MCX
METAL & ENERGY
Trade with Trust



CARDAMOM

PERFORMANCE REVIEW
2020-2021

FOREWORD TO THE CARDAMOM PERFORMANCE REVIEW

The Cardamom Performance Report (PR) is the outcome of the SEBI circular SEBI/HO/CDMRD/DNPMP/CIR/P/2020/21 dated February 04, 2020 directing all recognised Stock Exchanges offering commodity derivatives segment to create a 'Performance review of the commodity derivatives contracts'. The PR, based on SEBI directive, has to be uploaded on the Exchange website by June 30, 2021 after consultation with the respective Product Advisory Committee (PAC).

Following the above directive the Agri - Product Management Team (PMT) at the Exchange has created PRs for all the listed Agri products. These have since been prepared in consultation with the respective Commodity/Commodity Complex PACs.

The Cardamom Performance Report highlights the important aspects of the trade like the domestic and international supply, import and export statistics, etc. There is also extensive information on the volume, turnover, open interest, deliveries of Cardamom on the Exchange, along with the price correlations with auction markets and hedging efficiency to help the market participants get an empirical understanding of the performance of the Cardamom contract on the Exchange.

Acknowledgement

We have been ably guided by the MCX Spices Complex PAC members in improving the content of the report and we are extremely thankful to them. We hope to keep improvising the report going forward.

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

Brief about Cardamom

The origins of cardamom are unknown, yet it is believed that it grew as wild herbs in the monsoon forests of the Western Ghats in southern India. Cardamom finds its first mention in the Charak Samhita (an early text on Ayurveda) written somewhere between 2nd century BC and 2nd century AD. The Charak Samhita says that cardamom is an important constituent in many medicines. Later, the spice finds mentions in many Sanskrit texts as being used in rituals and ceremonies.

Small cardamom is grown in India, commercially in plantations, under the shade of tall forest trees at moderately high altitudes in the evergreen forests of the Western Ghats. India is a major producer and consumer of cardamom, holding the second spot in world production; Guatemala taking the top slot. With no domestic consumption, Guatemala also becomes the largest exporter in the world.

Cardamom is widely used as spice, renowned for its flavour and aroma. In south Asia, green cardamom is largely used in traditional Indian sweets and in the making of tea; in Arabia it is used in the preparation of 'gahwa'—a strong cardamom coffee that is used to welcome guests; in northern Europe, it is an essential ingredient in sweet foods. Therapeutically, Cardamom finds varied uses, such as in the treatment of teeth and gum infections, digestive disorders, throat trouble, and skin problems. Cardamom is also used for making perfumes, Massage Oils, etc.

Sample Picture of Cardamom



Lifecycle

Cardamom is a perennial plant. However, plants are removed & new plants are re-planted after 8 years approximately, as yields start dipping after 5-6 years. Cardamom plants normally start bearing fruits two years after planting.

The major production season in India is from August to March / April (peak season: Sep – Jan.). Season commencement can be early / late depending on monsoon. During Sep-Jan, plucking can be done every 40-45 days. Apart from that plucking is done every 90 days. Plant requires intermediate rains with periods of good sunshine for good yields.

Varieties/Grade of Cardamom

There are three distinctive types of Cardamom grown in India, namely Malabar, Mysore and Ceylon wild. The Malabar type also known as Alleppy green Cardamom is famous and preferred. It is the best grade available in the world. Indian Cardamom is slightly smaller but more aromatic. Two varieties of Cardamom plants are identified, and they are *Elettaria cardmomum maton* variety which is the major variety comprising of wild indigenous types from Sri Lanka and *Eletrraria cardamomum Maton* variety which is the minor variety comprising of indigenous types like Mysore, Malabar and Vazhukka. These types are grown in different tracts and are mostly identified based on the nature of panicles, size of plants and other morphological characters. Cardamom varieties are highly location specific.

The quality parameters of Cardamom include colour, maturity of seeds, percentage of seeds, percentage of seed counts and litre weight (gms).These are the major criterias used in the market.

