

In the green

Higher mandi prices for kharif crop, likely bumper rabi harvest spell gains for farmers

December 2019



Farm profits per hectare to grow 7-9% in crop year 2019-20

Improving mandi prices to boost kharif profitability despite production decline, rabi to profit from higher yields

Irregular distribution of the south west monsoon in 2019 has impacted the 3Ps of Indian farming – productivity, prices, and profitability – unevenly.

Despite this, overall farm profits per hectare will grow 7-9% on-year in crop year 2019-20 (April 2019 to March 2020), a CRISIL Research analysis of 15 key minimum support price (MSP)-linked crops on parameters such as crop productivity, output, international and domestic demand-supply scenario, share of government procurement and exports, farm gate prices, and evolving cost dynamics indicates.

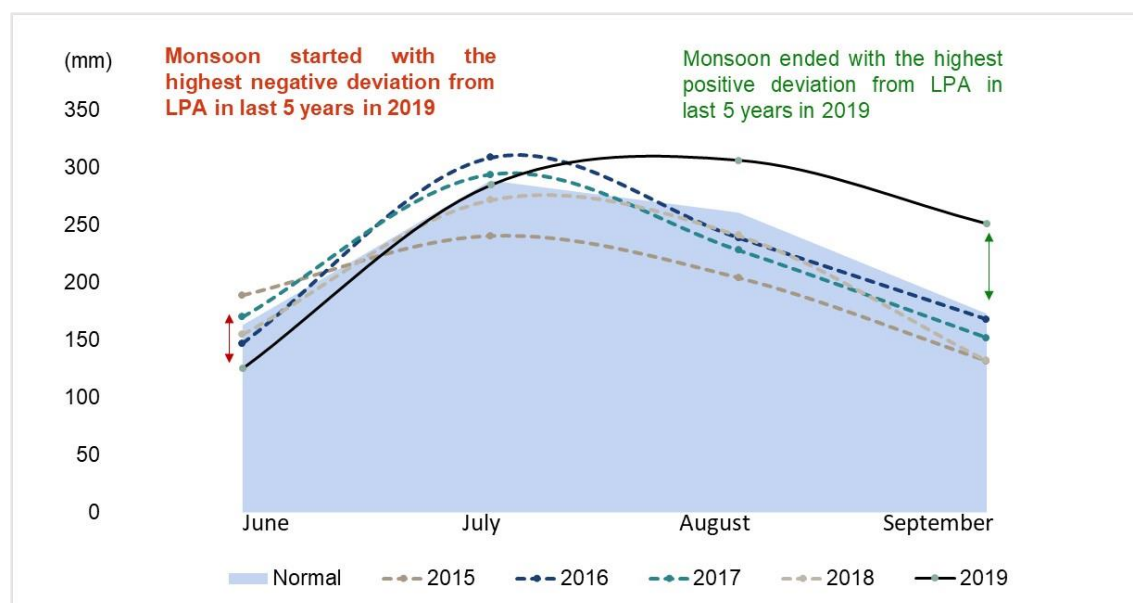
In crop year 2018-19, farm profits jumped 26% on-year over a low base of the preceding year (2017-18), which had seen per-hectare profits decline due to low mandi prices following a bumper crop.

The outlook for this year is muted in comparison, though a rise in mandi prices for kharif and higher productivity for rabi crop would lend support to overall profitability per hectare.

Rationale for our outlook: Unprecedented heavy rainfall in September-October would lower kharif crop production by 4-6% on-year. On the other hand, a 10% above-normal monsoon has filled reservoirs to the brim, which in turn, promises to elevate rabi crop productivity and lead to 7-8% higher output.

While lower market supply of kharif foodgrains will push up mandi prices by over 10%, higher MSP and government support for wheat (which accounts for over 50% of the rabi crop output) is expected to aid price growth for rabi, leading to an expansion in the overall per-hectare farm profitability in crop year 2019-20.

A drought-like situation in June 2019 quickly turned into surplus by September



Note: Normal represents the long period average (LPA) of past 50 years. Monthly rainfall is the average of actual rainfall across country in a month.

