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SOUTHWEST MONSOON OUTLOOK 2021

IMD forecasts normal monsoon in 2021; agricultural growth in FY2022 may be restricted to 2.0-2.5% even with well distributed rainfall

April 2021

Aditi Nayar
+91 124 4545 385
aditin@icraindia.com

Yash Panjraht
+91 124 4545 399
yash.panjraht@icraindia.com

Aarzoo Pahwa
+91 124 4545 873
aarzoo.pahwa@icraindia.com

Tiasha Chakraborty
+91 124 4545 300
tiasha.chakraborty@icraindia.com



HIGHLIGHTS



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IMD's First Long Range Forecast for 2021 has predicted a normal southwest monsoon rainfall at 98% +/-5%

This comes as a relief, given the YoY decline in reservoir storage level and early rise in temperatures

Even with a well distributed monsoon, growth of GVA in agriculture, forestry and fishing may be limited to 2.0-2.5% in FY2022

This augurs well for softening the food inflation, even though the demand-supply disruptions for perishables and global trend for edible oils will continue to play a critical role

The India Meteorological Department's (IMD's) first stage forecast has predicted the volume of rainfall in the upcoming southwest monsoon season (June-September) at 98% of the long period average (LPA), with an error range of +/-5%, indicating a normal monsoon. This follows from above-average monsoon rainfall of 110% of LPA and 109% of LPA, respectively, in 2019 and 2020.

The IMD indicated that at present, neutral El Nino Southern Oscillation (ENSO) conditions are prevailing over the Pacific Ocean, and neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The latest Monsoon Mission Coupled Forecasting System (MMCFS) and other global model forecast indicated that the neutral ENSO conditions are likely to continue over the equatorial Pacific, whereas negative IOD conditions are likely to develop over the Indian Ocean during the ensuing monsoon season.

Given the moderate irrigation coverage of 45.5% of the net sown area in FY2015 (Source: Directorate of Economics and Statistics, Department of Agriculture, Government of India), the volume and dispersion of southwest monsoon rainfall continues to be crucial in India, since the country receives 75% of its total rainfall during this four-month season. As a result, the monsoon outlook has an impact on a host of macroeconomic factors, such as agricultural output, rural consumption sentiment for consumer non-durables and big-ticket items such as agricultural inputs, motorcycles, tractors etc., food and overall inflation, fiscal trends, as well as net imports of agricultural items.

The forecast of a normal monsoon for 2021 comes as a relief amid an early rise in temperatures, reservoir levels currently trailing the year-ago levels by a margin of eight percentage points, the ongoing pandemic, and the uncertainty regarding the overall economic outlook in the near term. Nevertheless, the temporal and spatial distribution of the monsoon rains will remain crucial for timely sowing and harvesting of crops.

In our view, even with a well distributed monsoon, the growth of gross value added (GVA; at constant 2011-12 prices) in agriculture, forestry and fishing in FY2022 may be limited to a moderate 2.0-2.5%, given the high base following two years of above average rainfall and healthy output expansion.

A normal pattern of monsoon rainfall should also help to dampen overall food inflation, although the global trend in the prices of edible oils, as well as domestic demand-supply disruptions for perishable items such as vegetables, and the trend in non-vegetarian protein items will continue to play a critical role.

First Long Range Forecast for the Southwest Monsoon Rainfall in 2021: The IMD has released its first stage forecast for the southwest monsoon rainfall for 2021, which has estimated the volume of rainfall at 98% +/-5% of the LPA, indicating a normal monsoon (96%-104% of LPA). The IMD has indicated the likelihood of a normal monsoon at a modest 33%, based on the climatological probability. The probabilities for excess (more than 110% of LPA), above normal (104-110% of LPA), below normal (90-96% of LPA) and deficient (less than 90% of the LPA) rainfall have been placed at 17%, 16%, 17% and 16%, respectively. In terms of the forecast probability, the IMD has placed the likelihood of a normal rainfall at 40%, with excess and above normal pegged at a modest 5% and 16%, respectively, whereas the probabilities for below normal and deficient have been placed at 25% and 14%, respectively.

