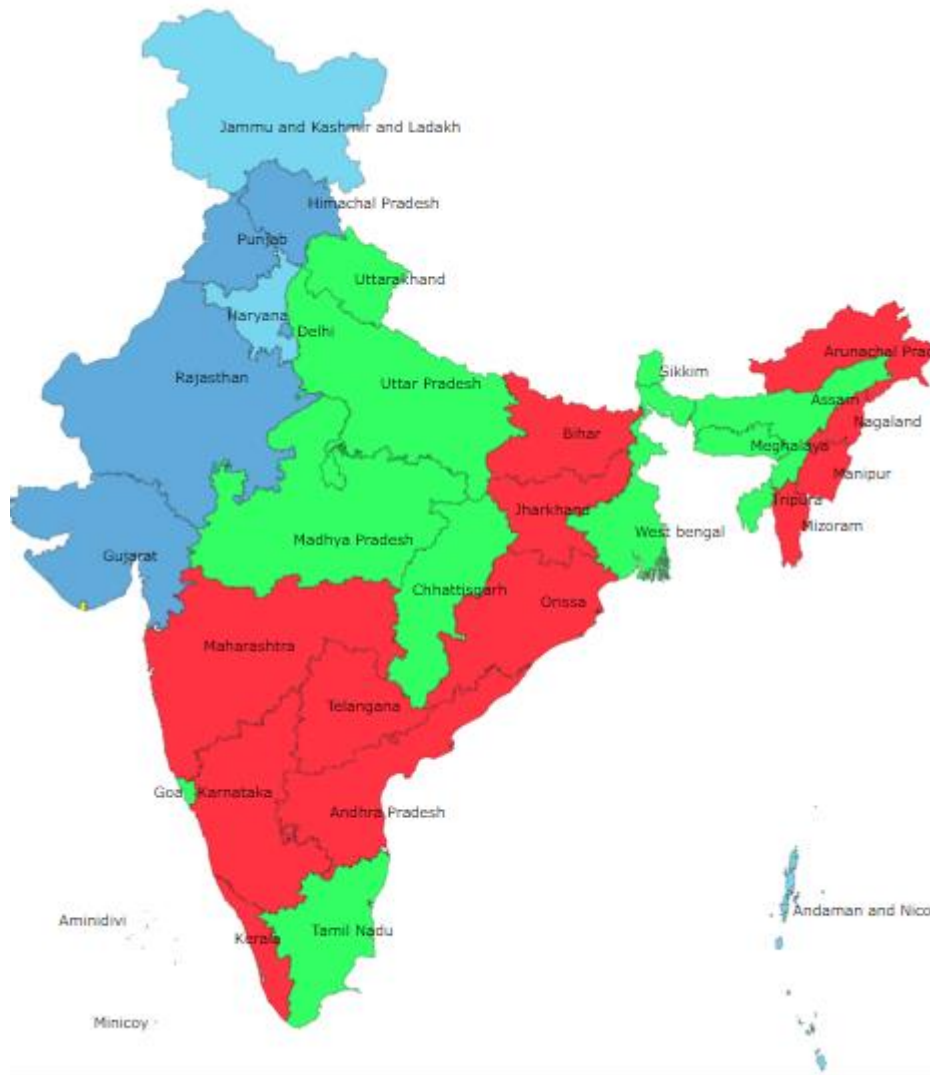
### **Monsoon:**

For the period 1 Jun 2023 to 9 Jul 2023, South West Monsoon is 2% above LPA compared with last year.

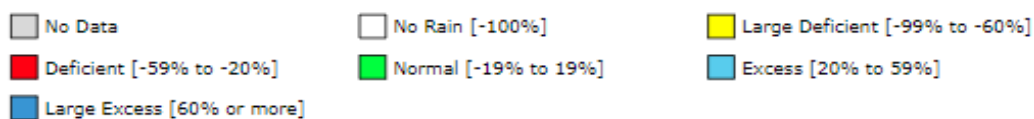
- Northern and Western region of India including states such as Punjab, Haryana, Jammu & Kashmir and Himachal Pradesh have received excess rainfall. Furthermore in the Western region, states including Rajasthan and Gujarat states too have registered heavy rainfall. Rising water levels in the rivers have pushed states to remain on alert towards flood like situations. IMD has also issued red alert in some states given such conditions.

- Madhya Pradesh, Tamil Nadu, Chhattisgarh, West Bengal, Delhi and Uttar Pradesh have received normal rainfall.
- On the other hand, following states including in the eastern belt, states like Bihar, Jharkhand, Odisha and in Central (Maharashtra) and Southern Region (Telangana, Karnataka, Kerala) continue to lag behind other dates and have received deficient rainfall.
- IMD has notified, in the coming days it expects heavy rainfall in some places of Uttar Pradesh, West Madhya Pradesh, Gujarat, West Bengal, Chhattisgarh, Odisha, Coastal Karnataka and nearby regions. Likelihood of thunderstorms and lightning are also expected in some regions.

