ROADMAP:

COMMODITY FUTURES MARKETS DEVELOPMENT IN INDIA

2005 AND FORWARD

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COMMODITY FUTURES MARKETS DEVELOPMENT PROJECT

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Financial Markets International, Inc. (FMI) is a U.S. based international consulting firm that specializes in assisting countries to develop sound and efficient markets. FMI has worked in over 25 countries with the U.S. Agency for International Development (USAID), World Bank, Asian Development Bank, and private corporations since 1992. www.fmi-inc.net

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Executive Summary

The Government of India (GoI) and the United States Agency for International Development (USAID) commissioned this report to help determine the best approach to develop the commodity futures markets of India. The examination included a broad review of the commodity futures markets and the exchanges' operational practices, the legal and regulatory environment governing the industry, and the risk management needs of the agricultural sector.

This report is timely and vital for several reasons: 1) the GoI has authorized the development of national multi-commodity futures exchanges that operate on the basis of advanced international "best practices"; 2) the legal and regulatory framework for commodity futures in India is fifty years old, and it evolved in an environment where the regulators' principal task was more to police sequential GoI bans on the trading of commodity futures, than to develop those markets; 3) a credible regulatory regime is essential for the development of the commodity futures markets; 4) numerous educational and facilitating issues must be addressed in order to extend the risk management benefits of commodity futures markets to India's vast agricultural sector; and, 5) India is competitively poised to become an international commodity futures trading center.

The GoI decision to modernize and liberalize commodity futures markets, in order to gain the economic benefits of hedging and price discovery, represented the culmination of more than a decade of careful evaluation of the implications of such for the agricultural sector. GoI officials, and international and Indian commodities and securities markets experts, conducted a series of studies that, taken together, point to a consensus on several fundamental issues which recommend the development of commodity futures markets now.

The conclusions of these expert reports can be summarized as follows:

- Indian agriculture has evolved beyond self-sufficiency and is opening up to internationally competitive world markets.
- These world agricultural market opportunities present new challenges, because engaging them will require a *market-based* agricultural sector.
- Indian policy makers had traditionally coped with the uncertainty of crop yield

Indian Commodity Markets Studies

Khusro Committee Report (1980)

Kabra Committee Report (1994)

World Bank & UNCTAD: Managing Price Risks with Futures Markets (1996)

World Bank: Brokerage (2000)

World Bank: Clearing Houses (2000)

World Bank: Improving Commodities Futures Markets (2000)

World Bank: Warehouse Receipt Systems (2000)

Guru Committee Report (2001)

The Report of the Group on Forward and Futures Markets (2001)

The Ramamoorthy Committee Report (2003)

The Report of the Inter-Ministerial Task Force on Convergence of Securities and Commodity Derivatives Markets (2003)

A detailed summary of these key reports is provided in Appendix A.

and price volatility by resorting to policy instruments such as a virtually closed external trade regime, pervasive government controls on private sector activities, extensive market interventions, setting up the Food Corporation of India, and licensing Fair Price Shops to ensure food security.

- The historic GoI policy approach is being reconsidered both to foster a *market-based*, internationally competitive, agriculture sector, and because of the high fiscal and economic costs of previous policies.

- Major advances have occurred in the technology of commodity futures exchange operations elsewhere in the world. Such systems are commercially available, and they can ensure highly reliable, on-line, electronic trading and margining operations that eliminate certain types of trading abuses that historically plagued commodity futures markets.

These basic conclusions call for a course of action to achieve a modern commodities futures industry, accompanied by a strong regulatory regime for that industry. Properly functioning commodity futures markets promote more efficient production, storage, marketing and agro-processing operations, financing, and improved overall agriculture sector performance. It is precisely because of these benefits that transition and developing economies with large agricultural sectors have embraced commodity futures markets in recent years. Countries such as Brazil, China, Hungary, Poland, South Africa, Russia, and Turkey have sought to emulate the successful commodity futures markets of Chicago, London, and Tokyo.

The GoI decision to charter national multi-commodity exchanges that *meet certain stringent criteria* was the first step toward such a serious commodity futures markets development program. Further development steps will include significant policy, legal, operational, and educational challenges in five inter-related areas. Importantly, a broad spectrum of Indian leaders interviewed in the course of conducting this assessment recognize that the challenge for success is an *inter-related* development plan across each of these five areas.

I. Regulatory Purpose and International Approaches.

The economic functions of commodity futures and securities markets are different: commodities futures markets provide risk management and price discovery, and securities markets provide capital formation. Consequently, different regulatory objectives follow from these substantive differences. This section of the report provides an analytical framework for Indian policy makers to consider as they make decisions about regulatory approaches for the two industries.

Various regulatory approaches are used in nations that have successful commodity futures markets. Common approaches are: 1) a unified regulatory approach, with one regulator for both commodity futures and securities markets; 2) a dual regulatory approach, with a separate regulator for *all* futures contracts irrespective of the nature of the underlying commodity (agricultural, energy, financial, or securities derivatives), and a separate regulator for the offering and trading of securities, companies' shares; and, 3) a multi-body approach, where commodity futures are regulated by *product*.

Country specific criteria are presented to assist the GoI in evaluating these alternative approaches. This section also offers detailed background on the United States dual regulatory approach; the Chinese and United Kingdom unified regulatory approach; and summarizes the regulatory approaches of five Asian nations.

This section concludes that the GoI should proceed rapidly in providing substantial resources to revise and invigorate its dated regulatory scheme for commodity futures markets. This is necessary to minimize the possibility of a market scandal that could severely harm the burgeoning reputations of the three national multi-commodity exchanges, and thus stall their needed growth in hedge participation. Whether this support eventually leads to an enhanced and autonomous FMC - - or to the convergence of the FMC with SEBI - - is not, *at this point*, a critical decision. That decision can be made over time as the FMC is strengthened, and as the commodity futures markets continue to develop.

II. Agenda for Regulatory Reform of the Forward Markets Commission.

The FMC was created as an advisory body with limited powers over the commodity futures exchanges and intermediaries. Despite this, the FMC has nonetheless succeeded at working with exchanges to see them adopt effective Articles of Incorporation and Bye-Laws. Because of this ad-hoc approach, however, the FMC has essentially no standardized body of regulations that affects all commodities futures exchanges alike. A credible regulatory regime is imperative for the sound development of internationally competitive commodity futures markets.

