

Parameters for Performance Review of Commodity

GUAR GUM

1. Background

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

Guar gum is a processed product derived from Guar seed which is a legume crop. Guar processing is usually a two-stage process. The first stage of processing involves conversion of Guar seed into Guar gum (Splits). Guar meal (Churi and Korma) is produced as a by-product during this stage. The second stage of processing involves the conversion of Guar gum (Splits) into Guar gum powder (Guar gum treated and pulverized). Scientifically, Guar seed comprises three parts: the seed coat (14-17%), the endosperm (35-42%), and the germ (43-47%). It is from the endosperm that guar gum is derived, which is the prime marketable product of the plant. Guar Gum is a natural high molecular weight polysaccharide composed of galactose and mannose units combined through glycosidic linkages.



Guar gum has wide ranged industrial applications; the major one being that in oil drilling industry. Guar Gum is used as a controlling agent in oil wells to facilitate drilling and prevent fluid loss. Guar gum is the source of a natural hydrocolloid, which is cold– water soluble and forms a thick solution at low concentrations. Guar gum is used as a thickening and binding agent in the food, textile, finishing, printing, paper, pharmaceutical and oil industry. Highly refined guar gum is used in the food industry as a stabilizer in ice creams, as a meat binder and a stabilizer for cheeses, instant puddings and whipped cream substitutes. Guar gum is used in industrial applications including cloth and paper manufacture, oil well drilling, explosives, ore flotation, and many other applications.

Crop Cycle:

Guar gum is a processed commodity. The crop cycle is not applicable for it.

Life Cycle: Value Chain of the Commodity	Major Varieties / Grades																
<pre>graph TD A[Guar seed Primary Processors] --> B[Guar meal] A --> C[Guar Gum splits] C --> D[Secondary Processors -Guar Gum Powder Manufacturers] D --> E[Export Oil Fracking] D --> F[Exporter] D --> G[Tertiary Processor Hydroxyl Guar] D --> H[Domestic User Industry Paints, Food, Pharma]</pre>	Major Varieties: Not applicable as it is a processed commodity. NCDEX: Important Quality Parameters <table><tr><td>Residue insoluble in Acid</td><td>3.00%(Max)</td></tr><tr><td>Protein</td><td>5.00% (Max)</td></tr><tr><td>Undehusked Splits</td><td>10.00%</td></tr><tr><td>Black, dark red and brown coloured splits</td><td>1.00% (Max)</td></tr><tr><td>Through 14" mesh</td><td>3.00% (Max)</td></tr><tr><td>Through 20" mesh</td><td>0.10%(Basis)</td></tr><tr><td>Moisture</td><td>8%</td></tr><tr><td>Foreign Particles (all non-gum particles)</td><td>0.30%(Basis)</td></tr></table>	Residue insoluble in Acid	3.00%(Max)	Protein	5.00% (Max)	Undehusked Splits	10.00%	Black, dark red and brown coloured splits	1.00% (Max)	Through 14" mesh	3.00% (Max)	Through 20" mesh	0.10%(Basis)	Moisture	8%	Foreign Particles (all non-gum particles)	0.30%(Basis)
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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 MT)		
Global Scenario	Previous FY (2024-25)	Current FY (2025-26)
Opening Stocks	NA	NA
Production	NA	NA
Imports	2.59	NA
Total Supply	NA	NA
Exports	3.28	NA
Domestic Consumption	NA	NA
Total Consumption	NA	NA
Closing Stocks	NA	NA

Source: UN Comtrade; HS codes used is 130232 (It is inclusive of Guar gum as well as other derivatives)

NA: Data is not available in the public domain;

*Data is not available as per financial year. It is provided as per Calendar Year (Jan-Dec)

(In Lakh MT)		
Indian Scenario	Previous FY (2024-25)	Current FY (2025-26)*
Opening Stocks	NA	NA
Production	6.59	5.00
Imports	NA	NA
Total Supply	6.59	5.00
Exports#	4.54	4.59
Domestic Consumption	0.50	0.45
Total Demand	5.04	5.04
Closing Stocks	NA	NA

*Data is as per Second Advance Estimates of Kharif crops 2025, releases by Govt. of Rajasthan and Gujarat.

