

Jahnavi Prabhakar Economist

How has Monsoon and Kharif fared in the past?

The onset of South West monsoon was delayed this year by more than a week against expectation (1st Jun). This might result in delay in rainfall in some of the Southern states as has been seen in the past. While there is an expectation of normal rainfall, there is an upside risk of El Nino conditions forming which poses significant risk. However, severity of El Nino has to be taken in to account based on past years data. The result of normal and spatially distributed rainfall would be evident on sowing of Kharif crops as well on their prices in the coming months.

Kharif sowing season begins in Jun-Sep and interlaces with the South-West Monsoon. Kharif crops are harvested in the months of Oct-Dec and accounts for roughly 50% of the foodgrains production in the year. With the recent turn of events led by climate change, likelihood of a normal monsoon and the spatial distribution of the rainfall has become quite challenging with frequent fluctuations being evident. Notably, higher and lower production of foodgrains have some relation to the excessive or deficient monsoon in the respective year.

Table 1: Monsoon over the years

Years	% of LPA	Type of	El Nino/ LA	Agriculture	Crops GVA
		Monsoon	Nina	GVA	
2014-15	88	Deficient	El Nino	-0.2%	-3.7%
2015-16	86	Deficient	El Nino	0.6%	-2.9%
2016-17	97	Normal	La Nina	6.8%	5.3%
2017-18	95	Below Normal	La Nina	6.6%	5.4%
2018-19	91	Below Normal	El Nino	2.1%	-2.4%
2019-20	110	Excess		6.2%	5.7%
2020-21	109	Excess	La Nina	4.1%	2.8%
2021-22	99	Normal	La Nina	3.5%	1.7%
2022-23	104	Normal	La Nina	3.3%	

Source: CEIC, Bank of Baroda Research

Table 1 showcases the distribution of rainfall over the years. In the last 2-years, the country has seen a normal rainfall after receiving excess rainfall consecutively in the previous 2-years. Additionally, the world has witnessed the formation of La Nina conditions in the last 3-years. However, this year, there are higher chances of the EL Nino conditions forming which might adversely affect rainfall bringing to the fore drought like conditions and even patchy monsoon. This in turn might have some effect on sowing of Kharif crops and on overall output. Despite all these challenges, IMD expects a normal monsoon this year at 96% of LPA. On the other hand, SKYMET, a private forecaster has projected a below normal monsoon of this year at 94% of LPA. The range for normal monsoon is between 96-104% of LPA.

The year of 2015-16 was typified by deficient monsoon and El Nino conditions which had resulted in drought like conditions and thereby kharif production took a beating in the given year.

Moreover, it is also important to understand the severity of El Nino conditions and whether it translates into normal monsoon or not. In the past, barring one-year, there have been several instances where despite the emergence of El Nino drought like conditions did not emerge. Hence, despite the threat one needs to be watchful and track the ongoing condition. The intensity of such conditions and its overall impact on crop yield remains pertinent. All the three years with El Nino impact had witnessed negative growth across crop categories (denoted by the shaded cells in the table below).

Table 2: Crops and food grain production over the years

Years	Kharif	Foodgrains	Pulses	Cereals	Sugarcane	Oilseeds	Cotton
2014-15	-0.5%	-4.9%	-4.3%	-0.4%	2.9%	-15.1%	-3.1%
2015-16	-2.3%	-0.2%	-3.5%	-3.6%	-3.8%	-8.2%	-13.8%
2016-17	10.6%	9.4%	73.2%	9.1%	-12.2%	23.9%	8.6%
2017-18	1.5%	3.6%	-2.8%	2.5%	24.1%	0.6%	0.7%
2018-19	0.7%	0.1%	-13.1%	-0.2%	6.7%	0.2%	-14.5%
2019-20	1.6%	4.3%	-2.1%	2.9%	-8.6%	5.4%	28.6%
2020-21	4.7%	4.5%	24.0%	5.4%	9.4%	8.2%	-2.3%
2021-22	3.2%	1.6%	-14.8%	2.7%	8.4%	5.6%	-11.7%
2022-23	-1.2%	2.5%	-2.6%	3.4%	6.7%	5.4%	8.4%

Source: CEIC, Bank of Baroda Research, only kharif crops have been accounted in the estimation.

It should be noted that having a normal monsoon does not rule out the possibility of crop production declining as can be seen in 2021-22 and 2022-23 for pulses and cotton.

MSP

Government of India announced higher MSP for Kharif crops for the year FY24 (marketing season). The hikes across the crops has been in the range of 5.3% to 10.4%, with moong registering the biggest jump and urad the lowest.

Table 3: MSP over the years

Kharif Crops: MSP	FY19	FY20	FY21	FY22	FY23	FY24
Paddy (common)	12.9%	3.7%	2.9%	3.9%	5.2%	7.0%
Maize	19.3%	3.5%	5.1%	1.1%	4.9%	6.5%
Jowar	42.9%	4.9%	2.7%	4.5%	8.5%	7.1%
Bajra	36.8%	2.6%	7.5%	4.7%	4.4%	6.4%
Ragi	52.5%	8.7%	4.6%	2.5%	6.0%	7.5%
Arhar	4.1%	2.2%	3.4%	5.0%	4.8%	6.1%
Moong	25.1%	1.1%	2.1%	1.1%	6.6%	10.4%
Urad	3.7%	1.8%	5.3%	5.0%	4.8%	5.3%
Groundnut	9.9%	4.1%	3.6%	5.2%	5.4%	9.0%
Soybean	11.4%	9.1%	4.6%	1.8%	8.9%	7.0%
Sunflower	31.4%	4.9%	4.2%	2.2%	6.4%	5.6%
Sesamum	17.9%	3.8%	5.7%	6.6%	7.2%	10.3%
Nigerseed	45.1%	1.1%	12.7%	3.5%	5.2%	6.1%
Cotton (long staple)	26.2%	1.8%	5.0%	3.4%	5.9%	10.0%

Source: CEIC, Bank of Baroda Research

However, compared with other years, the range of increase has been much higher for all the crops. Paddy has registered the largest increase (Rs 2183/quintal) in the last 5-years. In addition to Moong, crops such as cotton (10%) and sesamum (10.3%) have also registered double digit hike in FY24. The objective of much higher MSP has been to encourage crop diversification and to allow fair remunerative prices to farmers.

Disclaimer

The views expressed in this research note are personal views of the author(s) and do not necessarily reflect the views of Bank of Baroda. Nothing contained in this publication shall constitute or be deemed to constitute an offer to sell/ purchase or as an invitation or solicitation to do so for any securities of any entity. Bank of Baroda and/ or its Affiliates and its subsidiaries make no representation as to the accuracy; completeness or reliability of any information contained herein or otherwise provided and hereby disclaim any liability with regard to the same. Bank of Baroda Group or its officers, employees, personnel, directors may be associated in a commercial or personal capacity or may have a commercial interest including as proprietary traders in or with the securities and/ or companies or issues or matters as contained in this publication and such commercial capacity or interest whether or not differing with or conflicting with this publication, shall not make or render Bank of Baroda Group or any of its officers, employees, personnel, directors shall not be liable for any loss, damage, liability whatsoever for any direct or indirect loss arising from the use or access of any information that may be displayed in this publication from time to time.

Visit us at www.bankofbaroda.com











For further details about this publication, please contact:

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