This section offers detailed *Recommended Regulatory Approaches* to achieve reform in core principles which affect three areas: the financial integrity of futures markets actors; the monitoring, market surveillance, and compliance provisions; and the business practices of exchanges and intermediaries. Achieving a sound new regulatory scheme will require an effort similar to "*changing the engines while the plane is in flight*". The FMC must continue to monitor and supervise the futures industry. At the same time, it needs to introduce new requirements as it invigorates the regulation of the commodity futures industry, as well as its own regulatory practices.

This section also assesses the capacity of the FMC and finds its regulatory authority can be substantially improved through more aggressive use of its powers, and through the infusion of resources to address its current staffing deficiencies. The FMC has a sanctioned strength of approximately 140 staff members, yet its total current level is 87. While the future work of the FMC should be intense on both legal and investigative matters, the FMC has no lawyers and no accountants on staff. A more efficient organizational structure is outlined and recommended for the commodity futures markets regulator.

III. Education Initiatives for Price Risk Management.

The vast preponderance of the agricultural sector actors in India are *not* engaged in price risk management, and are *not* hedging with commodity futures. Indeed, the Indian agricultural sector as a whole is, in essence, acting as a massive speculator with its fate dependent upon the vagaries of weather.

India needs to inculcate an effective price risk management culture for three reasons: 1) India has moved beyond agricultural self-sufficiency; 2) the GoI supports a market oriented agricultural sector and economy; and, 3) modern national multi-commodities futures exchanges now provide the operational capacity to effectively accomplish the hedging, or price risk management function, of futures markets.

This section recommends extensive, and targeted, education and training initiatives. It sets forth a methodology for implementing broad-based education and training by harnessing the skills and outreach capacities of numerous Indian institutions that are now poised to assist the agricultural sector, and help inculcate risk management. Many institutions could help lead this effort to make the commodity futures markets deeper and more efficient, and benefit the agricultural sector.

This section sets forth criteria that should be applied to evaluate these institutions to determine which ones might be most effective. The evaluative process would identify institutional partners with the *mission* to assist the lives of Indian farmers; the *direct access* to farmers through a well organized network of employees and facilities across India; a large *professional staff* knowledgeable about agricultural sector issues; strong *institutional relationships* with entities relevant to training, such as farmers associations, agricultural cooperatives, rural banks; and a *willingness to act*. The objective would be an effective India-wide, large-scale and multi-faceted education and training program over a sustained period of time.

Increase Hedging

"*Increasing hedge participation is a major challenge for all exchanges. We are actively educating the agricultural sector on the merits and methods of risk management through commodity futures. We also need the Government to better use its resources to encourage risk management, remove certain legal impediments affecting futures trading such as making warehouse receipts negotiable, permitting banks and mutual funds to act in commodity futures markets, making mandis more transparent, and neutralizing tax policy. India's commodity futures markets growth potential is enormous.*"

P.H. Ravikumar, Managing Director & CEO, NCDEX, June 7, 2004. Remarks to USAID/FMI delegation, Mumbai.

IV. Operational Reforms in Commodity Futures Exchanges.

Commodity exchanges in India withered over the past forty years as various commodities were periodically banned from futures trading. The GoI decision to permit the formation of new exchanges that must operate in accord with demutualized ownership, electronic trading, advanced modern systems, and international best operational practices, has resulted in India having a “two tier” exchange system.

This section of the report presents survey information that details the nature of the two tier system, with major differences in exchange ownership, mutual or demutualized; trading systems of open outcry versus electronic; volume; number of contracts authorized to trade; margin systems; and clearing and settlement systems.

These differences require tailored regulatory approaches. For the national multi-commodity exchanges, the focus should be to develop hedge participation, ensure that futures prices remain aligned with the underlying physical prices, and improve liquidity through development tools such as contract design, and educational outreach. By contrast, for the regional exchanges, the regulatory emphasis should be on trading integrity and financial soundness.

For both tiers of exchanges, the regulator’s challenge is to focus on applying its regulations with three objectives foremost: market integrity, financial integrity, and customer protection. If an exchange fails to meet these regulatory tests, then the GoI should require remedial action, or close the exchange.

This section also highlights methods for improving the design of futures contracts, and outlines methods to gain substantial input from the agricultural sector hedgers, the producers and food-processors. The purpose is to broaden hedge participation and build futures markets liquidity, because liquidity is a magnet for greater liquidity.

V. Facilitating Issues: warehousing issues; standardization and grading of commodities; improving price transparency of *mandis;* authorizing institutional participation by banks and mutual funds in commodity futures markets; authorizing options trading; and adopting conducive tax policies.

Commodity futures markets have different requirements than do securities markets for facilitating trading, margins, settlement, and other aspects. For example, warehouses need to exist so that delivery on agricultural futures contracts can occur. A warehouse receipts system, with receipts formally serving as negotiable instruments, can assist farmers and payment transfers. Standards for grading commodities can assist hedging, and grading can provide confidence for delivery or provide a basis for discounts. Greater price transparency at *mandis* could offer farmers greater marketing alternatives and more information in order to better use futures markets. This section briefly outlines these commodity industry facilitating issues that, if properly addressed, would help develop the commodity futures industry and empower the farmer.

This section also addresses ancillary policy and legal issues that could facilitate the development of commodity futures markets. These issues include authorizing options trading on commodity futures; authorizing institutional participation in commodities futures markets by certain banks and mutual funds; authorizing foreign participation in the commodities futures markets; adopting conducive tax policies; and broadening the legal definition of "commodities" that may be subject to futures trading.

This section illustrates that the recommendations in this report could not only transform commodity futures markets practices, but also have a far reaching impact on the physical commodity markets. These beneficial impacts could include: 1) making spot markets more efficient for agricultural producers, end-users, consumers, and traders; 2) integrating spot and futures markets players; 3) developing support institution efficiencies in the food handling system, making agriculture a globally competitive sector as required under a WTO regime; and 4) removing regulatory and logistic bottlenecks to improve farmers' price realization and reduce overall costs of raw materials.