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

Global Scenario (MT)	2019-20	2020-21
Opening Stocks	NA	NA
Production	39,000 – 41,000	NA
Others (If any)	NA	NA
Consumption	NA	NA
Closing stocks	NA	NA
Source – Market sources **NA – Not available**		

Indian Scenario (MT)	2019-20	2020-21
Carry over stock	0-500	500-1000
Production	11,230	12,000 - 14,000
Imports	2288	256
Total Supply	14,018	15,256
Exports	2090	5196.4
Domestic consumption	11,000	10,000
Closing stocks	500-1000	0-500
Source - Spices Board of India, Ministry of Commerce and Industry and market sources		

Top major producing countries (MT)	2019-20	2020-21
Guatemala*	28,000 – 30,000	NA
India	11,230	12,000 – 14,000
Source - Spices Board of India and market sources; * - Market Sources **Guatemala & India constitute major portion of the global production**		

Top major consuming countries (MT)	2019-20	2020-21
NA	NA	NA
NA – Not available		

Top major exporting countries (MT)	2019-20	2020-21
Guatemala*	36,600	NA
India	2090	5196.4
Source - Spices Board of India and market sources; * - Market Sources		

Top 10 major importing countries (MT)	2019-20	2020-21
UAE	815.5	1450.69
Saudi Arabia	37.02	699.38
Singapore	119.85	380.54
Kuwait	173.72	358.8
USA	86.36	220.86
Canada	40.73	167.54
Qatar	17.52	133.53
UK	31.7	104.81
Oman	29.14	88.89
Iran	117.42	67.75
Source – Ministry of Commerce and Industry (Importing nations of Indian Cardamom)		

Top major producing states in India (MT)	2019-20	2020-21*
Kerala	10074	11000-13000
Karnataka	619	500
Tamil Nadu	538	500
Source - Spices Board of India and market sources; * - Market Sources		

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

Due to the floods in Kerala for consecutive years the productivity and quality parameters of Cardamom have suffered substantially. The production statistics are as below;

(In MT)	2017-18	2018-19	2019-20	2020-21
Production	20,640	12,940	11,230	12,000 – 14,000

Source – Spices Board and market estimates, 2020-21 – Market sources

As it can be seen, the production has gone down significantly. In turn, the quality of the crop available in the Idukki region has also been affected.

As per market sources, he financial health of cardamom trade is negative in 2019-20 and 2020-21 as the two seasons were not at all trade friendly due to severe price volatility. Thanks to an export demand ahead of Ramadan, 7 to 8 mm grades are fast moving in the market and fetching a price tag of ₹1,700 plus.

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

The Middle Eastern nations who are the major importing nations of Indian Cardamom insisted on Organic/Free from pesticide Cardamom from India, this has dealt a huge blow to the Indian exports market. However, with the changes where Saudi Arabia will be accepting CODEX standards for imports from India, this increased the exports from India in 2020-21.

The exports from India can be seen as below;

(In MT)	2017-18	2018-19	2019-20	2019-20
Exports	5680	2850	2090	5196.4

Source – Spice Board of India and Ministry of Commerce and Industry

2. Trading related parameter

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

Month	Traded Quantity (MT)
APR'20	12.9
MAY'20	4.9
JUN'20	3.9
JUL'20	1.7
AUG'20	0
SEP'20	0.3
OCT'20	1
NOV'20	0.6
DEC'20	0
JAN'21	0
FEB'21	0
MAR'21	0
2020-21	**25.3**

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

	Annual traded volume (MT)	Deliverable Supply (MT)
2020-21	25.3	15256
Annual traded volume as proportion of deliverable supply	0.17%	

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

	Annual traded volume (MT)	Production (MT)
2020-21	25.3	14000
Annual traded volume as proportion of production	0.18%	

d. Annual average Open interest as proportion of total production

	Annual average Daily OI (MT)	Production (MT)
2020-21	0.8	14000
Annual average OI as proportion of production	0.1%	

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

	Annual average Daily OI (MT)	Deliverable supply (MT)
2020-21	0.8	15256
Annual average OI as proportion of deliverable supply	0.01%	

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

Month	Volume (Rs Crores)
APR'20	2.36
MAY'20	0.79
JUN'20	0.55
JUL'20	0.24
AUG'20	0.00
SEP'20	0.05
OCT'20	0.15
NOV'20	0.09
DEC'20	0.00
JAN'21	0.00
FEB'21	0.00
MAR'21	0.00
2020-21	**4.23**

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

No deliveries took place in Cardamom contract in FY 2020-21

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

No deliveries took place in Cardamom contract in FY 2020-21

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

Month	Average Daily OI (MT)
APR'20	5
MAY'20	2.4
JUN'20	1.2
JUL'20	0.8

AUG'20	0.1
SEP'20	0.1
OCT'20	0.3
NOV'20	0.3
DEC'20	0
JAN'21	0
FEB'21	0
MAR'21	0
2020-21	0.8

j. Annual average volume to open interest ratio

	Average Volume (MT)	Average OI (MT)
2020-21	0.099	0.8
Annual average volume to open interest ratio	12.38%	

