POLICY BRIEF

15

Tackling Food Inflation

Is restricting exports and imposing stocking limits the optimal policy?

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SEPTEMBER 2023

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Published by: Indian Council for Research on International Economic Relations (ICRIER),
Core-6A, 4th Floor, India Habitat Centre, Lodhi Road, New Delhi - 110003

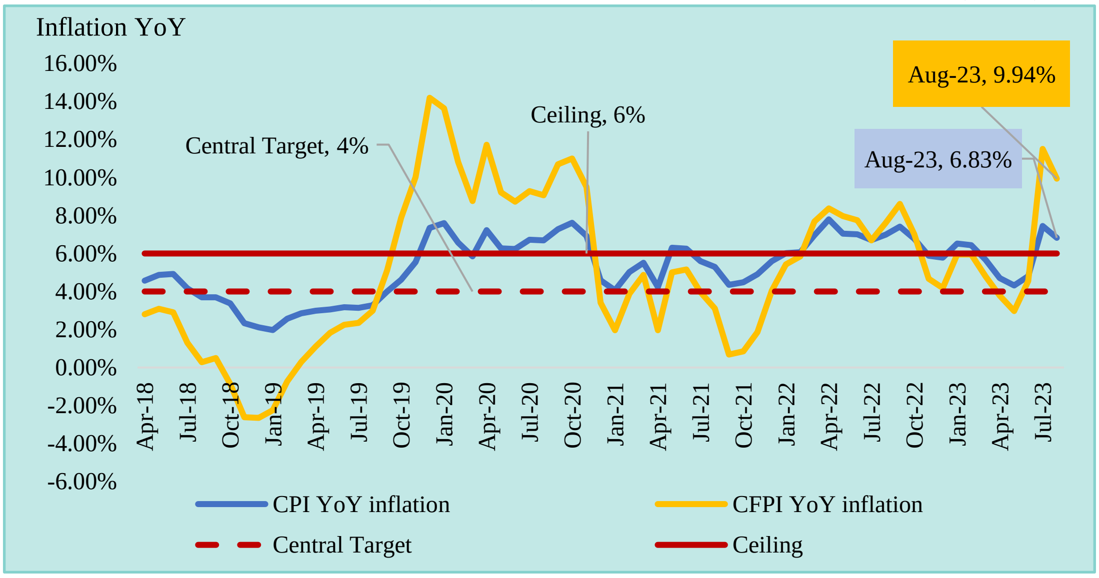
Acknowledgements

The authors would like to express their sincere gratitude to Puja Mehra, Senior Fellow (Consultant), ICRIER for her comments and editing of this policy brief. The authors would also like to thank to Rahul Arora, who did an excellent job in formatting and putting it in final shape.

In a somewhat concerning development on macro-economic front, retail inflation, measured by the year-on-year (YoY) Consumer Price Index (CPI) remains above the Reserve Bank of India's (RBI) upper tolerance ceiling of 6 percent (4+/- 2 percent), at 6.83 percent in August 2023 (**Figure 1**). In the last month, retail inflation had surged to 7.44 percent. The recent inflation is largely because of the impact of rising food prices, contributing 57.41 percent in August CPI inflation. Since food and beverages carry 45.9 percent weight in the CPI basket (food items alone accounts for 39.05 percent), the highest in any G20 countries, managing food prices becomes critical for taming retail inflation. Furthermore, this year there are growing apprehensions related to the possible negative impact of El Niño on food production and thereby on food prices.

The rainfall data from the India Meteorological Department (IMD) on the exceptionally dry conditions in August, the driest recorded since 1901, have contributed to a negative deviation in rainfall for the ongoing monsoon season (cumulative rainfall from June 1st to September 12th of this year) at 10 percent. This level of deviation, if it continues till September end, falls within the IMD's categorization of a "drought." RBI's projection for CPI inflation at 5.3 percent, for the Fiscal Year 2023-24 (FY24), is under assumption of normal rainfall. Given the rainfall deficit, CPI inflation will likely breach that projection. In this context, we try to understand how in these conditions Indian policy makers can contain inflation below 6 percent, if not 4 percent.