Source: Indian Meteorological Department, CRISIL Research

Excess rainfall in less-irrigated regions brighten rabi prospects

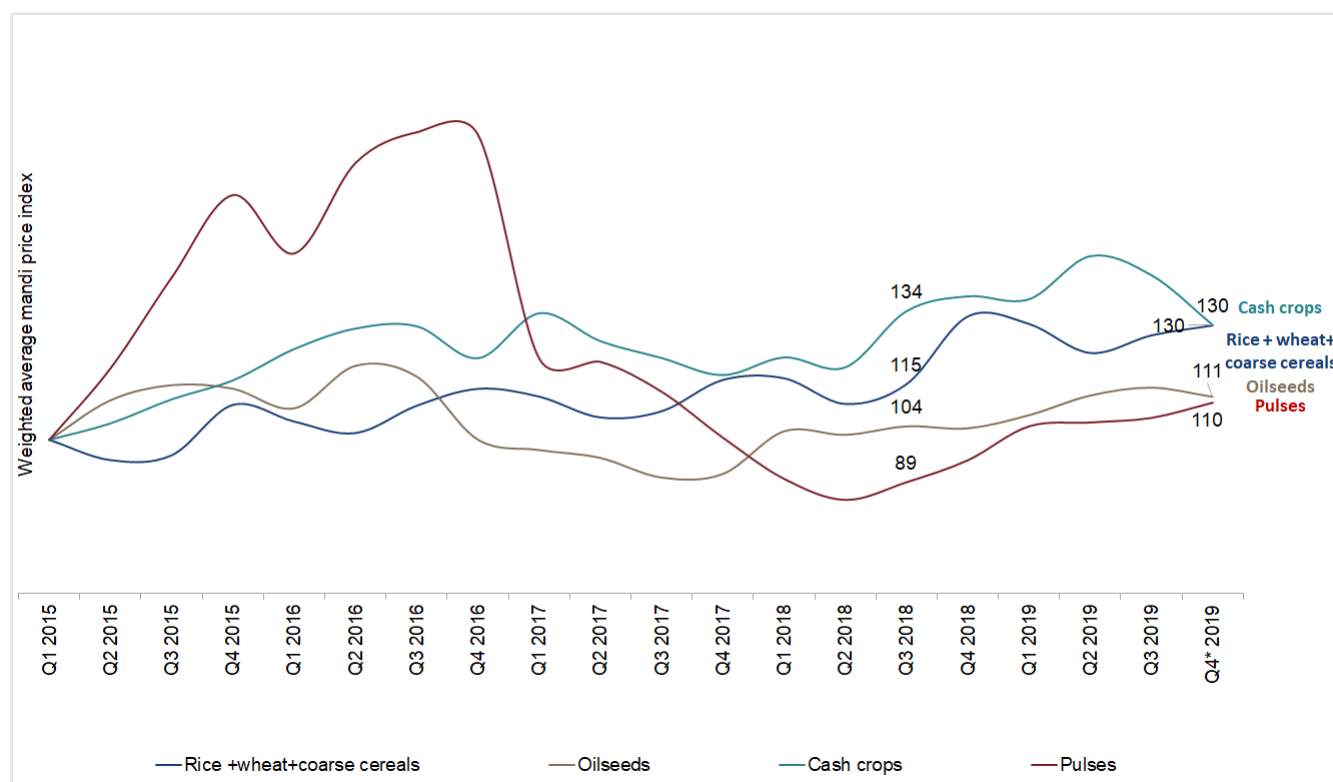
The southwest monsoon was 28% below normal on June 30 and 9% below normal on July 30, leading to delayed onset of kharif crop sowing this year. However, a quick catch-up in August and September resulted in 10% above-normal monsoon from June 1 to September 30.

Though sowing gained pace in response to the monsoon’s progress, many parts of the country, including Punjab, Haryana, Uttar Pradesh, and West Bengal, continued to be dry. On the other hand, states like Maharashtra, Madhya Pradesh, Karnataka, Kerala, Andhra Pradesh, Rajasthan and Odisha suffered from crop damage due to excess rainfall and floods.

Overall, the kharif crop output is expected to be 4-6% lower on-year in crop year 2019-20. However, shortage in market supplies is expected to keep mandi prices firm – indeed, mandi prices have already shown an upward trend in the last few quarters – leading to higher kharif profits per hectare.

Among crop segments, prices of pulses and oilseeds have shown an increase of 23% and 8%, respectively, from the third quarter of 2018 to the fourth quarter of 2019 (the comparison period is odd because of delayed mandi arrivals in 2019). However, prices for cash crops have softened by ~5%, led by a decline in cotton prices because of an expected increase in output. Prices of cereals and coarse cereals inched up 13% on average, because of an 11% increase in paddy prices supported by higher MSP, and over 25% increase in weighted average prices of coarse grains because of high domestic demand.

Mandi prices have firmed up on-year, supporting kharif realisations



Notes: (1) Mandi prices are weighted average mandi prices across 2,000 mandis in India, weights being daily arrivals

*Q4 2019 includes prices for October and November 2019 only 2) Price Index base: Q1 2015

Source: Agricultural Marketing Information System, CRISIL Research

Delayed kharif sowing impacted harvesting, as indicated by 38% lower mandi arrivals (across 2,000 mandis in India) during October-November 2019. This, in turn, would delay rabi sowing, which was 15% lower as on November 8, 2019.

