

Parameters for Performance Review of Commodity

BAJRA-FEED GRADE

1. Background

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

Pearl millet/Bajra is the most widely grown type of millet. (Millets are a group of highly variable small-seeded grasses, widely grown around the world as cereal crops or grains for human food and as fodder. Millets include Pearl Millet, Finger Millet, Variga (Proso millet) Foxtail Millets and other small millets). Pearl millet goes by several common names, including Bulrush millet, Babala, Ddukn (in the Sudan), and Bajra (in India). It has been grown in Africa and on the Indian subcontinent since prehistoric times. Bajra is the major cereal crop grown in the hottest, driest areas of the world where, rainfed agriculture is practiced. Bajra is not just a resilient and dependable source of energy, but also a good source for other dietary needs, especially micronutrients. It is also mainly consumed as cattle/poultry feed in India apart from its consumption for food purpose. In India, major producers are Rajasthan, Uttar Pradesh, Haryana, Madhya Pradesh and Maharashtra. Bajra is largely grown as a rainy season crop (Kharif Crop) under rainfed conditions in Asia and Africa. Bajra has the smallest crop cycle of 80 to 85 days only, sowing starts from June and extends till August and harvesting starts from September and extends up to November.



Crop Cycle (India)											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sowing			Harvesting								

Life Cycle: Value Chain of the Commodity	Major Varieties /Grade								
<pre> graph TD Farmer[Farmer] --> Aggregators[Aggregators] Aggregators --> Traders1[Traders] Traders1 --> Exporters[Exporters] Exporters --> HumanConsumption[Human Consumption] Exporters --> FeedStarch[Feed /Starch Manufacturers /Processors] Exporters --> Traders2[Traders] Traders2 --> GovtAgencies[Govt. Agencies] </pre>	Major Varieties: RHB-58, Pusa-444, PAC-903, RHB-154, Jawahar Bajra Variety-2, GHB-558, Pusa- 605, Nandi-32, Ananta, GHB-526, Saburi, Nandi-35, Nandi-32, GK-1004, Proagro No 1, Avika Bajra Chari NCDEX: Quality Parameters <table> <tr> <td>Moisture</td><td>12% basis, accepted upto 13% with moisture adjusted weight (MAW) of 1:1</td></tr> <tr> <td>Foreign Matter</td><td>2% Max</td></tr> <tr> <td>Damaged, Immature/Shriveled grains</td><td>5% Max</td></tr> <tr> <td>Other edible grains</td><td>2 % Max</td></tr> </table>	Moisture	12% basis, accepted upto 13% with moisture adjusted weight (MAW) of 1:1	Foreign Matter	2% Max	Damaged, Immature/Shriveled grains	5% Max	Other edible grains	2 % Max
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Foreign Matter	2% Max								
Damaged, Immature/Shriveled grains	5% Max								
Other edible grains	2 % Max								

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	Current Financial Year = Previous Production Year = Current

		Marketing Year = Current Calendar Year	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)

Global data for Bajra (Pearl Millet) is not available. However, as per FAO, Bajra accounts for about 50% of the total global production of millets. The following Tables show data for Millets.

(In Lakh Tonnes)		
Global Scenario	Previous FY (2024-25)	Current FY (2025-26)
Beginning Stocks	6.25	5.90
Production	287.60	296.80
Imports	0	0.00

Total Supply	293.85	302.70
Exports	0	0.00
Domestic Consumption	287.95	296.80
Ending Stocks	5.90	5.90

Source: USDA (April 2026)

Note: Data relates to all Millets, which is inclusive of Pearl Millet.

(In Lakh Tonnes)

Indian Scenario	Previous FY (2024-25)	Current FY (2025-26)
Beginning Stocks	6.15	5.85
Production	115.70	126.00
Imports	0.00	0.00
Total Supply	121.85	131.85
Exports	0.00	0.00
Domestic Consumption	116.00	126.00
Ending Stocks	5.85	5.85

Source: USDA (April 2026)

Note: Data relates to all Millets, which is inclusive of Pearl Millet.

Please refer to Table entitled "Reference Years for Commodities" to know type of years corresponding to financial year.

(In Lakh Tonnes)

Rank	Top 10 Major Producing Countries			Top 10 Major Consuming Countries		
	Country	Previous FY (2024-25)	Current FY (2025-26)	Country	Previous FY (2024-25)	Current FY (2025-26)
1	India	115.70	126.00	India	116.00	126.00
2	Niger	38.36	34.00	Niger	38.36	34.00
3	China	27.00	27.00	China	27.00	27.00
4	Mali	19.85	18.00	Mali	19.85	18.00
5	Nigeria	15.46	15.50	Nigeria	15.46	15.50
6	Ethiopia	11.25	11.00	Ethiopia	11.30	11.00
7	Sudan	7.93	10.00	Sudan	7.93	10.00
8	Burkina Faso	8.00	9.00	Burkina Faso	8.00	9.00
9	Senegal	6.75	7.25	Senegal	6.75	7.25
10	Chad	6.19	6.70	Chad	6.19	6.70
	Others	31.11	32.35	Others	31.11	32.35
	World	287.60	296.80	World	287.95	296.80

Source: USDA (April 2026)

Note: Data relates to all Millets, which is inclusive of Pearl Millet.