Figure 1: Trend of Consumer Price Index (General) and Consumer Food Price Index (CFPI) at YoY level



Source: Ministry of Statistics and Programme Implementation (MOSPI), GOI

So far, Government of India (GOI) has taken spate of measures to tame food inflation. These include, *inter alia*, the imposition of wheat export ban in May 2022, ban on the export of broken rice in September 2022, followed by the implementation of stocking limits on wheat traders and millers in June 2023, then export ban on non-basmati white rice in July 2023, export duty of 20 percent on parboiled rice, setting a Minimum Export Price (MEP) of $1200 per tonne for basmati rice in August 2023, and 40 percent export duty levied on onions during the same month. Some media reports also suggest that GOI is considering restricting exports of sugar and an imposition of 25 percent export duty on the export of molasses. These measures, stringent and somewhat abrupt, indicate a knee jerk approach rather than a well thought out strategy. In this policy brief, we argue for a more rational and reliable trade policy, encompassing export and import policies, to contain food inflation that is neutral to the interests of producers and consumers. We seek to address the following key questions:

1. What are the primary drivers of the prevailing food inflation in India? (Without proper diagnostics, it is difficult to design a rational policy.)
2. How do export restrictions and domestic stocking limits disrupt market dynamics and impact farmers' interests while protecting consumer interests?
3. What would be an optimal policy to tame food inflation in India, and how can trade policies be strategically employed to achieve it?

What is the nature of food inflation and what is driving it?

Segregating retail inflation in August 2023 across major groups shows that food contributed 57.41 percent to overall CPI inflation (**Figure 2.1**). CFPI inflation was reported at 9.94 percent YoY in August 2023, lower than 11.51 percent YoY in July due to a drop in tomato prices. The spike in July 2023 was largely due to soaring vegetable prices, especially of tomatoes that witnessed 201.54 percent inflation CPI YoY and contributed 18.84 percent to overall CPI inflation of the month. Tomato remains the top contributor (15.51 percent) in August CPI 2023, with 180.29 percent CPI YoY increase.

However, prices of tomato started cooling down since the mid-August and are not expected to be a big driver of inflation in September. Cereals have a big weight in CPI basket of 9.7 percent. They are the second biggest driver of inflation after tomato, contributing 15.49 per cent of August CPI inflation. Spices CPI inflation of 23.18 percent YoY was the next biggest contributor (9.46 percent), followed by milk and dairy products that contributed 7.25 per cent of August CPI inflation, with CPI inflation of 7.73 per cent (**Figure 2.2**).

Figure 2.1 Contribution of food to CPI Inflation in August 2023 (in percent)

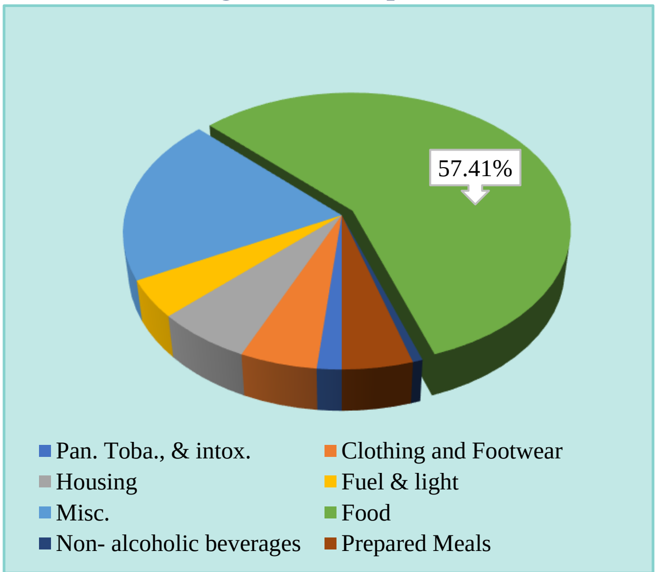
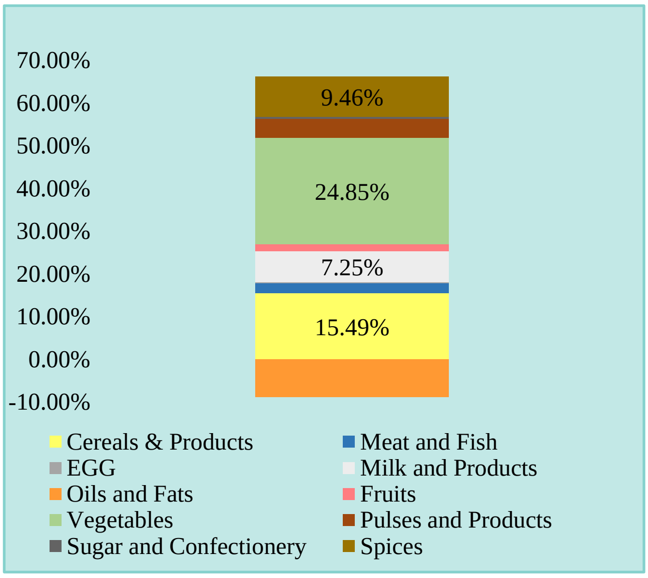


