Performance Review of Refined Soy Oil Contract

Refined Soy Oil

1. Background

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

Soybean though very high in protein content is classified as an oilseed crop. Soybean upon crushing yields 18-20% of soy oil and balance becomes Soy meal. Soy complex which constitute soybean, soy meal and Soy oil have a developed derivatives contract globally and to some extent in India as well. In India, Soybean is grown exclusively in the Kharif season. The harvesting commences from September, with Maharashtra reporting the earliest arrivals. October and November are the peak arrival months. In India, Soybean oil is mainly used as cooking medium. The soya milk consumption now-a-days has emerged as a healthy drink habit as it is a high protein and low-calorie food especially to those, who are intolerant to lactose present in animal milk. Soybean cake is rich in nitrogen and mineral content and can be very well utilized as a manure for the soil and as cattle feed for the animals.



Major Varieties

PK-308, PK-416, PK-327, JS-335, JS-90-41, JS-71-05, JS-75-46, NRC-12(Ahilya-2), NRC-7(Ahilya-3), PUSA-22, PK-472

Important Quality Parameters:

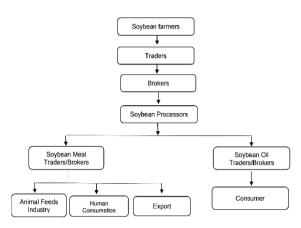
| 1% Maximum |
|------------|
| 2% |
| 2% |
| 7% |
| |



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Value Chain:

Value chain participants



b. Commodity fundamentals and balance sheet :

Table - Fundamentals & Balance sheet (quantity)

| Table - I unuamentais & Dalance sheet (quantity) | | (In Lakh Tonnes) |
|--|------------------------------|--------------------------------|
| Global Scenario | Previous FY (2018- 19) | Current FY (2019-20) (P) |
| Opening Stocks | 990.17 | 1,108.13 |
| Production | 3,586.46 | 3,380.82 |
| Imports | 1,446.39 | 1,514.66 |
| Total Supply | 6,023.02 | 6,003.61 |
| Exports | 1,482.98 | 1,514.98 |
| Domestic Consumption | 3,431.91 | 3,484.00 |
| Ending Stocks | 1,108.13 | 1,004.63 |

Source: USDA (April 2020); P= Provisional

| | | (In Lakh Tonnes) |
|----------------------|----------------|-------------------------|
| Indian Scenario | Previous FY | Current FY (2019-20) |
| | (2018-19) | (P) |
| Opening Stocks | 3.39 | 4.00 |
| Production | 109.30 | 93.00 |
| Imports | 1.85 | 2.00 |
| Total Supply | 114.54 | 99.00 |
| Exports | 1.78 | 1.50 |
| Domestic Consumption | 108.76 | 94.50 |
| Ending Stocks | 4.00 | 3.00 |

Source: USDA (April 2020); P= Provisional

| Rank | Top 10 Major Producing Countries | | | Тор 10 М | (In L /Iajor Consumi r | akh Tonnes) n g Countries |
|------|----------------------------------|-------------|------------|---------------|----------------------------------|-------------------------------------|
| | Country | Previous FY | Current FY | Country | Previous FY | Current FY |
| 1 | Brazil | 1,170.00 | 1,245.00 | China | 1,020.00 | 1,037.00 |
| 2 | United States | 1,205.15 | 968.41 | United States | 605.17 | 606.07 |
| 3 | Argentina | 553.00 | 520.00 | Argentina | 474.48 | 487.00 |
| 4 | China | 159.67 | 181.00 | Brazil | 448.05 | 469.00 |



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| 5 | Paraguay | 88.50 | 99.00 | European Union | 171.60 | 175.60 |
|----|-------------|----------|----------|----------------|----------|----------|
| 6 | India | 109.30 | 93.00 | India | 108.76 | 94.50 |
| 7 | Canada | 72.67 | 60.00 | Mexico | 61.95 | 62.52 |
| 8 | Russia | 40.27 | 43.59 | Russia | 52.58 | 55.80 |
| 9 | Ukraine | 48.31 | 36.99 | Paraguay | 39.72 | 39.80 |
| 10 | Bolivia | 27.00 | 28.00 | Egypt | 34.42 | 36.42 |
| | Others | 112.59 | 105.83 | Others | 415.18 | 420.29 |
| | World Total | 3,586.46 | 3,380.82 | World Total | 3,431.91 | 3,484.00 |

Source: USDA (April 2020)

| Rank | Top 10 Major Exporting Countries | | | (In Lakh Tonnes) Top 10 Major Importing Countries | | |
|------|----------------------------------|-------------|------------|--|-------------|------------|
| | Country | Previous FY | Current FY | Country | Previous FY | Current FY |
| 1 | Brazil | 745.94 | 785.00 | China | 825.40 | 890.00 |
| 2 | United States | 475.64 | 483.08 | European Union | 149.83 | 151.00 |
| 3 | Argentina | 91.04 | 82.00 | Mexico | 58.67 | 60.00 |
| 4 | Paraguay | 49.01 | 59.00 | Argentina | 64.08 | 39.00 |
| 5 | Canada | 52.58 | 43.00 | Egypt | 33.80 | 37.00 |
| 6 | Ukraine | 25.31 | 24.50 | Thailand | 31.55 | 34.00 |
| 7 | Uruguay | 27.50 | 21.30 | Japan | 33.14 | 33.50 |
| 8 | Russia | 7.97 | 9.00 | Indonesia | 26.23 | 28.75 |
| 9 | European Union | 1.79 | 2.50 | Taiwan | 26.14 | 28.50 |
| 10 | Serbia | 1.43 | 1.50 | Turkey | 24.05 | 28.00 |
| | Others | 4.77 | 4.10 | Others | 173.50 | 184.91 |
| | World Total | 1,482.98 | 1,514.98 | World Total | 1,446.39 | 1,514.66 |

Source: USDA (April 2020)



| | Top 10 Major Producing States in India | | | | | |
|------|--|-------------|------------|--|--|--|
| Rank | States | Previous FY | Current FY | | | |
| 1 | Madhya Pradesh | 58.18 | 40.11 | | | |
| 2 | Maharashtra | 34.34 | 39.42 | | | |
| 3 | Rajasthan | 8.95 | 6.56 | | | |
| 4 | Karnataka | 2.91 | 2.69 | | | |
| 5 | Andhra Pradesh | 1.57 | 1.51 | | | |
| 6 | Gujarat | 1.24 | 0.86 | | | |
| 7 | Chhattisgarh | 1.11 | 0.54 | | | |
| | Others* | 1.04 | 1.38 | | | |
| | Grand Total | 109.33 | 93.06 | | | |

Source: SOPA (April 2020)

States are arranged in descending order based on the figure in Current FY

*: The share of other states (except for top 7 states) in total domestic production is negligible.

c. Major changes in the polices governing trade in the spot markets of the commodity during FY 2019-20

NA

d. Geo political issues in the commodity and its impact on Indian scenario during FY 2019-20

Lockdown across the world in last quarter of financial year 2019-20 impacted and slowed down the trade and business activities.



- 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

I) 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

Not Applicable

- o) Delivery defaults NIL
 - i) Number of instances-
 - ii) Quantity involved
 - iii) Value involved



- 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 Applicable

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.

Futures: Not Applicable

Sp<u>ot:</u>

| Commodity | Maximum spot price volatility | Minimum spot price volatility |
|-----------|-------------------------------|-------------------------------|
| SOYAOIL | 2.10% | -2.8% |

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

Not Applicable



- 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 Applicable

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

Not Applicable

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

Not Applicable

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

Not Applicable

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

Not Applicable

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