(In Lakh Tonnes)

Rank	Top 10 Major Exporting Countries			Top 10 Major Importing Countries		
	Country	Previous FY (2024-25)	Current FY (2025-26)*	Country	Previous FY (2024-25)	Current FY (2025-26)*
1		1.13	NA		0.48	NA
2		0.80	NA		0.29	NA

3	United States of America	0.73	NA	Poland	0.24	NA
4	Russian Federation	0.41	NA	Germany	0.23	NA
5	France	0.31	NA	Belgium	0.22	NA
6	Uzbekistan	0.26	NA	United Arab Emirates	0.19	NA
7	United Republic of Tanzania	0.13	NA	Türkiye	0.18	NA
8	Poland	0.10	NA	Nepal	0.16	NA
9	Pakistan	0.08	NA	United Kingdom	0.14	NA
10	China	0.07	NA	Philippines	0.12	NA
	Others	0.60	NA	Others	2.30	NA
	World	4.61	NA	World	4.55	NA

Source: FAO (April 2026).

Note: Data relates to all Millets, which is inclusive of Pearl Millet.

Latest available data is for Calendar Year 2024.

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

Countries are arranged in descending order based on the data in Previous FY.

NA: Not Available

(In Lakh Tonnes)

Top 10 Major producing states in India			
Rank	States	Previous FY (2024-25)	Current FY (2025-26)*
1	Rajasthan	50.27	40.34
2	Uttar Pradesh	18.92	19.84
3	Haryana	12.76	12.82
4	Madhya Pradesh	8.04	6.79
5	Maharashtra	5.65	3.65
6	Gujarat	12.59	2.41
7	Karnataka	1.54	1.19
8	Andhra Pradesh	0.72	0.51
9	Tamil Nadu	1.24	0.40
10	Telangana	0.07	0.15
	Others	0.25	0.26
	All India	112.05	88.36

Source: Ministry of Agriculture & Farmers Welfare *Provisional

States are arranged in descending order based on the data in the Current Financial Year

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-2025	MSP of Bajra hiked from Rs. 2,625 to Rs. 2,775 for 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 Bajra specific global event impacting market sentiment was noted in FY 2025-26		

2. Trading related parameter

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

Month	Year	Symbol	Traded volume (MT)
April	2025	BAJRA	-
May	2025	BAJRA	-
June	2025	BAJRA	-
July	2025	BAJRA	-
August	2025	BAJRA	-
September	2025	BAJRA	-
October	2025	BAJRA	-
November	2025	BAJRA	-
December	2025	BAJRA	-
January	2026	BAJRA	-
February	2026	BAJRA	-
March	2026	BAJRA	-
Annual Traded Volume (MT) (April'25 to March'26)			-

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

Symbol	Traded Volume (MT)	Deliverable Supply(MT)	Proportion
BAJRA	-	8,836,000	-

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

Symbol	Traded volume (MT)	Production(MT)	Proportion
BAJRA	-	8,836,000	-

d. Annual average Open interest as proportion of total production

Symbol	Average Open Interest (MT)	Production(MT)	Proportion
BAJRA	-	8,836,000	-

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

Symbol	Average Open Interest (MT)	Deliverable supply(MT)	Proportion
BAJRA	-	8,836,000	-

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

Month	Year	Symbol	Traded value (in Rs. Crores)
Apr	2025	BAJRA	-
May	2025	BAJRA	-
June	2025	BAJRA	-
July	2025	BAJRA	-
August	2025	BAJRA	-
September	2025	BAJRA	-
October	2025	BAJRA	-
November	2025	BAJRA	-
December	2025	BAJRA	-
January	2026	BAJRA	-
February	2026	BAJRA	-
March	2026	BAJRA	-
Annual Traded Volume (in Rs Crores) (April'25 to March'26)			-

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

Expiry Month	Year	Symbol	Total Delivery (in MT)
April	2025	BAJRA	-
May	2025	BAJRA	-
June	2025	BAJRA	-
July	2025	BAJRA	-
August	2025	BAJRA	-
September	2025	BAJRA	-
October	2025	BAJRA	-
November	2025	BAJRA	-
December	2025	BAJRA	-
January	2026	BAJRA	-
February	2026	BAJRA	-

