



Review Paper

A study on futures price movement of Jeera agricultural commodity in National Commodity Derivatives Exchange (NCDEX) in India

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Abstract

Generally in the world market the prices of agricultural commodities play a vital role. In developing and developed countries the demand for agricultural commodities are not perceptible to the prices of commodities. Every country (it may be a developing or developed country) should face the demand of all the commodities so it cannot give the much importance to the price of import the agricultural commodities from the developed countries from the following reasons (e.g., Japan): i. most agricultural commodities (mainly grains) are a necessity; ii. the total value of agricultural imports is a small portion of the country's gross national product (GNP). When decrease the price of commodities in developing countries, instead of increasing the domestic production, reducing the imports from other countries. However, in developing countries the relationship of price and quantity is influencing the general economic conditions.

Keywords: Futures market, Jeera, NCDEX, daily price movement, trading volume.

Introduction

Commodities futures trading in India: A particular futures exchange sets a standardized contract that includes the transaction price, tons, place of deliveries, the type of the commodity, as well as the quality of the commodity to be delivered from one place to another or one person to another. Through the futures exchanges all the sell and buy orders are placed. Generally in progress and economic growth of every country the commodity markets placed an important role. In the mid of the 19th century, only the proper commodity trading activities was established. In 2008, the world experienced a dramatic surge in the prices of commodities. Maize, rice and wheat are showing a high level of production.

In 2008 financial crisis was happened and the economic growth was fully affected. Hence the commodities price upswing decelerated and price also decreased. Especially for investors, arbitrageurs and speculator commodities markets offer enormous potential to become a separate asset. Retail investors, who claim to understand the equity markets, may find commodities an unfathomable market. But commodities are easy to understand as far as the fundamentals of demand and supply are concerned. Retail should understand the risk advantages of trading in commodities futures before taking a leap. Historically, pricing in commodities futures has been less volatile compared with equity and bonds, thus providing an efficient portfolio diversification option¹.

Jeera is comes under the spice products, comparing to other countries, and India got the first place for production of total

spice commodities as well as Jeera commodity. Usually Jeera commodity is produced by South Asia, North Africa and North America because this type of spices needs hot and humid climates for cultivation. The world market is expected the demand of Cumin from India is nearly 25 to 30 thousand tons; it is also raised by food and food processing industry.

Cultivation pattern of Jeera in India: In India during the winter season in the months of October, November and December the Cumin commodity is planted and in the months of February, March and April it is harvested. In India the jeera plant is grown in the name of Rabi crop.

In the other countries of the Middle East, this commodity is planted in the months of April and is harvested in the months of August and September. When this plant turns to a yellowish brown that time only the people will come to know it is mature and ready to harvest. After the cumin harvested through the winnowing process only it can be cleaned up².

The plant becomes mature and ready to harvest when it turns yellowish brown. After the crop gets harvested, the cumin seeds are cleaned up through the winnowing process.

Farmer can use all type of type of climate to cultivate the Jeera plant (it may be hot, cooler and tropical climate). And they can use almost all types of soil for cultivate the plant. Some of the suitable types of soil are given below for this crop i.e., a well-drained, fertile sandy soil type etc. Jeera plant is also called a draught resistant plant because it has a good tap root system².

Jeera or Cumin seeds producing countries: The following countries are producing the cumin seeds i.e India, Syria, Turkey, China, United States of America, Iran, Indonesia, Sudan, Egypt, Morocco, Algeria, Libya. India is producing nearly one to two lakh tons of cumin seeds per annum. Compared to the other countries in the world, India only is called a top producer of because it has allotted around 5.25 lakh hectares for cultivation of Jeera. From last few years the area of jeera cultivation and the production has increased significantly. In the world jeera production list Syria stands second in place and it is producing nearly 25000 tons of cumin. It clearly shows that the India possesses the most dominant capacity for jeera production as well as the maximum area of cultivation.

The production level of Iran and Turkey are also having the equivalent capacity, i.e. 15000 to 20000 tons of jeera and that encourage securing them to stand in the third place of world top jeera producer's list. However, when comparing to India, other countries like Syria, Turkey and Iran have a very smaller amount of production, but to bring out the price decision jeera these countries are influenced equally. Globally cumin has created a significant demand exclusively in the places of where spicy food is preferred. After pepper jeera spice plays a vital role in the world because it provides helps to the medicinal for curing many diseases².

