Quickonomics

July 11, 2023

Taking the pulse

Moving from volatility to stability

- Lower volatility in pulses inflation — around the lower average levels — seen in the past few years benefits both producers and consumers. Producers get stable price signals and better visibility on earnings and consumers benefit from gradually reducing inflation over time
- This year, though, pulses inflation is a concern due to spillover from some crop damage last year as well as ongoing monsoon disturbance, which would require government intervention
- Yet, peak inflation in pulses this year is likely to be less pronounced than seen in the episodes of inflation spikes over the last two decades

In the past five months, the inflation rate of pulses has nearly doubled. When measured at the Wholesale Price Index (WPI) level, it stood at 5.8% in May, while at the Consumer Price Index (CPI) level, it was 6.6%.

Considered a staple food item, pulses are an important source of protein for a vast majority of the Indian population. In the food inflation basket, it has a 6% weight and hence any sharp increase in prices can hurt household budgets. Containing pulses inflation therefore becomes a policy priority.

This recent pick-up in pulses inflation should not come as a surprise. The periodic ups and downs in pulses inflation is not new.

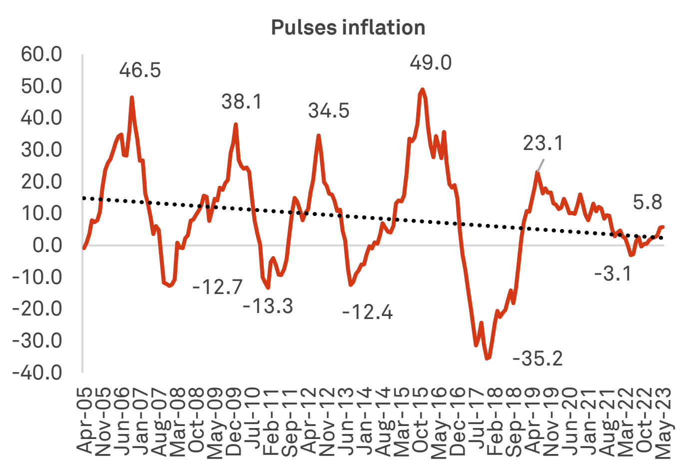
But rising inflation in pulses, when other staples such as rice and wheat are already seeing inflation rates of ~10% and ~12%, respectively, create ground for some probing into the trends that influence this food sub-category.

In our previous reports[1], we saw how pulses have been exhibiting the impact of 'cobweb' price-production phenomenon — which pushes up inflation to its peak every three years, followed by a drop.

The last pulses inflation trough was in May 2022 (chart 1), after which it has again started picking up. The typical time between trough to next peak has been 1.5 years.

Going only by that calculus, pulses inflation could move northwards for another 6-7 months to touch its next peak.

Chart 1: Cobweb phenomenon is now less pronounced in pulses



Source: Ministry of Industry and Commerce, CRISIL

But, recent trends indicate peaks and troughs in inflation have become less pronounced due to proactive policy interventions.

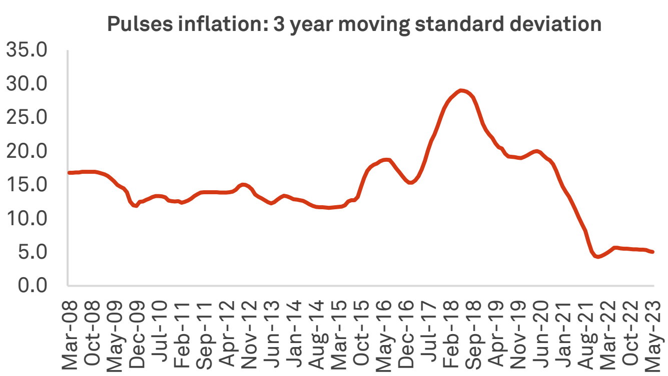
I. Volatility in pulses inflation has come down

The last peak was in June 2019. Interestingly, the peak inflation rate (23.1%) was the lowest compared with all previous peaks (chart 1). Likewise, the last trough was in

[1] 2015, CRISIL Insight, 'Every third year, pulses catch price-fire' and 2017, CRISIL Insight 'Pulses & Rhythms'. Here upon analysing the correlation between production and one-year lagged WPI inflation data, we found that the price cycles have been generally triggered by positive (excess production) and negative (under production) supply shocks. This has to do with the fact that farmers base their sowing decisions on the prices observed in the previous period, and accordingly over- or under-produce the crops, triggering a price cyclicality.

May 2022 when the pulses inflation rate (at -3.1%) was the highest compared with all previous troughs. This suggests volatility in pulses inflation has come down. Inflation volatility, measured by the standard deviation over a moving three-year period, shows a sharp drop after 2018 (chart 2). This is mostly led by arhar (tur) and urad dal.

