



Tomatoes Price Volatility

For Prelims: [Tomato Mosaic Virus \(ToMV\)](#) and the [Cucumber Mosaic Virus \(CMV\)](#), **Inflation Rate**

For Mains: Food Inflation and issues, Impact of extreme weather conditions, Pest attacks, and viruses (ToMV and CMV) on tomato yields, Role of the Government in managing prices and stabilizing the market.

Source: [TH](#)

Why in News?

Tomatoes, a staple vegetable in Indian households, have become a cause for concern due to their **soaring prices**.

- The sudden increase in tomato prices from **₹20 to ₹40 per kg in June 2022, reaching ₹100 per kg in July 2023**, has raised questions about the reasons behind this price volatility.
- Despite the soaring prices, the [inflation rate for tomatoes is surprisingly negative](#), creating a puzzling economic phenomenon known as **#Tomato-nomics**.

Why are Tomato Prices High?

- **Tomatoes Production in India:**
 - Tomato production is regionally concentrated in states like **Andhra Pradesh, Madhya Pradesh, Karnataka, Odisha, and Gujarat**, collectively accounting for **approximately 50% of total production**.
 - India witnesses two main tomato crops annually - **kharif and rabi**.
 - The **Kharif crop is available from September**, while the [rabi crop hits the market between March and August](#).
 - **July-August is a lean production period for tomatoes** as they fall between yields.
 - Despite being one of the most cultivated vegetables, tomato production has been **declining since its peak in 2019-20 at 21.187 million tonnes (MT)**.
- **Reasons Behind the High Tomato Prices:**
 - **Extreme Weather:**
 - [Heatwaves and delayed monsoons](#) in April and May led to pest attacks on tomato crops, affecting their quality and commercial realization.
 - As a result, farmers received low prices for their produce in the months leading up to June.
 - **CMV and ToMV Virus:**
 - The recent decline in tomato crops and the surge in tomato prices in Maharashtra, Karnataka, and other South Indian states can be attributed to the infestation of two plant viruses: the [Tomato Mosaic Virus \(ToMV\)](#) and the [Cucumber Mosaic Virus \(CMV\)](#).
 - These viruses have caused **partial to complete crop losses in tomato plantations over the last three years**.

- As both viruses have a broad host range and can lead to **nearly 100% crop loss if not treated in time**, they have significantly impacted tomato yields, resulting in a rise in tomato prices.
- **Low Commercial Realization:**
 - Farmers faced the challenge of **low commercial realization for their tomato crops** in the months leading up to the price surge.
 - Between December 2022 and April 2023, many farmers received prices as low as **₹6 to ₹11 per kg for their produce**.
 - This led to a situation where farmers had to sell their crops at **unprofitable rates or even abandon their produce**, resulting in a shortage of supply.
- **Farmer Shifting from Tomato Production:**
 - The low prices received by farmers in the previous year led to a significant **impact on cultivation patterns**.
 - Many farmers **who** contribute substantially to tomato supplies **shifted their focus to cultivating other crops fetched higher prices** in the market, motivating farmers to opt for alternative crops.
 - This shift in cultivation **resulted in reduced tomato production**, further aggravating the supply crunch and contributing to the surge in prices.
- **Supply Crunch:**
 - Inferior-quality tomatoes forced many farmers to **sell at low prices or abandon their crops**, resulting in a crunch in tomato supply.
 - Incessant rains further impacted the new crops and transportation to non-growing regions.
- **Regional Drop in Production:**
 - **Tamil Nadu, Gujarat, and Chhattisgarh** witnessed a **20% drop** in tomato production, exacerbating the shortage.
- **Impacts of High Tomato Prices:**
 - **Inflationary Pressures:** The volatility of tomato prices has historically contributed to overall inflation levels in the country, affecting consumers' purchasing power.
 - **CPI Impact:** Tomato's price fluctuations have significant implications for the [Consumer Price Index \(CPI\)](#), making it a challenge for policymakers to control inflation.
 - **Economic Distress:** The high prices put a strain on households' budgets, especially for **low-income families** heavily reliant on tomatoes as a dietary staple.
- **Possible Solutions for Reducing Tomato Prices:**
 - **Improve Value and Supply Chains:** Enhance value and supply chains to address perishability and transportation issues.
 - **Increase Processing Capacity:** Convert tomatoes into paste and puree during peak seasons to ensure adequate supply during lean periods.
 - **Encourage Direct Sales:** Promote direct sales by Farmer Producers Organizations to provide farmers with a larger share of consumer prices.
 - **Promote Cultivation in Poly Houses and Greenhouses:** Encourage cultivation in controlled environments to control pest attacks and increase yields.

Why is the Inflation Rate for Tomatoes Negative?

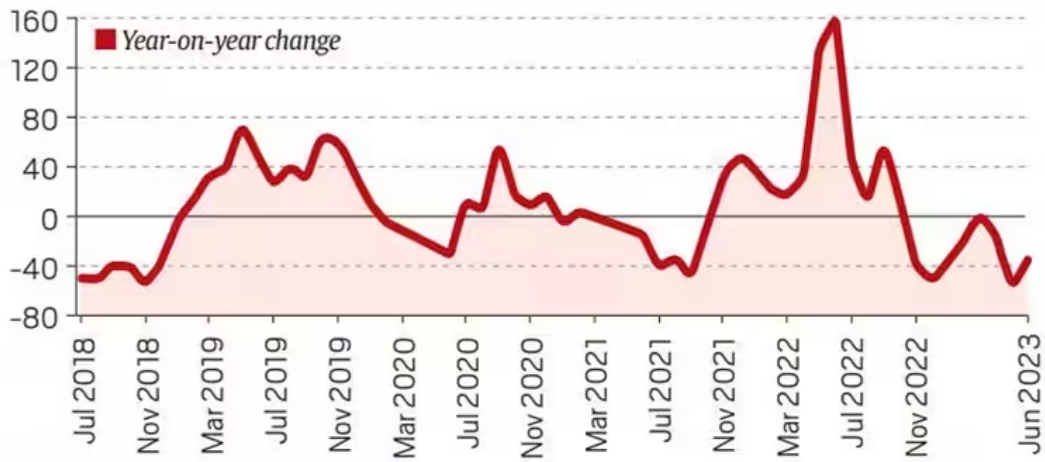
- **High Base Effect:**
 - The negative inflation rate is a result of a **high base effect**. The index value for **tomatoes in June 2022 was significantly higher due to soaring prices at that time**.
 - In June 2023, despite a spike in prices, the **index value was much lower compared to the previous year**, leading to **negative inflation**.
- **Calculation Method:**
 - In India, the inflation rate is **calculated on a year-on-year basis**, comparing the index value for a specific month to the same month in the previous year.
 - The **index value for June 2023 (191)** is significantly lower than the **index value for June 2022 (293)**, showing a **35% decrease**.
 - The decline in index value from June 2022 to June 2023 led to negative inflation, despite a recent increase in tomato prices.
- **Temporary Price Surge:**
 - Tomato prices experienced a rapid increase within a short period, reaching Rs 100 per kg in

June 2023.

- However, this **surge was not sustained, and prices began to decline afterward**, contributing to the negative inflation rate.

// Tomato prices and inflation, 2018-2023

CHART 1: YEAR-ON-YEAR INFLATION RATE IN TOMATO PRICES



PDF Reference URL: <https://www.drishtias.com/printpdf/tomatoes-price-volatility>