The IMD indicated that at present, neutral ENSO conditions are prevailing over the Pacific Ocean. Moreover, neutral IOD conditions are prevailing over the Indian Ocean. The latest MMCFS and other global model forecast indicated that the neutral ENSO conditions are likely to continue over the equatorial Pacific, whereas negative IOD conditions are likely to develop over the Indian Ocean during the ensuing monsoon season.

While the forecast of a normal monsoon in 2021 is encouraging, the temporal and spatial distribution of the monsoon rains will remain crucial for timely sowing and harvesting of crops.

Above-normal monsoon rainfall in 2020: Pan-India rainfall had stood at 109% of LPA in the monsoon months of 2020, well above the level that had been projected by the IMD (102% of LPA). However, the rainfall was geographically uneven, with below average rains in the Northwest region. Moreover, the level of monthly monsoon rainfall was highly varied in 2020, and in contrast to the trend in 2019, even as the total volume of precipitation was similar to the previous year¹.

The precipitation during the northeast monsoon season (October-December) was normal, at 101% of the LPA (refer Exhibit 2). Subsequently, rainfall during the winter season (January-February) was deficient, at 68% of the LPA. Moreover, the ongoing pre-monsoon season (March-May) has witnessed a deficient rainfall so far, with 62% of the LPA (till April 16, 2021).

Decline in reservoir levels in 2021: Consequent to the weak rainfall since the start of 2021, reservoir levels stood at 37% of FRL on April 15, 2021, eight percentage points lower than the year-ago level (45%; refer Exhibit 3). The region-wise distribution of reservoir storage (refer Exhibit 4) indicated that reservoir storage trailed the year ago levels by a wide extent in the Northern (21% vs. 47%), Eastern (30% vs. 52%) and Central (40% vs. 51%) regions. Additionally, there was a YoY dip in the storage level in the Western region (46% vs. 48%), whereas it was mildly higher in the Southern region (36% vs. 34%).

Healthy crop output in last kharif and rabi season: Following the above-average monsoon rainfall, the 2nd Advanced Estimates (AE) of crop production, released by the Ministry of Agriculture and Farmers Welfare on February 24, 2021, indicated a healthy trend in the production of kharif crops relative to the Final Estimates for FY2020. This was led by the output of oilseeds (+12.4%), sugarcane (+7.3%), pulses (+6.8%), and coarse cereals (+6.3%; refer Exhibit 5), amid a mild rise in the output of rice (+1.4%) and cotton (+1.3%).

After the healthy kharif harvest, the 2nd AE indicated a mixed trend in the production of rabi crops (refer Exhibit 6), estimating a rise in FY2021 relative to the Final Estimates of FY2020 for oilseeds (+12.1%), pulses (+5.7%), and wheat (+1.3%) in line with sowing trends, and a decline in the case of coarse cereals (-3.5%), and rice (-0.1%).

¹ Refer to ICRA's [publication](#), Southwest Monsoon Wrapup 2020, published in October 2020.

Agricultural GVA growth expected to be moderate in FY2022: The pace of growth in agricultural GVA stood at a healthy 4.3% in FY2020, benefitting from the healthy precipitation since September 2019. Subsequently, the agricultural GVA growth eased somewhat, while remaining healthy at 3.5% in 9M FY2021, reflecting the favourable kharif harvest and rise in rabi sowing. Subsequently, we estimate the pace of growth in agricultural GVA to decelerate to 3.0% in Q4 FY2021, amid a mixed trend in the production of rabi output and an unfavourable base effect (+6.8% in Q4 FY2020 as estimated by ICRA based on data for FY2020 and 9M FY2020 released by the NSO; refer Exhibit 7).

The forecast of a normal monsoon for 2021 comes as a relief amid an early rise in temperatures, reservoir levels currently trailing the year-ago levels, the ongoing pandemic, and the uncertainty regarding the overall economic outlook in the near term. In our view, even with a well distributed monsoon, the GVA growth (at constant 2011-12 prices) in agriculture, forestry and fishing in FY2022 may be limited to a moderate 2.0-2.5%, given the high base following two years of above average rainfall and healthy output expansion.