Figure 2.2 Food items' contribution to CPI in August 2023 (in percent)

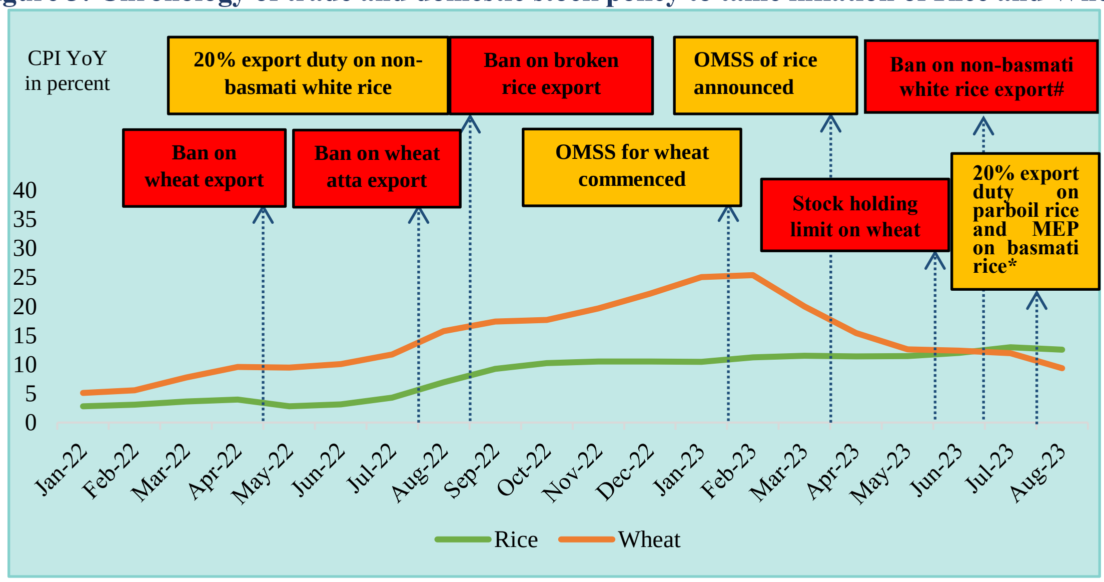


Source: MOSPI, GOI

Taming wheat inflation without hurting farmers' interests

Inflation in **wheat** retail prices declined to 9.33 percent in August CPI YoY from 11.94 percent in July 2023. However, the lower procurement of 26.1 MMT by the government, way below the target of 34 MMT in the current rabi marketing season (RMS, 2023-24), has created a concern on the supply for coming months. During the last two years, 2022-23 and 2021-22, production of wheat seems to have suffered due to heatwaves in the major wheat producing states in India. As a result, trade estimates of wheat production significantly differ (by at least 5 to 6 MMT lower) from the official estimates of GOI. This difference in estimates created a trust gap in the market, which put pressure on wheat prices. The procurement of wheat in 2022-23 RMS also dropped significantly to just 18.8 MMT, down from 43.3 MMT in the previous year. Panicked by the lower figure of procurement, GOI suddenly banned wheat exports in May 2022 even though inflation was below 10 percent (9.45 percent) in May 2022 (**Figure 3**). But this sudden ban on wheat exports, instead of bringing wheat inflation down, led to greater uncertainty in the market and wheat inflation surged to 15.7 percent in August 2022, when GOI also banned exports of wheat flour (atta) products. These export bans failed to contain wheat inflation which accelerated to 25.4 percent by February 2023, just before the harvest season.

