

Monsoon and Sowing: Update

For the cumulative period, South West Monsoon is 7% above LPA as of 19 Sep 2022. Out of 36 subdivisions, 7 are in the deficient zone during this period including 8 states (Uttar Pradesh, Punjab, Bihar and Jharkhand amongst other states). The actual rainfall is above the normal range, for this period. Sown area of Kharif crops is marginally lower compared with last year. Deficient rains continue to adversely impact the sowing area of rice and pulses. The impact of the same may be manifested in lower production and might also be translated in to higher inflation. Hence, it requires further monitoring. On the other hand, higher reservoir level bodes well for winter crops. IMD expects withdrawal of South-West Monsoon from North West in the coming few days.

Where does Kharif sowing stand?

For the week ended 16th Sep 2022, overall kharif acreage has shrunken (declined by 0.8% last week) compared with last year. Sown area of pulses is down by 4.1%. Within pulses, Arhar (- 4.6%), Moong (- 4%) and Urad (- 3.8%) have registered a drop in acreage. Area sown for oilseeds (- 0.7%) is tad lower compared with last year levels. On the other hand, sowing area of cotton (7.5%) have registered an improvement.

Table 1: Kharif Sowing

	Area sown in 2022-23 (mn ha)	Area sown in 2021-22 (mn ha)	Growth (YoY %)
Rice	39.90	41.79	-4.5
Coarse-nutri cereals	18.13	17.41	4.1
Pulses	13.19	13.75	-4.1
Oilseeds	19.09	19.22	-0.7
Cotton	12.72	11.82	7.5
Sugarcane	5.56	5.49	1.2
Jute and Mesta	0.69	0.70	-0.1
Total	109.29	110.18	-0.8

Source: CEIC, Bank of Baroda | Data as of 16 Sep 2022.

Table 2 presents data on the procurement of both wheat and rice over the years. As can be seen procurement of wheat was low last season as a lot of the production got diverted to the export market before restrictions were put by the government. Also open market rates were higher than the MSP resulting in farmers selling in the market rather than to the government. Stocks of wheat have gotten depleted due to the diversion for the PM food programme for the poor. Due to wheat shortfall the government has substituted the same with rice as part of the scheme. It is therefore imperative for the rice production to be normal this time or else there will be challenges in both procurement as well as prices.

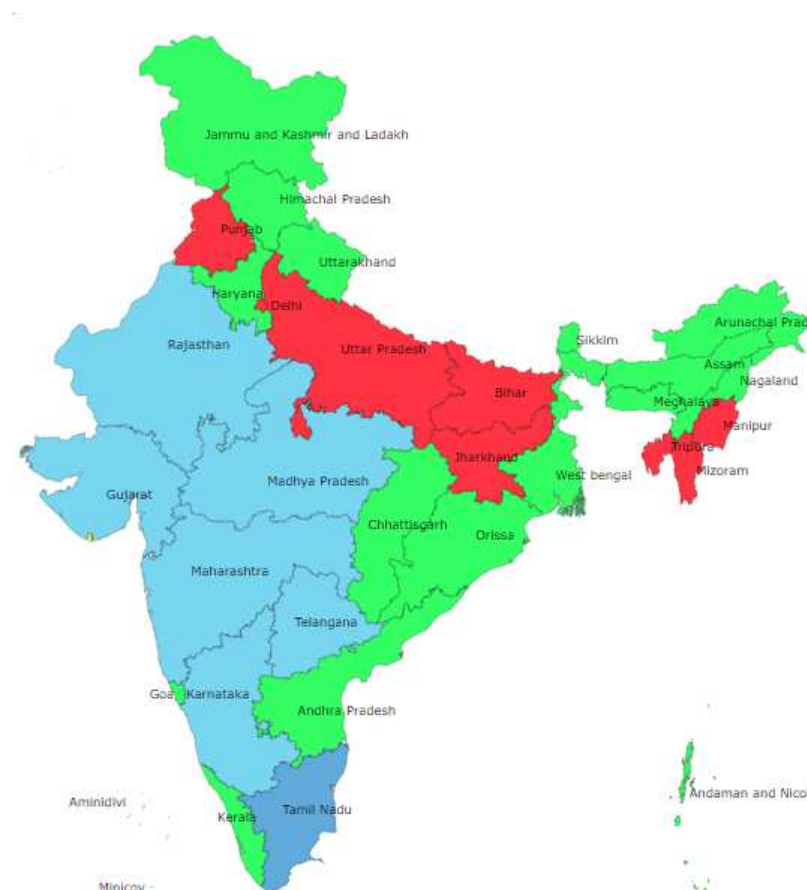
Table 2: Procurement of Rice and Wheat

Years	Wheat (Apr-Mar) mn ton	Rice (Oct-Sep) mn ton
2012-13	38.15	34.04
2013-14	25.09	31.85
2014-15	28.02	32.04
2015-16	28.09	34.22
2016-17	22.96	38.11
2017-18	30.83	38.19
2018-19	35.80	44.39
2019-20	34.13	51.83
2020-21	38.99	60.19
2021-22	43.34	59.21*
2022-23	18.79*	

