

Castor Seed

1. Background

a) Brief about the commodity such as sample picture, lifecycle and various varieties/grade of the commodity found in India

Castor is non-edible oilseed grown mainly for industrial usage. Castor seed is processed to extract oil which is used in chemical industry. The oil content of the seed is in the range of 40-48%.

Castor (*Ricinus communis* L.) is cultivated around the world because of the commercial importance of its oil. India is the world's largest producer of castor seed and meets most of the global demand for castor oil. India produces 10 to 12 lakh tonnes of castor seed annually, and accounting for more than 60% of the entire global production.

In India, Castor planting season is during July or August and harvested around December or January. The seedpods are dried, de-podded and brought to the market yards during December or January for trading. Traditionally, castor is a Kharif season crop. Sowing of castor with onset of monsoon is found most beneficial in rainfed condition. However, sowing can be done up to first fortnight of August without reduction in yield under irrigated condition. Gujarat is the leading state in castor seeds production in India followed by Rajasthan and Andhra Pradesh. Castor oil is obtained by pressing the seeds, followed by solvent extraction of the pressed cake. Castor Oil's application range is very wide. The usages

Castor oil is obtained by pressing the seeds, followed by solvent extraction of the pressed cake. Castor Oil's application range is very wide. The usages range from cosmetics, paints, synthetic resins & varnishes, to the areas of national security involving engineering plastics, jet engine lubricants and polymers for electronics and telecommunications. Castor oil and its derivatives find major application in soaps, lubricants, grease, hydraulic brake fluids and polymers and perfumery products.

The major factors influencing the prices are:

- Production
- Monsoon
- Yield in other countries
- Prices of substitute oils
- Domestic and export demand
- Seasonal factors
- Stock availability
- Development of new uses of the oil

India is the largest exporter of castor oil and has a market share of about 85-90%. China and Brazil are the second and third largest producers of castor oil in the global market contributing around 5-7% of the world exports. During the FY2016-17, Indian castor oil exports declined by 11% Y/Y to 4.85 lakh tons due to subdued demand from the international market as it was traded at higher prices on expectation of weaker output. However, in the first six months of FY2017-18, total castor oil exported was around 2.70 lakh tons, up by 3% Y/Y on higher consumption demand from US, Netherland, Russia and Japan.

Performance Review of Castor Seed Contract

- a) Commodity fundamentals and balance sheet as per the following format (to be prepared based on publicly available information on best effort basis):

Table - Fundamentals & Balance sheet (quantity)

| Global Scenario | Previous FY | Current FY |
|-----------------|-------------|------------|
| Opening Stocks | | |
| Production | 12.92 | 21.87 |
| Others (if any) | | |
| Consumption | | |
| Closing Stocks | | |

| Indian Scenario | Previous FY | Current FY |
|----------------------|-------------|------------|
| Opening Stocks | - | - |
| Production | 10.82 | 19.52 |
| Imports | - | - |
| Total Supply | - | - |
| Exports | - | - |
| Domestic Consumption | - | - |
| Closing Stocks | - | |

| Top 10 Major Producing Countries | Previous FY | Current FY |
|----------------------------------|-------------|------------|
| India | 11.30 | 20 |
| China | 0.26 | 0.36 |
| Brazil | 0.20 | 0.31 |
| Africa | 0.19 | 0.20 |
| Thailand | 0.12 | 0.12 |
| Others | 0.85 | 0.88 |
| World | 12.92 | 21.87 |

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| Top 10 Major Producing States in India | FY | Current FY |
|--|-------|------------|
| Gujarat | 8.89 | 16.58 |
| Rajsthan | 1.47 | 2.37 |
| South | 0.24 | 0.33 |
| Others | 0.22 | 0.24 |
| Total | 10.82 | 19.52 |

- b) Major changes in the policies governing trade in the spot markets of the commodity
No development.
- c) Geo political issues in the commodity and its impact on Indian scenario.

2. Trading related parameter

- a) Monthly and Annual traded volume (quantity in appropriate units): **Nil**
- b) Annual traded volume as proportion of total deliverable supply (quantity in appropriate units) **Nil**
- c) Annual traded volume as proportion of total annual production (quantity in appropriate units) **Nil**
- d) Annual average Open interest as proportion of total production: **Nil**
- e) Annual average Open interest as proportion of total deliverable supply : **Nil**
- f) Monthly and Annual value of trade (in Rs. Crores) : **Nil**
- g) Monthly and Annual quantity of delivery (in appropriate units): **Nil**
- h) Monthly and Annual value of delivery (in Rs. Crores): **Nil**
- i) Monthly and Annual Average Open Interest (OI) (in appropriate units): **Nil**
- j) Annual average volume to open interest ratio: **Nil**
- k) Total number of unique members and clients who have traded during the financial year: **Nil**
- l) Ratio of open interest by FPOs/farmers/Hedge/VCP positions to total open interest (Annual average as well as maximum daily value): **Nil**
- m) Number of unique FPOs / farmers and VCPs/hedgers who traded in the financial year : **Nil**
- n) Algorithmic trading as percentage of total trading: **Nil**
- o) Delivery defaults : Nil
 - i) Number of instances
 - ii) Quantity involved
 - iii) Value involved

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3. Price movements

- a) Comparison, correlation and ratio of standard deviation of Exchange futures price vis-à-vis international futures price (wherever relevant comparable are available).

Not Applicable

- b) Comparison, correlation and ratio of standard deviation of Exchange futures price vis – à - vis international spot price (wherever relevant comparable are available) and domestic spot price (exchange polled price).

Not applicable.

- c) Correlation between exchange futures & domestic spot prices along with ratio of standard deviation:

Not traded

- d) Correlation between international futures & international spot prices along with ratio of standard deviation (wherever relevant comparable are available).; Not applicable
- e) Comparison of Exchange polled price and mandi price (in case of agricultural commodities) / other relevant price (in case non - agricultural commodities) at basis centre.:

Not applicable

- f) **Maximum & Minimum value of daily futures price volatility and spot price volatility along with disclosure of methodology adopted for computing the volatility.**

| Maximum spot price volatility | Minimum spot price volatility |
|-------------------------------|-------------------------------|
| 4.15% | -10.20% |

- g) Number of times the futures contract was in backwardation/contango by more than 4% for the near month contract in the period under review : Nil

4. Other parameters

- a) Qualitative and quantitative measure for Hedge effectiveness ratio and basis Risk (Volatility of Basis) along with disclosure of methodology adopted for such calculations.

Not applicable

- b) Details about major physical markets of the commodity vis – à - vis market reach in terms of availability of delivery centres (information to be provided state – wise and UT - wise).

Not Available

- c) Details about major physical markets of the commodity and average Open Interest for each month generated from those regions.

Not applicable

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- d) Details, such as number and target audience, of stakeholders' awareness programmes carried out by the exchange.

Nil

- e) Steps taken / to be undertaken to improve hedging effectiveness of the contracts as well as to improve the performance of illiquid contracts.

Nil

- f) Any other information to be disclosed as deemed important by the exchange or as suggested by the PAC

Nil

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