Figure 3: Chronology of trade and domestic stock policy to tame inflation of Rice and Wheat



Source: Directorate General of Foreign Trade (DGFT), GOI

*Note: # indicates provision of the government-to-government negotiation. Under Open Market Sale Scheme (OMSS), reserve price for wheat and rice are fixed at Rs. 2350 per quintal and Rs. 3100 per quintal, respectively. * Minimum Export Price (MEP) of $1200 per tonne has been fixed.*

This inflation in wheat in February, 2023 heightened the panic in government circles as market prices were way above the announced minimum support price (MSP). The concern was that if the market prices stayed like that, Government would not be able to procure enough to meet its public distribution system (PDS) commitments. As a last-ditch measure, GOI commenced off-loading wheat under Open Market Sales Scheme (OMSS) from February 2023. A total of 3.4 MMT of wheat were sold at prices way below the economic cost of Food Corporation of India (FCI) to beat the market prices down to MSP levels so that enough could be procured for PDS. Furthermore, in June 2023, for the first time in 15 years, the GOI (The Department of Food and Public Distribution) imposed wheat stocking limits – of 3000 tonnes for traders or wholesalers,10 tonnes per retail outlet for retailers and 3000 tonnes for big chain retailers to tame wheat inflation. As a result of these stringent measures, wheat inflation plummeted from 25.4 percent in February 2023 to 9.33 percent by August 2023. The Government bureaucracy may celebrate this as an achievement, but it may be worth analysing what implications these measures will have on farmers who bore the brunt of this stringent approach.

It may be noted that in financial year FY22, India exported 7.5 MMT of wheat, and with Russia-Ukraine war from March 2022 onwards, the global prices were in upswing. India could have exported even more, which would have benefitted farmers as domestic prices were rising in tandem with the global trend. But by banning exports of wheat and wheat products (atta), unloading 3.4 MMT of wheat under open market operations at prices below economic cost, and then putting stocking limits on traders and millers, the market prices were dragged down to the level of the MSP announced.

The adoption of such policy measures indicates a bias in favour of urban consumers in India's food price policy, which in turn is a disguised transfer of resources from farmers to consumers. Prior research by ICRIER and OECD (2018) showed that between 2000-01 and 2016-17 producer support estimate (PSE) in India was a negative 14 percent due to "price depressing effect" of market distortions including export bans, MEPs and other policy interventions. This is the highest among 52 countries analysed, during the period. Remarkably, only two other countries (Ukraine and Vietnam) registered negative PSE values in the study. During the study period, Indian farmers carried a substantial implicit tax burden amounting to Rs. 2.65 lakh crores annually, estimated at 2017-18 price levels (Gulati, A. 2019, January, Taxed through trade policies, farmers need stable income policy, Indian Express). The current imposition of export bans, open market sales also indicate "negative market price support" by government, reducing incomes of farmers (**Box 1**).

It is worth recalling that the purpose of Minimum Support Price (MSP) policy is to serve as a floor price for farmers. And if market prices are higher, GOI is supposed to compete in the market and procure at market prices for its needs to feed the PDS. But when exports are banned, and GOI unloads its stocks below its economic cost with a view to suppress market prices, it practically amounts to "dumping" within India by GOI itself! And then, on top of this all, if it also imposes stocking limits on traders and millers, the net impact is an 'implicit tax' on farmers. The approach reflects a strong "pro-consumer bias" in India's food price policy. When more than 800 million people are already getting free wheat and/or rice (5kg/person/month) under PM Garib Kalyan Yojana, one wonders whom is the Government trying to protect by supressing market prices. Is it the urban middle class at the cost of farmers? Michael Lipton long back called this an "urban bias" in price policy. The classic work of Anne Krueger, Maurice Schiff and Alberto Valdes (1991) on Political Economy of Agricultural Pricing Policy spread over a number of developing countries called it 'The Plundering of Agriculture in Developing Countries'.

