

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 Monsoon | El Nino/ LA Nina | Agriculture GVA | Crops 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.

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