Warehouse Receipts Innovation

"The National Multi-Commodity Exchange (NMCE), the Punjab National Bank (PNB), and the Central Warehousing Corporation (CWC) launched a warehouse receipt financing program for the farming and trading community. Under this scheme, a farmer or trader can deposit an agricultural or non-agricultural commodity in a CWC facility and obtain a warehouse receipt. The farmer or trader would then enter into a forward sales contract with a NMCE broker or member and receive a copy of the order execution form. With the warehouse receipt and order execution form, the farmer can approach one of four PNB branches and obtain a loan of up to Rs. 2 lakh at Below Prime Lending Rate (BPLR).

This scheme will improve institutional credit to the agricultural sector, and in the long run through more than 4000 PNB branches across the country, will help bring down the indebtedness of marginal farmers. Farmers and growers who often rush to borrow funds from high interest private moneylenders are now being given a better alternative."

Kailash Gupta, Managing Director, NMCE. Excerpt of remarks at the FMI/NFA Training, August, 16, 2004, New Delhi.

Course of Action

This report outlines a recommended course of action in each of these five areas in order to achieve a comprehensive and integrated commodity futures market development program.

Adopting this program will mean a serious commitment of resources, both capital and human, by the GoI and the affected private sector stakeholders. Such a commitment means that the GoI policy makers and private sector commodity futures leaders will need to agree upon a program that is *consistently pursued* in the years ahead.

The GoI must remain resolute on its adoption of a market-based, internationally competitive, agricultural sector. This will mean that, unlike in the past, when a calamity befalls the agricultural sector, policy makers must remember that price volatility is usually reality-based, caused by supply and demand conditions. The historic urge to ban commodity futures as the putative solution must be resisted.

India is well positioned to take advantage of the many regulatory and operational advances that developed elsewhere while India's commodity futures markets languished. International standards for the legal, regulatory, and operational "best practices" are today refined and established. India has adopted them operationally with the three leading national multi-commodity exchanges. India needs to vigorously address the issues highlighted in this report to ensure that its commodity futures development potential is reached, and that the economic benefits of commodity futures are realized for its agricultural sector.

End Past Interventions

"GoI policy on commodity futures was premised on fear and misunderstanding for decades. If the vagaries of monsoon left no rain in Gujarat and groundnut prices shot up on futures markets, then the Government's response was to ban groundnut futures so as to stop those <u>speculative profiteers</u>.

When I was Chairman of the FMC in the 1980s, one year the rains were lean and in August the futures markets prices for gur in the months ahead were accordingly going up. The Minister of Civil Supplies called me to Delhi to inform me that he was very worried that with the festivals of Ganesh Chaturthi, Navratri, and Diwali all coming up, that we simply could <u>not</u> have high gur (jaggery) prices. As Chairman of FMC, I was to, somehow, make jaggery prices go down."

Venkat R. Chary, Chairman MCX, IAS (Retd.), Advocate, High Court, Mumbai. Excerpts of remarks at FMI/NFA Training Program, August 11, 2004, Mumbai

I. Regulatory Purpose and International Approaches

Nations regulate commodity futures and securities markets because policy makers understand the importance of sound legal structures for promoting key economic functions necessary for economic growth. Yet, securities markets participants are called “investors” while commodities futures participants are typically called “speculators.” Time and again, commodity futures markets are controversial. When a common man hears about transactions in which things do not change hands, and were never intended to, he is suspicious. Because of the fundamental role that speculators play in futures markets, there is frequently the allegation that whenever prices appear unusually volatile or move sharply in one direction or the other, then the cause must be excessive speculation, if not manipulation. Given the high leverage and potentially high risk of commodity futures markets, there is further concern about customer defaults, especially major defaults that could threaten the financial integrity of major institutions.

Offsetting these historical fears is the understood value of the economic function of price discovery and price risk management that commodity futures markets provide. But undeniably, these benefits have not always outweighed the controversy that can surround commodity futures, and futures markets around the world have experienced a reactive regulatory history. Historically, regulatory change in commodity futures markets is almost always preceded by scandal or the perception of wrongdoing.

India is now in the unique position of deciding to revise and reinvigorate its commodity futures regulatory scheme for positive reasons. Policy makers in India are choosing this course to best ensure that the economic benefits which strong commodity futures markets can provide are captured, and spread nationwide to benefit the farmer and the agricultural sector. This is a wise approach, because no nation has successful commodity futures markets unless it also has an effective and respected commodity futures markets regulatory scheme.

Analytical framework

This section sets forth an analytical framework for policy makers to use as they consider the best approaches to revise and reinvigorate the regulatory scheme for commodities futures markets. This framework has four parts: 1) the universal goals of all financial regulators; 2) procedural versus substantive aspects of financial regulation; 3) international structural models; and, 4) country specific criteria.

Universal goals of financial regulation

The *goals* of properly designed commodity futures regulatory schemes are threefold: 1) preventing market manipulation to assure efficient and fair pricing; 2) maintaining the financial soundness of clearing associations and their member firms; and 3) preventing fraud. Simply stated, these goals are market integrity, financial integrity, and customer protection. These goals are achieved through the relatively uniform regulatory *functions* practiced by regulators of commodity futures markets, and securities markets, and indeed by bank, or insurance, and other financial regulators. These include the following regulatory functions:

- *Licensing*: Regulators must establish the fundamental requirements for entry into the business of providing financial services. These include requirements for capital adequacy; education/skill/experience of managers; requirements for outside directors and audit committees untainted by conflicts; prohibitions on self-dealing; and the ability to understand and meet the basic reporting requirements of the regulatory authority.

- *Monitoring*: Regulators must ensure that the licensed exchanges, clearing houses, broker-dealers, and others comply with the capital requirements, operational guidelines, prohibitions on insider trading, and follow clear rules for customer protection. Monitoring compliance with the rules must occur through mandatory periodic reporting, reviews of those reports, and on-site examinations.

- *Enforcement*: Regulators must demonstrate that if an actor in the regulated industry fails to meet monitoring standards, fails to comply with the fundamental rules, it will be punished. Industry actors must know that their exchanges or firms will be fined, operations suspended, licenses revoked, or that they may themselves face criminal penalties for fraud.

These functions comprise the core activities of an effective and credible regulator. They are *procedurally* imperative and identical across financial regulators. In India, they are implemented by the Reserve Bank of India (RBI), the Insurance Regulatory and Development Authority (IRDA), the Securities and Exchange Board of India (SEBI), and the Forward Markets Commission (FMC).

