1 Introduction
A commodity is a product that has commercial value. It can be produced, bought, sold, and consumed. Commodities are basically the products of the primary sector of an economy. The primary sector of an economy is concerned with agriculture and extraction of raw materials such as metals and energy (crude oil, natural gas), which serve as basic inputs for the secondary sector of the economy.\(^1\)

A market where commodities are traded is a commodity market. These commodities include bullion (gold, silver), non-ferrous (base) metals (copper, zinc, nickel, lead, aluminium, tin), energy (crude oil, natural gas) and agricultural commodities such as soya oil, palm oil, coffee, pepper and cashew. Vibrant, active, liquid, and transparent commodity markets characterise developed economies. India is well placed to acquire such a commodity market.

Agricultural products triggered the concept of market. Hence this market is as old as agricultural products or the farming business itself. Traditionally, farmers would convey the produce to a central marketplace (called mandi / bazaar) in a town / village in which grain merchants / traders would also converge. The latter would buy the produce and transport, distribute, and sell it at other markets.

In the traditional market too, as is the case with the present-day market, the forces of supply and demand determined the price. A supply glut led to a price crash and a peak in demand led to an escalation in price. This favoured neither the buyers nor the sellers. Both were left unhappy given the uncertainty that the demand-supply mismatch engendered every now and then. It was in this backdrop that farmers and food grain merchants in Chicago initiated negotiations for supply of grains at a future date in exchange for cash at a price mutually agreed upon. The arrangement

\(^1\) Source: [http://www.ftkmc.com/commodities.html](http://www.ftkmc.com/commodities.html)
pleased both the parties since it eliminated the element of uncertainty. It eventually led to forward contracts and futures contracts in commodities.

Given India’s agro-based economy and the fact that organized futures market emerged in India as early as 1875, the commodity derivative market should have made a remarkable progress. But a slew of government policies and other developments stifled its growth. Options in cotton were banned in 1939 to curb widespread speculation. In the mid-1940s, trading in forwards and futures was rendered difficult no thanks to price controls in introduced by the government of the day. However, the passage of the Forward Contracts (Regulation) Act in 1952 regulated forward trading. But the fits-and-starts story repeated itself when in the 1960s, the government of India (GoI) suspended forward trading in several commodities like jute, edible oil seeds and cotton, fearing a rise in commodity prices. However, to cool down the backlash, the government offered to buy agricultural produce at the minimum support price (MSP). This would ensure that the farmer benefited. The government also managed storage, transportation, and distribution of agriculture produce. These measures weakened the agricultural commodity markets in India.

The post-liberalization era of the Indian economy, however, revved up activity in the commodity markets. The country witnessed the arrival of four national-level commodity exchanges and 20 plus regional commodity exchanges. The national-level exchanges are the Multi Commodity Exchange of India Limited (MCX), the National Commodity and Derivatives Exchange Limited (NCDEX), the National Multi Commodity Exchange of India Limited (NMCE), and the Indian Commodity Exchange (ICEX).

Today, the Indian commodity market is worth INR 400,000 Crores in the cash segment. The country is looking at a possible commodity futures market worth INR 4,000,000 Crores.$^2$

2 Literature Review
A review of the existing literature on the subject reveals the following. The research papers were accessed from authoritative sources.

1. **Rahul Oberoi** in “Keys to commodity trading” dwells on the nine common myths about investing in the commodity market. He admits that the commodity market has its share of speculators but sees nothing wrong with it. Along with hedgers and arbitrageurs, speculators help in the price discovery exercise. He argues that it is not difficult to understand the commodity market. All commodities are globally traded and the global demand-supply situation is widely known and available to anyone who reaches out for it. The commodity markets are nowhere as volatile as stock futures. If investors overtrade and exploit the margin to the hilt, then they cannot blame the commodity market for the unfavourable outcome, if any. Since commodity exchanges promote price transparency, he refuses to buy the story that commodity exchanges fuel inflation. On the other hand, by allowing wider participation, these exchanges discourage cartelization on the part of local traders and associations. Even small investors can take up commodity trading. It is also wrong to assume that buyers of commodity derivatives should take delivery as well. Delivery is mandatory only in specific commodities and that too only if one keeps the position open after the delivery notice period. There is compulsory delivery in commodities such as Chana and gold. Nor is it true that prices are easy to manipulate in the commodity markets. This is because most commodities that are traded are produced and consumed across the globe. As such, an individual or a group of people cannot easily manipulate prices. Price manipulation is possible only when production is concentrated in one area. It does not happen with essential commodities. Regulators and governments monitor prices of essential commodities and take steps whenever there is an attempt to manipulate the markets. One cannot change a commodity's fundamentals. Commodity prices reflect the demand-supply dynamics and thus operators cannot manipulate prices. Besides, commodities are traded worldwide and hence there is minimal chance of manipulation by a handful of participants.