Note: Guar Gum availability is 30% of Guar Seed production assuming the entire production is processed.

^: Data is Provisional and subject to further revision.

Total Consumption figures for Guar Gum are back calculated assuming that Guar Gum Exports are 90% of total consumption.

India does not import Guar Gum. For 2025-26, export data is for period **Apr 2025 to Feb 2026**.

Export data of Guar gum refined split (HS code: 13023231), Guar gum meal (HS code: 11061010) and treated & pulverized Guar gum (HS code: 13023239) sourced from Ministry of commerce have been added to calculate All- India Guar gum exports. It may be noted that HS codes of Guar gum refined split and Guar meal have been changed to 13023231 and 13023239. Hence, All-India Guar gum export data has been revised accordingly.

(In Lakh MT)						
Rank	Top 10 Major Producing Countries			Top 10 Major Consuming Countries		
	Country	Previous FY	Current FY	Country	Previous FY	Current FY
	NA			NA		

NA: Data is not available in public domain.

As per market feedback, India is the largest producer of Guar gum in the world, which accounts for 80-85% of the world production followed by Pakistan.

(In Lakh Tonnes)

Top 10 Major Exporting Countries				Top 10 Major Importing Countries		
Rank	Country	Previous FY (2024-25)	Current FY (2025-26)	Country	Previous FY (2024-25)	Current FY (2025-26)
1	India	2.40	NA	USA	0.63	NA
2	Pakistan	0.24	NA	Germany	0.38	NA
3	USA	0.09	NA	China	0.31	NA
4	Netherlands	0.09	NA	Canada	0.09	NA
5	Italy	0.09	NA	Netherlands	0.08	NA
6	China	0.08	NA	Mexico	0.07	NA
7	Germany	0.08	NA	Australia	0.07	NA
8	Spain	0.07	NA	United Kingdom	0.07	NA
9	France	0.02	NA	Italy	0.07	NA
10	Switzerland	0.02	NA	Japan	0.06	NA
	Others	0.10	NA	Others	0.76	NA
	World Total	3.28	NA	World Total	2.59	NA

Source: UN Comtrade; HS codes used is 130232 (It is inclusive of Guar gum as well as other derivatives).

NA= Data is not available in the public domain

Data is not available as per financial year. It is provided as per Calendar Year (CY) (Jan-Dec);

Countries are arranged in descending order based on the data in the 2024-25

(In Lakh MT)

Top 10 Major producing states in India			
Rank	States	Previous FY	Current FY
	NA	NA	NA

NA: Data is not available in the public domain.

It is a processed commodity. Thus, no such categorization is applicable for this commodity.

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
-	No Guar gum specific policy change was there during FY 2025-26

d. Geo political issues in the commodity and its impact on Indian scenario (FY 2025-26)

Date	Event	Key Details	Key Implications/Impact
No Guar gum specific Geo political issues was there during FY 2025-26			

2. Trading related parameter

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

Month	Year	Symbol	Traded volume (MT)
Apr	2025	GUARGUM5	550
May	2025	GUARGUM5	5
Jun	2025	GUARGUM5	-
Jul	2025	GUARGUM5	-
Aug	2025	GUARGUM5	-
Sep	2025	GUARGUM5	-
Oct	2025	GUARGUM5	-
Nov	2025	GUARGUM5	-
Dec	2025	GUARGUM5	-
Jan	2026	GUARGUM5	-
Feb	2026	GUARGUM5	-
Mar	2026	GUARGUM5	-
Annual Traded Volume (MT) (April'25 to March'26)			555

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

Symbol	Traded Volume (MT)	Deliverable Supply(MT)	Proportion
GUARGUM5	555	500,000	0.00

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

Symbol	Traded volume (MT)	Production(MT)	Proportion
GUARGUM5	555	500,000	0.00

d. Annual average Open interest as proportion of total production

Symbol	Average Open Interest (MT)	Production(MT)	Proportion
GUARGUM5	5	500,000	0.00