Procedural versus substantive aspects

Importantly, there are also *substantive* knowledge requirements that affect the application of these *procedural* regulatory functions. By example, a securities offering is fundamentally about disclosure by the issuer of its financial standing, business operations and plans, and use of proceeds. Accurate and reliable accounting and financial data reporting is fundamental. The prospective investor needs to have reliable information to make an informed investment decision. The economic function is capital formation. The purchase and sale of most securities, including stock options, reflects a judgment about the value of a single company. Most types of securities are not derivative instruments, and can be transferred directly between individuals, over-the-counter, or on exchanges.

By contrast, a commodity futures contract has little to do with disclosure, at least in the securities market sense. *Disclosure* for a futures contract only means getting the few contract terms correct, designed through the knowledge of, and connection to, the commercial practices of the producer or end user of the underlying commodity, whether that underlying is soyabean, wheat, pulses, oilseeds, cotton, sugar, crude oil, gold, silver, ferrous and non-ferrous metals, or a financial futures contract. The economic functions of futures markets are price discovery and hedging for price risk management.

Because of these differences in economic function - - capital formation versus risk management and price discovery - - securities and commodities futures laws and regulations have a different focus. The primary focus of securities laws is to regulate the offer and sale of a particular company's debt or equity instruments to the public, and the secondary market trading of those instruments, whose historical value is a reflection of the company's business success.

The primary focus of commodities futures law is oversight of trading on the futures exchanges, and commodity professionals engaged in transactions on behalf of customers. This involves closely monitoring supply and demand factors, and surveying the agricultural markets for congestion or other pricing distortions during delivery periods at contract expiration. Futures markets are equally important to two types of hedgers, such as a farmer seeking protection against price decreases *or* a food processor seeking protection from price increases. Consequently, commodity futures regulation favors the concept of *price neutrality*. That is, commodity futures regulation supports the goal that derivative markets should *accurately* reflect the cash market price, whatever direction that price is moving. Certainly the futures markets participants are equally vehement about futures prices moving up <u>and</u> down. Securities market participants dealing in company shares, on the other hand, tend to favor upward price movements. Arguably, securities regulation is also price neutral, but it may appear to favor upward movements in the value of the investment. For example, securities regulation often has rules discouraging short-selling on a down tick, while futures markets have no comparable rule.

These and other substantive knowledge matters must be understood and applied for effective securities and commodities futures regulatory schemes. This is, of course, also true for banking or insurance regulation.

<u>*Three regulatory models*</u>

Three regulatory approaches are common in nations with successful commodity futures markets:

1. A unified regulatory approach with one regulator for commodity futures and securities markets (e.g., China, United Kingdom, Australia, Hong Kong, Singapore, Korea, and others);

2. A dual regulatory approach whereby there is a separate regulator for the securities markets, and another for *all* exchange traded futures contracts -

- whether the underlying is based on agriculture, energy, currency, interest rates, or securities derivatives (e.g., United States);

3. A multi-body approach where commodity futures are regulated by "product" so that wheat futures are under the Ministry of Agriculture; energy and metal futures under the Ministry of Economy, Trade and Industry; and financial futures under the Securities and Exchange Surveillance Commission within the Financial Services Agency (e.g., Japan).

Country specific criteria

Policy makers should evaluate these three alternative regulatory approaches through an analytical framework that considers the following criteria:

- *Resources, both capital and human*. Nations vary in the allocation of resources they are willing to dedicate to markets regulation, and vary in the availability of highly educated lawyers, economists, accountants, and investigators to apply the regulatory regime. This is one reason smaller nations with transition economies typically find it resource prudent to have one regulator. This criteria is less important to developed populous nations.

- *Market size*. The level of activity in securities markets and commodity futures markets must be evaluated with a special emphasis on the potential market growth if there is a burgeoning financial sector, or if agriculture comprises a significant proportion of GDP, or affects large numbers of people's livelihood.

- *Regulatory status*. The current regulatory scheme requires consideration of the following factors as the reform decision is considered: whether or not there are separate commodities and securities regulatory schemes in place; the effectiveness of one scheme versus another; the perception of the regulator's effectiveness by the stakeholders in each industry and the public; the respective budget autonomy or implementation authority; and technological infrastructure capacities.

- *Political and legal considerations.* What methods of legal implementation are required to accomplish a specific reform? By example, is a major legislative overhaul necessary that could require time-consuming deliberation in Parliament, or can desired regulatory reforms be achieved by Administrative and Budget Directives? What are the budgetary implications of any particular course of action, and are there sufficient resources to address the reforms both in terms of national priorities and political capital necessary to address various government priorities?

- *Facilitating economic growth*. The economic functions of capital formation (securities markets) and risk management/price discovery (commodity futures markets) are valuable for any nation. In both securities and commodities markets, there are now highly refined international "best practices" for regulatory schemes and exchange operational functions. Capturing the benefits of these "best practices" should be a priority, and thus an evaluation of which industry--commodity futures or securities--most urgently needs such assistance should influence policy making.

- *Support institutions*. Commodity futures markets are supported by different institutions than securities markets. The development of warehouses, warehouse receipt systems, commodity grading and certification systems, delivery center procedures, and other agricultural specific facilitating institutions need to be developed to maximize the beneficial impact of commodity futures on the farmer and agricultural sector.

- *Economic consequences*. There may well be consequences on the national economy, or on stakeholders in the commodities futures or securities industries, from regulatory choices. For example, a dual regulatory scheme was once thought to encourage a regulatory "race to the bottom" in terms of ever-easier capital or reporting requirements, due to the "captive agency" syndrome. Yet, in the United States the dual regulatory approach has fostered competition, encouraged innovation in each industry, and avoided an over zealous single regulator. Undeniably, stronger regulatory regimes may mean that less capitalized exchanges, and those with histories of poor regulatory compliance, will fold. This can occur through regulatory fiat, or through market migration as participants move to the most liquid trading forums and abandon less liquid markets.

The GoI is highly capable of applying this analytical framework as it considers issues on commodities futures markets regulation. It has already issued a Report of the Inter-Ministerial Task Force on Convergence of Securities and Commodity Derivative Markets which dealt broadly with the implications of hypothetical convergence of exchange *operational* and *trading* rights. Its findings are summarized in Appendix A, "Indian Commodity Market Studies".