Chart 2: Volatility has dropped after 2018

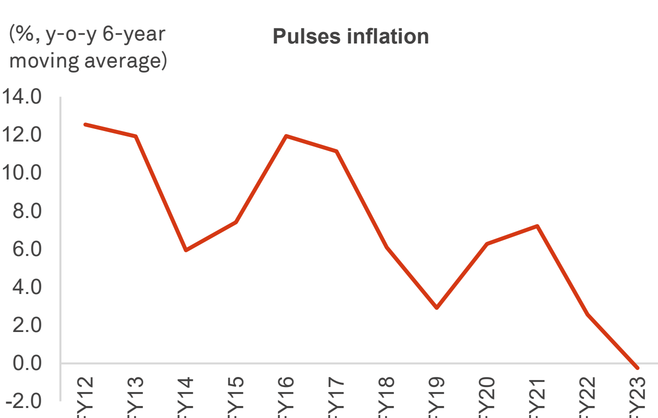


Source: Ministry of Industry and Commerce, CRISIL

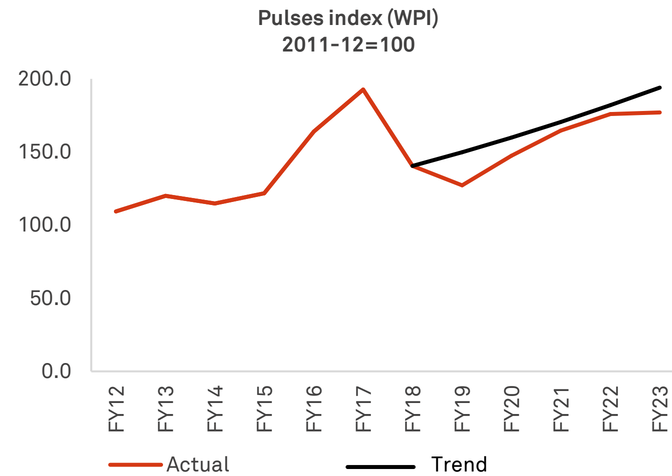
II. Pulses inflation is settling at a lower level

While volatility in pulses inflation has reduced, the other good news is that pulses inflation has been settling at a lower level. The first bodes well for pulse growers as lower volatility ensures better earnings visibility. The second is good news for consumers.

Chart 3: Pulses inflation has been trending down



Source: Ministry of Industry and Commerce, CRISIL



We conclude this by looking at two metrics.

First, a six-year moving average of pulses inflation rates shows a clear and steep decline (chart 3). A six- year period is taken to capture at least two price cycles. This metric suggests that the rate of price increase, or the inflation rate in pulses, is softening over time.

Second, a trend line extrapolated from where there appears to be a break in trend (assuming that year is 2018-19 basis chart 2 above) suggests that if not for price stabilisation policies, pulses prices — proxied by the trend index values — would have settled at a slightly higher level. With inflation rates softening over time, values have settled at a lower level.

This is largely attributed to policy interventions in recent years to improve the supply position of pulses, which includes incentivising cultivation and strategic imports in junction with administrative steps to stabilise prices.

Steps to improve domestic production bring long-term benefits, while other measures help to iron out short-term supply issues.

Shoring up supplies

Domestic production: Pulses production saw a thrust under the National Food Security Mission (NFSM-Pulses) which promoted improved technology, provided crop advisories, distributed high-yielding variety seeds and critical nutrient inputs, and extended nutrient management at subsidised prices to the farmers.

In addition to sharp increases in minimum support prices (MSPs), other reforms included opening-up of export markets for pulses, removing import restrictions on pulses and removing pulses from Agricultural Produce Market Committee (APMC) Acts to enable better market reach to pulse growers.

These measures resulted in both an increase in pulses acreage and in yields, pushing up production, from 16-18 million tons (MT) during the years 2012-13 to 2015-16, to 23-25 MT in 2016-17 to 2020-21. Thereafter, production has settled at these higher levels (27 MT).

Strategic imports: Imports of pulses has been one way to check price spikes and avert domestic shortages. After lifting restrictions, recent years have seen import contracts signed with Mozambique, Malawi and Myanmar, which has helped improve supplies.

Counterintuitively, India's import dependence in pulses has reduced (from 19% in fiscal 2014 to 9-10% in fiscals 2022-2023), with domestic production steadily picking up. The role of imports therefore has been strategic – with imports being resorted to only in the interim periods of prices spikes

Administrative/price stabilisation measures

Despite the increase in production, interim shocks due to weather disturbances and higher global prices can also cause prices spikes. For instance, in 2019-20 and 2020-21, despite high production levels, pulses inflation was high at 16% and 12%, respectively.

It is in such times that price stablisation policies provided some cushion. Policy interventions ranging from higher procurement, release of buffer stocks, and limiting stock holdings by traders especially during interim periods of supply shortages have been deployed to check price pressures.

Notably, in fiscal 2016, a Price Stabilisation Fund was set up with a budgetary allocation to enable purchase of pulses to maintain a buffer stock which could be released in the market to arrest any abnormal increase in prices.

Under this and the government's Price Support Scheme (PSS), pulses procurement at MSP started rising rapidly — from ~0.5% average share of total production between fiscals 2014 and 2017, rising to a peak of 19% in fiscal 2019 and settling around 5-7% thereafter.

Outlook

This year, assuming that pulses inflation continues to display the cobweb phenomena (albeit less pronounced), the next peak could be 6 to 7 months away. Moreover, truant weather patterns last year caused some damage to production, which could have some impact on prices. This year, too, with rains delayed and uneven, and impacting pulses sowing, pressure on prices could be felt.

But, continued government intervention via price stabilisation schemes could ensure that the next peak remains less intense. In a recent move[2], the government announced the removal of the 40% procurement ceiling for key pulses (tur, urad and masur) which will allow farmers to sell any amount of their produce.

This should encourage farmers and help increase sown area in the cropping seasons to come. Higher procurement also facilitates better price signaling through announcement of MSP. Incorrect price signaling was a key reason which led to cobweb pattern of growing pulses.

Other timely policy measures including the recent announcement to impose stock limits on arhar and masur to discourage traders from stocking supplies, also keep a check on price spikes.

This year, too, policymakers will have to keep their eyes peeled on monsoon behaviour and its implication on prices, and accordingly take measures to correct price pressure.

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[2] *https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1930269*

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