CPI Inflation for Food and Beverages: The CPI inflation for the food and beverages sub-index (with a weight of 45.9% in the CPI) rose to a four-month high 5.2% in March 2021 (+7.8% in March 2020) from 4.3% in February 2021 (+9.5% in February 2020), reflecting an unfavourable base effect. This was largely driven by a hardening in the inflation prints of items such as oils and fats (to a current series-high +24.9% in March 2021 from +20.9% in February 2021, in tune with the global trend), meat and fish (to a three-month high +15.1% from +11.5%), fruits (to a 33-month high +7.9% from +6.0%), pulses and products (to +13.3% from +12.6%), non-alcoholic beverages (to +14.4% from +14.0%), and prepared meals and snacks (to +5.4% from +5.3%). Despite the sharp base, the YoY disinflation for vegetables narrowed modestly to 4.8% in March 2021 (+18.6% in March 2020) from 6.3% in February 2021 (+31.6% in February 2020).

The YoY inflation for food and beverages increased to an average of 7.3% in FY2021 from an average of 6.0% in FY2020, led by a hardening in the average inflation for pulses and products (to +16.4% in FY2021 from +9.9% in FY2020), oils and fats (to +16.0% from +2.9%), meat and fish (to +15.4% from +9.3%), eggs (to +12.9% from +4.5%), cereals and products (to +3.8% from +2.8%), sugar and confectionary (to +2.5% from +0.8%) etc., partly offset by decrease in the inflation for vegetables (to +5.8% from +21.3%; refer Exhibit 8).

Early data for the month of April 2021 has revealed a diverse trend in terms of prices of various food items, with softening in the average prices for cereals and vegetables relative to the previous month, and continuing hardening in the prices various edible oils (sunflower, palm, mustard, soya, vanaspati, etc.), and some pulses (gram, tur and masoor) at a varied pace. **Nevertheless, a sharp favourable base effect (+7.8% in March 2020; +10.5% in April 2020) related to the supply-side disruptions during the stringent nation-wide lockdown, should soften the inflation for food and beverages to 2.0-2.5% in the ongoing month.**

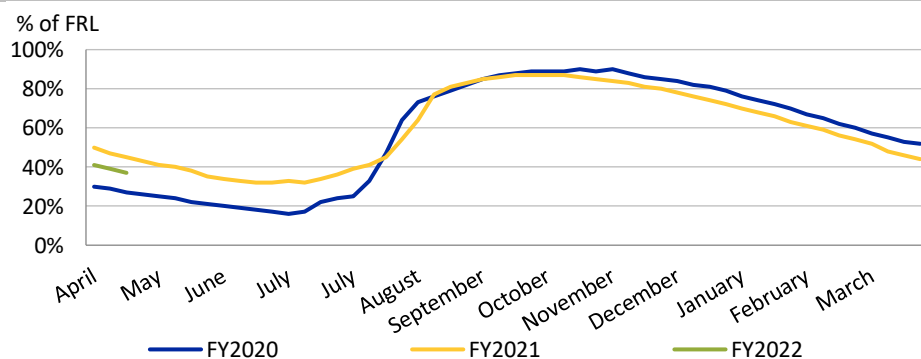
Looking ahead, a normal pattern of monsoon rainfall should also help to boost foodgrain output and prevent a sharp rise in prices. Nevertheless, the global trend in the prices of edible oils, as well as domestic demand-supply disruptions for perishable items such as vegetables, and the trend in non-vegetarian protein items will continue to play a critical role. On average, we expect the food and beverages inflation to ease to 4.8% in FY2022 from 7.3% in FY2021.