While the *regulatory* convergence issue is still under evaluation, one issue is now beyond further deliberation. *Substantial resources will be needed for a revised and invigorated regulatory scheme for commodity futures markets*. This follows from the GoI decision to license the national multi-commodity exchanges and transform the commodities futures markets. But as this report will show, there are significant commodity futures markets regulatory shortfalls that demand attention and the commitment of resources to the commodities futures markets regulator, the FMC. These legal and regulatory shortfalls are highlighted in Section II of this report, and are also detailed in Appendix B, "Comparative Analysis of the Securities and Commodities Laws of India."

The most critical finding of this report is that a commitment of resources and technical assistance to the FMC should begin now, because the GoI should take steps now to minimize the possibility of a market scandal that could severely harm the burgeoning reputations of the three national multi-commodity futures exchanges, and thus stall their needed growth in hedging participation. Resources are necessary now to enhance the regulatory framework, and educate the farmers and natural hedgers on the benefits of these markets. This is required to allow the futures markets to achieve sustained liquidity and their internationally competitive potential. Whether this support leads to an enhanced and autonomous FMC, or to the FMC being converged with SEBI, is not, *at this point*, a critical decision. That is a decision that can be made over time, as the FMC is strengthened, and as the commodity futures markets continue to develop.

There are sufficient positive factors at work in India's commodity futures markets today, as there were in the United States futures markets thirty years ago, to warrant a reinvigorated commitment to establish a respected and credible commodity futures markets regulatory regime.

The following section offers lessons from other nations as they made choices on regulatory convergence.

UNITED STATES

Regulatory Approach. The U.S. has two independent regulators. The securities markets - - the markets for offering and trading companies' shares - - are regulated by the Securities and Exchange Commission (SEC). The commodity futures markets (which in the U.S. means futures on *all* exchange traded derivatives whether agriculture, metals, energy, interest-rate, currency, or securities derivatives) are regulated by the Commodity Futures Trading Commission (CFTC).

The principal reason the CFTC was created as an independent agency with sole authority over the *entire* exchange traded commodity futures industry was two fold: political leverage from an established and prosperous exchange industry; and indifference from the traditional securities industry. While there was discussion at the time to merge the staff of the Commodity Exchange Authority division at the US Department of Agriculture with the SEC, the Chicago-based commodities futures exchanges strongly opposed that merger. The Chicago Board of Trade and the Chicago Mercantile Exchange were agriculturally based, and did not want their industry potentially subsumed under an unfamiliar securities regulator that had established New York relationships. The legislation under consideration was being drafted in the House and Senate *Agriculture* Committees (rather than the Banking Committees, which regulate the securities industry). The Chicago exchanges were masters at cultivating good relationships with Agricultural Committee members. Both Chicago exchanges were important sources of campaign contributions for politicians, and that mutually beneficial situation facilitated the creation of an independent CFTC.

The CFTC was established in 1974, thirty years after the SEC. The key provisions of the establishing Act gave the CFTC the following powers:

- Exclusive jurisdiction over all futures transactions executed on U.S. exchanges.
- Designation authority over an exchange to permit it to operate as a "contract market." This reversed the presumption for exchange development of contracts. In the past, the Agriculture Department could only disapprove contracts. Now commodity futures exchanges were to submit new contracts to the CFTC for advance approval. The exchanges had to demonstrate to the CFTC's satisfaction that the proposed contracts were not contrary to the public's interest and passed an economic purpose test.
- The definition of "commodity" was no longer a static list of thirty-some specific commodities, as the basis of what could be traded in the future. Rather, the new legal definition broadened commodity futures to a dynamic *concept* of trading "goods, services, rights, or interests" so long as the economic function of risk management could be shown.
- Registration authority for all commodity futures broker-dealers, commodity trading advisers, commodity pool operators, floor brokers, and associated persons.
- Authority to protect customers' funds held by broker-dealers.
- Authority to conduct periodic examination of broker-dealers' books and records.
- Authority to go directly into any United States District Court to enjoin any exchange or person from violating the Act's provisions.

However, there are regulatory overlaps. By example, the Federal Reserve Board of Governors makes bond market decisions for the underlying instruments, but the CFTC regulates interest rate futures. Further, a compromise between the chairman of the SEC and CFTC in the 1980s left stock index futures under the purview of the CFTC, but the underlying securities with the SEC, and futures on individual securities were also left to the SEC. Only years later, with futures on single stocks developing in Australia, and with competitive pressures from equity derivatives on OTC markets, was this issue revisited. Such overlap in the regulation of financial futures is common across nations.

History of the U.S. Commodity Futures Trading Commission

In the early 1900s, with almost half of Americans living on farms, commodity futures exchange activity had become important to the U.S. economy. There were concerns about the Chicago exchanges' club-like trading system that favored insiders, lack of effective self-regulation, and farmer resentment. These fears about abuse in these markets led Congress to begin regulating commodity exchanges.

The first futures trading laws were enacted two decades before Congress began regulating the securities markets in the 1930s. The 1914 Cotton Futures Act and the 1922 Grain Futures Act were early regulatory efforts to rein in manipulative practices in commodity futures.

The 1936 Commodity Exchange Act was a more significant government regulatory initiative. It established the Commodity Exchange Authority (CEA) as a division of the U.S. Agriculture Department, run by a three member Commission consisting of the Secretary of Agriculture, Secretary of Commerce, and the Attorney General. The CEA was in many respects similar to India's Forward Markets Commission, established in 1952. Over time, the CEA was increasingly viewed as under-funded, understaffed, with little surveillance or enforcement capability. In the early 1970s, with the collapse of the Bretton Woods system of *fixed* international currency exchange rates, the new price volatility in currencies led to the introduction of futures on currencies and futures on various government securities.

The modern regulatory era began with the creation of an independent Commodity Futures Trading Commission in 1974, patterned after the SEC, with no ties to the Department of Agriculture. That legislation was triggered by the failure of a seller of unregulated "naked" commodity options, which caused $85 million in customer claims and corresponding complaints to members of Congress to do something about the futures industry. The concern surrounding those early 1970s events was heightened by a startling analysis that demonstrated that the trading value of the commodity futures industry was equal to that of the securities industry. And if futures markets were equal to securities markets, then Congress was intent on greater regulation of futures markets. However, the method used to compare the commodities futures markets to securities markets was deceptive: it used the *face value* of the underlying futures contracts. Because futures contracts are almost always offset, with no delivery of the underlying commodity occurring or ever intended, and because the futures margin is only about 10% to hold the leveraged position, the comparison was highly misleading.

