

Performance Review of PADDY (BASMATI) PB1121 Contract

Basmati Paddy PB1121

1. Background

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



Paddy is raw rough rice kernel covered with husk which upon milling yields Rice. “Basmati” is long grain aromatic rice grown for many centuries in the specific geographical area, at the Himalayan foot hills of Indian sub-continent, blessed with characteristics extra- long slender grains that elongate at least twice of their original size with a characteristics soft and fluffy texture upon cooking, delicious taste, superior aroma and distinct flavor, Basmati rice is unique among other aromatic long grain rice varieties.

Agro- climatic conditions of the specific geographical area as well as method of harvesting, processing and aging attribute these characteristic features to Basmati rice. Owing to its unique characteristics the “scented Pearl” lends a touch of class that can transform even the most ordinary meal into a gourmet’s delight.

Areas of Cultivation:

The areas of Basmati Rice production in India are in the states of J & K, Himanchal Pradesh, Punjab, Haryana, Delhi, Uttarakhand and western Uttar Pradesh. In India, major production of basmati paddy is in the states of Punjab and Haryana, where **85%** of commodity is produced. The major markets of Basmati Paddy are Narela, Karnal, Taraori, Amritsar and Tarantaran, etc.

Varieties:

Performance Review of PADDY (BASMATI) PB1121 Contract

The main varieties of Basmati rice as notified under the seeds Act, 1966 are Basmati 386 , Basmati 217 , Ranbir Basmati , Karnal Local/ Taraori Basmati, Basmati 370, Type-3 (Dehradooni Basmati), Pusa Basmati-1, Pusa Basmati 1121, Punjab Basmati-1, Haryana Basmati- 1, Kasturi and Mahi Sugandha.

India accounts for around 70% of Basmati rice production while balance about 30% production is from Pakistan. As per market estimates, Basmati Rice Production is nearly 5-6% of the total Rice production in India. In terms of Basmati paddy, the major variety produced in India is PUSA 1121 which is almost two thirds of the total Basmati production. Paddy Basmati is grown in Kharif season. Sowing and transplanting is done respectively in the month of May June and harvesting is done from Sept to November. India is the largest producer, consumer and exporter of Pusa Basmati -1121.

India is the leading exporter of the Basmati Rice to the global market. The country has exported 44,54,656.70 MT of Basmati Rice to the world for the worth of Rs. 31,025.91 crores (or 4,330.68 US\$ Mill.) during the year 2019-20. Basmati paddy exhibits very high fluctuations in the price mostly emanating from export market. Volatility in paddy price has resulted into heavy losses among the trading community and rice milling industry where only the big players could survive. There has been massive investment in the Basmati paddy industry with many rice mills got established across the state of Punjab and Haryana.

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)

The published data is aggregated one and only for the rice. There are umpteen Varieties of paddy. Variety wise production figures are not available. In general Rice conversion ratio from paddy in percentage terms is around 67%. Upon milling of 100 kg Paddy around 67 kg of Rice is obtained.

All the figures shown in given Tables are for Rice.

(In Lakh Tonnes)

Global Scenario	Previous Year (2018-19)	Current Year (2019-20)
Opening Stocks	1,625.31	1,757.11
Production	4,990.70	4,960.81
Imports	435.73	412.14
Total Supply	7,051.74	7,130.06
Exports	436.92	421.68
Domestic Consumption	4,857.71	4,892.35
Ending Stocks	1,757.11	1,816.03

Source: USDA (April 2020); P= Provisional; The above figures are inclusive of all varieties of Rice.

(In Lakh Tonnes)

Indian Scenario	Previous FY (2018-19)	Current FY (2019-20)
Beginning Stocks	226.00	295.00
Production	1,164.80	1,180.00
Imports	0	0
Total Supply	1,390.80	1,475.00
Exports	104.20	102.00
Domestic Consumption	991.60	1,023.00
Ending Stocks	295.00	350.00

Source: USDA (April 2020); P= Provisional; The above figures are inclusive of all varieties of Rice.