2. **Nirmal Kumar, R.T and Balaji, K** in “An Empirical Investigation on the Investors’ Perception Towards Commodities Futures Trading In India With Special Reference To Puducherry, India” argue that since 2004, the growth of the commodity derivative market in the

---

country has been impressive⁴. With institutional players prevented from participating in the commodity futures market, the retail investors, as a group, have emerged as major players in the said market.

3. Narender L Ahuja in his research paper “Commodity Derivatives Market in India: Development, Regulation and Future Prospects” recalls that commodity derivatives arrived in India as early as 1875, barely about a decade after they arrived in Chicago⁵. Since 2002, the commodities futures market in India has experienced an unprecedented boom in terms of the number of modern exchanges, the number of commodities allowed for derivatives trading as well as the value of futures trading in commodities. However, there are several impediments to be overcome and issues to be settled for a sustained development of the market. The Researcher examines how India pulled it off in such a short time (since 2002). He also examines if this pace can be sustained and tries to identify the obstacles that need to be overcome if the market is to realize its full potential. He reveals what other emerging market economies could learn from the Indian experience.

4. Mukherjee, Dr Kedar Nath (2011) in his study titled “Impact of Futures Trading on Indian Agricultural Commodity Market” states that the usefulness and suitability of futures contracts in developing the underlying agricultural commodity market, especially in an agro-based economy like India has always been doubted⁶. Therefore, the Researcher has made an attempt to re-validate the impact of futures trading on the agricultural commodity market in India. The daily price information in spot and futures markets, for a period of seven years (2004 – 2010), for nine major agricultural commodities, taken from different categories of agricultural products, is incorporated into various econometric models to test the objective concerned. Like most of the other studies undertaken on the global and Indian commodity markets, the Researcher’s study concludes that the destabilizing effect of the futures contract on agricultural produce is casual in

---


⁶ Source: Munich Personal RePEc , vide: http://mpra.ub.uni-muenchen.de/29290/
nature and tends to vary over a long period of time. The empirical findings show that the comparative advantage enjoyed by the futures market in disseminating information, leading to an accurate price discovery and risk management, can help in successfully developing the underlying commodity market in India. Therefore instead of curbing the commodity futures market activities, the market structure should be strengthened to achieve the broader target.

5. **Rajnarayan Gupta** in “Commodity Derivative Market in India: The Past, Present and Future” asserts that since its reintroduction, the commodity derivative market is thriving and the current trend shows the strong growth potential of the market, although, the actual growth trajectory will depend upon the attitude of the policy makers and the efficiency of the regulatory mechanism.

### 3 Research Gap

The reviewed literature has no doubt thrown some valuable light on the various strategies evolving in the country’s commodity markets. The national level markets in particular, have gained universal admiration and respect. However, they can rise to greater heights. The reviewed literature does not spell out the strategies and remedial measures needed on all the fronts, including the regulatory front, to take the markets to new heights. Towards this end, the reviewed literature suffers from a gap. It is this gap this study seeks to bridge.

### 4 Need for the Study

All said and done, India is an agro-based economy. It is comprised of several agro-climatic zones which in itself is a welcome feature. Such a diversified basket of agro-climatic zones ensures that even if there is a bust in one part of the country, it is made good by a boom in another part. Hence nature has ensured that the economy of the country is hedged against adverse fallouts. In fact, the Planning Commission of India has demarcated the geographical area of India into 15 agro-climatic regions. These are further divided into more homogeneous 72 sub-zones.

This advantage is dented by the fact that the country’s primary sector, namely, agriculture, is characterised by fragmented landholdings of marginal farmers and small farmers. With marginal

---

farmers and small farmers constituting a big chunk of the farming community, the resultant fragmented landholdings have robbed their agricultural operations of economic viability. Often the price they get for their produce at the marketplace does not even cover their investment in farming operations. Predictably, the plight of marginal farmers and small farmers has been deteriorating by the day and many of them have been obliged to dispose of their meagre landholdings to avoid starving themselves to death. On the other hand, the big farmers are affected equally badly when prices are not attractive or crash at the marketplace. Their investment in agricultural operations being on the high side, their price-induced losses are also on the high side. So a way out of this vicious cycle has to be found and that is where the commodity markets come in. With the help of the signals emitted by the commodity markets, farmers or growers or producers can minimise the price risk and avoid a supply gut. The consumers of the output, thanks to the signals emitted by the commodity markets, can minimise the price risk and ensure that the demand pressure is appropriately capped. Thus, commodity markets can ensure that a positive sum game results and benefits all the stakeholders, namely, producers, investors and arbitrageurs.

