ICRA

SOUTHWEST MONSOON 2021-UPDATE

Monsoon likely to exceed normal in 2021; flooding and YoY decline in acreage to curtail growth in crop output

AUGUST 2021

Highlights

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Rainfall uneven but normal in aggregate in first half of 2021 monsoon season

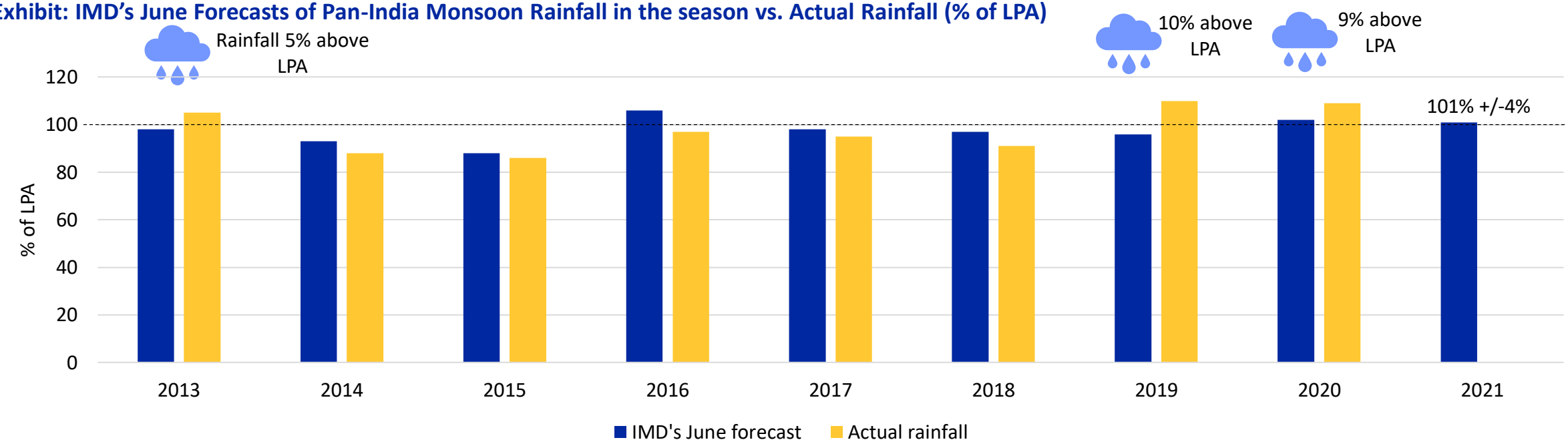
IMD has forecast H2 monsoon rainfall at 95-105% of LPA, indicating a likelihood that rainfall will be above normal

Kharif acreage expected to trail robust 2020 level

- The Pan-India Rainfall was normal at 99% of Long Period Average (LPA) in June-July 2021, slightly lower than the mid-point of the Indian Meteorological Department's (IMD's) second stage Long Range Forecast for the entire season (101%, +/-4%), with sub-par rains in the month of July 2021.
- However, the rainfall has been highly uneven so far. More than 40% of sub-divisions have witnessed either deficient or large deficient rainfall in first half of monsoon season; nearly a quarter have reported large excess.
- IMD expects H2 monsoon rainfall to be normal at 95-105% of LPA, with a 'tendency to be in the positive side of normal'.
- With the revival in rains in the last week of July 2021 (15% above LPA pan-India), overall reservoir storage surpassed the year-ago levels by a wide margin of eight percentage points as on July 29, 2021. However, reservoir storage in Northern and Central regions lags the year-ago levels.
- With renewed rains, kharif sowing in 2021 has picked up pace, reducing the gap relative to the year-ago level; we expect the current season acreage to mildly trail the record 2020 acreage.
- Episodes of flooding in certain parts of the South Peninsula, along with a YoY decline in kharif acreage suggest that the rise in crop output is likely to be muted. We expect Gross Value Added (GVA) growth of agriculture, forestry and fishing to be mild at 2.0% each over Q2-Q4 FY2022.
- Farm demand may however remain buffered by the modest rise in Minimum Support Prices (MSPs) and the expectation of continued robust procurement.

Pan-India rainfall was normal at 99% of LPA in June-July 2021, slightly lower than mid-point of the IMD's forecast for the entire monsoon season

Exhibit: IMD's June Forecasts of Pan-India Monsoon Rainfall in the season vs. Actual Rainfall (% of LPA)



***Source**: IMD; ICRA research*

- On June 1, 2021, the IMD had released its second stage Long Range Forecast (LRF) for 2021, which had pegged the volume of southwest monsoon rainfall at an all-India level to be normal at 101% of the LPA with a model error of +/-4% (97-105% of LPA).
- In terms of region-wise distribution, the monsoon seasonal rainfall (June-September 2021) was projected to be normal over Northwest India (92-108% of LPA) and the South Peninsula (93-107% of LPA). In contrast, the seasonal rains are most likely to be below normal in Northeast India (<95% of LPA), whereas "above normal" in the case of Central India (>106% of LPA), during the monsoon season.
- In the first half of the monsoon season, India as a whole has witnessed a normal rainfall of 99% of LPA.

The LPA of the season rainfall over the country as a whole for the period 1961-2010 is 88 cm. On a pan-India basis, rainfall between 96% and 104% of the LPA is considered to be normal. The other classifications are deficient (below 90% of LPA), below-normal (90-96% of LPA), above-normal (104-110% of LPA) and excess (more than 110% of LPA).

Sub-par rains in July 2021 wiped out the 10% above-LPA precipitation in June 2021

Exhibit: Weekly and Cumulative Monsoon Deviation from Normal (All-India) in first half of the 2021 season

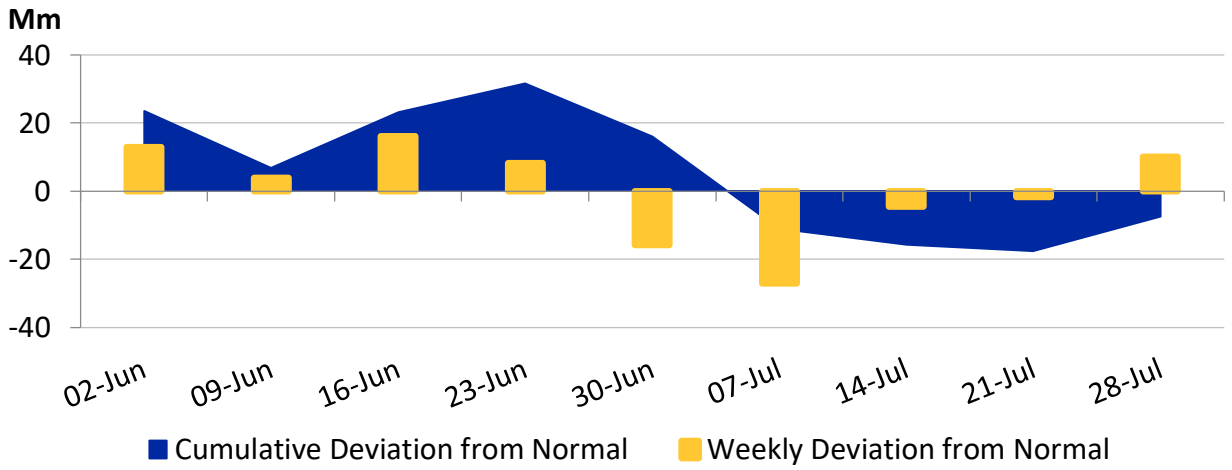
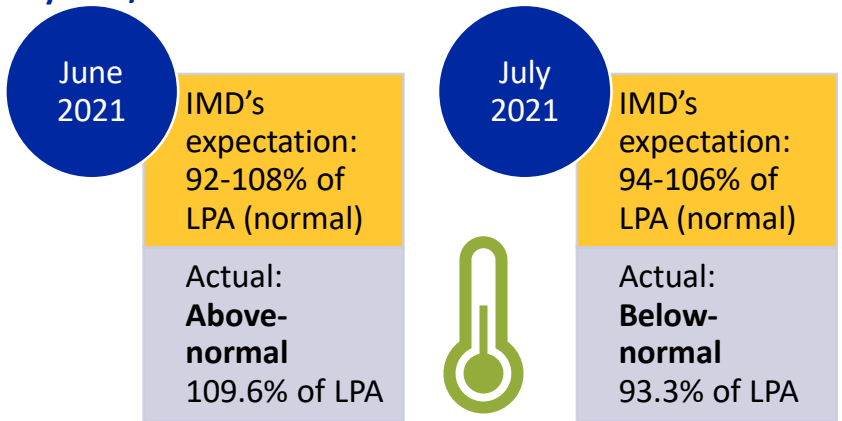


Exhibit: Monthly IMD/MME's forecast of Pan-India Rainfall vs. Actual Rainfall



Weekly rainfall trends:

- The southwest monsoon had covered the entire country on July 13, 2021, a week later against the normal date of July 8, 2021.
- After having witnessed above-LPA rains at a pan-India level until the week ended June 23, 2021, rainfall was a sharp 30-46% below normal in the next two weeks.
- Subsequently, the rains picked up swiftly, narrowing the rainfall deficit in the weeks ended June 14, 2021 and July 21, 2021.
- In the last week of July 2021, India as a whole witnessed 15% above LPA rainfall, on account of excess rains over Central (53% above- LPA) and South Peninsula (37% above-LPA) regions, causing floods in some areas.
- On a cumulative basis, pan-India rainfall was 1% below LPA on July 31, 2021.