**Fig 1: Distribution pattern of South-West Monsoon**



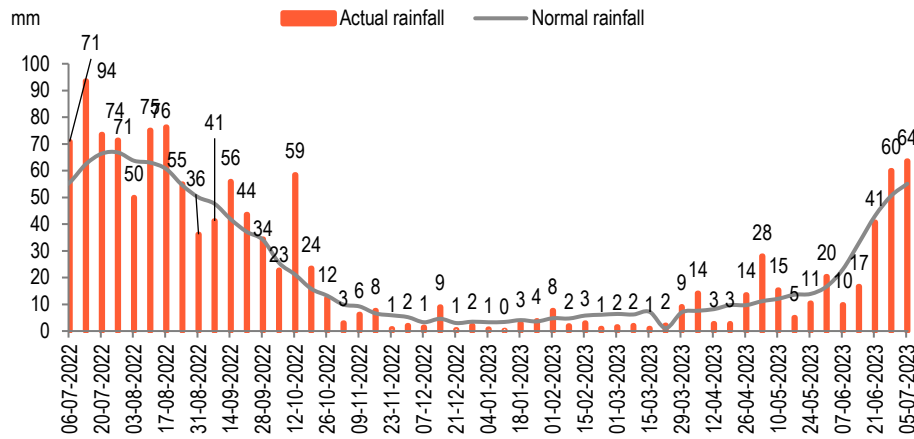
Source: IMD, Bank of Baroda Research | Period from 1 Jun-9 Jul 2023.



In Fig2, actual rainfall this year has been comparatively less than last year (64mm versus 71mm). It is much higher than the normal rainfall. Fig 3, explains regions wise distribution of rainfall. With the

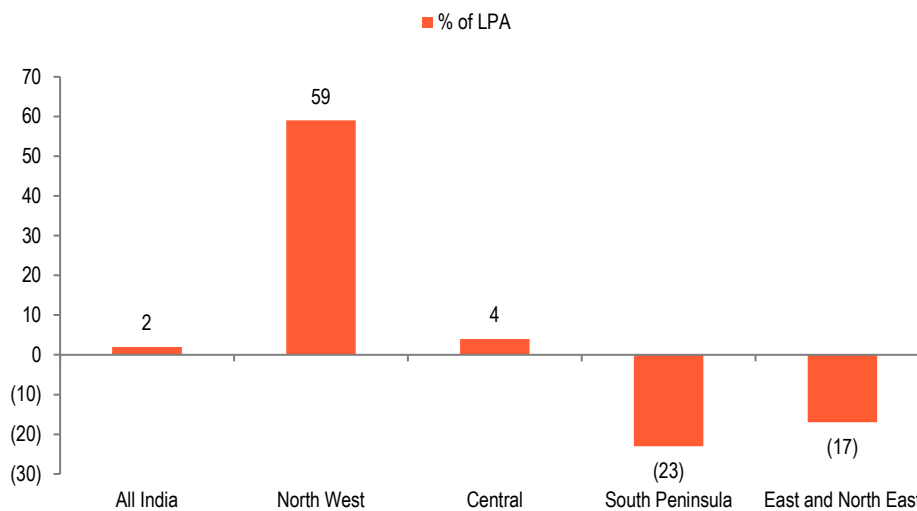
exception of South Peninsula (23% below LPA) and Eastern (17% below LPA), other regions such as North West (59% above LPA) and Central region (4% above LPA) region have witnessed above normal rainfall. (2% above LPA).

**Fig 2: Weekly distribution of rainfall**



Source: CEIC, Bank of Baroda

**Fig 3: Region-wise deviation of rainfall**



Source: CEIC, Bank of Baroda

In the table 2, mentioned below, over 15 subdivision have received deficient rainfall (20 for previous week) for cumulative period ranging from 1 Jun-9 Jul'23. Amongst states too, there are over 12 states (16 states previously) that have received deficient rainfall during this period.

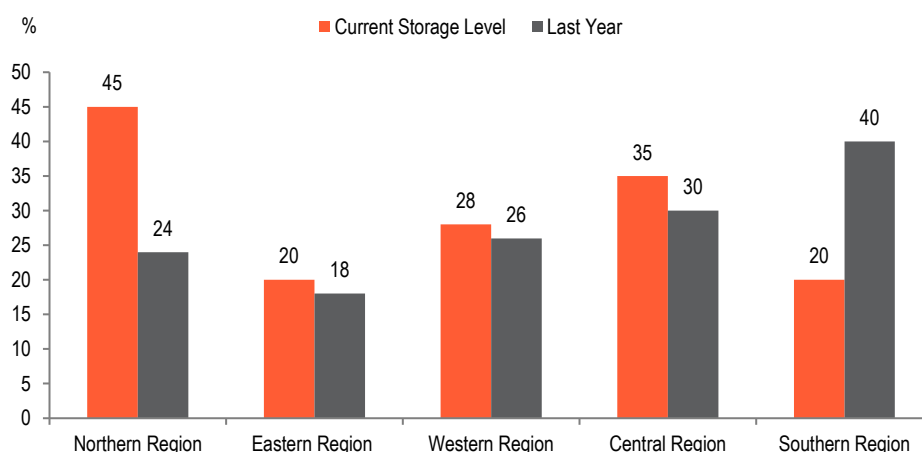
In terms of storage (Fig 4), the reservoir level as a % of total capacity stands at 29% as on 6 Jul 2023. Total live storage available in 146 reservoirs stands at 96% of storage of last year and 110% of average storage for last 10 years. Within regions, Northern region continues to have higher reservoir level (45% against 24% last year), followed by Central (35% versus 30% last year), Western (28% versus 26%) and lastly Eastern region (20% against 18%). Reservoir level in Southern region currently is far lower at 20% versus 40% for last year.

**Table2: Subdivision wise distribution of Rainfall**

| Period (1 Jun 2023-9 Jul 2023) | No. of Subdivisions | Subdivisional % area of Country |
|--------------------------------|---------------------|---------------------------------|
| Large Excess                   | 6                   | 18%                             |
| Excess                         | 5                   | 14%                             |
| Normal                         | 10                  | 28%                             |
| Deficient                      | 15                  | 40%                             |
| Large Deficient                | 0                   | 0%                              |
| No Rain                        | 0                   | 0%                              |

Source: IMD, Bank of Baroda

**Fig 4: Reservoir level across regions**



Source: Central Water Commission, Bank of Baroda

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