What could be a better policy mix? In our view, judicious use of trade policy is needed to tame inflation at home without hurting farmer earnings. In case of wheat, the policy objective ought to have been addressing the market perception of wheat production being much lower than the government estimate. To allay those fears, the natural policy response should have been better transparency and communication about government estimates of production, and a reduction in the import duty of wheat from 40 percent to say 10 percent or even a complete removal. About 5-6 MMT should then have been imported to curb the inflation. In FY 2017 also, the government had taken the decisive action of bringing down the import duty to nil, and 5.75 MMT of wheat was imported in that financial year, when wheat stock was at 30.18 MMT as on July 1st, 2016. That situation was not all that different from the one in the current year in terms of the stock position, which was at 30.14 MMT on July 1st, 2023. Currently, the global prices of wheat have been hovering around US$ 244 (US SRW, Gulf), and US$ 252 (Russia milling) per tonne as of 23rd August 2023 due to record harvest (IGC, 2023). Hence, this is the right time to import without any adverse impact on farmers' price realization, as procurement season is over. This would help curtail inflationary expectations, especially during October to December when festival season demand peaks.

Box 1: Implicit taxation of farmers and the need to compensate them

How do government-imposed restrictive policies impact the price realization of farmers? Consider the wheat market in the current year: The wheat production in 2022-23 stood at 112 MMT with a marketed surplus of wheat comprising 73.78 percent (as per Agriculture Statistics at a glance, 2018). In the 2023-24 RMS, the MSP for wheat was set at Rs. 2125 per quintal, while the market price hovered around Rs. 2673 per quintal in January, 2023. To stabilize domestic wheat prices, the government initiated OMSS sales in February, offering wheat at a substantially reduced price, starting at Rs. 2350 per quintal and later at even lower price of Rs. 2150 (for Fair Average Quality, FAQ). This OMSS price was lower than the economic cost of wheat, which was at Rs. 2654 per quintal during 2022-23. Without this market intervention, farmers could have potentially earned an additional Rs. 548 per quintal (Rs. 2673 minus Rs. 2125) from their sales of wheat. Our rough estimate of the collective loss incurred by farmers due to the sale of wheat at reduced OMSS prices, is a staggering Rs. 45,283 crores. Even if we take all India average whole-sale price of February, the loss incurred by the wheat farmers comes to Rs. 39,829 crores or say, roughly about Rs 40 thousand crores due to the dumping of wheat in the market by government. This brings out the economic impact of the government's restrictive policies on farmers.

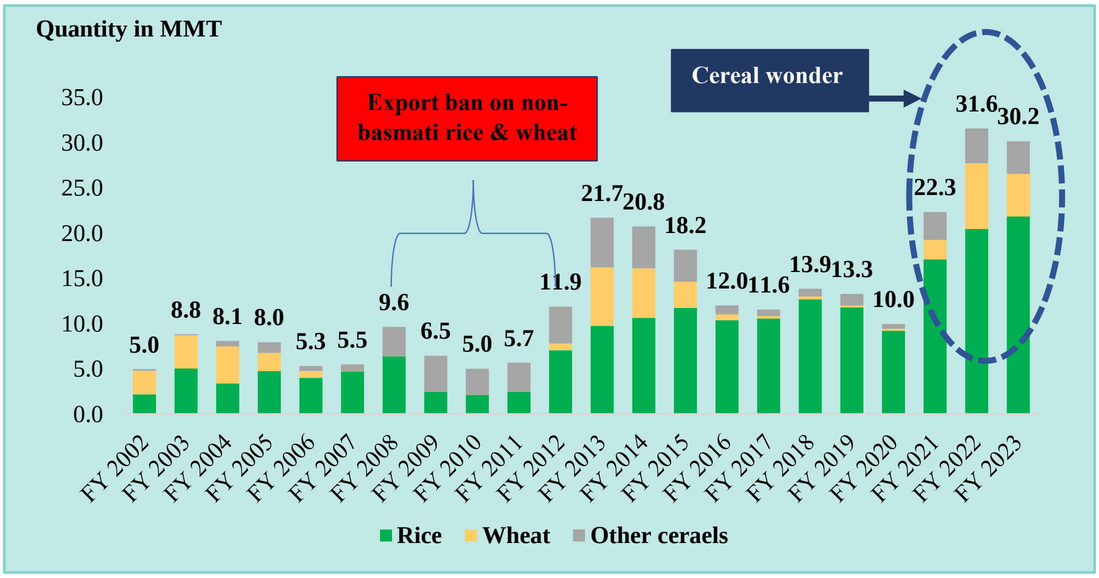
Similar policies have been followed in case of rice. The market price is being brought down to the level of the MSP announced. In the approaching procurement season, paddy farmers will suffer losses just as wheat farmers have. Their 'implicit taxation' could be higher. Similar restrictive policies are in place for pulses farmers, and now even onion farmers! This calls for revisiting market restrictive policies, and compensating farmers for the substantial transfer of resources from producers to consumers. The best way to do so would be to do it separately for each crop, say wheat and rice farmers, on per hectare basis, as per the productivity of these farms in each state. But since implementing such a scheme based on crop specific acreage can be quite complicated and time consuming in the absence of farmer level data, the second-best alternative would be to hike the annual transfer under PM-Kisan from Rs. 6000 per farm family to Rs. 10,000. Adjusting for price inflation, Rs. 6000 announced in 2019 itself comes to Rs. 8000 in 2023. And adding to that the losses suffered by producers due to restrictive marketing policies, the minimum amount goes up to Rs. 10,000 per farm family. Of course, the large farmers with large surpluses would like to be compensated at a much higher level. But they should also remember that they gained quite a bit when fertilizer prices in global markets went up, but GOI did not change the domestic price of urea, which led to massive increase in fertilizer subsidy in the government budget.