Performance Review of PADDY (BASMATI) PB1121 Contract

(In Lakh Tonnes)

Rank	Top 10 Major Producing Countries			Top 10 Major Consuming Countries		
	Country	Previous FY	Current FY	Country	Previous FY	Current FY
1	China	1484.90	1467.30	China	1,427.20	1,429.30
2	India	1164.80	1180.00	India	991.60	1,023.00
3	Indonesia	367.00	365.00	Indonesia	381.00	378.00
4	Bangladesh	349.09	358.50	Bangladesh	354.00	358.00
5	Vietnam	273.44	273.69	Vietnam	212.00	215.00
6	Thailand	203.40	180.00	Philippines	141.00	144.00
7	Burma	132.00	127.00	Thailand	115.00	115.00
8	Philippines	117.32	114.00	Burma	102.50	104.50
9	Japan	76.57	76.11	Japan	84.00	83.00
10	Pakistan	73.00	75.00	Brazil	74.50	74.50
11	Others	749.18	744.21	Others	974.91	968.05
	World Total	4990.70	4960.81	World Total	4,857.71	4,892.35

Source: USDA (April 2020);

Performance Review of PADDY (BASMATI) PB1121 Contract

(In Lakh Tonnes)

Rank	Top 10 Major Exporting Countries			Top 10 Major Importing Countries		
	Country	Previous FY	Current FY	Country	Previous FY	Current FY
1	India	104.20	102.00	Philippines	36.00	26.00
2	Thailand	75.62	75.00	China	30.00	24.00
3	Vietnam	65.81	63.00	European Union	21.50	22.00
4	Pakistan	45.00	44.00	Cote d'Ivoire	13.50	13.50
5	China	27.70	32.00	Iraq	12.00	12.00
6	United States	29.71	31.43	Nigeria	19.00	12.00
7	Burma	27.00	22.00	Iran	12.00	11.00
8	Cambodia	13.50	9.00	Saudi Arabia	14.25	11.00
9	Uruguay	8.00	7.75	United States	9.20	10.16
10	Paraguay	6.89	6.00	Indonesia	6.00	10.00
11	Others	33.49	29.50	Others	262.28	260.48
	World Total	436.92	421.68	World Total	435.73	412.14

Source: USDA (April 2020); The above figures are inclusive of all varieties of Rice. Variety wise production figures are not available; Previous FY is 2018-19 and Current FY is 2019-20. Countries are arranged in descending order based on the figure in Current FY;

Major State-wise Production

(In Lakh Tonnes)

Top 10 Major producing states in India			
Rank	States	2017-18	2018-19
1	West Bengal	149.67	160.51
2	Uttar Pradesh	132.74	155.36
3	Punjab	133.82	128.22
4	Andhra Pradesh	81.66	82.47
5	Odisha	65.51	73.10
6	Telangana	33.16	67.03
7	Chhattisgarh	49.31	65.27
8	Tamil Nadu	66.39	64.55
9	Bihar	80.93	60.43
10	Assam	52.84	51.35
	Others	281.57	256.51
	All India	1127.60	1164.80

Source: Ministry of Agriculture

c. Major changes in the policies governing trade in the spot markets of the commodity (FY 2019-20)

Date	Major Policies governing trade and Changes
3-Jul-19	MSP announced for Kharif Crops
18-Sep-19	Saudi Arabia from Sept 01, 2019 implemented a new procedure that require basmati shipments to have a certificate of conformity from Jan 01, 2020.. It also decided to source basmati rice from companies that have adopted food safety management systems based on standards of International Organization for Standardization 22000, or Hazard Analysis and Critical Control Point.
09-Jan-20	Indian exporters of basmati and non-basmati rice will have to furnish a certificate of inspection for shipments to Iceland, Liechtenstein, Norway, and Switzerland with immediate effect, the Directorate General of Foreign Trade said in a notification. Exporters of basmati

