Parameters for Performance Review of Commodity for the Financial year 2019-20

Guar seed

1. **Background**

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

India is native of guar or cluster bean where it is used as a vegetable. The guar bean is principally grown in India and Pakistan, with smaller crops grown in the U.S., Australia, China, and Africa. The drought-resistant guar bean can be eaten as a green bean, fed to cattle, or used in green manure. For hundreds of years Guar has been used as vegetable in India. Guar is a rain-fed crop, sown in July-August and harvested in October-November. Being a leguminous crop, guar fixes nitrogen, making the soil fertile. The growing season of guar is 14 -16 weeks and requires reasonably warm weather and moderate flashing rainfall with plenty of sunshine. The crop is generally sown after the monsoon rainfall in the second half of July to early August and is harvested in late October early November. The Guar is a naturally rain fed crop. Depending on the monsoon rainfall the total size of Guar crop varies from year to year. The consumption pattern of guar seeds is largely influenced by the demands from the petroleum industry. India accounts for 90 per cent of the world's guar produce, of which 72 per cent comes from Rajasthan

Source: APEDA

Varieties Of guar seed Cultivated in India

Variety	Duration	Avg yeild/ha
RGC 936	85-90	8 to 10
RGC1002	85-91	10 to123
RGC1066	85-92	10 to 12
HG365	85-90	12 to 15
HG 2-20	90-95	12 to 15
GC1	90-100	12 to 15
RGC1017	90-100	12 to 14
HGS 563	85-90	12 to 13
RGM112	92-95	12 to 14
RCG1038	95-100	12 to 15

b) **Commodity fundamentals and balance sheet as per the following format (to be prepared based on publicly available information on best effort basis**

Global Guar seed Scenario - Not available

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India Guar seed Scenario		
In lakh MT	2018-19	2019-20
Opening Stocks	N. A	N. A
Production	13.01	13.16
Import	India Does Not Import Guar seed	
Total Supply	N. A	N. A
Exports	N. A	N. A
Domestic Consumption	N. A	N. A
Closing Stocks	N. A	N. A
Ministry of Agriculture of Rajasthan, Gujarat and Haryana states		

Top 10 Major producing countries

Not Available

Top 10 Major consuming countries

Not Available

Top 10 Major Exporting countries

Not Available

Top 10 Major Importing countries

Not Available

Top 10 Major producing States In India

Top 10 Major producing states in India (in lakh MT)			
State	2018-19	State	2019-20
Rajasthan	10.31	Rajasthan	12.08
Gujarat	0.76	Gujarat	1.08
Haryana	1.94	Haryana	NA
Total	13.01	Total	13.16
Source: Agriculture Ministry of Rajasthan, Gujarat, and Haryana			

c) Major changes in the polices governing trade in the spot markets of the commodity

Exemption of mandis, procurement agencies, farm operations, agri machinery hiring centres as well as intra- and inter-state movement of farm implements from the lockdown rules by the central government

d) Geopolitical issues in the commodity and its impact on Indian scenario

- United States-China trade talks
- Lower crude oil prices which depressed oil drilling activity

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2. Trading related parameter

a) Monthly and Annual traded volume

Month	Guarseed (in MT)
Apr-19	3,11,660
May-19	4,38,040
Jun-19	4,37,970
Jul-19	6,19,900
Aug-19	6,78,580
Sep-19	5,87,670
Oct-19	5,31,250
Nov-19	6,35,450
Dec-19	5,27,590
Jan-20	1,60,620
Feb-20	1,65,270
Mar-20	1,79,010
Total	**52,73,010**

b) Annual traded volume as proportion of total deliverable supply: 405.94%

- Annual Traded Volume: 52,73,100 MT
- Deliverable Supply: 12,99,000 MT

c) Annual traded volume as proportion of total annual production: 405.94 %

- Annual Traded Volume: 52,73,100 MT
- Annual Production: 12,99,000 MT

d) Annual average Open interest as proportion of total production: 0.26%

- Annual Average OI: 3,430 MT
- Annual Production: 12,99,000 MT

e) Annual average Open interest as proportion of total deliverable supply: 0.26%

- Annual Average OI: 3,430 MT
- Deliverable Supply: 12,99,000 MT

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f) Monthly and Annual value of trade

