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Research Article

A STUDY ON DEVELOPMENT AND PERFORMANCE OF AGRICULTURAL COMMODITY FUTURES MARKET IN MULTI COMMODITY EXCHANGE IN INDIA

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ABSTRACT

The main purpose of this paper focuses on the growth and performance of Agricultural commodity market in Multi Commodity Exchange in India for the period of 2012 to 2016. This study has been carried out using the secondary data. Commodity markets have a crucial role in developing agriculture dominated economies. India is one of the top producers of commodities. Indian agriculture has registered impressive growth over last few decades. The Multi Commodity Exchange of India Limited (MCX) is located in Mumbai. It is the financial capital of India. Earlier MCX was regulated by the Forward Markets Commission (FMC), which got merged with the SEBI on September 28, 2015. MCX COMDEX is India's first and only composite commodity futures price index. MCXAgri, MCXEnergy and MCXMetal commodity indices also developed in India. MCX is India's leading commodity derivatives exchange with a market share of 84.3% in terms of the value of commodity futures contracts traded in 2016, and the total value of trade was 13622238.64 lakhs as at the end of the year 2016. The present study is to consider the following agricultural commodities trade volumes and trade values like Cardamom, Cotton, Crude Palm Oil, Kapas, Guar, almond, Chana, Flakemonth in Multi Commodity Exchange from 2012-2016.

INTRODUCTION

From 2003 onwards the commodity futures trading was permited in India. But before 2003 in India has some restrictions for doing commodity trade. After this year, these restrictions have been relaxed. Hence, the restrictions relaxation leads to the spontaneous growth of commodity market India. Commodity trading or futures trading is organized in such commodities as are permissible by the Government. The association, company or any other body corporate which organize the future trading in commodities through futures contract is known as commodity exchange. Commodity markets play vital role in the economies like India where agricultural production constitutes a major part of GDP. The production, supply and distribution of many agricultural commodities are still governed by the state. The commodity markets has achieved substantial development in India in term of transparency, technology and trading activities.

Commodity futures trading in India is regulated through a three tier regulatory structure, viz, the Central Government, Forward Markets Commission and the Recognized Commodity exchanges/Associations. There are 6 National and 16 regional commodity specific exchanges, which regulates forward trading in 113 commodities approves by the Forward Markets Commission under the Forward Contracts (Regulation) Act, 1952. However, futures trade was prohibited in most of the commodities thereafter. In 2002-03, Government of India removed all restrictions on commodities, which could be traded on commodity exchanges. The main 6 national exchanges are the National Multi Commodity Exchange Ltd. (NMCE), Ahemadabad; was the first exchange to be granted permanent recognition by the Government. The Multi Commodity Exchange of India Ltd. (MCX), Mumbai; the National Commodity and Derivatives Exchange Limited (NCDEX),Mumbai; Indian Commodity Exchange Limited (ICEX), Mumbai, as nation-wide multi-commodity exchanges; Ace Derivatives and Commodity Exchange Ltd. (ACE), Ahemadabad; and Universal Commodity Exchange Limited (UCX), Mumbai. These commodity exchanges are regulated by the Forward Markets Commission (FMC), which was established in 1953.

Literature Review

Gopal and Sudhir (2002) explained that the agricultural commodity futures market has not fully developed as competent mechanism of price discovery and risk management. This study found that some aspects are to blame for deficient market. That is poor management, infrastructure and logistics

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etc. Brajesh and Pandy (2013) focused to investigate the short run market efficiency and long run market efficiency of Indian commodity futures market. For market efficiency and un-biased they tested four agricultural and non- agricultural commodities. The researcher found that the commodity futures prices are efficiency in long run and inefficiency in short run. Singh (2007) explained that in spite of new developments in commodity trading, the efficient and modern infrastructural facilities has accounted for major bottlenecks in growth of Indian commodity exchanges. He suggested that discouraging the unofficial commodity market. Neeti Agarwal and Gurbandini Kaur (2013) focused that the Agricultural Commodity Future Trading and its Implications - An Overview. Here the researcher discussed various parameters of the commodity market as a whole. There is no defined viewpoint on any of the variables selected. It is clearly shows the uncertainty prevailing in the market. Harwinder Pal Kaur and Dr. Bimal Anjum (2013) studied that Agricultural Commodity Futures In India- A Literature Review. Since 2003 in commodity futures market the Indian economy has witnessed a mini resolution. They found there is no integration between the commodity futures markets and spot market.