The main 6 national commodity exchanges in India are:

Multi Commodity Exchange of India Ltd. (MCX): MCX was established on the November 10, 2003 Mumbai. It is a No. 1 commodity exchange in India and it also does its trading activities independently.

National Commodity and Derivative Exchange Ltd. (NCDEX): It was incorporated as Public limited Company under the company Act 1956 on April 23, 2003. It is located in Mumbai and this exchange started its operations on 15th December 2003.

National Multi Commodity Exchange of India Ltd. (NMCE): This is the first national level exchange in India. It was established in November 26, 2002 and this is the 3rd largest commodity exchange in India.

Indian Commodity Exchange Ltd. (ICEX): It is incorporated in 2009 Mumbai. It is the 4th National online derivative exchange of India, which has established a transparent, time-tested and reliable trading platform.

ACE Derivatives and Commodity Exchange Ltd. (ACE): This exchange was started in 2010. It is also located in Mumbai and it is a 5th National Commodity Exchange in India.

Universal Commodity Exchange Ltd. (UCX): Universal Commodity Exchange Limited is the India's 6th National Commodity Exchange and it was set up in Mumbai 2012.

Introduction of Jeera Trade in NCDEX

In India Price is the dominant factor in creating the domestic demand and it exports 80% of its production, then also it is having a heavy competition from Syria but India is treated as the largest producer and consumer. During February 2004 the Jeera futures contract was introduced on NCDEX platform, but it has witnessed considerable volatility since its launch. Comparing to other exchange NCDEX is having physical goods transaction. This kind of trading and transaction create opportunities to attract arbitragers, hedgers and speculators and it provide cash opportunities also. In NCDEX jeera contracts visibly invite every investor because it's having a liquid contract so it can be produce easy entry and exit in trading activities³.

Factors influencing prices: i. Domestic Fundamentals, ii. World production and Exports, iii. International trading price, iv. Domestic and Export demand, v. Carry forward stocks, vi. Sowing and Harvesting, vii. Climatic conditions (heavy rains can adversely affect the productivity).

Methodology

This study was fully based on secondary data. The data used for the study consisted of the daily closing prices of only one commodity in Indian market taken for a period of three months. The data are taken from the NCDEX.

Review of Literature

Sunitha Ravi⁴ examined the Price Discovery and Volatility Spillover in Indian Commodity Futures Markets Using Selected Commodities and she found that the commodity futures market is more vibrant as compared to the spot market. Through the price discovery the spot market can get help from the futures market, this study indicates that for the underlying commodities derivative instruments are available but it is significantly influence the volatility.

G. Selvalakshmi and A. Arumugam⁵ are found that the Impact of Price Level Change in Indian Commodity Market. The current trend can clearly explains that India is having a strong and potential growth after reintroduction of commodity derivatives market. It will help to improve the GDP level. However, based on the efficiency of regulatory mechanism and policy makers' attitudes only the actual growth line of commodity markets will be in India.

In Figure-1 I have taken the Jeera commodity futures price from January to March 2018. When we analyse the closing price value from January to February the closing price of jeera was very high but in March it was in diminishing. Hence this particular month only the investors has highly involved in Jeera commodity futures trading activities.

Figure-2 has shown the Jeera commodity futures price from January to March 2018. During these three months analysis only March month was having a good performance in Trade volume.

Table-1: Futures Price Movement of Jeera Commodity in NCDEX³.