March	2026	BAJRA	-
Annual value of delivery (in MT) (April'25 to March'26)			-

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

Expiry Month	Year	Symbol	Total Delivery Value (in Cr)
April	2025	BAJRA	-
May	2025	BAJRA	-
June	2025	BAJRA	-
July	2025	BAJRA	-
August	2025	BAJRA	-
September	2025	BAJRA	-
October	2025	BAJRA	-
November	2025	BAJRA	-
December	2025	BAJRA	-
January	2026	BAJRA	-
February	2026	BAJRA	-
March	2026	BAJRA	-
Annual value of delivery (in Crores) (April'25 to March'26)			-

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

Month	Year	Symbol	Average Open Interest (MT)
Apr	2025	BAJRA	-
May	2025	BAJRA	-
June	2025	BAJRA	-
July	2025	BAJRA	-
August	2025	BAJRA	-
September	2025	BAJRA	-
October	2025	BAJRA	-
November	2025	BAJRA	-
December	2025	BAJRA	-
January	2026	BAJRA	-

February	2026	BAJRA	-
March	2026	BAJRA	-
Annual Average OI (MT) (April'25 to March'26)			-

j. Annual average volume to open interest ratio
0.00%

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

Symbol	Member Count	Client Count
BAJRA	-	-

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	-
Maximum Daily Value	-

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

Commodity	Count
BAJRA	-

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

n. Algorithmic trading as percentage of total trading

Commodity	%
BAJRA	-

o. Delivery defaults

Number of instances	-
Quantity involved	-
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).

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>	0.934355	1	
<i>Mandi</i>	0.934355	1	1

Standard Deviation			
	<i>Futures</i>	<i>Spot</i>	<i>Mandi</i>
<i>Futures</i>	1	0.981989	20.44858
<i>Spot</i>	1.018341	1	20.82362
<i>Mandi</i>	0.048903	0.048022	1

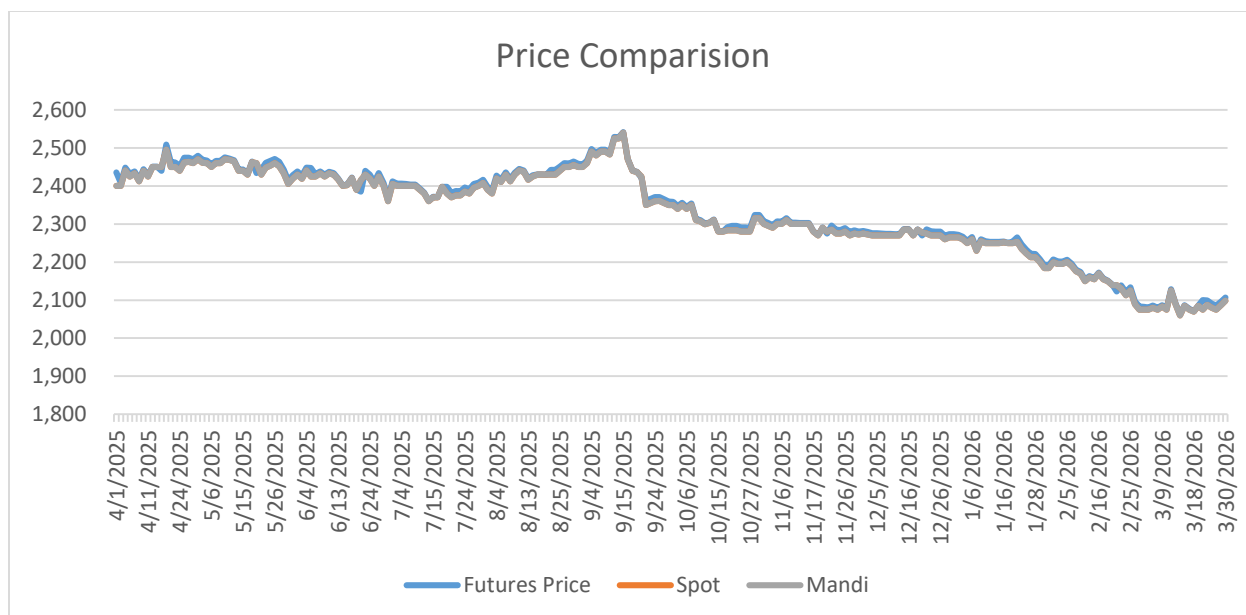
- d. Correlation between international futures & international spot prices along with ratio of standard deviation (wherever relevant comparable are available).

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.