Performance Review of PADDY (BASMATI) PB1121 Contract

	and non-basmati rice to other countries in the European Union will require a certificate of inspection from Jul 1, 2020. The European Union had imposed stricter pesticide norms for basmati imports from Jan 1, 2018. The EU, one of the high-value buyers of Indian basmati, had reduced the permissible limit of tricyclazole residue in imported rice to 0.01 parts per million from 1 part per million earlier. EU annually imports about 350,000 tonnes basmati rice.
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d. Geo political issues in the commodity and its impact on Indian scenario (FY 2019-20)

Date	Event	Remarks	Key Implications/Impact
11-Mar-20	COVID-19	WHO declared COVID 19 as a pandemic	Impact on exports.
19-Mar and 25 th March 2020	Lockdown in Indian States	Pan India Janta Curfew on 22nd March. Nation- wide lock-down for 21 days effective from Mar 25.	Trade activities severely got impacted.

Performance Review of PADDY (BASMATI) PB1121 Contract

2. Trading related parameter

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

Months	Traded volume (MT)
Jul-2019	3552
Aug-2019	6510
Sep-2019	4982
Oct-2019	6419
Nov-2019	7116
Dec-2019	7384
Jan-2020	8097
Feb-2020	7619
Mar-2020	9807
Yearly traded volume (Total)	61486

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

Traded volume (MT)	Deliverable supply(MT)	Proportion
61486	5024000	0.012%

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

Traded volume (MT)	Production(MT)	Proportion
61486	5024000	0.012%

d. Annual average Open interest as proportion of total production

AvgOpen Int(MT)	Production(MT)	Proportion
513.53	5,024,000	0.00%

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

AvgOpen Int(MT)	Deliverable supply(MT)	Proportion
513.53	5,024,000	0.00%

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

Month	Traded Value(in Cr.)
Jul -2019	138.54
Aug-2019	228.40
Sep-2019	165.87
Oct-2019	221.23
Nov-2019	230.95
Dec-2019	242.20
Jan-2020	268.09
Feb-2020	241.45
Mar-2020	321.17

Performance Review of PADDY (BASMATI) PB1121 Contract

Yearly traded value	2057.89
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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)

Month	Avg Open Int (MT)
Jul -2019	499.57
Aug-2019	816.19
Sep-2019	406.67
Oct-2019	376.09
Nov-2019	298.10
Dec-2019	261.43
Jan-2020	660.43
Feb-2020	802.86
Mar-2020	500.45
Yearly Average Open Interest	513.53

Performance Review of PADDY (BASMATI) PB1121 Contract

j. Annual average volume to open interest ratio

Average of traded volume (MT)	Average of Open Interest (MT)	traded to Open interest
6831.7	51 3. 53	13.30%