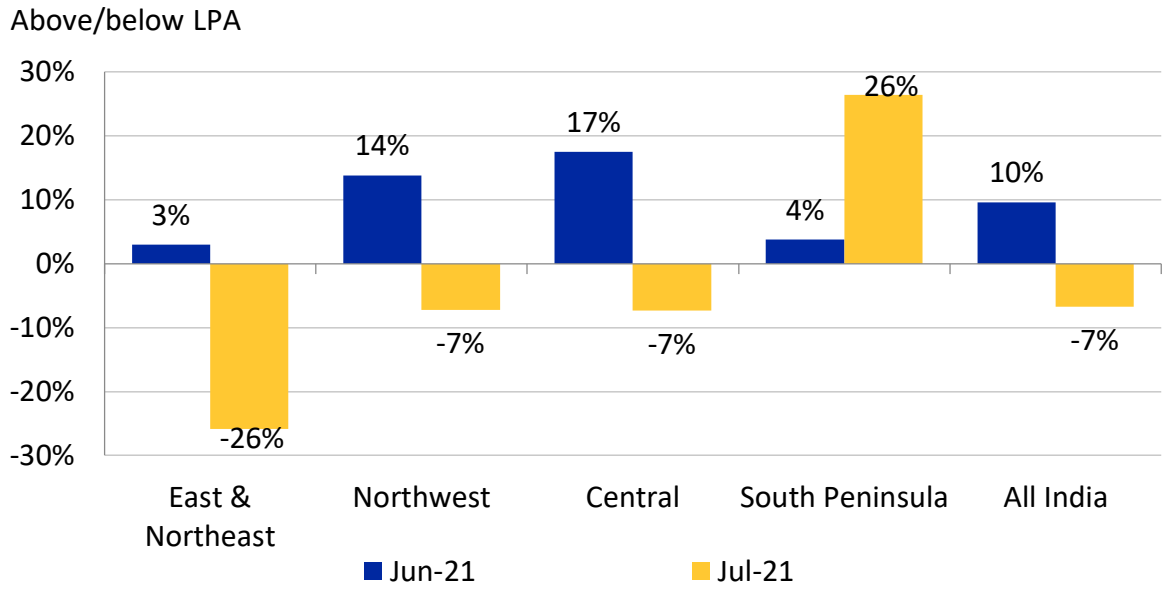
Monthly Forecast vs. Actual Rainfall:

- The IMD had indicated that the Multi Model Ensemble (MME) probability forecast suggested a normal pan-India rainfall of 92-108% of LPA in June 2021. However, the actual rainfall was above-normal at 109.6% of LPA, exceeding the forecast.
- For July 2021, the IMD had forecast the pan-India rainfall to be normal at 94-106% of LPA, whereas the actual precipitation turned out to be below-normal at 93.3% of LPA.

***Source**: IMD; ICRA research; Note: On a pan-India basis, rainfall between 96% and 104% of the LPA is considered to be normal. The other classifications are deficient (below 90% of LPA), below-normal (90-96% of LPA), above-normal (104-110% of LPA) and excess (more than 110% of LPA).*

Three of the four regions reported below-LPA rainfall in July 2021, after having recorded favourable rains in June 2021; overall, all regions reported normal rainfall by end-July 2021

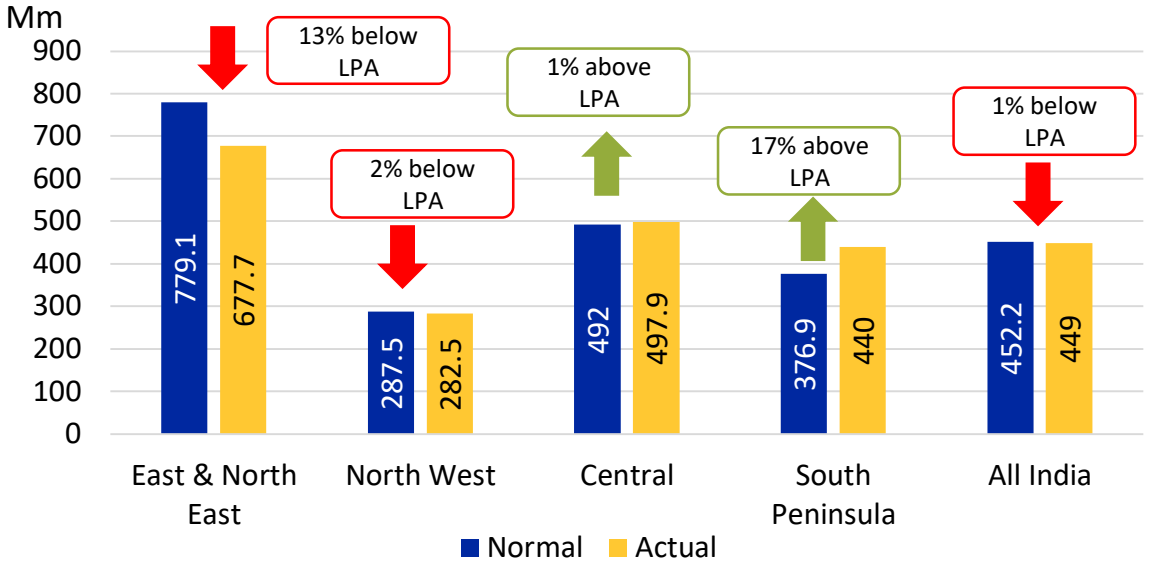
Exhibit: Pan-India and Region-wise Monthly Deviation from Rainfall



Source: *IMD; ICRA research*

- The 10% above-normal rainfall in June 2021 for India as a whole, was mainly led by the Central and Northwest regions.
- The subsequent 7% deficit in pan-India rainfall in July 2021 was chiefly on account of deficient precipitation in the East and Northeast region, partly offset by excess rains in the South Peninsula.

