

Monsoon and Sowing: Update

With the advancement of South-West monsoon, rainfall is above normal at 11% above LPA till 25 Jul 2022. The actual rainfall for this period has exceeded and moved past the normal range. The recent uptick in rainfall has also resulted in pick-up of kharif sowing which rose by 0.1%. Out of 36 subdivisions, only 7 have received deficient rainfall during this period. However, there has been uneven distribution of rainfall and there is growing concern that this might translate in to lower sowing, resulting in lower production. This in turn might even adversely impact food inflation.

Where does Kharif sowing stand?

For the week ending 15 Jul 2022, overall kharif sown area has increased by 0.1% compared with last year (previous week it had declined by 9.3%). Sown area of pulses (9%) and oilseeds (7.4%) has improved. Additionally, cotton sowing has also been higher by 6.5%. However, the sowing area for rice has declined by 17.4% and is worrisome. Sugarcane and Jute and Mesta too have registered much lower sowing by 0.7% and 1.4% respectively.

Table 1: Trend in Kharif Sowing

	Area sown in 2022-23 (mn ha)	Area sown in 2021-22 (mn ha)	Growth (YoY %)
Foodgrains	29.5	30.9	(4.6)
Cereals	22.2	24.3	(8.3)
Rice	12.9	15.6	(17.4)
Pulses	7.3	6.7	9.0
Oilseeds	13.4	12.5	7.4
Cotton	10.3	9.7	6.5
Sugarcane	5.3	5.4	(0.7)
Jute and Mesta	0.7	0.7	(1.4)
Total	59.2	59.1	0.1

Source: CEIC, Bank of Baroda | Data as of 15 Jul 2022

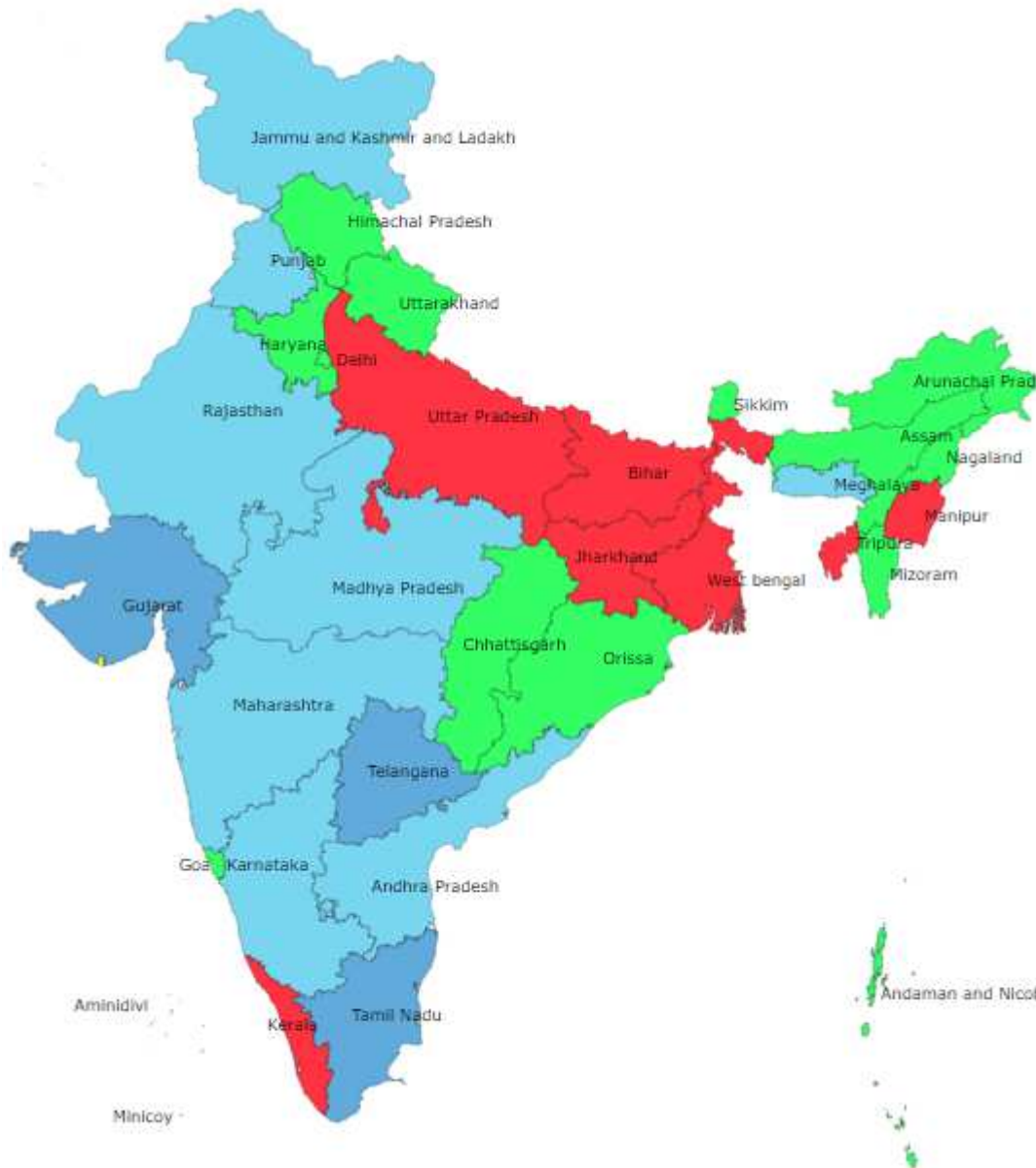
Monsoon:

For the period 1 Jun 2022 to 25 Jul 2022, South West Monsoon is 11% above LPA compared with last year.

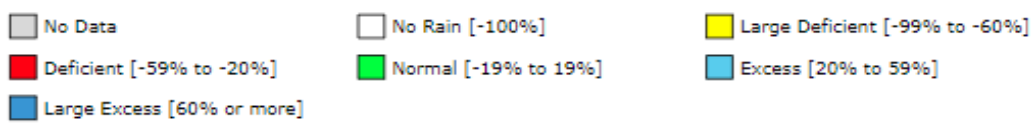
- Rajasthan, Gujarat, Maharashtra, Madhya Pradesh along with the states in the Southern belt such as Tamil Nadu, Telangana, Karnataka and Andhra Pradesh have been receiving excess rainfall.
- On the other hand, states such as Uttar Pradesh, Bihar, Jharkhand, West Bengal, Delhi, Kerala and Manipur have been witnessing deficient rainfall.
- North Eastern states such as Assam, Nagaland, Arunachal Pradesh, Sikkim and other states including Punjab, Haryana, Chhattisgarh and Odisha have been receiving normal rainfall, during this period.

- According to Skymet, South West monsoon is expected to progress further as it manages through the diverse conditions of Pacific and Indian Ocean. La Nina conditions continue to solidify (Fig 3) and makes a case for higher rainfall in the coming days, however negative IOD (Indian Ocean Dipole) might negatively impact rainfall conditions. IMD had stated enhanced probability for negative IOD in the coming weeks.

Fig 1: Distribution pattern of South-West Monsoon

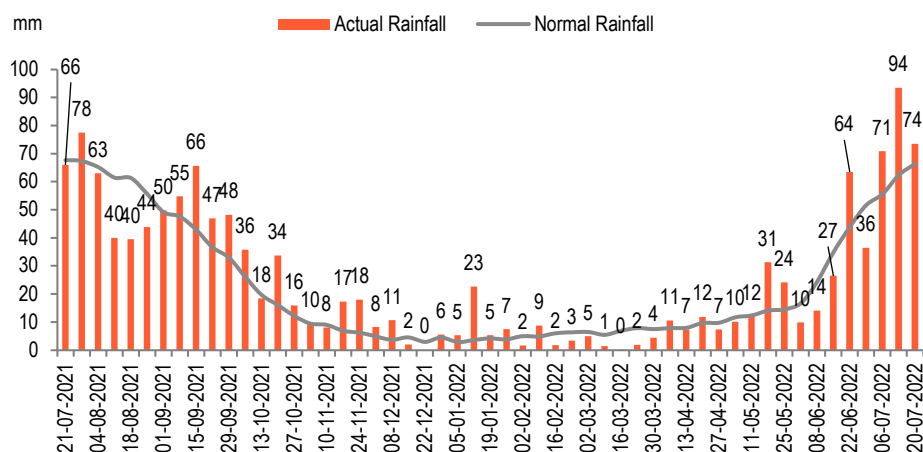


Source: IMD, Bank of Baroda Research | Period from 1 Jun-25 Jul 2022.



In Fig2, actual rainfall this year has been comparatively more than last year (74mm versus 66mm). It is also much higher than the normal rainfall.

Fig 2: Weekly distribution of rainfall



Source: CEIC, Bank of Baroda

In the table mentioned below, over 7 subdivision have received deficient rainfall for cumulative period ranging from 1 Jun-25 Jul'22. These include regions such as Gangetic West Bengal, Uttar Pradesh, Jharkhand, Bihar and North Eastern Region. On further detailed analysis and taking in to account, crop wise production of only Kharif crops for the year 2019-20, following crops such as **Rice** and within pulses **Urad**, seems to be at a much greater risk in terms of lower sowing due to deficient and patchy rains. In terms of total share in production, 33% of the rice production is in deficient subdivisions. For Urad, this share stands at 28.9%.