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

Member Count	Client Count
26	129

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

Date	VCP/Hedger	Proprietary traders	Others
12-Jul-2019	0.00%	65.01%	34.98%

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

Number of Instances	0
Quantity involved (MT)	0
Value Involved (Cr)	0

Performance Review of PADDY (BASMATI) PB1121 Contract

3. Price Movement

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

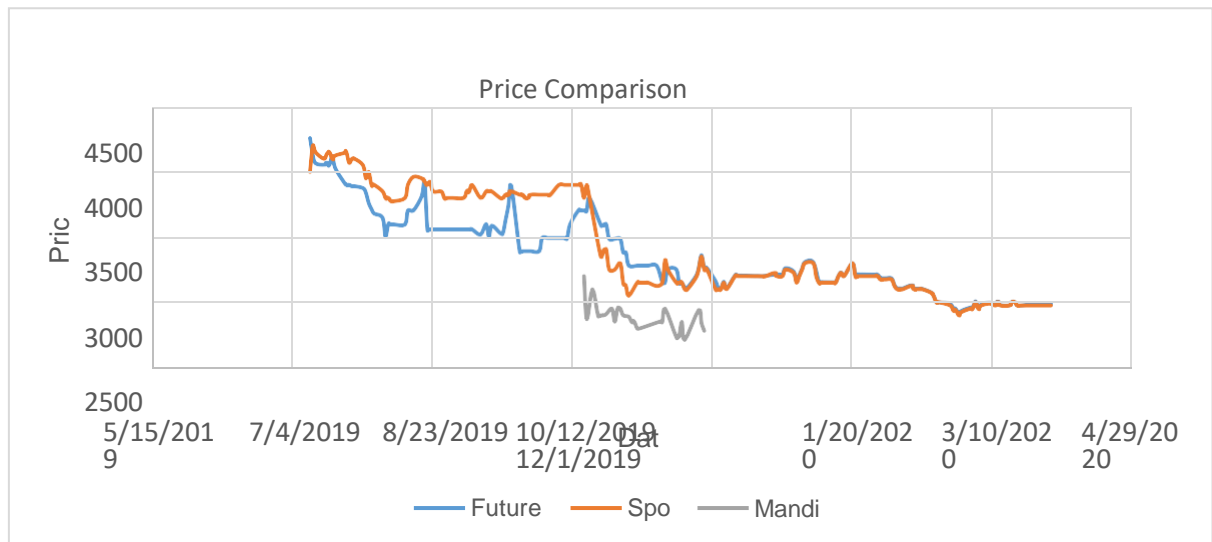
Not applicable

- 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.**

Correlation	0.7770
Standard Deviation	0.0186



- 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 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	Futures		Spot	
	Month	Value	Month	Value
Max	Sep	0.035841	Oct	0.033199
Min	Feb	0.007508	Feb	0.006599

Performance Review of PADDY (BASMATI) PB1121 Contract

- 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	43
Backwardation	28

Performance Review of PADDY (BASMATI) PB1121 Contract

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.**

Basis Volatility – -8.67

Note: Sufficient price points are not available to find the hedge efficiency ratio for Paddy

- 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	ICEX basis and Delivery Centers
Rajasthan	Kota	Basis Center
	Bundi	
	Baran	
	Pilibanga	
	Hanumangarh	
Punjab	Amritsar	
	Tarantaran	
	Gurdaspur	
	Patiala	
	Sangrur	
	Ferozepur	
	Ludhiana	
	Bhatinda	
	Jalandhar	
Haryana	Karnal	
	Sonipat	
	Kaithal	
	Jind	
	Hisar	
	Bhiwani	

Performance Review of PADDY (BASMATI) PB1121 Contract

- 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), in MT

State	Punjab	Rajasthan
Jul-19	0	0
Aug-19	0	0
Sep-19	0	0

Performance Review of PADDY (BASMATI) PB1121 Contract

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

Month - Year	Event Name	Event Date	Location
Jun-19	Awareness Programme of the Basmati Paddy 1121 grade Contracts	Friday June 7,2019	Punjab
Jun-19	Awareness Programme of the Basmati Paddy 1121 grade Contracts	Saturday June 8,2019	Amritsar
Jun-19	Awareness Programme of the Basmati Paddy 1121 grade Contracts	Tuesday June 18,2019	Karnal
Jun-19	Awareness Programme of the Basmati Paddy 1121 grade Contracts	Saturday June 22,2019	Kurukshetra
Jun-19	Awareness Programme of the Basmati Paddy 1121 grade Contracts	Saturday June 29,2019	Delhi
Aug-19	AWARENESS PROGRAMME AT PARBHANI ICEX Traded Contract for Investors in Parbhani	Friday 8th August 2019	Parbhani - 431401
Aug-19	AWARENESS PROGRAMME towards Basmati Paddy 1121 Grade Contracts” in Karnal	Saturday 31st August 2019	Karnal and Taraori.
Nov-19	AWARENESS PROGRAMME towards Basmati Paddy 1121 Grade Contracts” in Karnal	Thursday November 28,2019	Merkanda (Haryana)

Sr. No.	Program / Event / Engagement	Location	Number of Stakeholders
1	Paddy Pre Launch program	Karnal	Nil
2	Investor Awareness program	Karnal	Nil
3	Investor Education Program	Kurukshetra	Nil

Performance Review of PADDY (BASMATI) PB1121 Contract

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

Nil

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