Development of Agricultural Commodity Futures Market in India

The first and foremost exchange in India is Bombay Cotton Exchange it was established in 1875. For the purpose of oil seeds trade in futures gujrati vyapuri mandala was established in 1900. In Cochin Pepper and Spices Trade Association (IPSTA) was established in 1957. Thereafter, most of the commodities was prohibited to trade in futures in 1977. For agricultural commodities the revival of futures trading was recommended by Dantawala Committee and Khusro Committee both was established in 1966 and 1980 respectively. In 1993 the government set up a Committee to examine the role of futures. For that purpose it was appointed Dr.K N Kabra. After that committee was set up 17 commodities were recommended in futures trading (excluding wheat, pulses, non-basmati rice, tea, coffee, dry chilli, maize, vanaspati and sugar). There were a number of other expert committees, including the Shroff Committee, Dantwalla Committee and the Khusro Committee, which laid the foundation for the revival of futures trading.

Many reports, notably a UNCTAD and World Bank joint mission report (1996) highlighted the role of futures markets as market based instruments for managing risks. After that in November 2003 Multi Commodity Exchange Ltd. (MCX), was established, it is located in Mumbai; in December 2003 National Commodity and Derivatives Exchange Ltd. (NCDEX) was established, it is also located in Mumbai; Indian Commodity Exchange Limited(ICEX) as nation-wide multi-commodity exchanges, which commencement in 2009. ACE Derivatives and Commodity Exchange Ltd., was established in 2010. Universal Commodity Exchange Limited (UCX), Mumbai, was set up in 2012.These exchanges are regulates by Forward Markets Commission (FMC).

At present, there are 22 exchanges operating in India and these exchanges are carrying out futures trading activities in as many as 146 commodity items. Apart from that, these 22 recognized futures exchanges in India having more than 5098 registered members. Trading platforms can be accessed through 20000 terminals spread across 800 towns/cities across the country.

Performance of Agricultural Commodity Futures Market in India

Indian cardamom market

Guatemala is the first largest cardamom producer in the world. After that India is the second largest producer of cardamom and its production hovers around 11500 metric tons. In India Kerala is the largest cardamom producer. And this state is producing around 8000 tons of spices. It produced the cardamom in 2002-03 around 12000 tons. After that it has decreased. If we can say the domestic consumption India 90 per cent of cardamom. Hence, it is stands at the second place in the world consumption list. The maximum demand comes from the western part of the country at around 45% followed by the northern part constituting about 35%. For Indian cardamom Saudi Arabia is the largest market. The total India exports Saudi Arabia gets around 42% of share followed by Japan with 39% of share. Guatemala reduced India's export market as it provides cardamom at cheaper rates and India producing cardamom of much better quality is not able to improve on its prices. The major trading centers in India in which cardamom is traded are Vandanmedu (Kerala), Bodinayakanur (Tamil Nadu), Kumily (Kerala), Thekkady (Kerala),

Table 1 List of Agricultural Commodities Trading in India

Group of Agri-Commodities	Particular of Agricultural Commodities
Oil & Oil Seeds	Celery seed, Copra Oil/Coconut Oil, Copra Oilcake / Coconut Oilcake, Copra/ Coconut, Copra oil cake/Coconut Oil, Cottonseed Oil, Cottonseed Oilcake, CPO Refined, Crude Palm Oil, Crude Palm Olive, Groundnut, Groundnut Oil, Groundnut Oilcake, Linseed, Linseed oil, Linseed Oilcake, Rapeseed Oil/Mustard Oil, Rapeseed Oilcake/Mustard seed Oilcake, Rapeseed/Mustard seed, RBD Palmolein, Rice Bran, Rice Bran Oil, Rice Bran Oilcake, Safflower, Safflower Oil, Safflower Oilcake, Sesame (Til or Jiljilli), Sesame Oil, Sesame Oilcake, Soy meal, Soy Oil, Soybean, Sunflower Oil, Sunflower Oil cake, Sunflower Seed, Castor Oil, Castor Seeds, Cotton Seed, Kapasia Khalli
Spices	Cardamom, Jeera, Pepper, Chillies, Turmeric, Nutmegs, Methi, Ginger, Cloves, Cinnamon, Betel nuts, Aniseed
Pulses	Chana, Masur, Yellow Peas, Tur Dal (Arhar Dal), Tur(Arhar), Urad (Mash), Urad dal, Gram Dal, Mung Dal
Cereals(Food Grains)	Maize, Wheat, Arhar Chuni, Bajra, Barley, Gram, Guar, Jowar, Kulthi, Lakh (Khesari), Moth, Mung, Mung Chuni, Peas, Ragi, Rice or Paddy, Small Millets (Kodan Kulti, Kodra, Korra, Vargu, Sawan, Rala, Kakun, Samai, Vari & Banti)
Fibersand Manufactures	Manufactures Art Silk Yarn, Cotton Cloth, Cotton pods, Cotton Yarn, Indian Cotton (Full pressed, half pressed or loose), Jute goods (Hessian and Sackings and cloth and /or bags, twines and/or yarns manufactured by any of the mills and/or any other manufacturers of whatever nature made from jute), Kapas, Raw Jute Including Mesta, Staple Fibre Yarn
Others	Mentha Oil, Potato (Agra), Potato (Tarkeshwar), Sugar M-30, Sugar S-30

Source: FMC, (www.sebi.gov.in)

Cumbum (Andhra Pradesh), Pattiveeranpatti (Tamil Nadu), Cochin (Kerala), Thodupuzha (Kerala), Saklashpur (Karnataka). Mercara (Karnataka), Medikeri (Karnataka), Mangalore (Karnataka), Mumbai (Maharashtra), Virudhunagar (Tamil Nadu), Thevaram (Tamil Nadu).

