

Parameters for Performance Review of Commodity

COTTON WASH OIL

1. Background

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

Wash Cotton Oil, also known as cottonseed oil or cottonseed wash oil is a vegetable oil extracted from the seeds of the cotton plant, scientifically known as *Gossypium hirsutum*. It is a versatile and commonly used edible oil with various industrial applications.

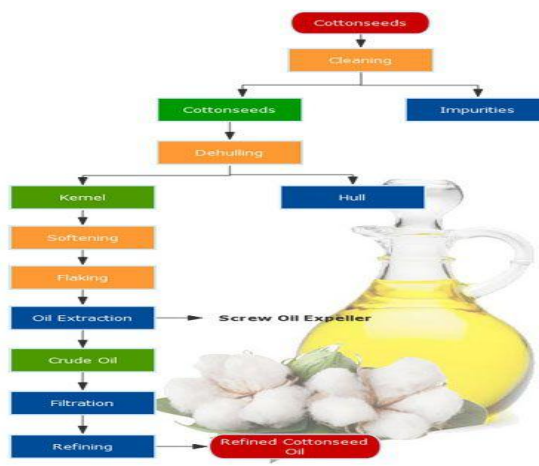
India is the largest producer and consumer of Cottonseed oil in the world, while Benin is the largest exporter of the same. Most of the Cottonseed oil produced in India is consumed domestically; hence, India is not the major exporter of Cottonseed oil. States like Maharashtra, Gujarat, Telangana, Karnataka and Rajasthan, which are the major producers of Cotton, are also the key regions contributing to cottonseed oil production in India.



Cottonseed oil is a processed product, derived after crushing Cotton seed. Cotton seed is obtained after ginning of Raw Cotton/Kapas. In India, Kapas is usually grown in kharif season, primarily from June to July. The ideal time for sowing cotton in various regions is from the last week of June to the second week of July. Optimal sowing occurs in the second fortnight of June to the first fortnight of July. Irrigated areas, sowing may commence in the first week of June with pre-sowing irrigation.

Crop Cycle:

Cottonseed oil is a processed product and hence does not follow any particular crop cycle.

Life Cycle: Value Chain of the Commodity	Major Varieties /Grade												
	Major Varieties												
	Not applicable (It is Processed commodity)												
	NCDEX Quality Parameters												
	<table> <tr> <td>Free Fatty Acid</td><td>0.2 % Max</td></tr> <tr> <td>Refractive Index, 40°C</td><td>1.4630 -1.4660</td></tr> <tr> <td>Iodine Value</td><td>98-112</td></tr> <tr> <td>Saponification Value</td><td>190-198</td></tr> <tr> <td>Unsaponifiable Matter</td><td>1.5% max</td></tr> <tr> <td>Specific Gravity, 30°C</td><td>0.910 -0.920</td></tr> </table>	Free Fatty Acid	0.2 % Max	Refractive Index, 40°C	1.4630 -1.4660	Iodine Value	98-112	Saponification Value	190-198	Unsaponifiable Matter	1.5% max	Specific Gravity, 30°C	0.910 -0.920
Free Fatty Acid	0.2 % Max												
Refractive Index, 40°C	1.4630 -1.4660												
Iodine Value	98-112												
Saponification Value	190-198												
Unsaponifiable Matter	1.5% max												
Specific Gravity, 30°C	0.910 -0.920												
	There shall be no turbidity after keeping the filtered sample at 30°C for 24 hours. If the oil is obtained by the method of solvent extraction and the oil imported into India, the oil shall not contain hexane more than 0.5 ppm.												

