TEJA CHILLI PRICE FORECAST

FOR 2024-25: WHAT INDIAN FARMERS NEED TO KNOW

K. Sam Professor, PJTSAU, Hyderabad



INTRODUCTION

As the most popular spice in the world, chillies hold immense value in the Indian agricultural landscape, with the Teja variety standing out for its intense red colour and strong pungency. Referred to as the "Wonder Spice," Teja Chilli is one of India's most demanded spice exports, widely cultivated and valued both locally and internationally. This article dives into an updated forecast of Teja Chilli prices for 2024-25 in key Indian markets, helping farmers make datadriven decisions for the Kharif season.

CHILLI AT A GLANCE: TELANGANA, INDIA AND GLOBAL CONTEXT

Globally, India is the largest producer and exporter of chillies, followed by countries like China, Mexico, and Turkey. In 2023-24, India's chilli production reached an estimated 2.2 million tonnes across roughly 800,000 hectares, with an average productivity of about 2.75 tonnes per hectare. Indian chilli is mainly exported to Asian countries like China, Sri Lanka, Malaysia, Bangladesh, Singapore, Thailand, UAE, etc. The Teja variety, prized for its vivid red color and



heat, is grown primarily in Andhra Pradesh, Telangana, and Karnataka, where market demand and exports have driven its steady

In 2023-24, Telangana ranked third in chilli area and second in production and productivity i.e., 3.92 lakh acres, 7.94 lakh tonnes and 2021 Kg per acre respectively (3 rd advance estimates). Chilli area and production in Telangana account for 16% and 25% of all India area and production respectively. The major chilli growing districts are Khammam, Mahabubabad, Gadwal, Survapet and Warangal (Rural). According to the 3 rd advance estimates, Telangana chilli production estimate was 7.94 lakh tonnes for 2023-24 as against 5.73 lakh tonnes in 2022-23.

KEY FIGURES ON CHILLI **CULTIVATION** IN INDIA:

- > Area under cultivation: Approximately 800,000 hectares (2023-24)
- ▶ Total production: 2.2 million tonnes (2023-24)
- > Average productivity: 2.75 tonnes per hectare
- Andhra Pradesh, Primary regions: Telangana, Karnataka, Maharashtra

The Teja variety, constituting a large portion of Indian chilli exports, is primarily produced in Andhra Pradesh and Telangana. In recent years, global demand for Indian chillies, especially the high-pungency Teja type, has surged, reaching export volumes of 570,000 tonnes and a value of around ₹4,200 crores (\$500 million USD).



FORECASTING TEJA CHILLI PRICES FOR 2024-25

Given the economic importance of chilli, accurate price forecasting becomes critical. For the Teja variety, especially during the harvest period (January to March), price trends can help farmers decide acreage and prepare financially. Using ARIMA models based on historical prices from 2018-2023, we can estimate price trends for major Teja Chilli markets: Warangal, Khammam, Guntur, and Byadagi.

The study found that the ARIMA (212) model suited the Warangal, Khammam, and Byadagi markets, while ARIMA (211) was a better fit for Guntur, allowing for reliable predictions.



FORECASTED TEJA CHILLI PRICES PER **QUINTAL** (OCTOBER 2024-MARCH 2025)

- ➤ Warangal: ₹18,920 ₹19,937 per quintal
- ► Khammam: ₹17,519 ₹19,540 per quintal
- ► Guntur: ₹17,021 ₹22,532 per quintal
- Byadagi: ₹15,034 ₹16,779 per quintal

(*note: The prices in the respected markets are fluctuated according to the arrivals, exports and buyers in the market)

PRODUCTION TRENDS AND MARKET IMPACT

The forecasts reflect both the seasonality of chilli production and the supply-demand dynamics across regions. Farmers in Telangana and Andhra Pradesh, who produce nearly 60% of India's chillies, are expected to see steady demand for Teja chillies, both domestically and internationally. However, challenges like changing climate patterns, pest attacks, and input costs remain factors affecting yield and quality.



PRODUCTIVITY AND EXPORT DEMAND

India's chilli productivity, while increasing, still faces competition from countries like China and Mexico, where mechanized farming and advanced processing techniques support higher yields. The demand for Indian Teja chillies remains robust, especially in Southeast Asia, the Middle East, and the U.S., due to their unique flavor profile.

The Agricultural and Processed Food Products Export Development Authority (APEDA) notes that chilli exports, especially Teja, have expanded by over 15% in volume in the past year alone, driven by rising demand in countries like Vietnam, Bangladesh, and Thailand.



CONCLUSION

For Indian chilli farmers, especially those cultivating Teja chillies, forecasting price trends can significantly impact decision-making for the upcoming Kharif season. With India's leading position in global chilli production, backed by increasing international demand, farmers can capitalize on these price trends to maximize profitability. Staying informed about regional market variations and global demand trends can also help optimize yields and support India's reputation as a top chilli exporter.