Month	Value Traded (in Crores)
Apr-19	1,388.41
May-19	1,946.03
Jun-19	1,867.24
Jul-19	2,681.10
Aug-19	2,918.22
Sep-19	2,414.40
Oct-19	2,088.78
Nov-19	2,687.49
Dec-19	2,130.31
Jan-20	650.19
Feb-20	624.46
Mar-20	623.14
Total	**22,019.76**

g) Monthly and Annual quantity of delivery

Month	Quantity of Delivery (In MT)
Apr-19	980
May-19	940
Jun-19	30
Jul-19	1,720
Aug-19	1,330
Sep-19	1,810
Oct-19	50
Nov-19	330
Dec-19	180
Jan-20	100
Feb-20	30
Mar-20	20
Total	**7,520**

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

Month	Value of Delivery
Apr-19	4.26
May-19	4.04
Jun-19	0.12
Jul-19	7.25
Aug-19	5.59
Sep-19	7.21
Oct-19	0.20
Nov-19	1.39
Dec-19	0.72
Jan-20	0.40
Feb-20	0.11
Mar-20	0.06

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Total	31.35

i) **Monthly and Annual Average Open Interest (OI)**

Month	Monthly OI (In MT)
Apr-19	7,680
May-19	5,600
Jun-19	3,850
Jul-19	7,120
Aug-19	4,890
Sep-19	4,780
Oct-19	3,210
Nov-19	2,610
Dec-19	1,030
Jan-20	440
Feb-20	100
Mar-20	10

Annual Average OI = 3430 MT

j) **Annual average volume to open interest ratio: 593.59%**

- Average of Traded Volume = 20,360 MT
- Avg of Open Interest = 3,430 MT

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

- Unique Members = 41
- Unique Clients = 58

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

Not Available

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

Not Available

n) **Algorithmic trading as percentage of total trading**

- 1.42%

o) **Delivery defaults**

Number of instances = Nil

Quantity involved = Nil

Value involved = Nil

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3. **Price movements**

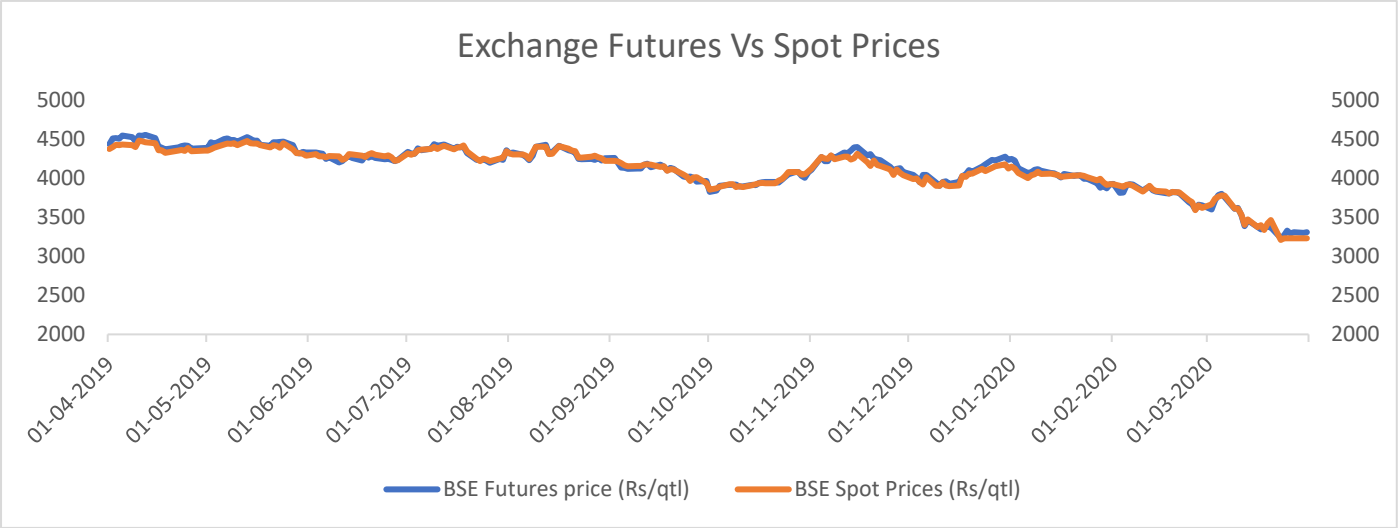
a) **Comparison, correlation, and ratio of standard deviation of Exchange futures price vis-à-vis international futures price (wherever relevant comparable are available)**

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**



The correlation between Exchange futures and Exchange Spot Prices is 0.9894 FY 2019-20

The standard deviation of exchange Futures prices was 1.19% for period February FY 2019-20