	The contaminants, toxins, and residues must not exceed the limits specified in FSSAI Regulations.
--	---

Table: Reference Years for Commodities

Sl. No.	A	B	C
Crop Season	Kharif	Kharif (Long Duration Crop)	Rabi
Crops	Bajra, Groundnut, Guar seed, Kapas, Maize, Sesame Seed,	Castor seed and Turmeric	Barley, Coriander, Jeera, Isabgol Seed and Yellow Peas
Relevant Processed commodities	Guar gum, 29 mm Cotton, Cotton seed Oil cake, Cotton Wash Oil and Crude Sunflower Oil	Castor Oil	-
Sowing Time	July onwards	July onwards	October onwards
Harvesting Time	October onwards	January onwards	March onwards
Reference Year			
Financial Year 2025-26 (Apr-Mar)			
Corresponding Years			
Production Year (PY)	2025-26 (July-Sept)	2024-25 (July-June)	2024-25 (July-June)
Marketing Year (MY)	2025-26 (Oct-Sept)	2025-26 (Jan/Feb-Dec/Jan)	2025-26 (Mar/Apr - Feb/Mar)
Calendar Year (CY)	2025 (Jan-Dec)	2025 (Jan-Dec)	2025 (Jan-Dec)
Relationship b/w Various Years	Current Financial Year = Current Production Year = Current Marketing Year = Current Calendar Year	Current Financial Year = Previous Production Year = Current Marketing Year = Current Calendar Year	Current Financial Year = Previous Production Year = Current Marketing Year = Current Calendar Year
Example	FY 2025-26 = PY 2025-26 = MY 2025-26 = CY 2025	FY 2025-26 = PY 2024-25 = MY 2025-26= CY 2025	FY 2025-26 = PY 2024-25 = MY 2025-26= CY 2025

Explanatory Notes:

- India is a vast country and various crops are sown and harvested at different point of time. However, two major crop seasons, are there i.e. Kharif & Rabi. Apart from it, Zaid/Summer season is also there.
- Crop seasons are classified based upon sowing time. Normally Kharif season sowing starts from mid-June/July and new crop arrivals begin from Oct/Nov. However, early/late sowing/harvesting also takes place. Rabi season sowing usually takes place mainly from October/November and harvesting starts from March/April. Early/late sowing/harvesting also takes place. Summer crops/Zaid crops are short duration crops mainly sown during January-March and harvested during April-June.
- “Production Year” is considered as “July to June”. With the start of monsoon rains during June/July the sowing of Kharif season starts and they are harvested during Sept/Oct. From Oct onwards the sowing of Rabi season crops starts and harvesting usually takes place during March/April. Thus, a single production cycle completes between July-Sept period covering Kharif, Rabi and Zaid crops. Thus, production year remains same for all season crops and the period corresponds to July-Sept.
- “Marketing Year” for each crops starts from beginning of the harvest time i.e. from start of new crop produce arrivals in the market. Thus, for Kharif crops Marketing Year is generally considered as “October to September”, while for Rabi crops Marketing Year is considered as “April to March”. However, Marketing Year may vary slightly for some of the crops depending upon early/late maturity/harvesting.
- For processed commodities, their production starts after the start of new season crop arrivals of their underlying crop.

b. 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)

(In Lakh Tonnes)		
Global Scenario	Previous FY (2024-25)	Current FY (2025-26)(P)
Opening Stocks	1.88	1.78
Production	47.13	47.00
Imports	0.64	0.80
Total Supply	49.65	49.58
Exports	0.62	0.74
Domestic Consumption	47.25	46.98
Total Demand	47.87	47.72
Closing Stocks	1.78	1.86

Source: USDA; (April 2026); P: Provisional

(In Lakh Tonnes)		
Indian Scenario	Previous FY (2024-25)	Current FY (2025-26)(P)
Opening Stocks	0.46	0.28
Production	13.11	12.97
Imports	0.01	0.05
Total Supply	13.58	13.30
Exports	0.00	0.00

Domestic Consumption	13.30	13.05
Total Demand	13.30	13.05
Closing Stocks	0.28	0.25

Source: USDA; (April 2026); P: Provisional

(In Lakh Tonnes)