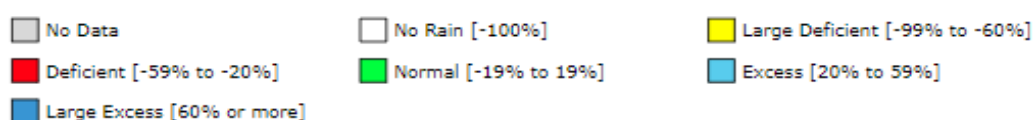
Source: CEIC, Bank of Baroda | *Data as of 30 Aug 2022

Monsoon:

Fig 1: Distribution pattern of South-West Monsoon



Source: IMD, Bank of Baroda Research | Period from 1 Jun-19 Sep 2022.

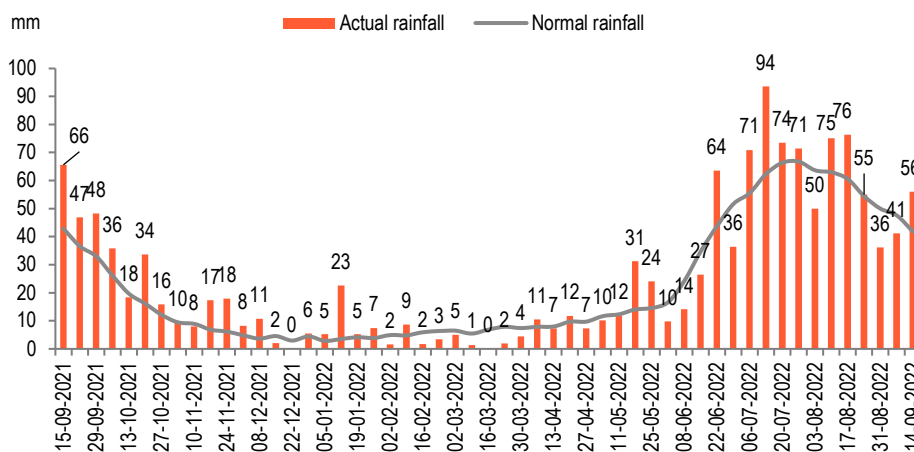


For the period till 19 Sep 2022, South West Monsoon is 7% above LPA compared with last year.

- The Eastern belt including Bihar, Uttar Pradesh, Bihar and Jharkhand have been on the receiving deficient rainfall. Additionally, Punjab, Manipur and Mizoram too have been in red.
- On the other hand, other states such as Rajasthan, Gujarat, Telangana, Karnataka and Tamil Nadu have been on the receiving end of excessive rainfall.
- Other parts of the country including states in North India, Central India (Madhya Pradesh, Chhattisgarh), Andhra Pradesh, Kerala and West Bengal have received normal rainfall.
- IMD has projected subdued rainfall activity in Southern peninsula and North East India, in the coming week. It also expects a possibility of upper air cyclonic circulation to form over adjoining area of West central Bay of Bengal and Northwest region.