Rice export ban: A knee jerk action

In the last three years, India has exported approximately 85 MMT of cereals (Figure-4). This record-breaking export volume represents an all-time high in India's history, highlighting the nation's significant role as a major player in the global cereal trade landscape aligning with the G-20 agenda of global food security. Rice accounts for 71 percent of the total cereal exports of India over the last three years. Rice export witnessed a tenfold increase from 2.6 MMT to 21.8 MMT between FY 2002 to FY 2023 making India the largest rice exporting country in the world, comprising 40 percent share of 55.6 MMT of global rice trade. Due to increasing export quantity of non-basmati rice variety, GOI put an export ban of non-basmati rice in July 2023[1], when rice inflation (CPI, YoY) was at 12.96 percent in July 2023. Given the erratic nature of rains, which are below normal so far, and the coming year being an election year, policy makers do not want to take any chances about food inflation lest it costs them heavily in political terms.

The non-basmati export increased from 1.38 MMT in FY20 to 6.40 MMT in FY23, by 363 percent. **What could have driven such a substantial increase in export volume?** In FY23, the unit value of export of non-basmati rice was $344 per tonne which was lower than MSP for rice in India. This suggests that millers are either procuring rice directly from farmers or that there is an influx of rice from the expanded free rice distribution program under the PMGKAY[2], possibly as a result of distribution leakages. **Figure 4** and **Figure 5** highlight the increase in offtake of rice and wheat in last three years and leap in export quantity of grains from India during the same period.

Figure 4: Trends of Cereal export in India FY 2002 to FY 2023



Source: DGFT, GOI

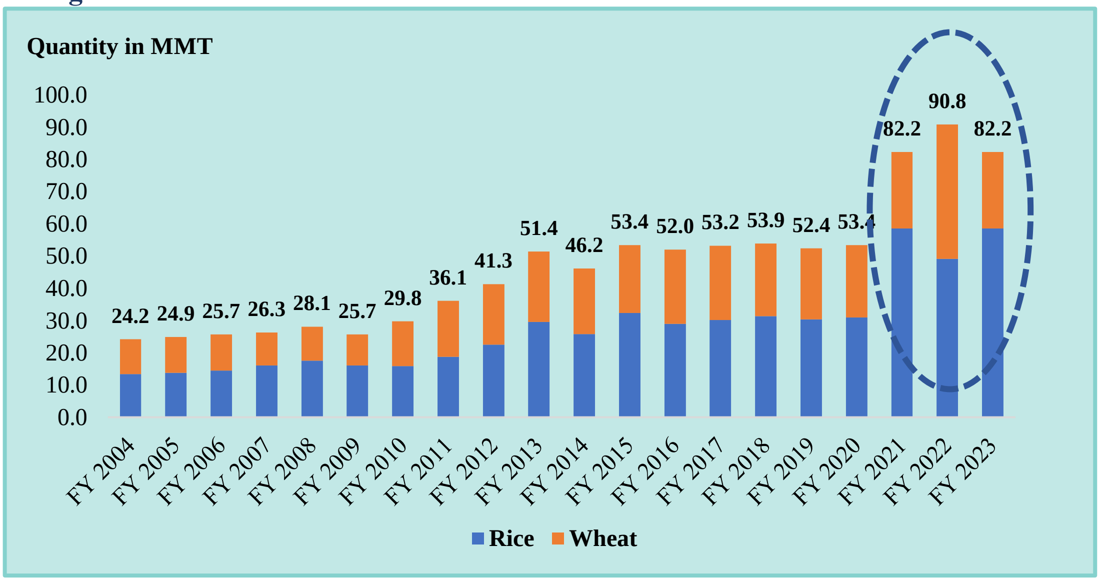
[1] However, this is not the first time India has imposed an export ban on non-basmati rice, it occurred during the 2008 financial crisis. The imposition continued from October 2007 to September 2011 for four consecutive years.