Rank	Top 10 Major Producing Countries			Top 10 Major Consuming Countries		
	Country	Previous FY (2024-25)	Current FY (2025-26) P	Country	Previous FY (2024-25)	Current FY (2025-26) P
1	India	13.11	12.97	India	13.30	13.05
2	China	11.64	11.64	China	11.56	11.57
3	Brazil	8.05	8.81	Brazil	7.95	8.65
4	Pakistan	3.43	3.38	Pakistan	3.50	3.40
5	Turkey	2.35	1.85	Turkey	2.35	1.80
6	Uzbekistan	1.80	1.60	Uzbekistan	1.75	1.66
7	United States	1.31	1.22	United States	1.16	0.99
8	Turkmenistan	0.49	0.52	Turkmenistan	0.49	0.52
9	Mali	0.59	0.50	Mali	0.62	0.50
10	Benin	0.43	0.43	Benin	0.42	0.42
	Others	3.93	4.08	Others	4.15	4.42
	World	47.13	47.00	World	47.25	46.98

Source: USDA; (April 2026); P: Provisional Countries are arranged in descending order based on the data of Current FY 2025-26.

(In Lakh Tonnes)

Rank	Top 10 Major Exporting Countries			Top 10 Major Importing Countries		
	Country	Previous FY (2024-25)	Current FY (2025-26) (P)	Country	Previous FY (2023-24)	Current FY (2024-25) (P)
1	United States	0.20	0.23	Australia	0.20	0.20
2	Brazil	0.03	0.10	Mexico	0.11	0.15
3	Kazakhstan	0.08	0.08	Tajikistan	0.05	0.07
4	China	0.08	0.07	Uzbekistan	0.02	0.06
5	Turkey	0.02	0.06	Brazil	0.07	0.05
6	Azerbaijan	0.05	0.05	European Union	0.02	0.05
7	Cote d'Ivoire	0.04	0.05	Kyrgyzstan	0.05	0.05
8	South Africa	0.03	0.03	India	0.01	0.05
9	Benin	0.01	0.01	Turkey	0.03	0.02
10	European Union	0.01	0.01	United States	0.01	0.02
	Others	0.07	0.05	Others	0.07	0.08
	World	0.62	0.74	World	0.64	0.80

Source: USDA; (April 2026); P: Provisional

Countries are arranged in descending order based on the data of Current FY 2025-26.

Wash cotton Oil is a processed commodity. State-wise production data for Wash Cotton Oil is not readily available in the public domain.

Cotton, which is the raw material for Wash Cotton Oil, is mainly sown in four states in India i.e. Gujarat, Maharashtra, Telangana and Rajasthan, which together contribute for about 73% of total production in the country.

State wise production data Cotton

(Lakh bales of 170 Kg each)

Top 10 Major Cotton producing states in India			
Rank	State	Previous FY (2024-25)	Current FY (2025-26) (P)
1	Maharashtra	73.73	78.91
2	Gujarat	71.57	66.08
3	Telangana	57.89	60.84
4	Karnataka	22.73	21.50
5	Rajasthan	17.86	17.94
8	Andhra Pradesh	11.31	12.11
6	Madhya Pradesh	15.35	10.16
7	Haryana	11.77	9.75
9	Orissa	8.23	8.49
10	Punjab	4.14	3.46
	Others	2.66	1.67
	All India Level	297.24	290.91

Source: As estimated by Committee on Cotton Production and Consumption (COCPC) in its meeting on Apr 16, 2026, P= Provisional.

States are arranged in descending order based on the figure in Current FY 2025-26.

c. Major changes in the policies governing trade in the spot markets of the commodity (FY 2025-26)

Date	Major Policies governing trade and related changes
28-May-25	MSP is fixed at Rs 8,110 per Quintal for Long Staple Cotton for Marketing Season 2025-26 – an increase of 8% y-o-y. For Medium Staple Cotton, MSP is fixed at Rs 7,710 per Quintal for Marketing Season 2025-26 – an increase of 8% y-o-y.
01-Jan-26	India's duty-free window for cotton imports ended on December 31, 2025, and since no extension notification has been issued, the 11% import duty is applicable from January 1, 2026 until further orders. However, the industry urges the government for an extension to keep input costs low for mills, while farmer groups backed reinstating duty as duty-free imports.