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

Cardamom (2020-21)	
Unique Members	Unique Clients
27	46

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

Average daily based data						Maximum Open Interest	
Avg Open Interest based on daily data	**Unit**	**FPOs/ Farmers/ VCPs/ Hedgers**		**% FPOs/ Farmers/ VCPs/ Hedgers**		**FPOs/ Farmers/ VCPs/ Hedgers**	
		Long	**Short**	**Long**	**Short**	**Long**	**Short**
579.28	KGS	165.77	359.46	47.56	48.86	600	1,400

Note: Details are provided based on weekly disclosure on the Exchange website for the period June 2020 to March 2021 in line with SEBI circular no SEBI/HO/CDMRD/DNPMP/CIR/P/2019/08 Dated January 04, 2019 Based on the data provided by the members from time to time pertaining to Farmers/ FPOs, VCPs/ Hedgers for the period June 2020 to March 2021

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

Farmers/FPOs	Value Chain Participants (VCPs)
2	6

Based on the classification provided by the members as on March 31, 2021 for clients traded during FY 2020-21.

n. Algorithmic trading as percentage of total trading

Month	Algorithmic trading as a % of total trading
2020-21	0.00

o. Delivery defaults

- Number of instances
- Quantity involved
- Value involved

Delivery default instances took place in 5 months in Cardamom in 2020-21.

Month	Delivery defaults (MT)	Default value (Rs Crs)
APR'20	0	0
MAY'20	0	0
JUN'20	0	0
JUL'20	0.2	0.033
AUG'20	0.1	0.018
SEP'20	0.1	0.017
OCT'20	0.1	0.015
NOV'20	0.2	0.030
DEC'20	0	0
JAN'21	0	0
FEB'21	0	0
MAR'21	0	0
2020-21	0.7	0.113

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).

Cardamom futures are only available in India.

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).

Cardamom futures are only available in India. International spot prices of Cardamom are not available.

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

Correlation	
	Exchange Future Price
Domestic spot price (Exchange polled)	64%

*Cardamom only traded for 67 days in FY 2020-21

Ratio of standard deviation	
	Exchange Future Price
Domestic spot price (Exchange polled)	0.35

*Cardamom only traded for 67 days in FY 2020-21

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

Cardamom futures are only available in India.

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	
	Exchange Polled spot price
Domestic spot price (Auction weighted Avg Price)	72.13%

*Data taken from June 2020, as the auctions were closed prior to that

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

	Maximum Daily Volatility	Minimum Daily Volatility
Future price	3.4%	0%
Spot price	11.2%	0%

Methodology adopted for computing volatility -
Volatility in any particular trading day is calculated by the formula given below-
Volatility = LN (Price/Previous day's price)*100

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

*Cardamom only traded for 67 days in FY 2020-21 with the negligible trades thus the data/sample size is not enough to provide a rational data and analysis

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.

*Cardamom only traded for 67 days in FY 2020-21 with the negligible trades thus the data/sample size is not enough to provide a rational data and analysis.

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).

As per Spices board of India, the major physical markets are the entire Idukki region, Cochin, Thodupuzha - (Kerala); Saklashpur, Mercara, Medikeri, Mengaluru - (Karnataka); Mumbai - (Maharashtra); Delhi, Virudhunagar, Cumbum, Bodinayakanur, Thevaram, Pattiveerampatti - (Tamil Nadu).

The auction Centres are Puttady (Vandanmedu) & Bodinayakanur.

The delivery center for Cardamom is Vandanmedu which caters to the entire Idukki region, Bodinayakanur and surrounding areas.

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

The major physical markets of Cardamom are as given above. The region wise Open Interest data is unavailable.

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

The exchange conducted 11 programs specific to Kerala. The target audience were the physical participants especially, the Farmers and Farmer Producing organisations (FPOs). The exchange reached out to more than 400 participants through these events.

Overall, the PMT – Agri team conducted 57 programs in the Agri segment and the target participants were primarily the physical participants associated with the commodities listed on the MCX platform.

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

The exchange strives to ensure that the contract remains a healthy replica of the physical market. We do one-on-one meetings and Product Advisory Committee (PAC) meetings with the physical market participants to make modifications in the contract to make it more lucrative for physical participants to participate in the contract.

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

No other information to be disclosed.

Disclaimer

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