Correlation			
	<i>Futures</i>	<i>Spot</i>	<i>Mandi</i>
<i>Futures</i>	1		
<i>Spot</i>	0.934355	1	
<i>Mandi</i>	0.934355	1	1

Standard Deviation			
	<i>Futures</i>	<i>Spot</i>	<i>Mandi</i>
<i>Futures</i>	1	0.981989	20.44858
<i>Spot</i>	1.018341	1	20.82362
<i>Mandi</i>	0.048903	0.048022	1



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	Sep	0.010643
Min	Dec	0.003065

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

Volatility	Month	Value
Max	Sep	0.010613
Min	Dec	0.002891

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

Contango	0
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

	BAJRA
Basis Volatility	4.08334
Hedge efficiency	100%

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	Jaipur	Yes (Basis)
	Bharatpur	No
	Alwar	Yes (ADC)
	Dausa	No
Utter Pradesh	Etah	No
	Mathura	No
	Kasganj	No
	Aligargh	No
Haryana	Rewari	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)

Month	GUJARAT (Avg Qty (MT))	HARYANA (Avg Qty (MT))	MAHARASHTRA (Avg Qty (MT))	RAJASTHAN (Avg Qty(MT))
Apr-25	-	-	-	-
May-25	-	-	-	-
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.	Programme	Location	Number of participants
1.	IEP	Mumbai	20
2.	IEP	Noida	31
3.	IEP	Delhi	31
4.	IEP	Roorkee	35
5.	IEP	Noida	42
6.	IEP	Hisar	55
7.	IEP	Delhi	45
8.	IEP	Delhi	42
9.	IEP	Ghaziabad	34
10.	IEP	Ghaziabad	36
11.	IEP	Ambala	48
12.	IEP	Chandigarh	60
13.	IEP	Noida	36
14.	IEP	Noida	30
15.	IEP	Aligarh	45
16.	IEP	Agra	100
17.	IEP	Delhi	43
18.	IEP	Ghaziabad	53

19.	IEP	Mumbai	65
20.	IEP	Delhi	41
21.	IEP	Ghaziabad	42
22.	IEP	Agra	50
23.	IEP	Andheri	45
24.	IEP	Noida	35
25.	IEP	Mussoorie	50
26.	IEP	Noida	35
27.	IEP	Yamunanagar	45
28.	IEP	Ghaziabad	39
29.	IEP	Noida	37
30.	IEP	Karnal	32
31.	IEP	Ghaziabad	36
32.	IEP	Ludhiana	61
33.	IEP	Noida	40
34.	IEP	Visakhapatnam	55
35.	IEP	Ghaziabad	37
36.	IEP	Noida	36
37.	IEP	Ghaziabad	39
38.	IEP	Ghaziabad	40
39.	IEP	Varanasi	250
40.	IEP	Delhi	39
41.	IEP	Delhi	36
42.	IEP	Kaushambi	48
43.	IEP	Prayagraj	40
44.	IEP	Indore	69
45.	IEP	Yamunanagar	35
46.	IEP	Akola	55
47.	IEP	Ludhiana	35
48.	IEP	Nagpur	57
49.	IEP	Delhi	53
50.	IEP	Lucknow	55
51.	IEP	Gorakhpur	35
52.	IEP	Belgaum	69
53.	IEP	Mangalore	50

54.	IEP	Bangalore	69
55.	IEP	Bhilai	53
56.	IEP	Hyderabad	73
57.	IEP	Online	32
58.	IEP	Latur	34
59.	IEP	Pune	27
60.	IEP	Mumbai	41
61.	IEP	Ahmedabad	136
62.	IEP	Ahmedabad	90
63.	IEP	Ahmedabad	107
64.	IEP	Jamshedpur	100
65.	IEP	Dehradun	100
66.	IEP	Chandigarh	400
67.	IEP	Sambhaji Nagar	750
68.	IEP	Webinar	40
69.	IEP	Webinar	31
70.	IEP	Webinar	40
71.	IEP	Webinar	29
72.	IEP	Webinar	38
73.	IEP	Webinar	38
74.	IEP	Webinar	35
75.	IEP	Webinar	41
76.	IEP	Webinar	40
77.	IEP	Webinar	38
78.	IEP	Webinar	39
79.	IEP	Webinar	55
80.	IEP	Webinar	100
81.	IEP	Webinar	70
82.	IEP	Webinar	45
83.	IEP	Webinar	40
84.	IEP	Webinar	32
85.	IEP	Webinar	62
86.	IEP	Webinar	36
87.	IEP	Webinar	39
88.	IEP	Webinar	39
89.	IEP	Webinar	35

90.	IEP	Webinar	32
91.	IEP	Greater Noida	40
92.	IEP	Ghaziabad	31
93.	IEP	Greater Noida	40
94.	IEP	Greater Noida	40
95.	IEP	Agra	30
96.	IEP	Agra	30
97.	IEP	Hathras	40
98.	IEP	Moradabad	60
99.	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 awareness about hedging and targeting the major processors/ Traders/ Stockists
- Awareness Programme in major trading centers as well as remote location
- One to 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.