07-Feb-26	India's Budget 2026–27 has shifted extra-long staple (ELS) cotton to the First Schedule, bringing customs duty to zero. This should lower input costs for premium yarn/fabric producers and improve the global competitiveness of India's high-value textile and apparel exports. As ELS cotton (typically 33 mm+ fibre length) is a key raw material for fine counts and high-end garments.
24-Mar-26	India has restored full Remission of Duties and Taxes on Exported Products RoDTEP benefits for all eligible export products from February 23 to March 31, 2026, reversing the earlier 50% cut. The move is aimed at helping exporters manage higher freight, insurance, and war-related trade disruption in the Gulf and West Asia routes. This is especially supportive for textile and apparel exporters, where margins are already thin.

d. Geo political issues in the commodity and its impact on Indian scenario.

Date	Event	Key Details	Key Implications / Impact on Indian Scenario
28-Feb-26	Escalation of Iran–US–Israel conflict	Military action involving Iran raised fears of disruptions in the Strait of Hormuz, a critical route for global crude oil and edible oil shipments. Market participants priced in supply-side risks across oil and oilseed markets.	Cottonseed oil prices in India firmed due to spillover strength from the edible oil complex and higher risk premium linked to energy and logistics concerns.

2. Trading-related parameter

a. Monthly and Annual traded volume (quantity in appropriate units)

Monthly Traded Volume			
Month	Year	Symbol	Traded Volume (MT)
Apr	2025	COTWASOIL	0
May	2025	COTWASOIL	5
Jun	2025	COTWASOIL	0
Jul	2025	COTWASOIL	12
Aug	2025	COTWASOIL	5
Sep	2025	COTWASOIL	0
Oct	2025	COTWASOIL	0
Nov	2025	COTWASOIL	0
Dec	2025	COTWASOIL	0
Jan	2026	COTWASOIL	0
Feb	2026	COTWASOIL	0
Mar	2026	COTWASOIL	0
Yearly Traded Volume			22

b. Annual traded volume as proportion of total deliverable supply (quantity in appropriate units)

Traded volume (MT)	Deliverable supply(MT)	Proportion
22	1,302,000	0.00

c. Annual traded volume as proportion of total annual production (quantity in appropriate units)

Traded volume (MT)	Production(MT)	Proportion
22	1,297,000	0.00

d. Annual average Open interest as proportion of total production

Avg Open Int (MT)	Production (MT)	Proportion
1.06	1,297,000	0.00

e. Annual average Open interest as proportion of total deliverable supply

Avg Open Int (MT)	Deliverable supply(MT)	Proportion
-------------------	-------------------------	------------

1.06	1,302,000	0.00
------	-----------	------

f. Monthly and Annual value of trade (in Rs. Crores)

Monthly Traded Value			
Month	Year	Symbol	Traded Value (Cr.)
Apr	2025	COTWASOIL	0.00
May	2025	COTWASOIL	0.06
Jun	2025	COTWASOIL	0.00
Jul	2025	COTWASOIL	0.16
Aug	2025	COTWASOIL	0.07
Sep	2025	COTWASOIL	0.00
Oct	2025	COTWASOIL	0.00
Nov	2025	COTWASOIL	0.00
Dec	2025	COTWASOIL	0.00
Jan	2026	COTWASOIL	0.00
Feb	2026	COTWASOIL	0.00
Mar	2026	COTWASOIL	0.00
Yearly Value of Trade			0.29

g. Monthly and Annual quantity of delivery (in appropriate units)

NA

h. Monthly and Annual value of delivery (in Rs. Crores)

NA

i. Monthly and Annual Average Open Interest (OI) (in appropriate units)