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

Symbol	Average Open Interest (MT)	Deliverable supply(MT)	Proportion
GUARGUM5	5	500,000	0.00

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

Month	Year	Symbol	Traded value (in Rs. Crores)
Apr	2025	GUARGUM5	0.01
May	2025	GUARGUM5	0.00
Jun	2025	GUARGUM5	-
Jul	2025	GUARGUM5	-
Aug	2025	GUARGUM5	-
Sep	2025	GUARGUM5	-
Oct	2025	GUARGUM5	-
Nov	2025	GUARGUM5	-
Dec	2025	GUARGUM5	-
Jan	2026	GUARGUM5	-
Feb	2026	GUARGUM5	-
Mar	2026	GUARGUM5	-
Annual Traded Volume (in Rs Crores) (April'25 to March'26)			0,01

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)

Month	Year	Symbol	Average Open Interest (MT)
Apr	2025	GUARGUM5	62.11
May	2025	GUARGUM5	0.48
Jun	2025	GUARGUM5	-
Jul	2025	GUARGUM5	-
Aug	2025	GUARGUM5	-
Sep	2025	GUARGUM5	-
Oct	2025	GUARGUM5	-
Nov	2025	GUARGUM5	-
Dec	2025	GUARGUM5	-
Jan	2026	GUARGUM5	-
Feb	2026	GUARGUM5	-
Mar	2026	GUARGUM5	-
Annual Average OI (MT) (April'25 to March'26)			4.82

j. Annual average volume to open interest ratio

46.64%

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

Symbol	Member Count	Client Count
GUARGUM5	4	4

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

Annual Average	0%
Maximum Daily Value	0%

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

Commodity	Count
GUARGUM5	-

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

n. Algorithmic trading as percentage of total trading

Commodity	%
GUARGUM5	45%

o. Delivery defaults

Nil

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).

NA

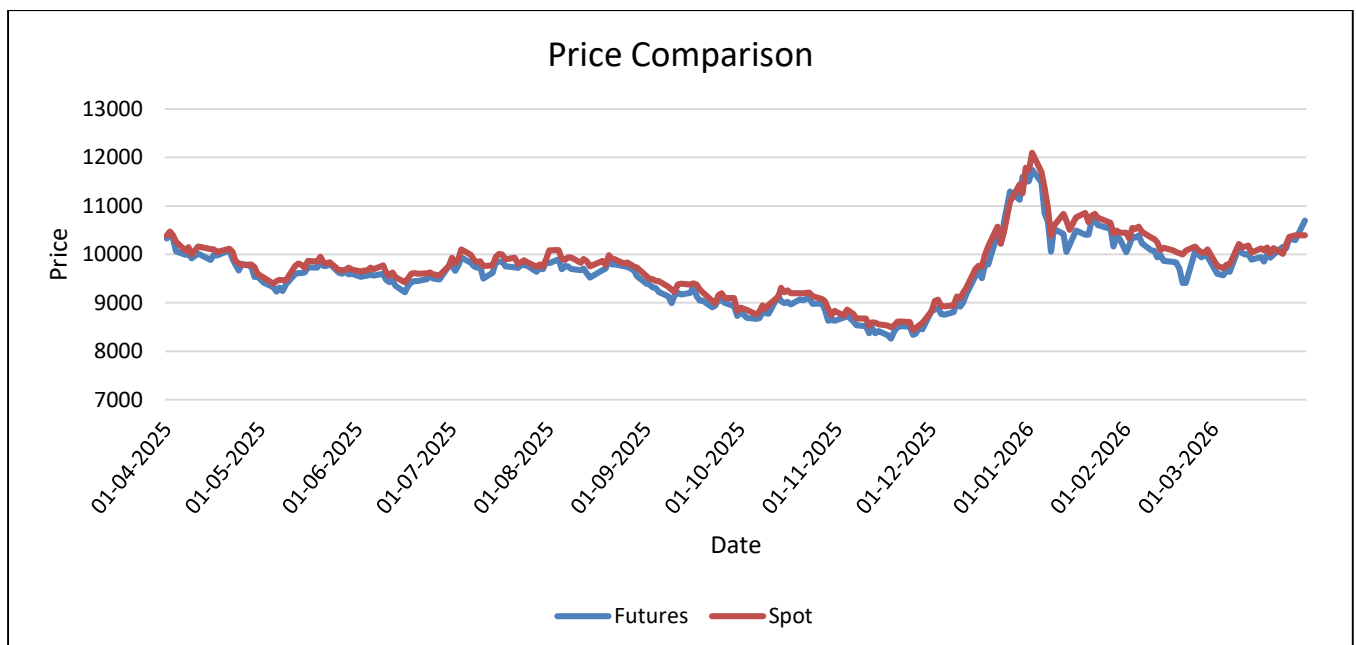
- b. Comparison, correlation and ratio of standard deviation of Exchange futures price vis-à-vis international spot price (wherever relevant comparable are available) and domestic spot price (exchange polled price).