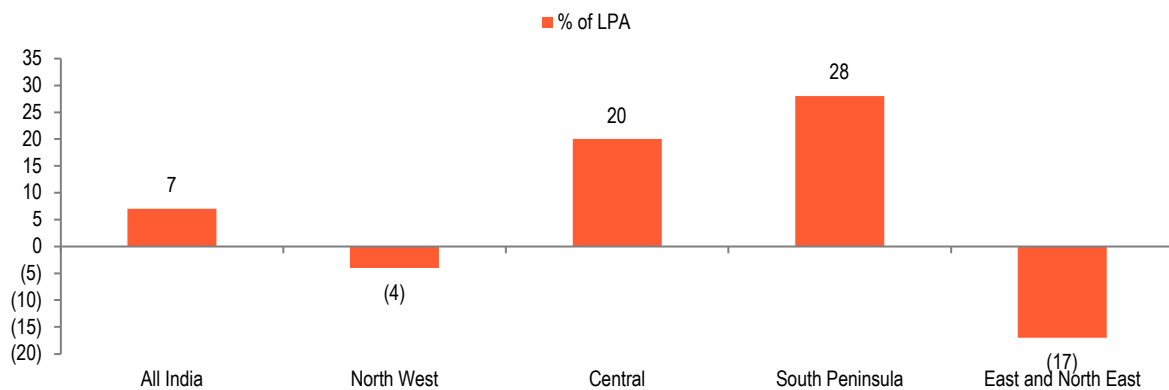
Fig 2 shows that actual rainfall this year has been comparatively less than last year (56mm versus 66mm). It is however higher than the normal rainfall which currently stands at 42mm. Fig 3, explains region wise distribution of rainfall. Southern Peninsula continues to clock excess rainfall (28% of LPA), followed by Central (20% of LPA). North West (-4% of LPA) and East & North Eastern (-17% OF LPA) region continue to receive deficient rainfall.

Fig 2: Weekly distribution of rainfall



Source: CEIC, Bank of Baroda

Fig 3: Region-wise deviation of rainfall



Source: CEIC, Bank of Baroda

Table 3 shows that 7 subdivisions have received deficient rainfall (-59% to -20% of LPA) for cumulative period ranging from 1 Jun-19 Sep'22. 8 states that have received deficient rainfall during this period.

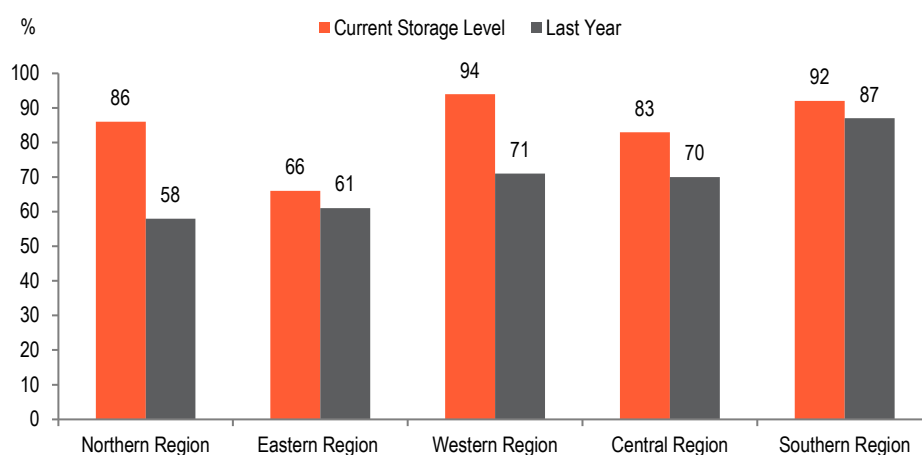
In terms of storage (Fig 4), the reservoir level as a % of total capacity stands at 86% as of 15 Sep 2022. Amongst regions, Western region has gone ahead of Southern region in terms of highest reservoir level (94% versus 71% last year), closely followed by Southern region (92% against 87% last year), Northern (86% against 58%), Central (83% against 70%) and Eastern region (66% versus 61% last year).

Table3: Subdivision wise distribution of Rainfall

Period (1 Jun 2022-19 Sep 2022)	No. of Subdivisions	Subdivisional % area of Country
Large Excess	2	7%
Excess	12	38%
Normal	15	37%
Deficient	7	18%
Large Deficient	0	0%
No Rain	0	0%

Source: IMD, Bank of Baroda

Fig 4: Region-wise deviation of rainfall



Source: Central Water Commission, Bank of Baroda. Period: As of 15-09-2022

In terms of districts (Table 4) receiving deficient and largely deficient rainfall, there are over 152 districts that have on cumulative basis been in the deficient zone (-59% to -20% of LPA) due to patchy rainfall. However, there are only 14 districts that are in largely deficient range receiving rainfall in the range of -99% to -60% of LPA.

Table 4: Districts in the large Deficient zone

Name of Districts		
GHAZIABAD	CHANDAULI	BHAGALPUR
FARRUKHABAD	KANPURDEHAT	SHOPIAN
GAUTAMBUDHNAGAR	AMROHA	BAGHPAT
SHAHJAHANPUR	RAMPUR	SHAMLI
LAHUL AND SPITI	KUSHINAGAR	

Source: IMD, Bank of Baroda | Note: Districts receiving rainfall in the range of -99% to -60% of LPA has been taken

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