Monthly Open Interest			
Month	Year	Symbol	Open Interest (OI)
Apr	2025	COTWASOIL	0
May	2025	COTWASOIL	0

Jun	2025	COTWASOIL	5
Jul	2025	COTWASOIL	5
Aug	2025	COTWASOIL	2
Sep	2025	COTWASOIL	0
Oct	2025	COTWASOIL	0
Nov	2025	COTWASOIL	0
Dec	2025	COTWASOIL	0
Jan	2026	COTWASOIL	0
Feb	2026	COTWASOIL	0
Mar	2026	COTWASOIL	0
Yearly Average OI			1.06

j. Annual average volume to open interest ratio

Volume to OI Ratio
8.43%

k. Total number of unique members and clients who have traded during the financial year

Member Count	Client Count
7	10

l. Ratio of open interest by FPOs/farmers/Hedge/VCP positions to total open interest (Annual average as well as maximum daily value)

	VCPs/ Hedger
Annual Average	0.00%
Maximum Daily value*	0.00%

****It is calculated on the day when commodity has highest open interest during the year.
Commodity wise client categorization is as per category details as provided by the members.***

m. Number of unique FPOs / farmers and VCPs/hedgers who traded in the financial year

Commodity	Count
COTWASOIL	-

Commodity wise client categorization is as per category details as provided by the members.

n. Algorithmic trading as percentage of total trading

Commodity	%
COTWASOIL	0

o. Delivery defaults

NA

3. Price Movements

a. Correlation between exchange futures & domestic spot prices along with ratio of standard deviation

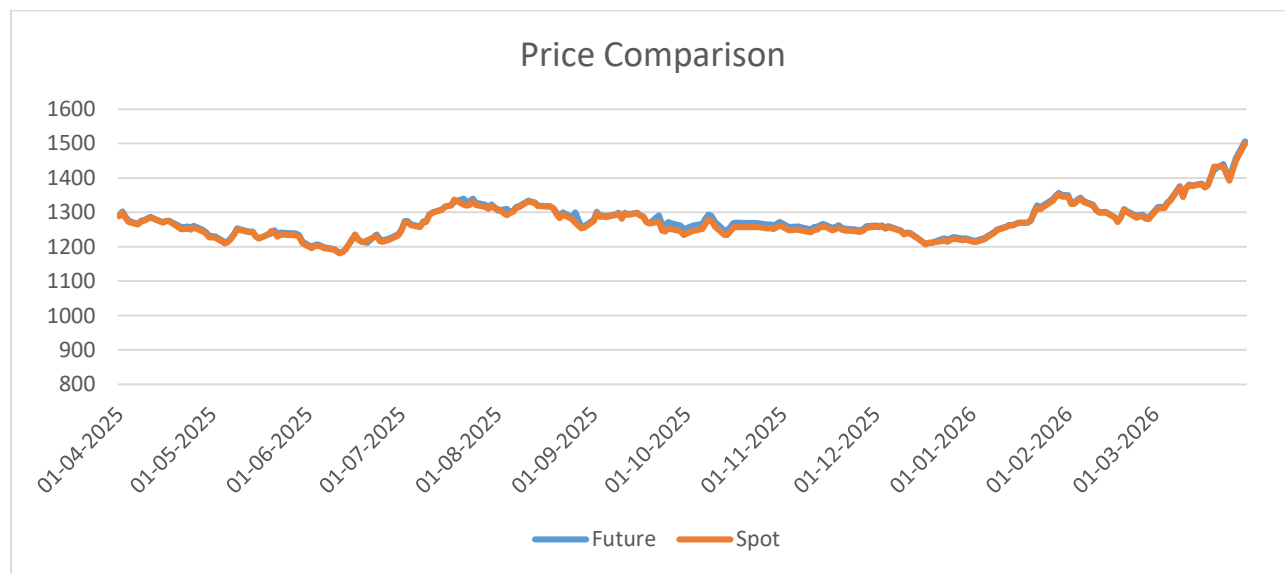
Standard Deviation			
	<i>Futures</i>	<i>Spot</i>	<i>Int'l Futures</i>
<i>Futures</i>	1	0.916865	-
<i>Spot</i>	1.090673	1	-
<i>Int'l Futures</i>	-	-	-