Exhibit: Region-wise Cumulative Rainfall Distribution as on July 31, 2021



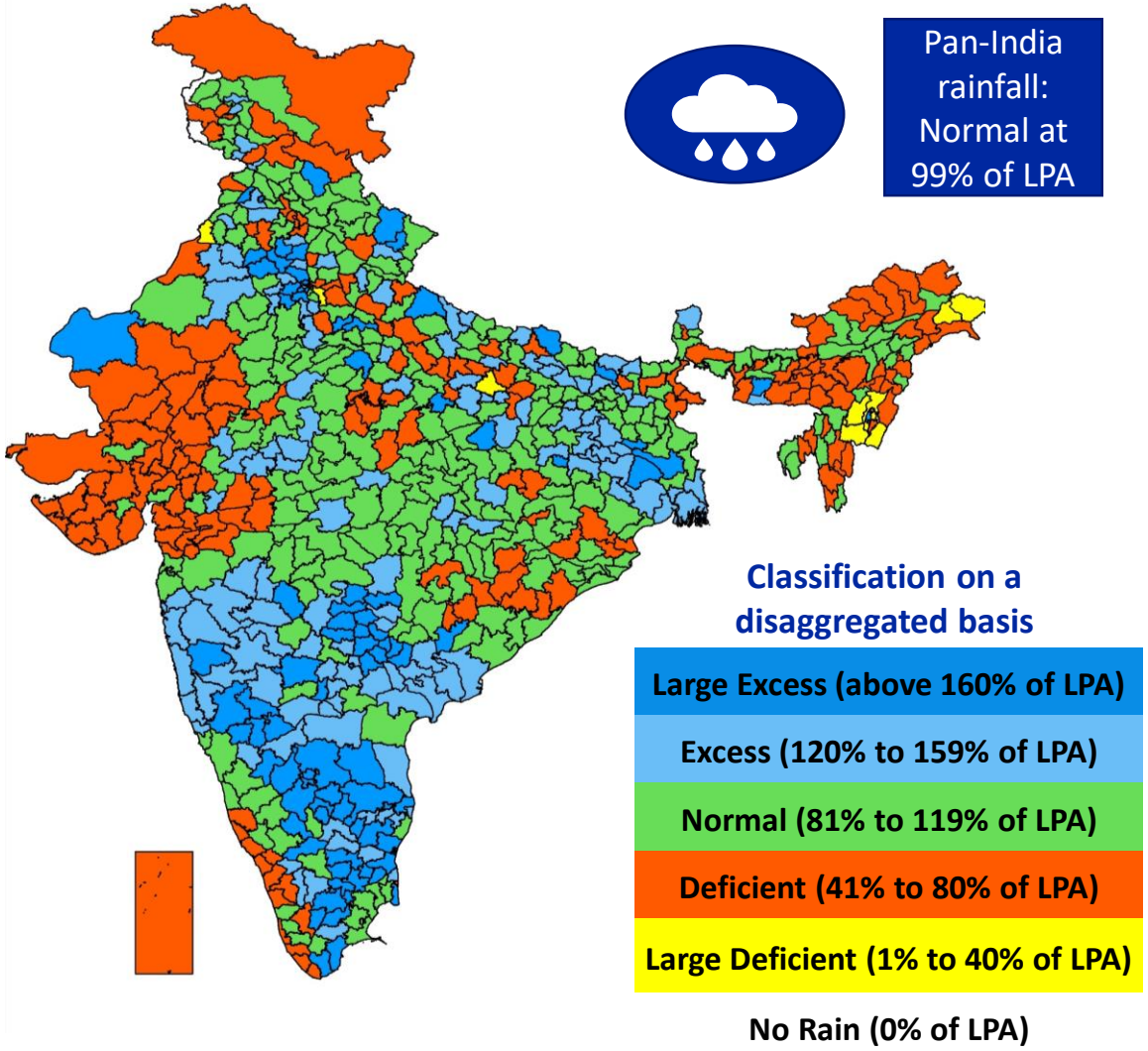
Source: *IMD, ICRA research*

- Nevertheless, on a cumulative basis, all of the regions have reported normal rainfall by the end-July 2021, as per the IMD's classification.
- However, the distribution of rainfall has been rather uneven across regions.
- The South Peninsula region has displayed some episodes of flooding, namely, in Telangana and Karnataka, which may dampen the outlook of crop output in those areas.

On a disaggregated basis, the classification is as follows: Large Excess: above 160% of LPA; Excess: 120%-159% of LPA; Normal: 81%-119% of LPA; Deficient: 41%-80% of LPA; Large Deficient: 0%-40% of LPA.

District-wise rainfall distribution has been highly uneven

Exhibit: District-wise Monsoon Rainfall in first half of 2021 season (June-July)

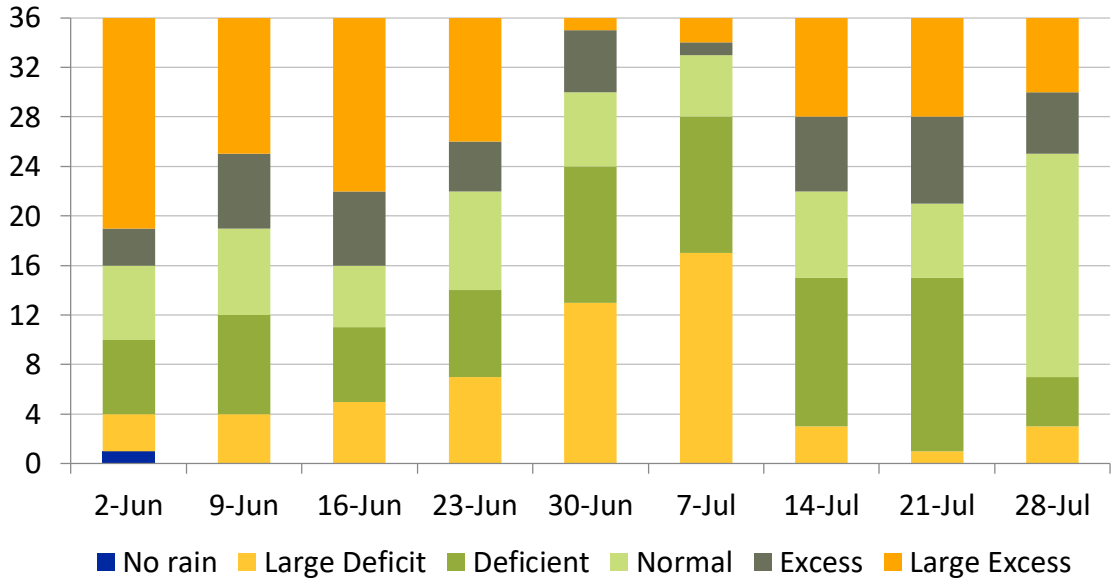


- The district-wise distribution of rainfall was highly uneven in June-July 2021.
- Some parts of East and Northeast India such as Arunachal Pradesh (>90% of the 16 districts), Assam (13 of the 27 districts), Meghalaya, and Nagaland, Manipur, Mizoram and Tripura (NMMT; >50% of the total 32 districts) have recorded deficient or large deficient rainfall.
- The rainfall in the districts of Punjab and Himachal Pradesh under the Northwest states has been normal during June-July 2021, while that for West and East Rajasthan recorded a deeper below-LPA rainfall of 6% and 12%, respectively, in the same period. In other states of Northwest India such as Jammu and Kashmir, five districts, namely, Badgam, Kathua, Kistwar, Punch and Rajouri have displayed deficient rainfall.
- Moreover, there have been deficient rains in some districts of Gujarat, and Saurashtra and Kutch.
- Several districts in the states of Central India such as Odisha, West and East Madhya Pradesh have reported normal precipitation in June-July 2021.
- Most of the states in the South Peninsula such as Telangana, Rayalaseema, Karnataka, Tamil Nadu Puducherry and Karaikal have witnessed either large excess or excess rains up to July 2021 on account of the floods in July 2021.

Source: *IMD; ICRA research*

More than 40% of sub-divisions have witnessed either deficient or large deficient rainfall in first half of monsoon season; nearly a quarter have reported large excess

Exhibit: Weekly Distribution of Rainfall across Subdivisions



***Source**: IMD; ICRA research*

Exhibit: Distribution of Rainfall Over 36 Sub-Divisions during nine weeks

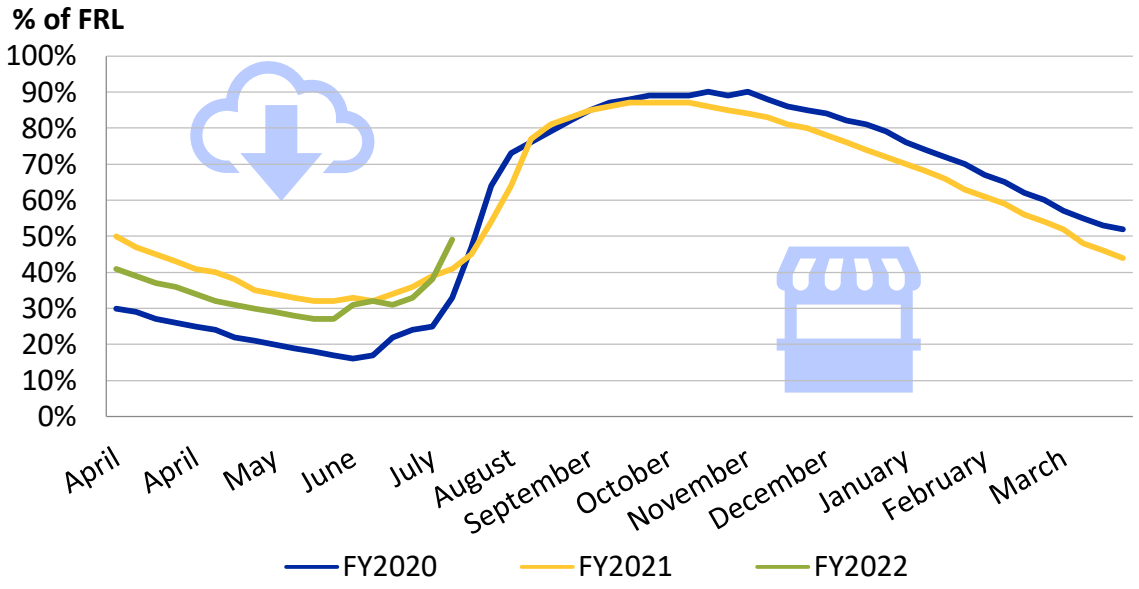
Category	% of LPA	Distribution	% of Total
Large Excess	above 160	77	23.8%
Excess	120-159	43	13.3%
Normal	81-119	68	21.0%
Deficient	41-80	79	24.4%
Large Deficient	0-40	56	17.3%
No Rain	0	1	0.3%
Total (9 weeks X 36 sub-divisions)		324	100.0%