NA

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

Correlation			
	<i>Futures</i>	<i>Spot</i>	<i>Mandi</i>
<i>Futures</i>	1		-
<i>Spot</i>	0.957201	1	-
<i>Mandi</i>	-	-	-

Standard Deviation			
	<i>Futures</i>	<i>Spot</i>	<i>Mandi</i>
<i>Futures</i>	1	0.770311	-
<i>Spot</i>	1.298177	1	-
<i>Mandi</i>	-	-	-



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

NA

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.

As Guar gum is a processed commodity mandi prices for the same are not available

f. Maximum & Minimum value of daily futures price volatility and spot price volatility along with disclosure of methodology adopted for computing the volatility. (Volatility calculated by Squareroot of Standard Deviation of daily returns for the period from 1 April 2025 to 31 March 2026)

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

Volatility	Month	Value
Max	Jan	0.042262
Min	Jun	0.010133

Value of daily Spot price volatility (April 2025- March 2026)

Volatility	Month	Value
Max	Dec	0.02246
Min	Jun	0.00823

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

Contango	3
Backwardation	0

4. Others 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

	GUARGUM5
Basis Volatility	27.254
Hedge efficiency	89.69%

The methodology for hedge efficiency ratio calculation is appended as Annexure 1

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 Physical Markets	Availability of NCDEX Delivery center
Rajasthan	Jodhpur	Yes (Basis)
	Bikaner	Yes (ADC)
	Barmer	No
	Merta	No
	Nokha	Yes (ADC)
	Ganganagar	Yes (ADC)
Haryana	Hisar	No
	Adampur	No
	Shiwani	No
	Sirsa	No
Gujarat	Deesa	Yes (ADC)
	Mehsana	No

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

Note – The OI for each month is classified based on the Member level. The Average OI is on gross level (Long OI + Short OI)

State	Rajasthan	Maharashtra	Gujarat	Haryana
Apr-25	72	-	53	-
May-25	-	-	0	-
Jun-25	-	-	-	-
Jul-25	-	-	-	-
Aug-25	-	-	-	-
Sep-25	-	-	-	-
Oct-25	-	-	-	-
Nov-25	-	-	-	-
Dec-25	-	-	-	-
Jan-26	-	-	-	-

Feb-26	-	-	-	-
Mar-26	-	-	-	-

Note - The OI for Custodian Participation is not mapped to any State/ location and hence not considered in the above data.

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	Roorkee	35
5.	IEP	Nalikul	58
6.	IEP	Noida	42
7.	IEP	Hisar	55
8.	IEP	Delhi	45
9.	IEP	Ichapur	73
10.	IEP	Delhi	42
11.	IEP	Uluberia	59
12.	IEP	Ghaziabad	34
13.	IEP	Ghaziabad	36
14.	IEP	Ambala	48
15.	IEP	Chandigarh	60
16.	IEP	Noida	36
17.	IEP	Barmer	51
18.	IEP	Noida	30
19.	IEP	Aligarh	45
20.	IEP	Kachrapara	79
21.	IEP	Agra	100
22.	IEP	Delhi	43
23.	IEP	Ghaziabad	53
24.	IEP	Mumbai	65
25.	IEP	Amtala	50
26.	IEP	Delhi	41
27.	IEP	Dhubulia	59
28.	IEP	Ghaziabad	42
29.	IEP	Agra	50
30.	IEP	Andheri	45
31.	IEP	Noida	35
32.	IEP	Mussoorie	50

