

Agricultural Commodity Derivatives in India: An Overview

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Introduction

Agricultural commodity derivatives are financial instruments that are traded on exchanges and are linked to agricultural commodities such as guar gum, turmeric, cotton and other crops. Futures trading is the major contract used by the players to trade in agricultural commodity derivatives. Futures trading refers to buying and selling of contracts, which are agreements between two parties to buy or sell a particular commodity/asset at a specific price and date in the future.

In India, the derivatives are traded on the major exchanges such as National Commodity and Derivatives Exchange (NCDEX), Multi Commodity Exchange of India Ltd. (MCX) etc. These exchanges provide a platform for farmers, traders and investors to hedge their risks against price fluctuations. Farmers can use these derivatives to lock in price for their crops, while traders and investors can use them to speculate on price movements and make profits.

Agriculture and commodity derivatives in India

The trading of agricultural commodities was started during 1875 with the establishment of the Bombay Cotton Trade Association which laid the foundation of futures trading in India. The agricultural commodities traded in the market are generally perishable agricultural products such as bengalgram, cotton, guar seed, maize, soybean, sugar, etc. It also includes processed agricultural commodities like guar gum, palm oil, soybean oil, etc. The agricultural commodity derivatives market in India was regulated by the Forward Markets Commission (FMC) up to 2014. During 2015, FMC merged with Securities and Exchange Board of India (SEBI), which is the regulatory body for the securities market in India. The merger of the FMC with SEBI was aimed at bringing the regulation of the commodity futures market in line with the securities market and improving the efficiency and transparency of the overall financial system.

Hedging and speculation in agriculture

Individuals can act as either hedger or speculator or arbitrageur to participate and gain the benefits from the market. Hedging is a process to overcome the price risk in the future whereas the speculation is to make profits out of the expectation that prices will rise in the future. The objective and implications of different players is given below:

Players	Represented by	Objectives	Implications
Hedgers	Manufacturers, traders, farmers / Farmer Producer Companies (FPCs) / Farmer Producer Organisations (FPOs), processors, exporters, other value chain participants of a commodity	To reduce risk due to price fluctuations in the spot market	Hedging implies taking position in the futures markets that is equal and opposite to the physical market position, such that the overall net market risk is reduced or eliminated.
Speculators	Traders including day traders, position traders, and market makers who are generally not having an offsetting position in the physical market	To anticipate the future price movement and take suitable position in the futures market with an intent to make a profit	Willingly accept price risk in order to profit from price changes
Arbitrageurs	Arbitrageurs	To earn riskless profit by buying and selling in different markets at the same time to profit from price discrepancies	Aim to earn risk-free profit

NCDEX is the largest exchange platform where agricultural commodity derivatives are traded in India. The agricultural commodity trading accounts for about 16 per cent of the total

derivatives trading in India. Angel one, Sharekhan, Motilal Oswal etc. are the major brokers who facilitate agricultural commodity trading.

FPOs' (Farmers Producer Organization) in futures trading

In recent years, there has been an increasing emphasis on the integration of FPOs and commodity derivatives in India. FPOs' can use commodity derivatives to manage their price risk and improve their access to markets. FPOs' participate in commodity derivative markets by way of hedging the produce. NCDEX is the major platform on which farming community engage in agricultural commodity trading. Since 2016, 548 FPOs have opened their accounts in commodity derivatives which comprise around 10.96 lakh farmers. The trade has been carried out in 22 commodities and the traded quantity accounts to 1,74,191 MT (upto Jan 2024). This indicates the potentiality of FPOs in derivative market to help farmers manage their price risk and reduce the impact of price volatility. The major FPOs' participating states are Maharashtra (188), Rajasthan (101), Madhya Pradesh (91), Gujarat (70) and Telangana (29) and in total 16 FPOs from states have represented on NCDEX (NCDEX, 2024).

Performance of FPOs

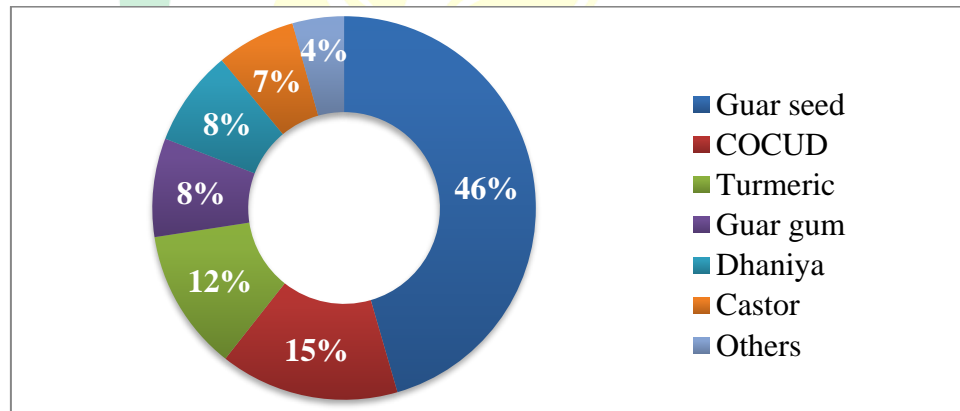


Fig.1: Share of commodities in agricultural commodity derivatives market

During the year 2023-24;

- ✓ A total of 37 FPOs hedged their commodities in NCDEX with farmer base of 22940.
- ✓ A total of 13 commodities were hedged namely, bajra, castor, by cotton seed oilcake (COCUD), dhaniya, groundnut, guar gum, guar seed, jeera, isabgol seed, kapas, maize, sunflower oil and turmeric.



- ✓ The major commodity hedged was guar seed followed by COCUD and turmeric with traded quantity of 24815, 8240 and 6515 MT, respectively and a total volume of 54,528 MT of agricultural commodity was hedged during the year (NCDEX, 2024).

Advantages of agricultural commodity derivatives

Agricultural commodity derivatives offer several advantages to the Indian agriculture sector including;

- Risk management (helps to reduce risk from fall in prices).
- Better future price signals (advance indication of future prices).
- Improved price discovery.
- Assists farmers to make informed decision in advance about which crops have to be cultivated which in turn can lead to diversification and creating an efficient market.
- Also helps processors and exporters of agricultural produce with respect to future prices.

Conclusion

Commodity markets play a pivotal role in the price-risk management process especially in any agricultural surplus country (Bhagwat and Maravi, 2016). However, the market has also faced challenges such as lack of liquidity in some contracts, issues related to warehousing and quality standards and regulatory changes. The other limitations comprise leverage, high volatility, low returns etc. Commodity derivatives in India play a major role in price stabilization particularly for the agriculture sector, act a tool for price discovery. With proper regulation and monitoring by the Government and the regulatory authorities, the derivative markets can play a major role in better price discovery and investment avenues in agriculture.

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