Numerous changes have occurred in the CFTC's powers since the 1974 Commodity Exchange Act, and these were driven by two factors: the duration of the authorization of the CFTC, and the development of financial derivatives.

The CFTC was the first federal agency authorized under a "sunset" approach, whereby every five years it had to be reauthorized by Congress. This mandatory review provided the CFTC and the futures markets players a periodic opportunity to lobby for different regulatory approaches. One significant change was the reversal of the rule that exchanges could only launch new product contracts *with the approval* of the CFTC after passing various economic purpose tests. The new rationale was laissez-faire: why not let the new contract proceed? If a contract successfully traded, it demonstrated that it had price discovery and hedging functions. If it failed, only the exchange lost money, and that need not be a government concern.

The massive growth of financial derivative products (futures on U.S. Treasury Bonds, Eurodollars, the Standard & Poors 500 Index, financial options, swaps, swaptions, etc.) also drove regulatory change. It increased the interest of the financial regulators, such as the Treasury Department, the Federal Reserve Board, and the SEC. Today, there exist numerous inter-market oversight boards such as the Inter-market Surveillance Group, the Joint Compliance Committee, the Clearing Organization and Clearing Bank Roundtable, and the White House Working Group on Financial Markets, composed of the Chairman of the Federal Reserve Board, the Secretary of Treasury, and the Chairmen of the SEC and CFTC. The purpose of all these groups is the same: information sharing to review market developments that could have systemic implications.

The SEC and CFTC are both independent, autonomous agencies, with budgets from the central government approved by Congress. However, there is a tiny tax on all securities transactions, and because of the volume of transactions, it generates more funds to the central government than the SEC budget. No similar tax exists on commodity futures transactions, though such a tax has been proposed in Congress many times, and always defeated by the commodity futures industry. The following offers a brief comparison of the two agencies.

	CFTC	SEC
Mission	To protect market users and the public from fraud, manipulation, and abusive practices related to the sale of commodity and financial futures and options, and to foster open, competitive, and financially sound futures and options markets.	To protect investors and maintain fair, orderly, and efficient securities markets, and facilitate capital formation.
2004 Budget	$90 million	$716.4 million
Total # of Staff FY 2004	497	3,100
Organizational Structure	• 5 Presidentially appointed Commissioners • 3 Divisions • 11 Offices • 4 Regional Offices	• 5 Presidentially appointed Commissioners • 4 Divisions • 18 Offices • 11 Regional Offices
Laws & Regulations that Govern the Industry	• Commodity Exchange Act of 1936 • Commodity Exchange Act of 1974 • Commodity Futures Modernization Act of 2000	• Securities Act of 1933 • Securities Exchange Act of 1934 • Public Utility Holding Company Act of 1935 • Trust Indenture Act of 1939 • Investment Company Act of 1940 • Investment Advisors Act of 1940 • Sarbanes-Oxley Act of 2002

The remainder of this section compares a series of nations' regulatory structures. The analysis would benefit from a comprehensive study of the following factors: a) the comparative value of the commodities and securities markets; b) the income streams and revenues collected by the respective industries; c) the magnitude of government interference in one market versus another, such as through price insurance for crops, or export subsidies of crops, versus trade protection of certain industries represented in securities markets. Such additional information on every nation used here for regulatory comparison purposes would be valuable, albeit beyond the scope of this assessment.

However, the following quick comparison is instructive. In the United States, the leading securities exchange, the New York Stock Exchange, has a daily trading volume valued at $50 billion. The leading commodity futures exchange, the Chicago Mercantile Exchange, has a daily trading volume valued at $1 *trillion*. The CME thus trades a value of the underlying commodities 20 times greater than the NYSE - - and the Chicago Board of Trade trades almost the same value as the CME. Thus, in the U.S., the derivatives markets dwarf the securities markets on the basis of the underlying value traded. But, on the NYSE the full dollar value of the securities traded does change hands, while in commodity futures markets only a 10% margin deposit changes hands. A quick comparison of India's derivatives markets at the National Stock Exchange of approximately $2 billion a day (using a Nifty underlying $1 billion and NSE individual stocks $1 billion) shows a CME/NSE ratio of 500.

CHINA

There are a number of parallels between India and China: a) both countries have populations in excess of 1 billion; b) the agriculture sector in both countries is vast, both in terms of percent of GDP and percent of the labor force; c) both countries have markets that were, in different degrees, subject to socialist policies and are now evolving toward free markets; and d) both countries are emerging as influential players in the international economy.

Regulatory Approach. There is one regulator for the securities and commodity futures markets: the China Securities and Regulatory Commission (CSRC).

The State Council Securities Commission (SCSC) is the State authority responsible for exercising centralized market regulation. The CSRC is the SCSC's executive branch. Its functions and responsibilities are as follows:

- To establish a centralized supervisory system for securities and futures markets and to assume direct leadership over securities and futures markets supervisory bodies;
- To strengthen the supervision over securities and futures businesses; stock and futures exchange markets; listed companies; fund management companies investing in securities; securities and futures investment consulting firms; and other intermediaries involved in the securities and futures business.

- To supervise information disclosure and proliferation.
- To prevent and better handle financial crises.
- To study, formulate, and draft laws, regulations, policies, and rules related to the securities and futures markets.
- To supervise securities markets by overseeing the listing, trading, custody, and settlement of equity shares, convertible bonds, and securities investment funds; approving the listing of corporate bonds; and supervising the trading activities of listed government and corporate bonds.
- To supervise the futures markets by overseeing the listing, trading, and settlement of domestic futures contracts; and monitoring domestic institutions engaged in overseas futures trading in accordance with relevant regulations.
- To grant, in conjunction with the relevant authorities, the qualification of law firms, accounting firms, asset appraisal firms, and professionals in these firms engaging in the securities and futures markets.
- To investigate and penalize activities violating securities and futures laws and regulations.