***Source:** IMD; ICRA research*

- The temporal breakup of the rainfall recorded over 36 sub-divisions in the course of nine weeks indicated that the proportion of normal rainfall stood at a moderate 21%.
- Further, it revealed a substantial ~42% of sub-divisions have received either deficient or large deficient rainfall during this period.
- The share of large excess and excess rainfall over these sub-divisions in a period of nine weeks observed at ~24% and 13%, respectively.

Reservoir storage has jumped past year-ago level in aggregate; northern and central regions continue to trail 2020 storage

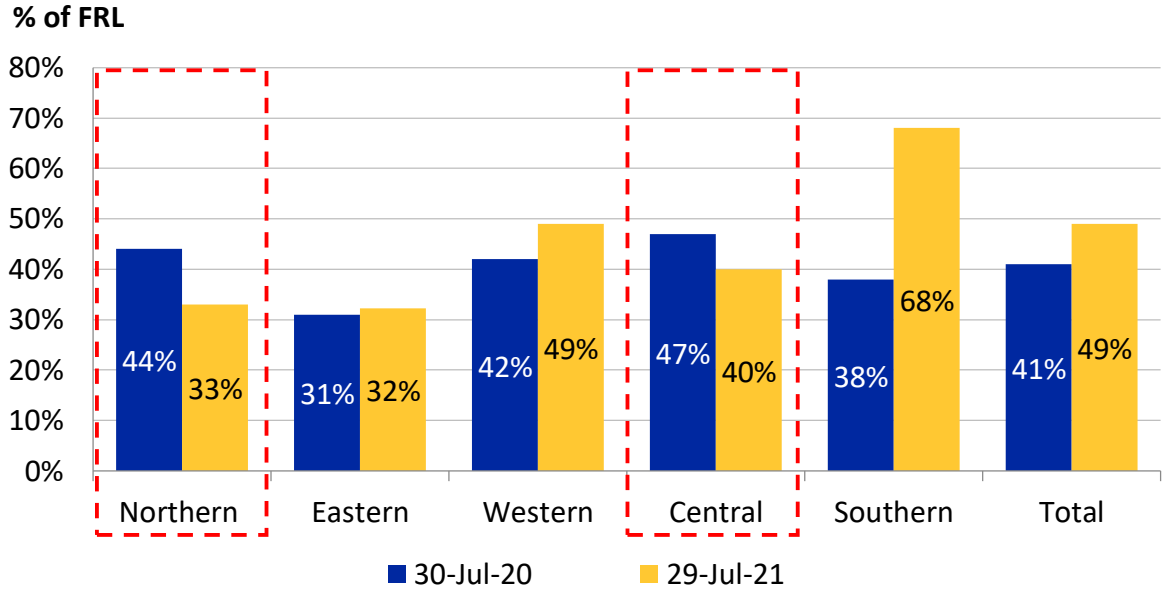
Exhibit: Trends in Reservoir Storage



Source: *CWC; ICRA research*

- With above-normal precipitation in June 2021, the all-India reservoir storage was at par with the year-ago level at 32% of FRL on July 1, 2021.
- After a lull in parts of July 2021, rains picked up swiftly in the past few days and reservoir storage rose appreciably to 49% of FRL on July 29, 2021, surpassing the year-ago level of 41% of FRL by eight percentage points.
- Moreover, it remained higher than the FY2020 level (33% of FRL) as well as the average storage of last decade (40% of FRL) during the same period.

Exhibit: Region wise distribution of Reservoir Storage

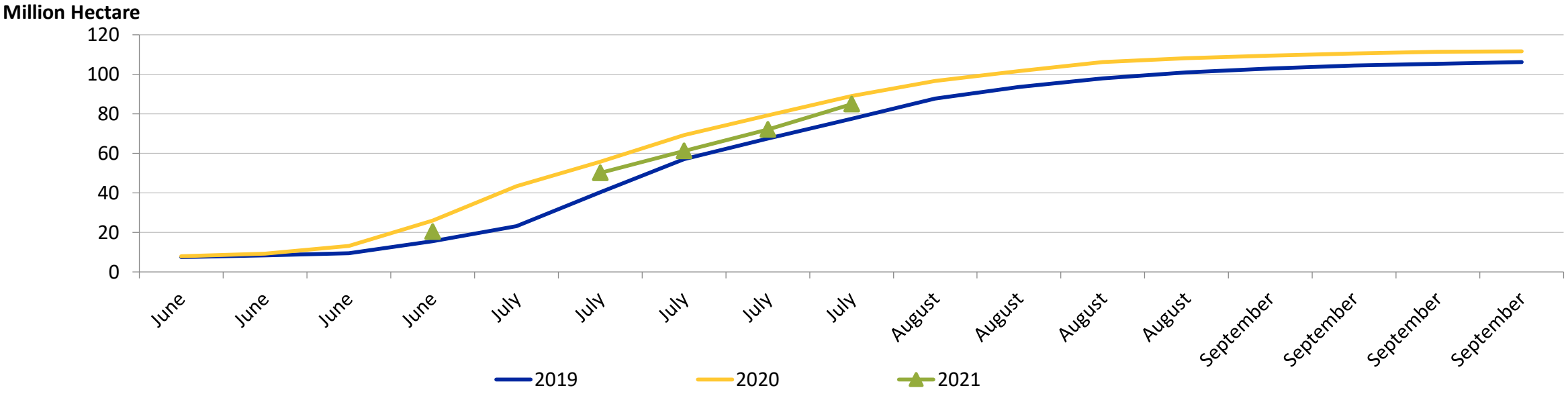


Source: *CWC; ICRA research*

- The region-wise distribution was highly uneven, as the reservoir storage in Southern region exceeded the year-ago level by a sharp 30 percentage points (in tune with the excess rains) on July 29, 2021, followed by seven and one percentage points, respectively, in the case of Western and Eastern regions.
- However, there was a moderate YoY decline in the reservoir storage levels of Northern and Central regions by end-July 2021.

With renewed rains, kharif sowing in 2021 has narrowed gap from year-ago level; expected to mildly trail the record 2020 acreage by the end of this season

Exhibit: Kharif sowing trends in 2019 and 2020 and 2021 YTD*



*As on July 30, 2021; **Source**: Ministry of Agriculture and Farmers' Welfare; ICRA research*

- Despite an early above-normal monsoon rainfall, sowing of kharif crops registered a decline of 21.6% as on June 25, 2021.
- Subsequently, the pace of YoY decline in sowing moderated to 4.7% as on July 30, 2021, with the revival of rainfall especially in the South Peninsula, Central and Northwest regions since mid-July 2021.
- Overall, nearly 76% of the 2020 kharif acreage level had been covered as on July 30, 2021, and the acreage is a robust 9.5% higher than sowing level recorded in the same period of the 2019 kharif season.
- **We expect acreage in the current kharif season to modestly trail the record-high witnessed in the 2020 season.**