The standard deviation of exchange Spot prices was 1.14% % for period FY 2019-20

The ratio of Standard Deviation for the same period was 1.04

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

Not applicable

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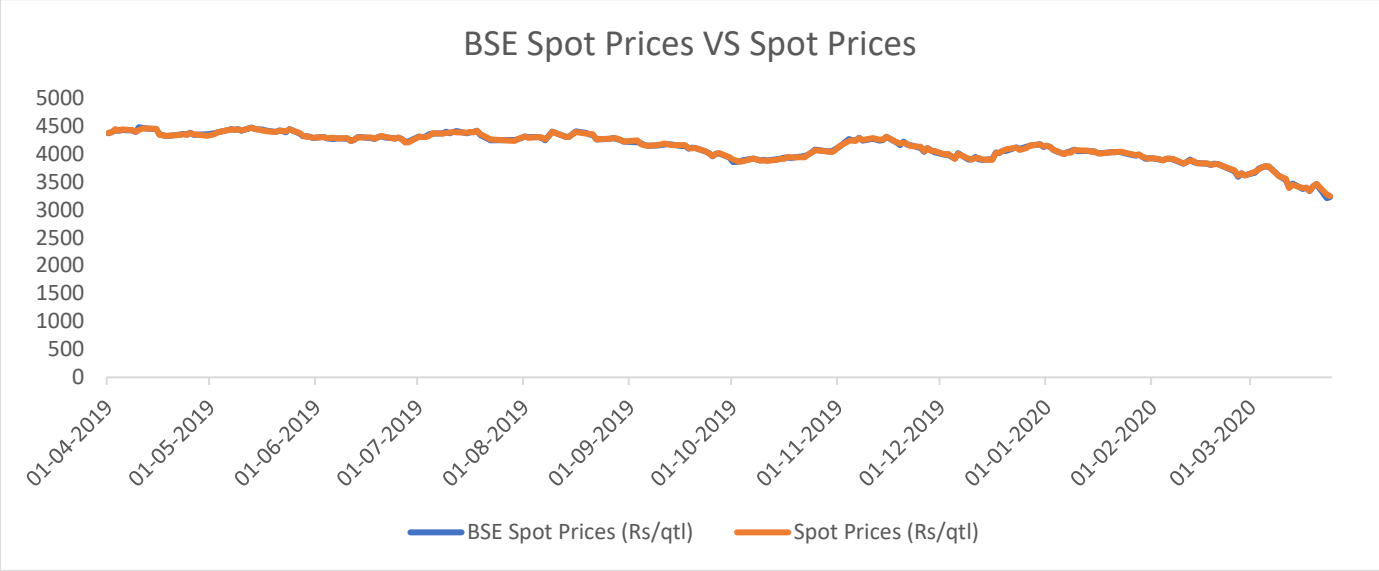
e) Comparison of Exchange polled price and mandi price (in case of agricultural commodities) / other relevant price (in case non-agricultural commodities) at basis centre



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

Commodity	Max of Daily Futures Price Volatility %	Min Daily Futures Price Volatility %	Max of Daily Spot Price Volatility %	Min Daily Spot Price Volatility %
Guarseed	3.94%	-3.99%	3.62%	-7.31%

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

BSE Guar seed futures contract was never in backwardation or contango by more than 4% in the period under review

4. Other's 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

Hedge Effectiveness for FY 2019-20

Commodity	Hedge Efficiency
Guarseed	99.85%

Note: Hedging efficiency is the 'R Square' value of the regression equation between BSE futures prices and BSE polled spot prices during the financial year.

Basis Risk for FY 2019-20

Commodity	Unit	Average Return of Basis (Unit)	Standard deviation
Guarseed	Rs/Qtl	-0.08	9.32

Note: Basis Risk is computed as the Standard deviation of daily normal return in Basis, which is excess of Spot over Futures price.

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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)

Name of State	Name of the physical markets	Market Reach of Exchange delivery centers
Rajasthan	Jodhpur, Bikaner, Ganganagar, Hanumangarh Barmer, Jaisalmer, Nokha, Sikar	Jodhpur, -Basis Centre Sriganganagar, Bikaner -Additional Delivery Centre Deesa -Additional Delivery Centre
Gujarat	Banaskanth, Ahmedabad, Dessa, Vadodara (Baroda) Rajkot. Gandhinagar	
Haryana	Sirsa, Hisar ,Bhiwani ,Fatehabad	No Delivery Centre

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

Details about physical markets are given above. Region-wise open interest is not available.

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

Sr. No.	Program Type	Location	Participants
1	Awareness about guarseed	Jaipur	150
2	Guarseed Event	Jodhpur	60
3	Guarseed Event	Ganganagar	250
4	Product Meeting	Mumbai	35

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

Exchange has conducted several client and product awareness programs for various stakeholders

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