EXHIBIT 1: Actual monsoon rainfall in 2020 exceeded the IMD's April and June 2020 forecasts by a wide margin

Year	IMD April Forecast	IMD June Forecast	Actual Rainfall (% of LPA)
2013	98% +/- 5% of LPA	98% +/- 4% of LPA	105%
2014	95% +/- 5% of LPA	93% +/- 4% of LPA	88%
2015	93% +/- 5% of LPA	88% +/- 4% of LPA	86%
2016	106% +/- 5% of LPA	106% +/- 4% of LPA	97%
2017	96% +/- 5% of LPA	98% +/- 4% of LPA	95%
2018	97% +/- 5% of LPA	97% +/- 4% of LPA	91%
2019	96% +/- 5% of LPA	96% +/- 4% of LPA	110%
2020	100% +/- 5% of LPA	102% +/- 4% of LPA	109%
2021	98% +/- 5% of LPA		

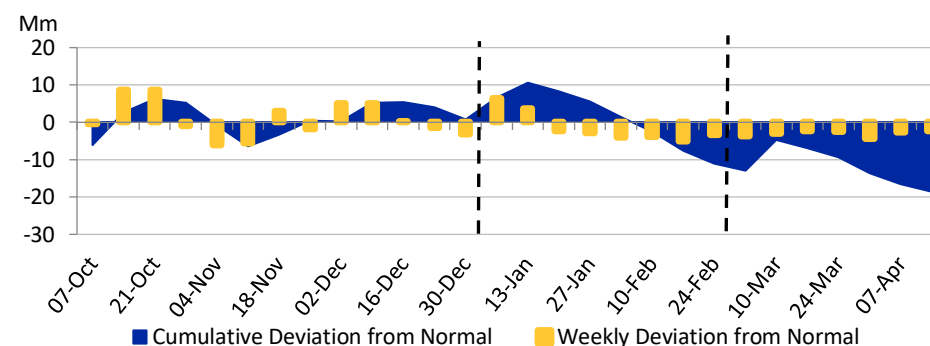
Source: IMD; ICRA research

EXHIBIT 3: Reservoir storage declined to 37% of FRL as on Apr 15, 2021, significantly lower than the year-ago level (45%), following the weak rains in 2021 and early rise in temperatures



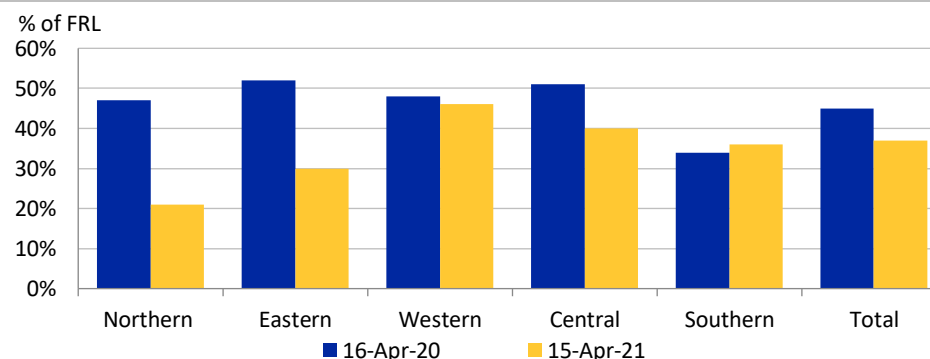
Source: Central Water Commission (CWC); ICRA research

EXHIBIT 2: Northeast monsoon (Oct-Dec) was normal at 101% of LPA; however, precipitation has been deficient both in the winter monsoon (Jan-Feb) at 68% of LPA, and in the ongoing pre-monsoon period (Mar-May) at 62% of LPA till April 16, 2021



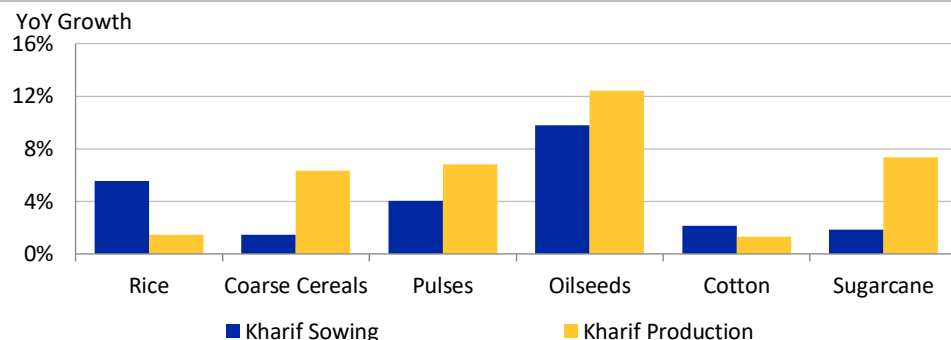
Source: IMD; ICRA research

EXHIBIT 4: Reservoir storage trailed the year ago levels by a wide extent in the Northern, Eastern, and Central regions, along with a mild YoY dip in the Western region; however, it was mildly higher in the Southern region