Cotton displayed the deepest YoY decline in acreage as on July 30, 2021

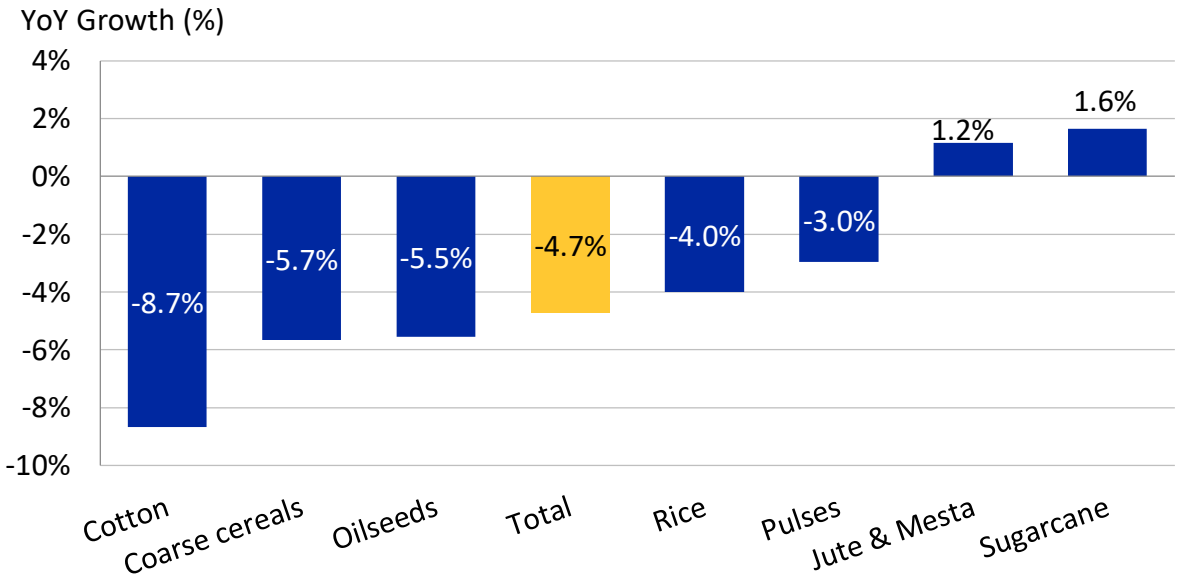
Crop-wise YoY sowing trends for pulses, oilseeds and coarse cereals

The YoY decline of 3.0% in sowing of pulses was chiefly driven by uradbean (-8.9%) and moongbean(-9.9%), outweighing the modest rise in acreage of arhar (+4.0%), kulthi (+4.3%), etc.

Within coarse cereals, sowing of ragi, small millets and jowar has witnessed a double-digit YoY decline of 31%, 18% and 11.1%, resp., while the decline in bajra was relatively modest at 8.8% and that for maize at a marginal 0.2% by end-July

Barring sunflower (+34.2%), the area sown in the rest of the oilseeds such as soyabean, groundnut, etc. is trailing the year-ago levels, with a wide range of 3-70.5%

Exhibit: YoY growth in Kharif Sowing as on July 30, 2021



***Source**: Ministry of Agriculture and Farmers' Welfare; ICRA research*

- The 4.7% YoY decline in the total kharif sown area as on July 30, 2021, was driven by cotton (-8.7%), coarse cereals (-5.7%) and oilseeds (-5.5%), followed by rice (-4.0%) and pulses (-3.0%).
- However, the sowing of sugarcane, and jute and mesta had risen by a mild 1.6% and 1.2%, respectively, in this season.

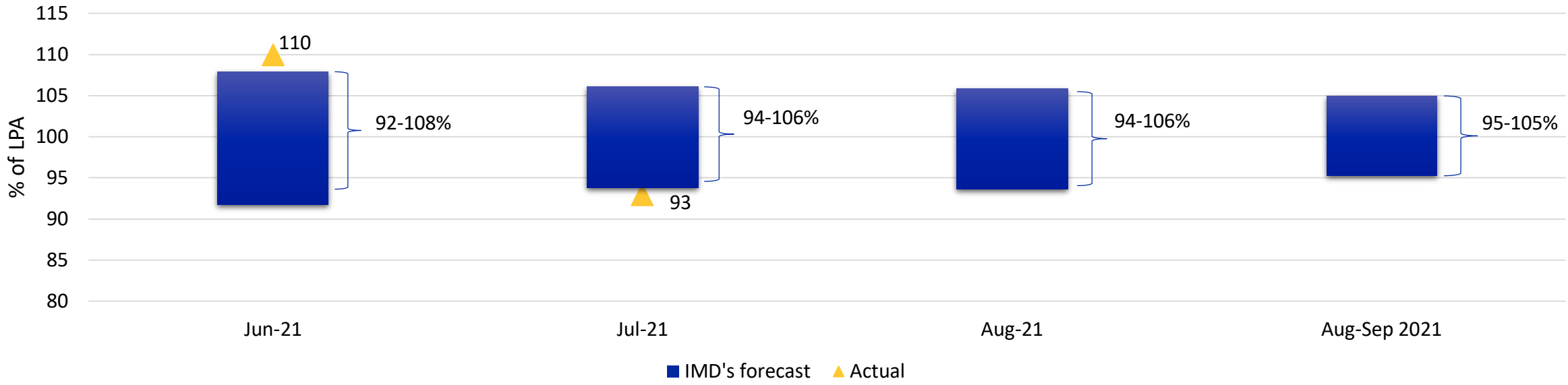
In absolute terms, rice, cotton, oilseeds and coarse cereals lead the decline in acreage

	Rice	Cotton	Oilseeds	Coarse Cereals	Pulses	Sugarcane	Jute and Mesta
YoY change	↓ -1.10 Million hectare	↓ -1.05 Million hectare	↓ -1.0 Million hectare	↓ -0.8 Million hectare	↓ -0.3 Million hectare	↑ +0.1 Million hectare	↑ +0.01 Million hectare
							
Major Agri. states	**YoY rise in coverage area**: Madhya Pradesh (+0.3), Assam (+0.3), Telangana (+0.3), etc. **YoY decline in coverage area:** **Bihar (-0.7), Odisha (-0.5)**, Chhattisgarh (-0.4), Jharkhand (-0.3), etc.	**YoY rise in coverage area**: Odisha (+0.01) **YoY decline in coverage area:** **Maharashtra (-0.3), Punjab (-0.2), Andhra Pradesh (-0.2), Telangana (-0.2),** etc.	**YoY rise in coverage area**: Maharashtra (+0.3), Karnataka (+0.02), etc. **YoY decline in coverage area:** **Madhya Pradesh (-0.7),** Andhra Pradesh (-0.4), Gujarat (-0.1), etc.	**YoY rise in coverage area**: UP (+0.2) and Telangana (+0.1), etc. **YoY decline in coverage area:** **Rajasthan (-0.5),** Maharashtra (-0.3),Haryana (-0.2), etc.	**YoY rise in coverage area**: Karnataka (+0.2) and Gujarat (+0.1) **YoY decline in coverage area:** **Madhya Pradesh (-0.2), UP(-0.2), Rajasthan (-0.2),** etc.	**YoY rise in coverage area**: **Maharashtra (+0.1), Gujarat (+0.1)**, Haryana (+0.02), etc. **YoY decline in coverage area:** Andhra Pradesh (-0.04), Tamil Nadu (-0.02), Chhattisgarh (-0.02), etc.	**YoY rise in coverage area**: **Assam (+0.02),** Bihar (+0.005), Tripura (+0.004), etc. **YoY decline in coverage area:** West Bengal (-0.02) and Nagaland (-0.001)

As on July 30, 2021; Cotton includes both BT and Non-BT segments; Sugarcane data is upto July 29, 2021; ***Source:*** *Ministry of Agriculture and Farmers' Welfare, GoI; ICRA research*

IMD expects a normal monsoon in the second half of monsoon season (Aug-Sep 2021); entire season rainfall appears set to exceed the LPA

Exhibit: Monthly forecast of monsoon rainfall by the IMD and actual precipitation (% of LPA)