Indian Cotton Market

India is the third largest producer of cotton and its derivatives in the world. The country is responsible for the origination and domestication of the cotton crop. India has the maximum area under cotton cultivation estimating up to around 9.50 million tons i.e. 21% share in the world. A number of varieties of cotton are cultivated in the country like Bengal Deshi, V-797, Jayadhar, etc and also the cotton fibers are graded into three major grades i.e. 'Short', 'Medium' and 'Elongated'. The northern areas in the country provide with mostly short and medium staple cotton, central areas provide with long and medium staple cotton and the southern areas largely with long staple cotton. The quantity of production of cottonseeds in India is around 5.68 million tons. The area on which cotton is produced is around 9.50 million hectares in India. India is the largest exporter of cotton yarn in the world accounting up to 450 million kg i.e. 17% market share.

Indian Palm Oil Market

The total production of palm oil in the world India holds a very small share of production. It producing only 70000 tons per year. While comparing to the total share of the world India is having only 2 per cent of share. When comparing to the world production India is producing very low. Due to the low or less production it cannot satisfy its domestic consumption demand. In India Kerala state is having the maximum production of palm oil i.e 20000 ton per year. The cultivating area of palm oil trees in India nearly 12000 hectares and also hold the maximum acreage with 10000 hectares pertaining to a public sector enterprise namely Oil Palms India Ltd and the rest pertaining to the private sector. In India Godrej company is the maximum area of palm oil plantation company i.e 20000 tons per year. India has been looking forward to increase its production so we can expect up to 3 lakh tons in the year 2015 to 2020. Crude palm oil markets in India are Kandla (Gujarat), Mumbai (Maharashtra), Kakinada (Andhra Pradesh), Chennai (Tamil Nadu), Vijaywada (Andhra Pradesh), Haldia (West Bengal), Indore (Madhya Pradesh).

Kapas

The biggest cultivators of cotton are America, India, China, Egypt, Pakistan, Sudan and Eastern Europe, with China, the U.S. and India being the three largest producers of cotton. Cotton is classified according to the staple, grade, and character of each bale - staple refers to the fibre length; grade ranges from coarse to premium and is a function of colour, brightness and purity; and character refers to the fibre's strength and uniformity. Although cotton is cultivated in almost all the states in India, ten states-Gujarat, Maharashtra, Andhra Pradesh, Telangana, Karnataka, Punjab, Haryana, Rajasthan, Madhya Pradesh and Tamil Nadu account for more than 95% of the area under cultivation.

Guar

The world production of Guar India is having the maximum level of production. It produces nearly 600000 lakh tons of guar annually. The total production of Guar share in the world India is having around 80 per cent of share. In India the largest guar producing state is Rajasthan. This is the most dominate state in India and also in the world. That is Rajasthan producing around 42000 tons of guar crops. It is treated as 70 per cent of the total production in India. The second and third position of guar production in India are Haryana and Gujarat 12% and 11% respectively. In Rajasthan, the districts where guar production is done are Churu, Bikaner, Jaisalmer, Barmer, Nagaur, Hanuman Garh, Jodhpur, Ganganagar, Jaipur, Sirohi, Dausa, Jhunjhunu and Sikar. The districts in Haryana indulged in the production of guar are Bhiwani, Gurgaon, Mahendragrh and Rewari and the districts in Gujarat are Kutch, Banaskantha, Mehsana, Sabarkantha, Vadodara and Ahmedabad. The major trading centers of guar and its derivatives in India are Jodhpu, Bikaner, Nokha, Nagaur, Merta. All the markets are in Rajasthan.

MCX is the major and largest contributor in the commodity market of India. The table shows the annual growth of Multi Commodity Exchange of India market during the year 2012 to 2016. India is trading nearly 113 agricultural commodities but in multi commodity exchange during these five year period only eight commodities were traded. That is cardamom, cotton, crude palm oil, kapas, guar, almond, chana, flake month. During 2012, cardamom trade value was 2866931 lakhs. In case for cotton, crude palm oil, kapas, guar almond, chana, flake month was1739017 lakhs, 10002356 lakh, 684177.6 lakhs, 37.36 lakhs, 292.75 lakhs, 41.24 lakhs, 10002356 lakhs respectively. During 2013, cardamom trade value was 1419638 lakhs. In case for cotton, crude palm oil, kapas, guar, almond was 4736424 lakhs, 5195761 lakhs, 654308.7 lakhs, 426891.4 lakhs, 127.21 lakhs respectively. But in that particular year chana, flake month were not traded so the total trade value was decreased 104 per cent from 2012 to 2013. During 2014 cardamom trade value was 685245.4 lakhs.