History of the China Securities Regulatory Commission

Commodity exchanges mushroomed during the period China accelerated the transformation from a centrally planned to a market-oriented economy, in the early 1990s. The establishment of the SCSC and the CSRC in October 1992 marked the formation of this regulatory body. More than 50 exchanges trading in agricultural staples such as wheat, corn, and soybeans existed by end of 1993. In November 1993, the State Council decided to charge the SCSC with the responsibility over operations of the futures markets, to be carried out by the CSRC. In 1995, the Government realized the serious deficiencies in commodity futures exchange management, trading systems, and practices, and made the decision to close down many of them, or reverted them to being whole sale markets. The Chinese government gave formal approval to only 15 restructured exchanges. In March 1995, the State Council formally approved the Organizational Plan of the China Securities Regulatory Commission thereby confirming CSRC to be a deputy-ministry rank, directly under the State Council and the executive branch of the SCSC. CSRC was authorized to supervise and regulate the securities and futures markets.

In August 1997, the State Council decided to put the securities markets in Shanghai and Shenzhen under the supervision of the CSRC. Meanwhile, offices of the CSRC commissioners were set up in the two municipalities. In November 1998, the Central People's Government held the National Finance Conference and decided to reform and reorganize the national securities markets' regulatory mechanism. The local securities regulatory departments were supervised directly. Organizations engaged in securities formerly supervised by the People's Bank of China were put under the centralized supervision of the CSRC.

In April 1998, pursuant to the State Council Reform Plan, the SCSC and the CSRC were merged to form one ministry rank, directly under the State Council. Both the power and the functions of the CSRC have been strengthened after the reform. A centralized securities supervisory system was thus established.

China's Futures Markets

Currently, only commodity futures are traded on China's three futures exchanges. Copper, aluminum, natural rubber, and fuel oil futures are traded on the Shanghai Futures Exchange; soybeans, soybean meal, beer barley, and most recently, corn futures, are traded on the Dalian Commodity Exchange; and wheat, green beans, red beans, and peanut kernels, are traded on the Zhengzhou Commodity Exchange (cotton was also recently approved). All products traded involve physical delivery. For the first six months of 2004, over 24 million contracts were traded at the Shanghai Futures Exchange, over 26 million in Zhengzou, and over 24 million in Dalian. All three exchanges operate time price priority electronic order matching systems for trading and clearing. In May, 2001, the three exchanges linked their information dissemination systems.

Product offerings under consideration include stock indices, rice, petroleum, Chinese government bonds, and metals in Shanghai; energy, crude oil, power, steel, plastic, Chinese treasury bonds, and stock indexes in Dalian; and sugar, rapeseed, and options in Zhengzhou. Irregularities in government bond futures in 1995 caused the CSRC to remain prudent about introducing financial futures. They are not likely to be permitted until the CSRC is confident that all necessary risk management and market surveillance systems are in place, and that sufficient experience with such systems has been achieved.

Seventeen Chinese institutions are presently authorized to use overseas products for hedging purposes. Foreign and domestic banks are permitted to undertake over-the-counter derivatives business in China, but for the most part, the futures markets are closed to foreign participation.

UNITED KINGDOM

Regulatory Approach. There is one regulator for the securities and commodity futures markets: the Financial Services Authority (FSA).

The FSA is an independent, non-governmental body that regulates the financial services industry in the United Kingdom. It has four statutory objectives:

- To maintain confidence in the UK financial system.
- To promote public understanding of the financial system.
- To secure an appropriate amount of protection for consumers.
- To help reduce financial crime.

It achieves these goals by supervising exchanges, settlement houses, and other market infrastructure providers; informing consumers of market benefits and risks; authorizing firms and individuals to engage in regulated activities by establishing stringent criteria; and fighting money laundering, fraud, and market misconduct.

History of the UK Financial Services Authority

The United Kingdom has a long history of commodity futures trading. The origins of the London Metals Exchange (LME) can be traced back to the opening of the Royal Exchange in 1571, where metals traders first began to meet on a regular basis. Today, the LME trades contracts in copper, aluminum, tin, zinc, and lead. Soft commodities, such as cocoa, coffee, sugar, and wheat have a long history of trading on the London Commodity Exchange, and now on the London International Financial Futures and Options Exchange (LIFFE), along with its financial derivatives.

Prior to the Financial Services Act of 1986, there was no legislation in the UK which comprehensively regulated all areas of investment business. The legislation that did exist had been enacted in a piecemeal manner and in response to scandals and abuses. The securities and commodity futures regimes were largely self-regulatory, with virtually no formal state regulation.

The international expansion of financial services in London in the 1970s led to the creation of two securities markets supervisory bodies: the Joint Review Body, which was responsible for the general oversight of all aspects of securities markets supervision; and the Council for the Securities Industry, which was responsible for the non-statutory aspects of supervision of the securities markets not covered by the Stock Exchange. Commodity futures markets remained unregulated.

Just as in the United States, scandals and other factors played a catalytic role in prompting regulatory reform. In the early 1980s, pressure for significant change in the regulatory system grew in response to increased competition from domestic and international market actors; improvements in technology which transformed the conduct of business; an increased reliance on investment managers and advisors; the development of new financial derivatives products which were not covered under existing financial regulatory schemes; and scandals with brokerage firms Norton Walburg and Halliday Simpson.

Several results followed. The commodity futures exchanges and the LIFFE agreed to establish an industry-based self-regulatory organization (SRO), the Association of Futures Brokers and Dealers (AFBD), in anticipation of legislation on investor protection. The Financial Services Act was passed, providing a two-tier regulatory framework composed of industry specific SROs and a statutory body, the Securities and Investment Board (SIB). Nearly all firms carrying out investment business in the UK were required to join a recognized SRO and abide by its rules, or be directly regulated by the SIB. Originally, there were five recognized SROs under the SIB, by 1995, there were twenty-two.

Again in the early 1990s, a series of market mishaps occurred: the collapse of Barings investment bank; a property futures scandal; a scandal involving the mis-selling of home income plans and personal pensions; disputes over authority between the SIB and its twenty-two SROs; and a series of other regulatory failures which resulted in vast losses of investor funds. Accordingly, harsh criticism was directed at financial services regulators. As a result, in 1997, the Chancellor of the Exchequer, Gordon Brown, announced the creation of one large regulator responsible for the entire financial sector. This regulator was the Financial Services Authority (FSA), which received its full authority under the Financial Services and Markets Act (FSMA) of 2000.