[2] Additional 5 kg of grains per person per month for more than 800 million beneficiaries of NFSA under PMGKAY (during pandemic period) were distributed from FY 2021 onwards which was subsequently discontinued after December 2022.

Rather than initially imposing an export duty of say 10 to 15 percent, and then gradually increasing it to calibrate the impact on domestic prices, GOI suddenly went ahead to ban export of non-basmati rice, which created panic not only in many African importing countries but also amongst Indian diaspora in USA. This is not in line with the spirit of G20 proposals to ensure global food security, as it has hit the African countries most which account for a substantial (53.89 percent) share of non-basmati exports from India. As a result of India's rice export ban, global rice markets went in a turmoil, with global Indica rice price (FAO's rice price index) spiking to its highest level of the last 15 years, registering 40.31 percent increase (YoY) in August 2023. This compelled many importing countries to shift to parboiled rice. But GOI in response imposed a 20 percent export duty on that variety too, and has now imposed an MEP of $1200 per tonne on basmati rice. As per traders the MEP fixed is much higher than the existing price quotations impacting the competitiveness of India's basmati rice in global market. It is important to recognize that it takes years to build export markets, and sudden policy shifts like this can undermine India's reputation as a reliable exporter.

Besides restricting exports to increase domestic supply, rice is being offloaded under OMSS (below economic cost), as an additional measure to cool down rice prices. Thus, the policy approach is similar to that for wheat, although rice buffer stocks are at comfortable position, three times the buffer stocking norm as on July 1st, 2023. In spite of export ban, retail inflation rate in August 2023 CPI for rice remained at 12.54 percent (YoY), indicating the limited effectiveness of the restrictive policies chosen to tame inflation.

Figure 5: Offtake of rice and wheat under NFSA and PMGKY from Central Pool



Source: FCI

Besides rice, export duty of 40 percent was also imposed on onion in August 2023, sensing a flare up in prices during the upcoming festive season. India is the largest exporter of onion with a share of 22 percent in global trade of onion. This export restriction has negatively impacted farmers' price realization.

Farmers have obviously protested and traders shut down India's largest onion market for three days. Worrying that the farmers' protests could quickly spread to other parts of the country, the government has directed NAFED and NCCF each to procure one lakh tonnes of onion from seven districts of Maharashtra at Rs.2410 per quintal with a view to ramp up buffer stocks from 3 to 5 lakh tonnes. But is this the right policy? Prices of onions had dropped to around Rs. 600 to Rs.700/quintal in March/April, 2023. If the government had procured even a million tonnes say at Rs.1500/quintal at that time, it would have given much-needed relief to farmers. It may be noted that if GOI was to announce MSP for onions based on its formula of 50 percent return over cost A2+FL, it would have to procure at around Rs. 1096/quintal. And government could have stabilised prices now with those buffer stocks. The policy measures being deployed now are thus nothing but knee jerk action without there being any thought-out strategy in place.

Milk and products inflation is at 7.73 percent YoY. The group contributed 7.25 percent to the overall CPI inflation. To tame inflation in milk, in short run, the only solution seems to augment supplies of milk through imports of Skimmed Milk Powder (SMP) and also of fat and butter. As of July 2023, Oceania's SMP price is $2503 per tonne. Whereas India's SMP price is $3343.9 per tonne, much above Oceania's SMP price. This indicates India is not very competitive globally in the SMP market. The government is protecting domestic industry by putting a high rate of total import duty of 68 percent on SMP and of 56.8 percent on butter (fat). Rationalising the import regime through a reduction in tariffs and duties across the board is required. India can bring down the import duty in a calibrated manner from 60 percent to 40 percent and then to 20 percent which will help in reducing the price pressure on milk at the retail end by augmenting the milk supply in the country.