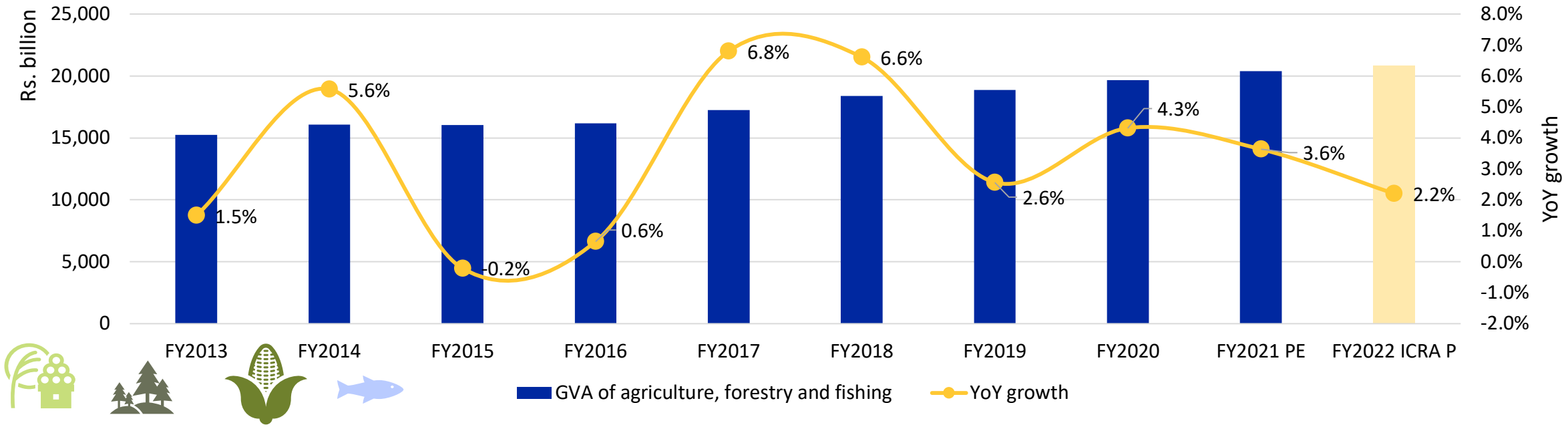


***Source**: IMD; ICRA research*

- On Aug 2, 2021, the IMD released its LRF for the second half of the southwest monsoon (Aug-Sep 2021), which has estimated the volume of rainfall to be normal at 95-105% of the LPA, with a 'tendency to be in the positive side of the normal'. Moreover, the volume of rainfall in August 2021 is estimated to be normal at 94-106% of LPA. Accordingly, the 2021 monsoon rainfall appears set to exceed the LPA.
- Looking ahead, the extent, and regional and temporal distribution of precipitation during Aug-Sep 2021 will be critical for ensuring favourable yields of the sown crops; too low or too high levels of rainfall, as well as a delayed withdrawal of the rains may damage the standing crop, thereby squeezing yields and posing upside risks to prices.
- **Episodes of flooding in certain parts of the South Peninsula, along with a YoY decline in kharif acreage suggest that the rise in crop output is likely to be muted.**

After two consecutive years of healthy growth, GVA of agriculture, forestry and fishing expected to rise by relatively modest 2.2% in FY2022

Exhibit: Annual absolute GVA and growth of agriculture, forestry and fishing at constant 2011-12 prices

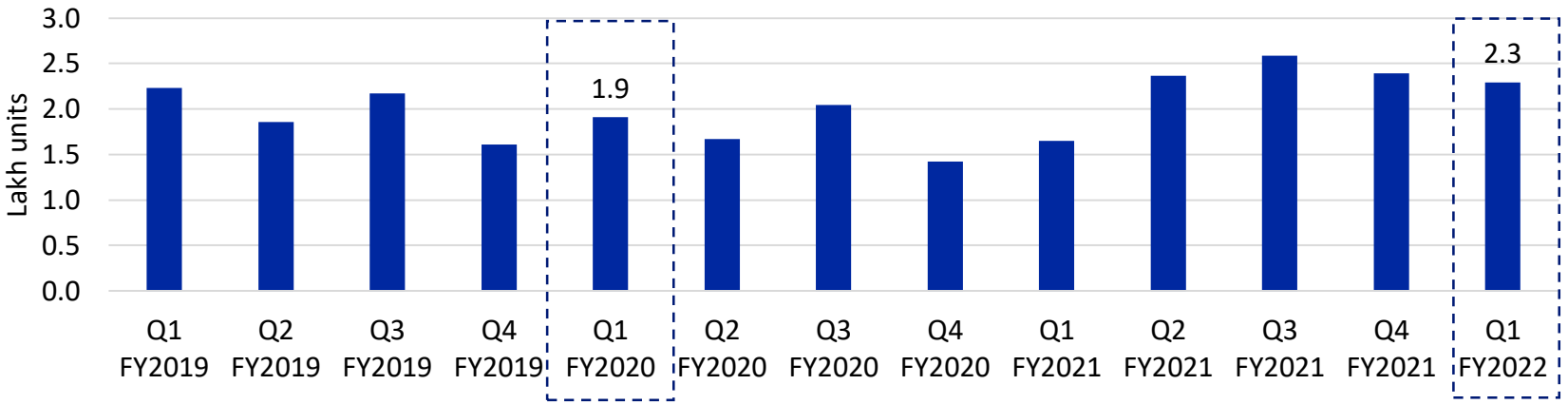


***Source**: National Statistical Office; ICRA research*

- ICRA expects the growth of GVA in agriculture, forestry and fishing to print at 3.0% in Q1 FY2022, similar to the 3.1% growth witnessed in Q4 FY2021, benefitting from the favourable rabi harvest.
- Given the recent trends in kharif sowing, we expect the agri GVA growth to ease to 2.0% each over Q2-Q4 FY2022.
- Overall, agri GVA growth is likely to moderate to 2.2% in FY2022 from 3.6% and 4.3%, respectively, in FY2021 and FY2020.

Healthy procurement and higher MSPs appear to have buffered farm sentiment in Q1 FY2022

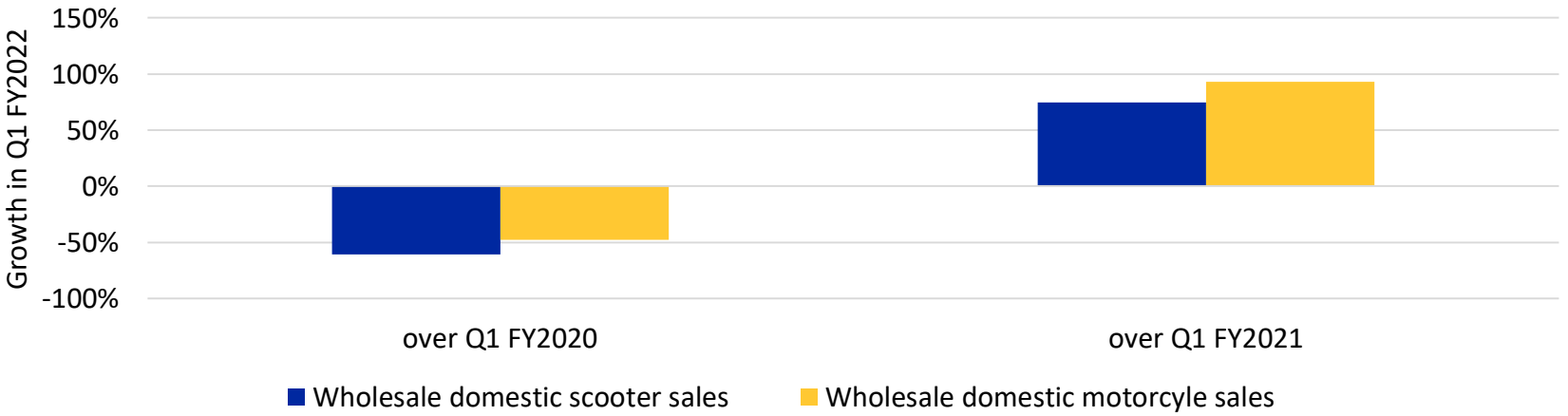
Exhibit: Wholesale Domestic Tractor Sales



Wholesale domestic tractor sales were robust in June 2021, aided by pent up demand as states resumed unlocking, after a lull in May 2021. Moreover, the volumes in Q1 FY2022 exceeded the pre-Covid level of Q1 FY2020

ICRA's FY2022 exp.:
+1% to 4%
on record-high base

Exhibit: Growth in Wholesale domestic Scooter and Motorcycle sales in Q1 FY2022 relative to Q1 FY2021 and Q1 FY2020