Correlation			
	<i>Futures</i>	<i>Spot</i>	<i>Int'l Futures</i>
<i>Futures</i>	1		-
<i>Spot</i>	0.990976	1	-
<i>Int'l Futures</i>	-	-	-

b. Correlation between international futures & international spot prices along with ratio of standard deviation (wherever relevant comparable are available).

International Spot prices not readily available in public domain.

c. Comparison of Exchange polled price and mandi price (in case of agricultural commodities) / other relevant price (in case non-agricultural commodities) at basis Centre.



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

Spot Price Volatility		
	Month	Value
Max	Mar	0.01709
Min	Nov	0.004681

Future Price Volatility		
Volatility	Month	Value
Max	Mar	0.016687
Min	Nov	0.004784

(Value of daily futures price volatility spot price volatility for period April 2025 - March 2026)

e. Number of times the futures contract was in backwardation/ contango by more than 4% for the near month contract in the period under review

Contango	0
Backwardation	0

4. Others parameters

a. Qualitative and quantitative measure for Hedge effectiveness ratio (Methodology in Annexure I) and basis Risk (Volatility of Basis) along with disclosure of methodology adopted for such calculations. (Volatility calculated by Square root of Standard Deviation of daily returns for the period from April 2025 to March 2026)

Basis Volatility	4.549
Hedging Efficiency	98.20%

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

State	Major Trading Centre	Exchange Delivery Centre
Gujarat	Kadi	Basis Centre

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

State	Delhi	Gujarat	Madhya Pradesh	Rajasthan
Apr-25	-	-	-	-
May-25	0	0	-	-
Jun-25	5	5	-	-
Jul-25	4	4	1	1
Aug-25	1	1	-	2
Sep-25	-	-	-	-
Oct-25	-	-	-	-
Nov-25	-	-	-	-
Dec-25	-	-	-	-
Jan-26	-	-	-	-
Feb-26	-	-	-	-
Mar-26	-	-	-	-

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

Following is the list of Awareness programmes, Stakeholder engagement programmes conducted by the

Exchange in FY 2025-26:

Sr. No.	Program Type	Location	No. of Participants
1.	IEP	Mumbai	20
2.	IEP	Noida	31
3.	IEP	Delhi	31
4.	IEP	Hingoli	50
5.	IEP	Buldhana	52
6.	IEP	Roorkee	35
7.	IEP	Karanja Lad	48
8.	IEP	Noida	42
9.	IEP	Hisar	55
10.	IEP	Delhi	45
11.	IEP	Delhi	42
12.	IEP	Ghaziabad	34
13.	IEP	Ghaziabad	36
14.	IEP	Ambala	48
15.	IEP	Chandigarh	60
16.	IEP	Noida	36
17.	IEP	Noida	30
18.	IEP	Aligarh	45
19.	IEP	Agra	100
20.	IEP	Amravati	65
21.	IEP	Delhi	43
22.	IEP	Ghaziabad	53
23.	IEP	Mumbai	65
24.	IEP	Delhi	41
25.	IEP	Ghaziabad	42
26.	IEP	Agra	50
27.	IEP	Andheri	45
28.	IEP	Noida	35
29.	IEP	Mussoorie	50
30.	IEP	Devgad (Ahilyanagar)	130
31.	IEP	Noida	35
32.	IEP	Yamunanagar	45
33.	IEP	Ghaziabad	39
34.	IEP	Noida	37
35.	IEP	Karnal	32
36.	IEP	Ghaziabad	36
37.	IEP	Ludhiana	61
38.	IEP	Noida	40
39.	IEP	Visakhapatnam	55