33.	IEP	Noida	35
34.	IEP	Yamunanagar	45
35.	IEP	Ghaziabad	39
36.	IEP	Noida	37
37.	IEP	Karnal	32
38.	IEP	Ghaziabad	36
39.	IEP	Ludhiana	61
40.	IEP	Noida	40
41.	IEP	Visakhapatnam	55
42.	IEP	Ghaziabad	37
43.	IEP	Noida	36
44.	IEP	Ghaziabad	39
45.	IEP	Ghaziabad	40
46.	IEP	Laskarpur	51
47.	IEP	Vadodara	56
48.	IEP	Varanasi	250
49.	IEP	Bardhaman	52
50.	IEP	Delhi	39
51.	IEP	Delhi	36
52.	IEP	Jaipur	70
53.	IEP	Konnagar	52
54.	IEP	Kolkata	52
55.	IEP	Baichi	55
56.	IEP	Kaushambi	48
57.	IEP	Prayagraj	40
58.	IEP	Barasat	40
59.	IEP	Indore	69
60.	IEP	Yamunanagar	35
61.	IEP	Bhilwara	48
62.	IEP	Junagadh	26
63.	IEP	Akola	55
64.	IEP	Ludhiana	35
65.	IEP	Jetpur	38
66.	IEP	Kota	95
67.	IEP	Nagpur	57
68.	IEP	Udaipur	75
69.	IEP	Udaipur	95
70.	IEP	Surat	60
71.	IEP	Paschim Medinipore	43
72.	IEP	Purba Medinipur	53
73.	IEP	Delhi	53
74.	IEP	Dunlop	56
75.	IEP	Lucknow	55
76.	IEP	Gorakhpur	35
77.	IEP	Belgaum	69
78.	IEP	Bolpur	60

79.	IEP	Mangalore	50
80.	IEP	Durgapur	54
81.	IEP	Sodepur	63
82.	IEP	Mahestala	54
83.	IEP	Nagpur	20
84.	IEP	Banglore	69
85.	IEP	Bhilai	53
86.	IEP	Kolkata	40
87.	IEP	Hyderabad	73
88.	IEP	Online	32
89.	IEP	Latur	34
90.	IEP	Pune	27
91.	IEP	Mumbai	41
92.	IEP	Ahmedabad	136
93.	IEP	Ahmedabad	90
94.	IEP	Ahmedabad	107
95.	IEP	Jamshedpur	100
96.	IEP	Dehradun	100
97.	IEP	Chandigarh	400
98.	IEP	Sambhaji Nagar	750
99.	IEP	Webinar	40
100.	IEP	Webinar	31
101.	IEP	Webinar	40
102.	IEP	Webinar	29
103.	IEP	Webinar	38
104.	IEP	Webinar	38
105.	IEP	Webinar	35
106.	IEP	Webinar	41
107.	IEP	Webinar	40
108.	IEP	Webinar	38
109.	IEP	Webinar	39
110.	IEP	Webinar	55
111.	IEP	Webinar	100
112.	IEP	Webinar	70
113.	IEP	Webinar	45
114.	IEP	Webinar	40
115.	IEP	Webinar	32
116.	IEP	Webinar	62
117.	IEP	Webinar	36
118.	IEP	Webinar	39
119.	IEP	Webinar	39
120.	IEP	Webinar	35
121.	IEP	Webinar	32
122.	IEP	Greater Noida	40
123.	IEP	Ghaziabad	31
124.	IEP	Greater Noida	40

125.	IEP	Greater Noida	40
126.	IEP	Agra	30
127.	IEP	Agra	30
128.	IEP	Hathras	40
129.	IEP	Moradabad	60
130.	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.

1. Identifying new value chain participants in the in the region of Jaipur, Udaipur, Barmer and Hissar.
2. One on one meeting with market participants and hedgers.

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

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.