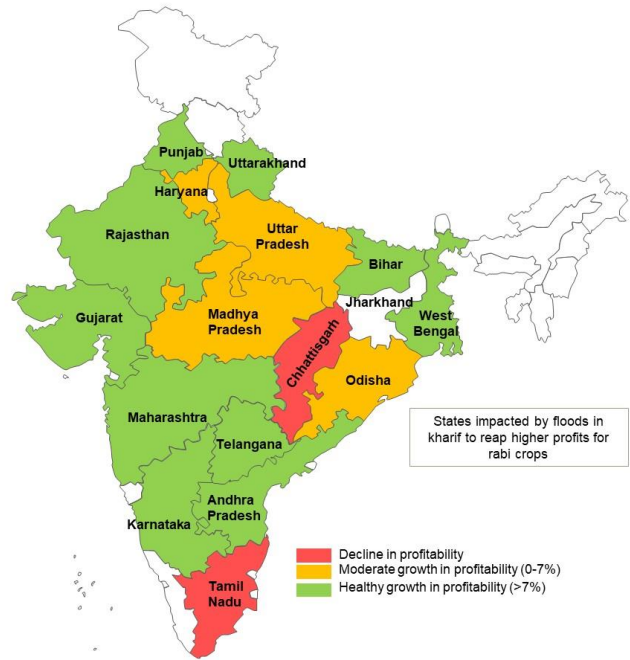
The good news, however, is that all 120 reservoirs in the country have higher water levels compared with the long period average as on October 31, 2019 (see annexure).

This is expected to lead to higher rabi crop sowing on-year. After two years of erratic south west monsoon, states such as Gujarat and southern states are expected to witness a healthy rabi output in crop year 2019-20.

Both kharif and rabi profits on upswing

Over 70% of the kharif sown area to make higher profits in crop year 2019-20

Over 90% of the rabi sown area to reap higher profits in crop year 2019-20



Notes: (1) Profitability analysis is done at C2 cost (the comprehensive cost including rent on land, depreciation, interest, opportunity cost and real cost)

Source: Directorate of Economics and Statistics, Commission for Agriculture Cost and Prices, and CRISIL Research

Farmers in south and east to reap robust gains

Over 75% of kharif sown area and over 90% of rabi sown area are expected to earn higher profit per hectare in crop year 2019-20. And though northern states will pocket the largest share, growth in profitability is expected to be robust in Gujarat and the southern states (except Tamil Nadu, as prices of key grains are expected to soften after a sharp rise in the previous season). Eastern states are also expected to turn profitable at C2 cost.

Uttar Pradesh, Punjab and Haryana are expected to continue reaping the highest per hectare profit on account of a favourable crop mix, government support in procurement of paddy and wheat, and lower cost of production due to higher mechanisation.

Tamil Nadu, Andhra Pradesh and Telangana are expected to log healthy growth in kharif profitability over a low base of the previous year, when profitability dropped significantly on account of scanty rainfall and lower mandi prices, especially for pulses and groundnut. Similarly, gradual improvement in crop yields and rise in mandi prices is expected to aid profitability growth in West Bengal and Odisha, too.

Maharashtra, Bihar, and Karnataka are estimated to bear the brunt of kharif crop damage due to floods and excess rain in the current crop year. However, adequate water supply for the rabi crops in these states is expected to lead to a robust growth in rabi productivity and profitability on-year.

Annexure

All states have higher reservoir levels compared with the long period average

Region	States	% of total live capacity	% departure from normal storage	Irrigation penetration
Northern	Uttar Pradesh	66%	21%	87%
	Uttarakhand	84%	5%	47%
	Punjab	82%	31%	100%
Western	Maharashtra	94%	24%	19%
	Rajasthan	100%	32%	45%
	Gujarat	95%	63%	41%
Central	Madhya Pradesh	98%	31%	62%
	Chhattisgarh	82%	27%	31%
Eastern	West Bengal	73%	64%	59%
	Odisha	93%	18%	28%
Southern	Telangana	98%	22%	39%
	Andhra Pradesh	99%	71%	47%
	Tamil Nadu	98%	102%	57%
	Andhra + Telangana common	82%	27%	43%
	Kerala	79%	10%	20%
	Karnataka	94%	30%	36%

Note: 1) Reservoir levels as on 31st Oct'19; * represents AP & Telangana: Common reservoirs between the two states; 2) Colour coding: Live capacity <30%- red, 30-60%- pink, >60% blue 2) LPA: Long period average reservoir levels of past 50 years

Note: There are some common reservoirs between Andhra Pradesh and Telangana, which is why these have been given separately

Source: Central Water Commission

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