

## Tackling the crisis of rising global food prices (GS Paper 3, Food Security)

### Context:

- Global food prices are characterised by **year-to-year volatility and periodic sharp spikes**. While year-to-year volatility is easily managed by most countries through changes in their trade and domestic policies, it is steep and severe periodic price shocks that can lead to some sort of a crisis at the global and national levels.
- The crisis can emerge in the form of **food shortages, trade disruptions, a rise and spread in hunger and poverty levels**, a **depletion of foreign exchange reserves** for net food importing countries, a strain on a nation's fiscal resources due to an increase in spending on food safety nets, a threat to peace, and even social unrest in some places.
- Because of these widespread ramifications of food price shocks, it becomes imperative to understand the real causes of such shocks and devise effective mechanisms to deal with them.

### Crises and history:

- Historical data on food prices compiled by international agencies such as the Food and Agriculture Organization of the United Nations, the World Bank/International Monetary Fund show that **since the onset and the adoption of Green Revolution technology** in the early 1960s, **the world has been struck thrice by food price crises**.

### First food crisis (1973-76):

- The first shock was experienced during 1973-76 **when the food price index (based on prices in U.S. dollars) doubled in nominal terms** and increased by one third in real terms compared to the pre-shock average of four years.
- This shock moved up the nominal prices of commodities (including food) into a new trajectory. However, for the next two decades, food prices in real terms followed a declining trend and were at their lowest around 2002.

### Food price crisis of 2008:

- After 2002, nominal as well as the real prices of food began rising; this momentum built up to culminate in the next food price crisis of 2008, which was further intensified by 2011.
- While the price shock began softening after 2014, food prices did not move back to their pre-2006 level.

### Current food crisis:

- The lull in global food prices stayed for a short duration, from 2015 to 2019, and food prices again began moving above the trend by the third quarter of 2020. This time the increase in the food price index happened very quickly and it turned out to be very big, it has taken the food price index to its historically highest level.

### Factors responsible for three food price crises:

- All the three food price crises during 1973-1976, 2007-12, and the recent one which began towards the end of 2020 have one thing in common, they were triggered by factors outside agriculture.
- They were not caused by any serious shortfall in agriculture production. Second, the interval between two consecutive price shocks has narrowed down considerably and the severity of shock is turning stronger.

### The recent spike:

- The recent spike in food prices has been triggered by **supply disruptions due to COVID-19 and further aggravated by the Russia-Ukraine war**.

# RUSSIA-UKRAINE WAR VS EARLIER PRICE SHOCKS



## Food prices change

FIRST MAX MIN LAST



Note: All prices in nominal U.S. dollar terms. % change in monthly price indexes over a two-year period, The last observation is based on April 2022 data,

Source: World Bank, Chart: Dipu Raj, Sarfaraz



### Global trade disruption:

- The current food price spike first began in vegetable oils and then expanded to cereals. The trade patterns of these commodities show that around 38% of the vegetable oil produced and consumed is globally traded. In the

case of wheat, dependence on trade to meet global demand forms 25%, while only one tenth of rice output or consumption is traded.

- Trade dependence for maize is 16%. It is evident then that the effect of global trade disruption will be higher for commodities that are traded more and vice-versa.

#### **Diversification of food for biofuel:**

- Another factor underlying the rising trend and spikes in food prices is the diversion of food for biofuel needs. The proportion of vegetable oil used for biodiesel increased from 1% in 2003 to 11% in 2011; it went up to more than 15% in 2021. This is further related to energy prices.
- When crude prices increase beyond a certain level it becomes economical to use oilseeds and grains for biodiesel and ethanol, respectively. The second reason for the use of food crops for biofuel is the mandates to increase the share of renewable energy resources.

#### **Increase in the prices of fertilizer and other agrochemicals:**

- Food prices are also expected to go up in the current and next harvest season because of an increase in the prices of fertilizer and other agrochemicals.
- The international price of fertilizer has increased by 150% between April 2021 and April 2022.

#### **Implications for India:**

- **Export and import in the agriculture sector constituted 13% of gross value added** in agriculture during 2020-21. Therefore, some transmission of an increase in global prices on domestic prices is inevitable. This transmission of global prices to the domestic market can be moderated through trade policy and other instruments.
- This is precisely what India has been doing to balance the interests of producers and consumers and in protecting the economy against excessive volatility in international prices. When international prices go too low, India has checks on cheap imports to protect the interests of producers; and when international prices go too high, the country liberalises imports and imposes checks on exports to ensure adequate availability and reasonable food prices for domestic consumers.
- The **policy of having a buffer stock of food staples** has also been very helpful in maintaining price stability especially in the wake of global food crises.
- Ongoing trends in domestic demand and supply imply that India will be required to dispose of 15% of its domestic food output in the overseas market by 2030. This is more than double the current ratio of export to output. This underscores the need to maintain India's image as a reliable and credible exporter. However, it is important to differentiate between the two situations: disturbing normal export and regulating exports exceeding the normal level.

#### **Wheat export restrictions:**

- The recent ban on wheat exports and restrictions on the export of other food commodities by India need to be seen in the light of an abnormal situation created by spikes in international prices.
- Some experts see it as a setback to India's image as a reliable exporter as this move is seen to disrupt (regular) export channels. A closer examination of data reveals that India's action to ban or restrict food exports is not disrupting its normal exports.
- **India was a very small exporter of wheat**, with its share in global wheat trade ranging between 0.1% to 1% during 2015-16 to 2020-21. Despite the ban, the export of wheat this year will be much higher than the average wheat export from India in recent years.

#### **How wheat restriction by India connected to India's food security?**

- The international market is looking for around 50 million tonnes of wheat to compensate for the disruption in wheat exports from Russia and Ukraine. This is close to half the wheat production in the country and more than two-thirds of the wheat that comes to the market.
- If India had not imposed a ban on wheat export, it would have resulted in a severe shortage of wheat within the country. No responsible country would jeopardise its own food security by allowing excess exports.
- India should continue with a policy of strategic liberalisation, as followed in the past, to balance the interests of producers and consumers. The policy of buffer stock has also been very helpful in maintaining price stability in the face of global price shocks.

### **Global impact:**

- The Green Revolution technology which spread in developing countries from the 1970s to the 1990s helped in keeping food prices low and relatively stable. As the steam of Green Revolution technology slowed down with the start of the 21st century, food prices began increasing in real terms. At the same time, the resilience of the food sector against price shocks has also weakened.
- The world requires new breakthroughs such as Green Revolution technology, for large-scale adoption in order to enable checks on food prices rising at a faster rate. This in turn requires increased spending on agriculture research and development (especially by the public sector and multilateral development agencies).
- There is a need to **strengthen and rejuvenate the global agri-research system** under the Consultative Group on International Agricultural Research (CGIAR) which is heading towards disarray.
- Biofuel protocols have contributed to the global food crisis for the second time in the last 15 years. **Diversion of land under food crops and food output** for biofuel **should be carefully calibrated** with implications for food availability. In most cases it requires serious rethink.

### **Way Forward:**

- The last three food price crises were primarily caused due to an increase in energy prices and disruptions in the movement of food across borders.
- Factors related to climate change are going to be an additional source of supply shocks in the years ahead. Therefore, the global community must plan to have a global buffer stock of food in order to ensure reasonable stability in food prices and supply.
- The situation requires coordinated and timely action by the global community.