Date	Prev Close Price	Open Price	High Price	Low Price	Close Price	Volume	Open Interest	Trade Value
01-Jan-18	17785	17695	17795	17695	17730	12	216	21.27
02-Jan-18	17730	17760	17760	17690	17750	39	237	68.93
03-Jan-18	17750	17700	17770	17700	17735	24	237	42.49
04-Jan-18	17735	17615	17780	17250	17300	378	294	658.78
05-Jan-18	17300	17255	17340	17200	17285	81	312	140
08-Jan-18	17285	17145	17320	17100	17265	141	390	242.98
09-Jan-18	17265	17320	17350	17200	17255	153	483	264.5
10-Jan-18	17255	17260	17260	16730	16790	1302	1215	2203.79
11-Jan-18	16790	16755	17095	16755	16965	453	1341	766.05
12-Jan-18	16965	16905	17000	16875	16930	216	1434	365.95
14-Jan-18	16930	0	0	0	16930	0	1434	0
15-Jan-18	16930	16950	17255	16950	17095	786	1626	1343.04
16-Jan-18	17095	17100	17100	16830	16905	219	1674	371.83
17-Jan-18	16905	16905	17020	16825	16905	114	1647	192.65
18-Jan-18	16905	16835	16925	16785	16820	411	1623	692.76
19-Jan-18	16820	16780	16865	16700	16735	342	1680	573.55
22-Jan-18	16735	16815	16835	16720	16785	90	1695	151.02
23-Jan-18	16785	16775	16850	16650	16700	438	1716	734.75
24-Jan-18	16700	16630	16770	16630	16720	147	1734	245.83
25-Jan-18	16720	16780	16820	16645	16715	288	1779	481.74
29-Jan-18	16715	16760	16860	16750	16825	612	1827	1029
30-Jan-18	16825	16900	16915	16620	16690	300	1845	504.32
31-Jan-18	16690	16790	16950	16710	16835	792	1734	1333.17
01-Feb-18	16835	16775	16960	16740	16895	222	1761	374.6
02-Feb-18	16895	16990	17040	16880	16900	318	1764	538.91
05-Feb-18	16900	17010	17115	16990	17030	297	1767	506.45
06-Feb-18	17030	16960	17170	16940	17110	432	1839	737.24
07-Feb-18	17110	17095	17280	17000	17030	240	1848	410.28
08-Feb-18	17030	16940	16940	16690	16715	867	1935	1453.46
09-Feb-18	16715	16665	16860	16665	16725	387	1818	648.18

Date	Prev Close Price	Open Price	High Price	Low Price	Close Price	Volume	Open Interest	Trade Value
12-Feb-18	16725	16720	16750	16395	16395	951	1914	1571.27
14-Feb-18	16395	16280	16310	16120	16165	753	1995	1218.88
15-Feb-18	16165	16155	16260	15975	16065	519	2109	837.11
16-Feb-18	16065	15985	16075	15965	16000	207	2142	331.48
19-Feb-18	16000	15940	15960	15640	15690	603	2292	951.74
20-Feb-18	15690	15670	15705	15500	15620	1140	2334	1776.92
21-Feb-18	15620	15690	16035	15620	15910	1041	2406	1651.01
22-Feb-18	15910	15870	16000	15630	15665	1266	2868	1996.39
23-Feb-18	15665	15620	15700	15470	15505	1176	3078	1830.57
26-Feb-18	15505	15360	15400	15045	15200	2085	3729	3172.89
27-Feb-18	15200	15300	15485	15000	15055	2022	4401	3080.58
28-Feb-18	15055	15150	15245	15040	15135	1398	4878	2115.43
01-Mar-18	15135	15175	15235	14650	14715	3063	5298	4554.47
05-Mar-18	14715	14785	14800	14425	14425	2823	5937	4113.67
06-Mar-18	14425	14420	14800	14410	14695	3045	6222	4439.69
07-Mar-18	14695	14745	14745	14490	14525	1824	6630	2666.14
08-Mar-18	14525	14560	14800	14525	14770	3063	7068	4486.77
09-Mar-18	14770	14700	15100	14660	14995	5613	7965	8383.96
12-Mar-18	14995	14890	14940	14515	14680	4839	8613	7123.79
13-Mar-18	14680	14700	14800	14550	14745	2067	8808	3040.68
14-Mar-18	14745	14720	14750	14605	14660	1875	8937	2750.88
15-Mar-18	14660	14725	14730	14520	14645	2646	8730	3867.35
16-Mar-18	14645	14710	14725	14560	14595	1137	8679	1663.72
19-Mar-18	14595	14525	14550	14270	14300	2244	8820	3224.22
20-Mar-18	14300	14325	14410	14210	14315	2271	8655	3252.62
21-Mar-18	14315	14365	14590	14260	14410	1545	8361	2230.76
22-Mar-18	14410	14510	14925	14495	14840	3705	8502	5457.22
23-Mar-18	14840	14790	14880	14675	14820	2223	8139	3279.36
26-Mar-18	14820	14865	14880	14425	14605	2325	7914	3392.81
27-Mar-18	14605	14570	14665	14470	14515	1803	7716	2620.72
28-Mar-18	14515	14490	14610	14370	14520	2442	7341	3539.35