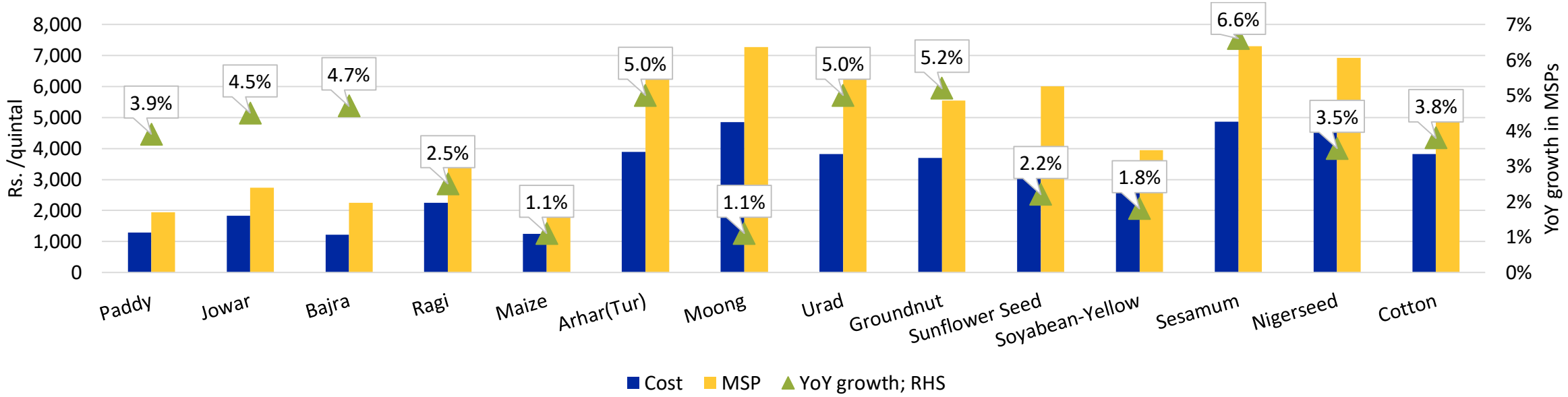
The performance of domestic sales of motorcycles, focussed on the rural segment, was relatively better than that of scooters (urban centric) in Q1 FY2022, in terms of both YoY as well as Q1 FY2020 levels.

ICRA's FY2022 growth exp:
Motorcycle: 11-13%
Scooter: 10-12%

***Source**: SIAM; ICRA research*

Pace of procurement will be crucial to support farm cash flows and demand amidst a modest hike in MSPs for kharif crops

Exhibit: Cost of Production and Minimum Support Prices of Kharif crops for marketing season FY2022 and YoY growth in MSPs

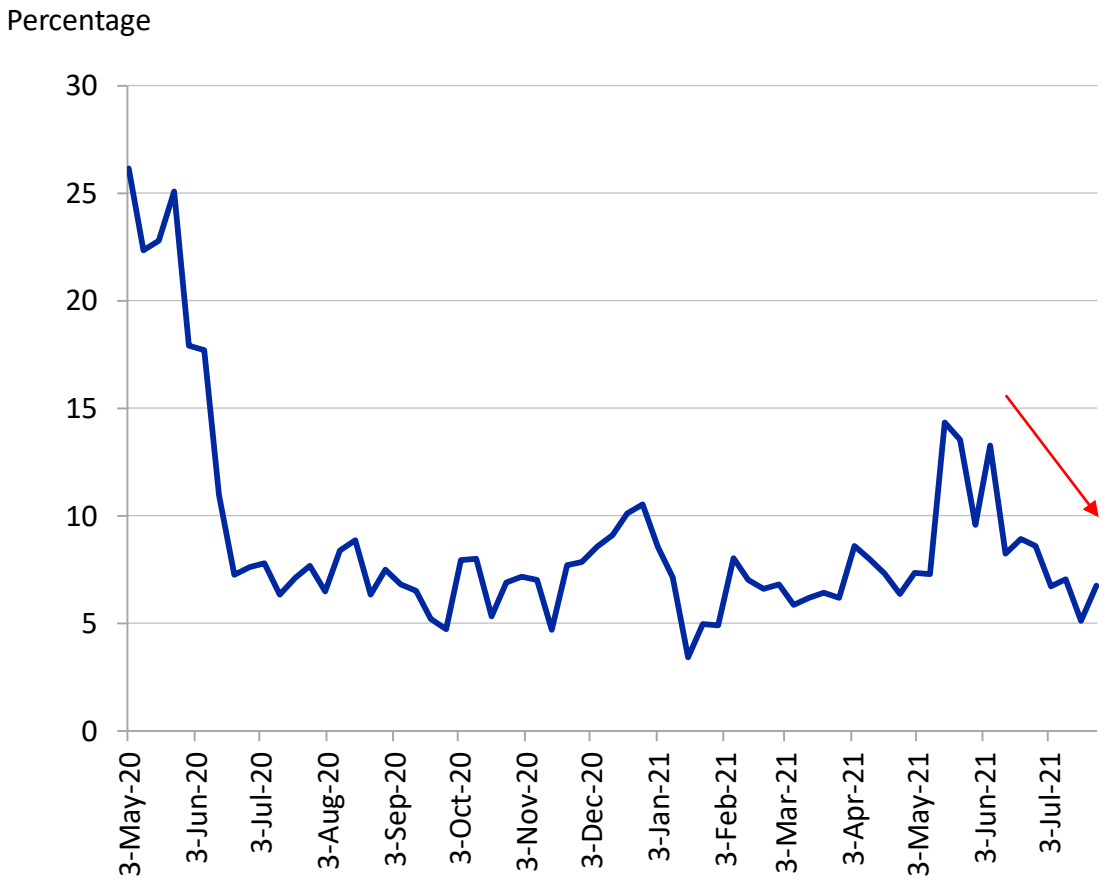


Source: *Cabinet Committee on Economic Affairs; GoI; ICRA research*

- Recently, on Jun 9, 2021, the Cabinet Committee on Economic Affairs (CCEA), GoI, has announced the Minimum Support Prices for all mandated kharif crops for the marketing season FY2022 with a moderate YoY uptick within the range of 1.1%-6.6%.
- The highest increase in MSP has been announced for seasamum by Rs. 452/quintal with a YoY rise of 6.6%, followed by pulses such as urad (+5.0%) and arhar (+5.0%) by Rs. 300/quintal each. Other kharif crops, such as soyabean, moong, maize saw a mild YoY increase of 1.8%, 1.1% and 1.1%, respectively in their respective MSPs.

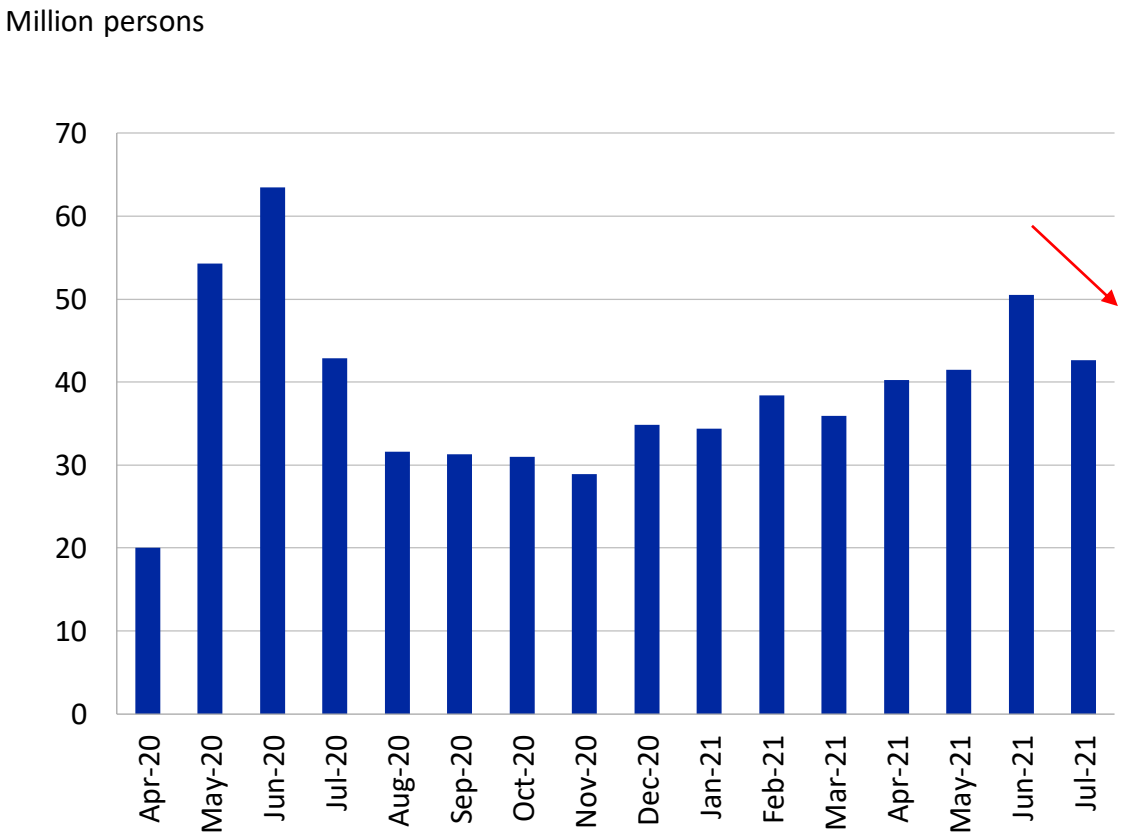
With pickup in kharif sowing, rural unemployment and work demand under NREGA have eased in July 2021