40.	IEP	Rajkot	19
41.	IEP	Ghaziabad	37
42.	IEP	Noida	36
43.	IEP	Ghaziabad	39
44.	IEP	Ghaziabad	40
45.	IEP	Varanasi	250
46.	IEP	Basmat	320
47.	IEP	Delhi	39
48.	IEP	Delhi	36
49.	IEP	Kamargoan	53
50.	IEP	Kaushambi	48
51.	IEP	Prayagraj	40
52.	IEP	Indore	69
53.	IEP	Yamunanagar	35
54.	IEP	Jalgoan	95
55.	IEP	Akola	55
56.	IEP	Ludhiana	35
57.	IEP	Rahuri	85
58.	IEP	Nagpur	57
59.	IEP	Delhi	53
60.	IEP	Aurangabad	32
61.	IEP	Bhadgoan	52
62.	IEP	Lucknow	55
63.	IEP	Gorakhpur	35
64.	IEP	Bhusaval, Jalgoan	32
65.	IEP	Belagaum	69
66.	IEP	Manglore	50
67.	IEP	Banglore	69
68.	IEP	Bhilai	53
69.	IEP	Hyderabad	73
70.	IEP	Online	32
71.	IEP	Latur	34
72.	IEP	Pune	27
73.	IEP	Mumbai	41
74.	IEP	Ahmedabad	136
75.	IEP	Ahmedabad	90
76.	IEP	Ahmedabad	107
77.	IEP	Jamshedpur	100
78.	IEP	Dehradun	100
79.	IEP	Chandigarh	400
80.	IEP	Sambhaji Nagar	750
81.	IEP	Webinar	40

82.	IEP	Webinar	31
83.	IEP	Webinar	40
84.	IEP	Webinar	29
85.	IEP	Webinar	38
86.	IEP	Webinar	38
87.	IEP	Webinar	35
88.	IEP	Webinar	41
89.	IEP	Webinar	40
90.	IEP	Webinar	38
91.	IEP	Webinar	39
92.	IEP	Webinar	55
93.	IEP	Webinar	100
94.	IEP	Webinar	70
95.	IEP	Webinar	45
96.	IEP	Webinar	40
97.	IEP	Webinar	32
98.	IEP	Webinar	62
99.	IEP	Webinar	36
100.	IEP	Webinar	39
101.	IEP	Webinar	39
102.	IEP	Webinar	35
103.	IEP	Webinar	32
104.	IEP	Greater Noida	40
105.	IEP	Ghaziabad	31
106.	IEP	Greater Noida	40
107.	IEP	Greater Noida	40
108.	IEP	Agra	30
109.	IEP	Agra	30
110.	IEP	Hathras	40
111.	IEP	Moradabad	60
112.	IEP	Moradabad	61

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

- Creating an awareness about the Hedge policy to bona fide hedger
- Online webinar conducted to increase hedging participation from the value chain participants.
- One to one meetings with market participants create awareness about new development / new initiatives at exchange level.

5. Any other information to be disclosed as deemed important by the exchange or as suggested by the PAC is missing

N.A

ANNEXURE I

Qualitative and quantitative measure for Hedge effectiveness ratio

Hedging Efficiency Methodology

Regression analysis is carried out between near month futures returns and NCDEX polled spot prices returns of the FY2025-26.

The R-Square value of the Regression analysis represents the “Hedging Efficiency”.

Note: -

Date for which spot prices were not available is not used for analysis.

Weekly returns are used for performing Regression Analysis.

The method used to calculate Hedging Efficiency does not consider liquidity risk because of this reason illiquid commodities can have high hedging efficiency.

References:

Ghosh, Ph.D, Nilanjan & Dey, Debojyoti & Moulvi, Nazir & Jain, Niteen & Sinha, Neha & Rachuri, Sarika. (2013). Hedging Efficiency—Measures and Empirical Study.