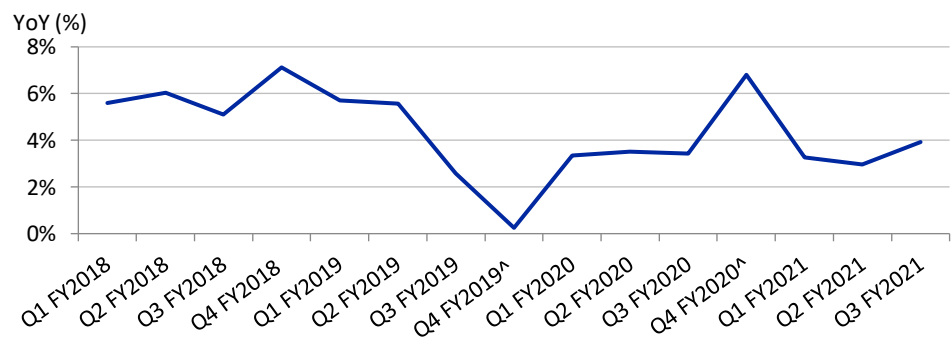
Source: CWC; ICRA research

EXHIBIT 5: Kharif sowing rose by a healthy 4.8% on a YoY basis as on September 25, 2020; the 2nd AE of crop production for FY2021 indicated a healthy trend in the production of kharif crops relative to FY2020



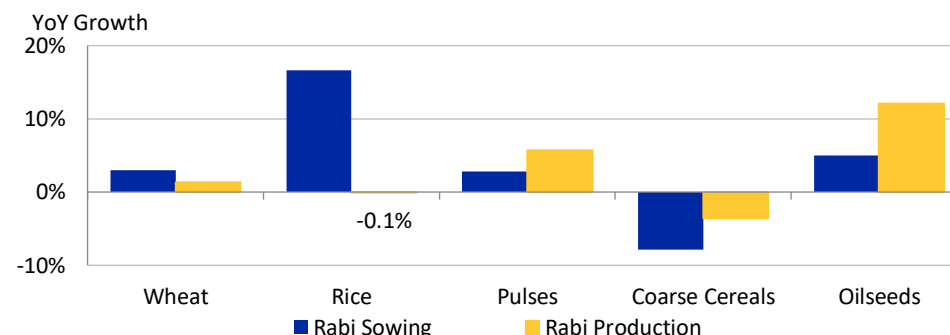
Source: Ministry of Agriculture and Farmer's Welfare; ICRA research

EXHIBIT 7: Benefitting from the healthy kharif harvest and rise in rabi sowing, growth in agricultural GVA increased to 3.9% in Q3 FY2021 from 3.0% Q2 FY2021; we expect it to decelerate to 3.0% in Q4 FY2021, and 2.0-2.5% in FY2022



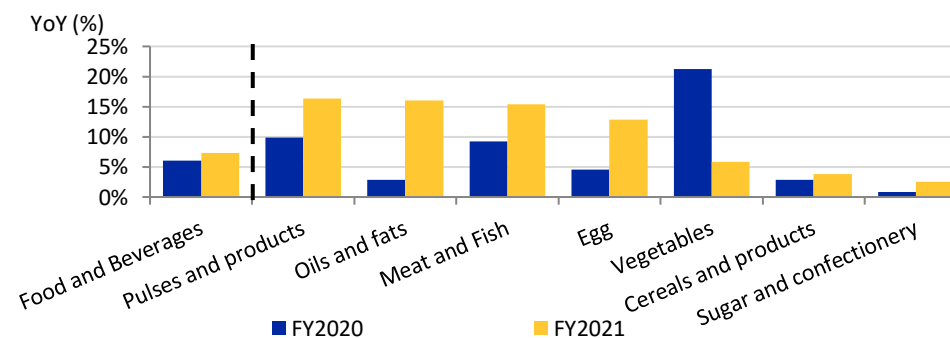
^Implicit based on FY2018 3rd RE, FY2019 2nd RE, FY2020 1st RE, and the data for 9M FY2018, 9M FY2019 and 9M FY2020; Source: NSO; CEIC; ICRA research