What could be optimal policy to tackle food inflation?

In the short-run, instead of protectionist trade policy, it is important to calibrate trade policy efficiently to control rising inflation in the commodity. For instance, the timely reduction in import duties on edible oils substantially reduced the domestic prices of palm oil and soft oils such as soybean and sunflower over the past year. The reduction of effective import duty on crude sunflower oil and crude soybean oil from 30.25 percent in August 2021 to 5.50 percent in October, 2021 had resulted in retail inflation of refined oil reducing from 43.97 percent CPI YoY in August 2021 to 13.54 percent in February 2022 CPI YoY[3]. In addition to these measures, the government also took steps to liberalize trade policy for pulses by abolishing import duties on tur and urad since March 2022 with a view to increase the domestic availability. While these are steps in right direction, it's important to note that import restrictions are still high on wheat, SMP milk and fat, as well as yellow peas, and spices despite inflationary pressures on these commodities/sub-groups.

To cool down the prices and to control the panic of shortages in the market, import duty for wheat should be reduced from 40 percent to say 5 percent and the government can import 5-6 MMT of wheat. However, to the extent possible, the landed cost should not be lower than MSP to ensure that farmers do get at least the MSP. The government has also restricted import of the cheapest pulses in the country- yellow peas by fixing minimum import price at Rs. 200 per kg (equivalent to import prohibition). This needs to be reconsidered, given the price pressure in pulses sub-groups particularly on Tur at 32.22 percent YoY increase in CPI in August 2023 due to production shortage. Similarly, to curb inflationary pressures in spices, the government should consider reducing the total import duty, which currently stands at 36.5 percent for cumin seed and ginger, and 70 percent for dry chillies, to a more moderate rate of 5 percent or even eliminating it entirely. Hence, the optimal policy mix should be reducing import duties to bridge the gap between demand and supply. This policy has merit considering India's substantial foreign

[3] To further cool down the price both the oils became duty-free with each receiving a 2 MMT tariff-rate quota for the coming two financial years (with effect from May 25, 2022, Gazette of India) and retail inflation reduced to 5.5 percent in September 2022 and remained negative since February 2023.

exchange reserves of $600 billion, and the country being a net-exporter of agriculture produce.

Second, government should build buffer stocks for volatile vegetable staples like TOP (Tomato, Onion, Potato) during the harvest season. This will help farmers realize stable prices in the glut period. The stocks can be systematically released over the lean period, or during festive season when demand is high, to cool down the prices. As it has for pulses, if GOI can procure for a buffer stock of 5-10 percent of production of TOP to be used for stabilizing prices. However, offloading should not be undertaken at prices lower than the economic cost, which can disincentivise farmers and traders to invest in storage. To facilitate this, an expansion of cold storage infrastructure is important, and the use of solar energy for perishable storage is a cost-effective and energy-efficient way to go about it.

In the medium term, the processing sector needs to be boosted. The promotion of use of dehydrated onion, tomato puree that can be viable substitutes for consumers during the period of price pressure on fresh produce will also help. To curb inflationary pressure on onion and tomato, at least 10 percent of fresh produce should be processed. To strengthen the processing sector, Farmer Producer Organisations (FPOs), farmer cooperatives can play a pivotal role in organising small farmers and facilitating the development of this sector. In 2018-19, the government announced a scheme "Operation Greens" with an outlay of Rs.500 crores to promote FPOs, logistics, processing facilities and professional management for TOP commodities which was further extended to all fruits and vegetables in 2020-21. These funds could significantly boost the processing of fresh vegetables to curb inflation pressure.

In the long run, the government needs to increase investments in R&D, which stands at paltry 0.48 percent share of agriculture GDP in order to augment productivity. Given the increasing severity of climate change effects in the coming years, it is important to invest in innovative farming practices, drought-resisting seed varieties, adaptive to these changing conditions. To cope with challenges of droughts, the irrigation coverage should also be increased from 50 percent to 70 percent in the country by expanding micro irrigation infrastructure including soil moisture sensors, drip irrigations for efficient use of water to make agriculture climate resilient. Hence, to tame food inflation, we need to revamp the entire policy matrix in light of climate change, and boost reform in marketing and trade policies, moving away from outdated export restrictions and pro-consumer agriculture price policies, often at the cost of farmers.

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