Table 2 Commodities Trade Value in (Lakhs)

Traded Commodities	Year				
	2016	2015	2014	2013	2012
Cardamom	242076.2	407143.3	685245.4	1419638	2866931
Cotton	4998456	2747702	5253552	4736424	1739017
Crude palm Oil	6046475	4048051	5253552	5195761	10002356
Kapas	325.14	1673.77	83655.88	654308.7	684177.6
Guar	-	-	64.07	426891.4	37.36
Almond	-	-	-	127.21	292.75
Chana	-	-	-	-	41.24
Flakemonth	-	-	-	-	10002356
Total	11287332	7204570	11276069	12433150	25295209

Source: www.mcxindia.com

In case for cotton, crude palm oil, kapas, guar was5253552 lakhs, 5253552 lakhs, 83655.88 lakhs, 64.07 lakhs respectively. But in that particular year almond, chana, flake month were not traded so this year also the trade value decreased 9 per cent from the previous year. During 2015 cardamom trade value was 407143.3 lakhs, cotton, crude palm oil, kapas was 274770.2 lakhs, 4048051 lakhs, 1673.77 lakhs traded respectively. But in that particular year guar, almond, chana, flake month were not traded so this year also the trade value decreased 56.5 per cent. During 2016 only cardamom trade value was242076.2 lakhs, cotton, crude palm oil, kapas was 4998456 lakhs, 6046475 lakhs, 325.14 lakhs traded respectively. In that particular year guar, almond, chana, flake month were not traded. But the traded value slightly increased 56.6 per cent in this year.

Table 3 Agricultural commodities in MCX

Year	Volume of (In 000's)	Total Value (In Lakhs)
2016	11909904.94	13622238.64
2015	10037314	11652929
2014	12083971	13407151
2013	20019204	18992733
2012	32371964	28746999

Source: www.mcxindia.com

This table clearly shows the performance of Multi Commodity Exchange of Indian Limited (MCX) during the year 2012 to 2016. The total volume of agricultural trading in the MCX market decreased (61.7 per cent) from Rs.32371964 thousands in 2012 to Rs. 20019204 thousands in 2013: and continuously the trade volume decreased (65.6 per cent) in 2014Rs. 12083971thousands to 20.3 per cent Rs. 10037314 thousands in 2015 and then the volume of trading in MCX market increased (18.65 per cent) Rs. 11909904.94 thousands in 2016. The total value of trade was continuously decreased from Rs. 28746999 lakhs in 2012, to, Rs. 18992733 lakhs (51.3 per cent) in 2013, Rs. 13407151 lakhs (41.66 per cent) in 2014, and Rs.11652929 lakhs (15per cent) in 2015 respectively and then the value of trade was increased in Rs. 13622238.64 lakhs (16.89per cent) in 2016.

CONCLUSION

Multi Commodity Exchange of India Limited (MCX) is one of the India-based holding company. An electronic commodity futures exchange operates by the MCX company. The price index of Multi Commodity Exchange will give the information about market movements. The MCX is connected with online trading, clearing and settlement operations of commodity futures transactions. And it also provide the futures trading to the following commodities like bullion, ferrous and non-ferrous metals, energy and agricultural commodities (mentha oil, cardamom, crude palm oil, cotton and others). Eventhough the commodity exchanges and online tradind are developed there are lot of problems facing in developing countries like India because of the demonetization, deficiencies in infrastructure, management, linkages with financial institutions, weather conditions, government regulations, improper imports and exports etc. In any agriculture-dominated economy, like India, the farmers face not only yield risk but price risk as well. Commodity futures have a crucial role to play in the price risk management process, especially in agriculture. After the strict regulations are implemented, the futures trading in India allowed almost all agricultural commodities by the government under close supervision of the FMC, Ministry of Consumer Affairs and Food and Public Distribution as per rules and regulation of the Forward Contracts (Regulation) Act 1952. From September 28, 2015, MCX is being regulated by the Securities and Exchange Board of India (SEBI). But due to demonetization, deficiencies in infrastructure, management, linkages with financial institutions weather conditions, government regulations, improper imports and exports etc., the total trade value of agricultural commodities in multi commodity exchange are continuously decreased from 2012 to 2015 fromRs.2874699 lakhs to Rs.11652929 lakhs. After that only it was slightly raised Rs. 13622238.64lakhs in2016.

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