EXHIBIT 6: Total rabi sowing stood at a record-high 68.5 million hectares at end-Jan 2021, with a YoY rise of 2.9%; the 2nd AE of crop production forecast a rise in the output of oilseeds, pulses and wheat, and a decline in coarse cereals in FY2021 relative to FY2020



Source: Ministry of Agriculture and Farmer's Welfare; ICRA research

EXHIBIT 8: Average YoY inflation for food and beverages increased to 7.3% in FY2021 from 6.0% in FY2020, led by pulses and products, oils and fats, meat and fish, cereals, etc., partly offset by a decrease in the inflation for vegetables



Source: NSO; CEIC; ICRA research

ABOUT ICRA

ICRA Limited (formerly Investment Information and Credit Rating Agency of India Limited) was set up in 1991 by leading financial/investment institutions, commercial banks and financial services companies as an independent and professional investment Information and Credit Rating Agency.

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Business Contacts

Mr. L. Shivakumar
E-mail: shivakumar@icraindia.com
+91 22 6114 3406 / +91 98210 86490

Mr. Jayanta Chatterjee
E-mail: Jayantac@icraindia.com
Tel: +91 80 4332 6401 / +91 98450 22459

Media and Public Relations

Ms. Naznin Prodhani
E-mail: Communications@icraindia.com
Tel: +91 124 4545 860

Registered Office

1105, Kailash Building, 11th Floor,
26, Kasturba Gandhi Marg, New Delhi -
110 001
Tel: + 91 11 2335 7940-50

Corporate Office

Building No. 8, 2nd Floor,
Tower A, DLF Cyber City, Phase II,
Gurgaon - 122 002
Tel: +91-124-4545300

Ahmedabad

1809-1811, Shapath V,
Opp: Karnavati Club,
S.G.Highway, Ahmedabad - 380015
Tel: +91 79 4027 1500/501

Bengaluru 1

'The Millenia', Tower B Unit No. 1004,
10th Floor, 1 & 2 Murphy Road,
Bengaluru - 560 008
Tel: +91 80 4332 6400

Bengaluru 2

2nd Floor, Vayudooth Chamber
15-16, Trinity Circle, M.G. Road,
Bengaluru - 560 001
Tel: +91 80 4922 5500

Chennai

5th Floor, Karumuttu Centre
634, Anna Salai, Nandanam
Chennai - 600 035
Tel: +91 44 4596 4300

Hyderabad 1

4th Floor, 'Shoban'
6-3-927/A&B. Somajiguda
Raj Bhavan Road,
Hyderabad - 500 082
Tel: +91 40 4067 6500

Hyderabad 2

No. 7-1-58, 301, 3rd Floor, 'Concourse',
Above SBI-HPS Branch, Ameerpet,
Hyderabad - 500 016
Tel: +91 40 4920 0200

Kolkata

A-10 & 11, 3rd Floor,
FMC Fortuna 234/3A,
A.J.C. Bose Road,
Kolkata -700 020
Tel: +91 33 7150 1100/01

Mumbai

3rd Floor, Electric Mansion
Appasaheb Marathe Marg,
Prabhadevi,
Mumbai - 400 025
Tel: +91 22 6169 3300

Pune

5A, 5th Floor, Symphony, S. No. 210
CTS 3202 Range Hills Road,
Shivajinagar, Pune - 411 020
Tel: +91 20 2556 1194

Email: Info@icraindia.com

Helpdesk: 9354738909

Website: www.icra.in/ www.lcraresearch.in