Exhibit: Weekly trends in rural unemployment rate



Source: *Consumer Pyramids Household Survey (CPHS); CMIE; ICRA research*

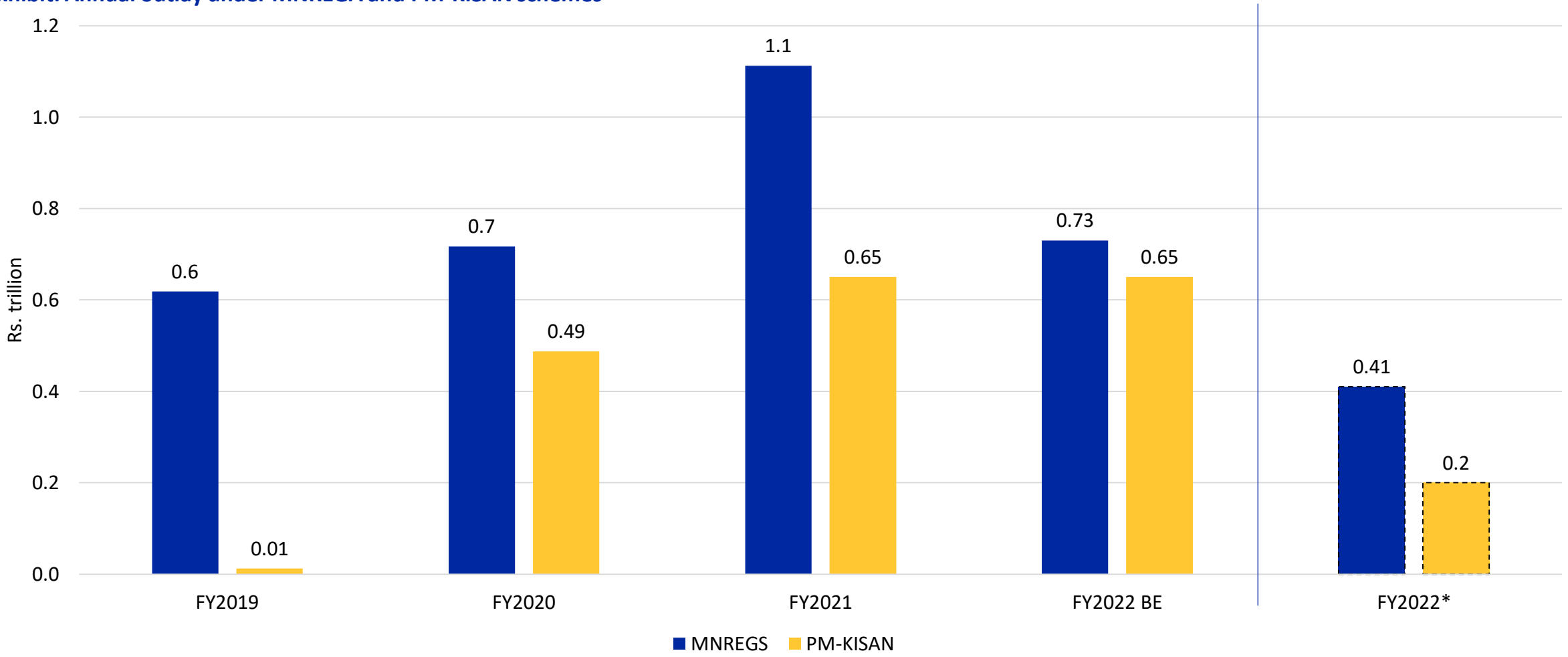
Exhibit: Trends in work demand generated under MGNREGS



MGNREGS: Mahatma Gandhi National Rural Employment Guarantee Scheme;
Source*: Ministry of Rural Development, GoI; ICRA research*

More than half of MNREGA outlay for FY2022 has been utilised in four months; first tranche of cash transfers under PM-KISAN scheme transferred

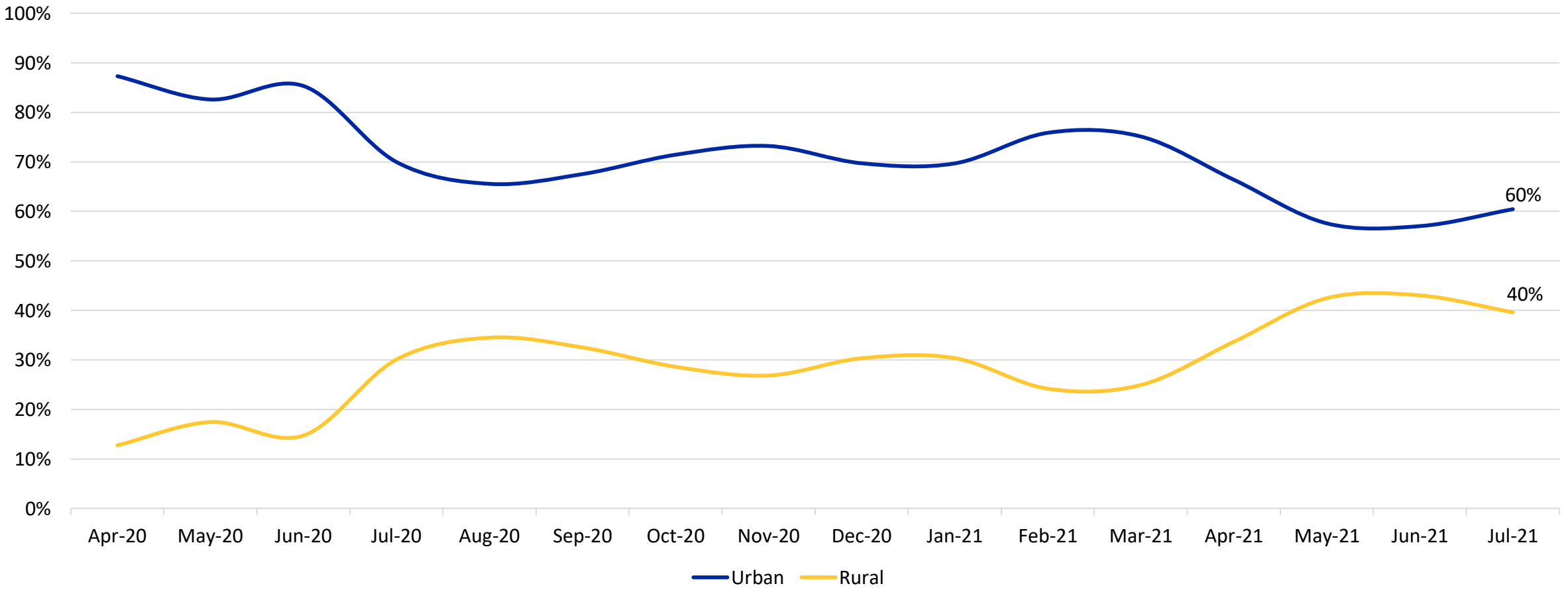
Exhibit: Annual outlay under MNREGA and PM-KISAN schemes



As on July 26, 2021; BE: Budget Estimates; The outlay under Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) for FY2021 is taken as per revised estimates included in the Union Budget 2021-22;* ***Source:* *MNREGA; PM-KISAN GoI; ICRA research*

Nevertheless, higher incidence of Covid cases in rural areas in second wave and associated healthcare costs, expected to dampen non-farm rural demand

Exhibit: Cumulative All-India Rural and Urban Share of Active Covid-19 Cases



Source: *ICRA research*

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Thank You!

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