Table2: Subdivision wise distribution of Rainfall

Period (1 Jun 2022-15 Jul 2022)	No. of Subdivisions	Sub divisional % area of Country
Large Excess	5	19%
Excess	10	35%
Normal	14	28%
Deficient	7	18%
Large Deficient	0	0%
No Rain	0	0%

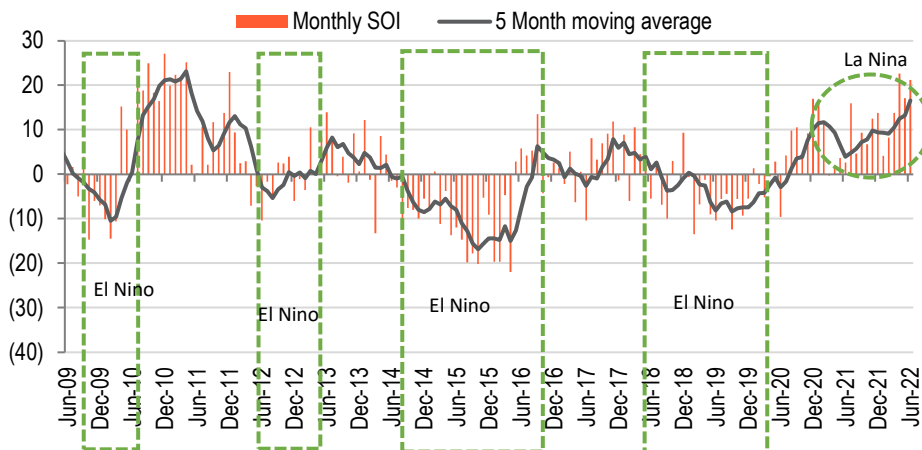
Source: IMD, Bank of Baroda

Table3: Deficient rainfall in subdivisions

Subdivision	% of LPA
Nagaland-Manipur-Mizoram-Tripura	(24)
Gangetic West Bengal	(45)
Jharkhand	(49)
Bihar	(45)
East Uttar Pradesh	(57)
West Uttar Pradesh	(49)
Kerala and Mahe	(22)

Source: IMD, Bank of Baroda

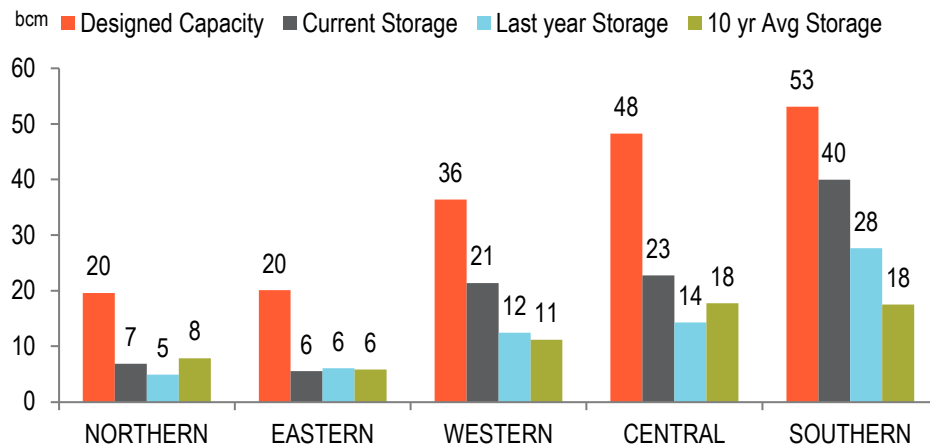
Fig 3: Formation of La Nina solidifying



Source: Bureau of Meteorology, Bank of Baroda Note: SOI-Southern Oscillation Index

On reservoir and water Storage (Fig 4), with the exception of Eastern region (Jharkhand, Odisha, Bihar and Tripura) all the other regions have stored more water compared with last year. However, it is still lower than the 10-year average storage level for Northern (Punjab, Rajasthan and Himachal Pradesh) and Central region (Uttar Pradesh, Uttarakhand, Chattisgarh and Madhya Pradesh).

Fig 4: Storage Position: Region wise



Source: Central Water Commission, Bank of Baroda

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For further details about this publication, please contact:

Economics Research Department
Bank of Baroda
chief.economist@bankofbaroda.com