Figure-1: Futures Price Movement of Jeera Commodity in NCDEX³.

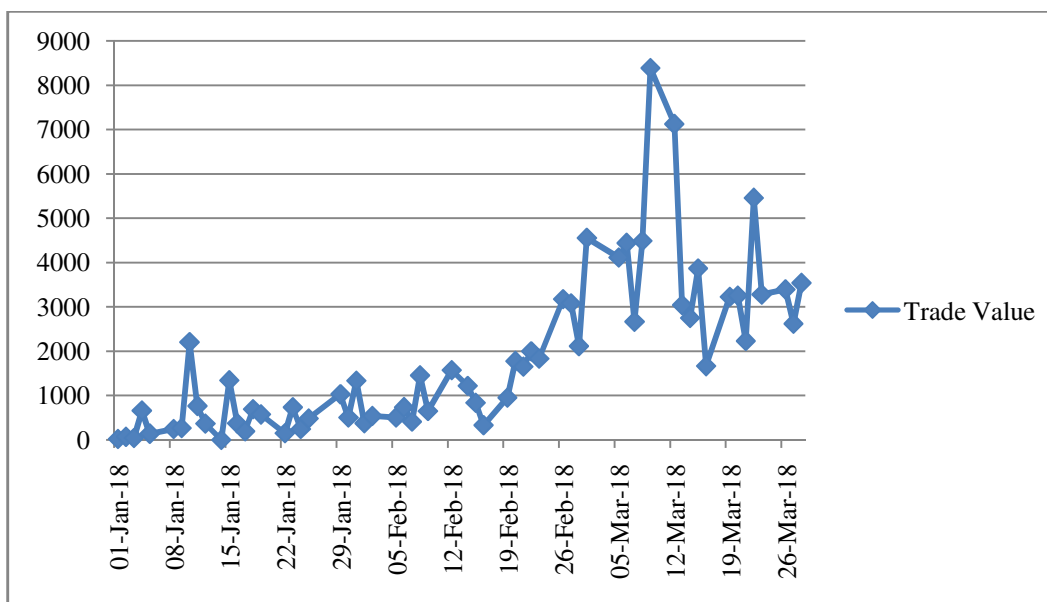


Figure-2: Jeera Commodity Trade Value in NCDEX (from Jan to Mar)³.

Conclusion

The expectation of demand and supply will create the price of commodities in the futures market in the world. Farmers can get a correct price for their commodities through the Forward/futures market. Through the online futures trading the national commodity derivatives exchange being provided a transparent price for their commodities so it not encourage to get the maximum amount of profits intermediates. At the time of harvest, farmers can get a better price indication from the commodity futures market. Based on the feasible supply and demand of various commodities and futures price trends the farmers can plan in advance about their production, storage as well as sales⁶.

The Forward Markets Commission has implemented a project to disseminate the future prices and spot prices by installing Ticker Boards at important Mandis/Agricultural Produce Market Committees, etc. Through the local newspapers and SMS alerts the commodity prices are disseminated. It also protects the farmers against intermediaries in the spot market and also farmers can get a regular price information as well as better price realization⁷.

Commodity prices are typically characterized by substantial volatility. The uncertainty that accompanies price volatility affects traders whose trading strategies are based, in part, on movements of short-term volatility, and investors interested in

hedging an underlying diversified portfolio of commodities⁸. The Jeera commodity futures price from January to March 2018. When we analyze the closing price value from January to February the closing price of Jeera was very high but in March it was diminishing. Hence this particular month only the investors has highly involved in Jeera commodity futures trading activities.

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