In addition, India is amongst the largest buyers and consumers of several commodities. In respect of gold, it is the largest buyer and consumer in the world. Despite the fact that it is fast developing into a major ‘economic powerhouse’ in the global arena it continues to look up at other markets to decide the local prices of commodities. With the country being the largest producer and consumer of a large number of commodities, is it only logical that the Indian markets become ‘price setters’. Presently, they are ‘price takers’. With the Indian markets increasingly opening up and integrating with markets around the world, such an aspiration is only logical. As for commodity markets, in which it is either one of the largest producers or consumers or both, India has immense potential to have a domestic market that is strong enough to set global market prices. In fact, given its share in global supply and demand as a dominant player in the world market, the country has the potential to become the price setter in at least 17 commodities.

It is therefore necessary to undertake a study of the country’s commodity derivative markets to identify the lacunae if any in them. Such lacunae should be immediately addressed considering the potential of the commodity derivative markets to become a force to reckon with internationally. Additionally, the possible policy measures and tools to catalyse their growth should be looked into.
It is in this backdrop that this study “A STUDY OF COMMODITY FUTURES IN INDIA” has become necessary.

5 Scope of the Study
The study will confine itself to stake-holders associated with commodity derivative markets and operating from Bangalore city. The stake-holders considered are hedgers, speculators and arbitrageurs.

6 Objectives of the Study
- The objectives of the study are to:
  - Identify the factors that influence the growth of commodity derivative markets in the country
  - Spell out policy measures / tools to ensure the success of the commodity derivative markets.
  - Identify the physical infrastructure and institutional infrastructure necessary to catalyse the growth of the commodity derivative markets
  - Identify the factors that can lead to efficient and transparent price discovery
  - Define the pre-requisites for more effective commodity futures exchanges
  - Examine how the commodity exchanges have benefited the various stakeholders

7 Research Methodology
By intent, this study will be a descriptive research that uses the survey method. Hence the study will be a fact-finding investigation with adequate interpretation. It will focus on certain aspects or dimensions of the identified problems. The study will be designed to gather descriptive information. Data will be collected by administering Interview Schedules and interviewing the respondents. Data will be analysed using statistical techniques consistent with the objectives of the study.

8 Hypotheses to be Tested
The study proposes to test the following hypotheses:

1. Appropriate policy measures / tools can ensure the success of the commodity derivative markets
2. Investing in physical infrastructure and legislating for institutional infrastructure can catalyse the growth of the commodity derivative markets
3. Once the pre-requisites are in place, commodity futures exchanges can become more effective
4. Commodity exchanges have benefited the various stakeholders

9. Sampling Plan
Hedgers, speculators and arbitrageurs will constitute the sampling universe.
Interview Schedules will be administered to 100 hedgers, 50 speculators and 50 arbitrageurs.
Probability sampling in the form of simple random sampling will be applied so every hedger, every speculator and every arbitrageur stands an equal and independent chance of being selected.
Interview schedules, duly completed and received from the first 50 hedgers, the first 25 speculators and the first 25 arbitrageurs will be selected for the study. They will constitute the sample size.

10. Sources of Data and Data Collection
Data required for the research will be collected from both primary and secondary sources.
Primary data will be collected by administering Interview Schedules to the three categories of respondents.
In addition, the Researcher will interact extensively with other stakeholders like commodity exchanges (like MCX and NCDEX) and trade / industry bodies (like CII and FICCI) to elicit their views and comments on the topic under study.
Secondary data will be collected from various books relating to the topic, articles, reputed journals, newspaper articles, government publications, websites and company annual reports.

11. Analysis of Data
Non-parametric statistical units will be used to test the association between some qualitative characters and conclusions will be drawn on the basis of formation of $H_0$ and $H_1$. To be specific, chi-square test will be applied to test the hypotheses.

12. Limitations of the Study
Primary data could sometimes be deduced through constant topic-oriented discussions with the respondents. It is possible that a certain degree of subjectivity, even if negligible, will have
clouded their views. However, the Researcher is confident such subjectivity will not affect the accuracy of the findings arrived at.

References

4. Bose, S (2008); Commodity Futures Market in India - A Study of Trends in the Notional Multi-Commodity Indices; ICRA Bulletin of Money and Finance