The key authority given to the FSA by the Financial Services and Markets Act of 2000 include the following:

- Supervision of securities and commodity futures markets, all recognized clearing and settlement houses, and selected additional market infrastructure providers;
- Single authorization, supervision and enforcement powers;
- Specific statutory objectives for consumer protection;
- Strong powers to tackle market abuse;
- Powers to prosecute financial firms for failure to maintain money laundering controls;
- An independent Lord Chancellor's Tribunal which can hear any enforcement case;
- Fining powers for the Listing Authority;
- A focus on how customers are treated after the sale of a financial product.

Within the FSA, the Market and Exchanges Division conducts market surveillance and transaction monitoring. The Transactions Monitoring Unit analyzes the transaction data collected from the recognized securities and commodity futures exchanges and settlement systems and monitors unusual trading activity.

Other Regulatory Approaches

Similar histories of the circumstances surrounding other nations' choices of a commodities futures regulatory approach are detailed in Appendix C "Regulatory Approaches of Selected Countries." The following paragraphs briefly summarize the situation in Australia, Hong Kong, Singapore, Korea, and Japan.

Australia

Regulatory Approach. One regulator for the securities and commodity futures markets: the Australian Securities and Investments Commission (ASIC).

History. Prior to 1989, the corporate sector and financial markets were regulated by the individual State and Territorial governments. A series of massive unit trust collapses in the 1980s led to a rapid decline in investor confidence and a demand for change in the regulatory structure. In 1989, the ASIC was established as a federal government regulator.

Hong Kong

Regulatory Approach. One regulator for the securities and commodity futures markets: the Securities and Futures Commission (SFC).

History. Securities and commodity futures markets in Hong Kong were largely unregulated by the Government until the market crash of 1973-74. This crash led to the establishment of two part-time regulators: one for the securities markets and one for the derivatives markets. In 1987, another world-wide market crash fueled by the interconnectedness of financial futures and underlying securities markets which saw the Hong Kong Futures Exchange clearinghouse fail, led to a reevaluation of this dual regulatory approach and the conclusion that it was inadequate. As a result, the Securities and Futures Commission was established as a single regulator in 1988.

Singapore

Regulatory Approach. One regulator for the securities and commodity futures markets: the Monetary Authority of Singapore (MAS).

History. Prior to 1970, the various monetary functions associated with a central bank were performed by multiple government departments and agencies. As financial markets developed in Singapore, the demands of an increasingly complex banking and monetary environment necessitated the streamlining of regulatory functions. In 1970, the MAS was established to regulate all monetary, banking, and financial aspects of Singapore. Securities and futures industry regulation was added to the MAS portfolio in 1984.

Korea

Regulatory Approach. One regulator for the securities and commodity futures markets: the Financial Supervisory Commission (FSC).

History. Prior to 1998, the Korean financial sector was regulated by four independent supervisory organizations. Advances in global finance and the Asian financial crisis of 1997-98 led to demands for a better coordinated and more efficient financial regulatory framework. In response, the FSC was established as the single financial sector regulator in 1998.

Japan

Regulatory Approach. Japan uses a “product-based” regulatory approach. The securities markets and financial futures are regulated by the Securities and Exchange Surveillance Commission (SESC), within the Financial Services Agency (FSA); agricultural commodity futures are regulated by the Ministry of Agriculture, Forestry and Fisheries (MAFF); and industrial commodity futures (i.e., energy and metals) are regulated by the Ministry of Economy, Trade and Industry (METI).

History. Japanese commodity futures trading dates back to the 18th century. The markets were widely used and highly liquid until futures trading was suspended in 1939, as a result of the start of World War II. In 1950, the government permitted resumption of futures trading in certain agricultural products, which were regulated by the MAFF. As contracts in financial futures, and futures in commodities such as oil and metals were developed and approved for trading, regulatory responsibilities were given to the Ministry which had jurisdiction over the underlying product.

Following the Asian financial crisis of 1997-98, the Government of Japan felt it necessary to strengthen the financial system and its regulatory regime. In response, the Government established the Financial Services Agency (FSA) in June, 1998, as an administrative organ responsible for the inspection and supervision of private-sector financial institutions (i.e., insurance companies, banks, and audit firms) and surveillance of securities transactions. In July 2000, the FSA was reorganized and given responsibility for planning of the financial system, which was previously under the jurisdiction of the Ministry of Finance. Effective January 2001, the FSA is an external organ of the Prime Minister’s Cabinet Office. Within the FSA, the Securities and Exchange Surveillance Commission is responsible for inspecting securities companies, daily market watch, and investigating criminal cases. Agricultural and industrial commodities, however, remain under the purview of MAFF and METI, respectively.

This section illustrates that unified, dual, or product based commodity futures regulatory models can all succeed. Determining the most appropriate model for India will require careful application by Indian experts, over time, of the analytical framework and *country specific criteria* outlined in this section. However, the commitment of human and financial resources to enhance the commodity futures regulator and educate potential commodity futures markets users *need not wait* for this decision to be made. A strengthened commodity futures regulator is immediately necessary in order to minimize the risk of a commodity futures markets scandal that could stall or cripple the remarkable progress India has made in the past two years. The regulatory strengthening necessary for the commodity futures regulator is discussed in the next section.

II. Implementing Regulatory Reforms in the Forward Markets Commission

The FMC was created in 1952 as an advisory body, and has continued to operate in that capacity. At inception, the FMC was provided limited authority to implement rules over exchanges, or over other commodity futures markets participants, and likewise it was granted limited enforcement powers.

However, the FMC does have the authority to *approve* commodity futures contracts. It has used this authority effectively to force exchanges to adopt Articles of Incorporation and operational Bye-Laws that were desired by the FMC, as a condition precedent for the exchange to obtain contract approval. Essentially then, every issue that came up vis-à-vis the operation of a futures exchange has been dealt with on a case-by-case basis. The result is no FMC standardized body of regulations that affects all commodity futures exchanges alike.

Considering the FMC has such limited authority, it is a testament to the innovative capacities of the FMC Commissioners and staff over the years, and to the commodity futures exchange leaders, that the regulatory situation in India is as sound as it is. While the legal and regulatory authority over commodity futures markets and participants is weak, the Articles of Incorporation and operational Bye-Laws of the exchanges are remarkably good. Markets work. Further, the three national multi-commodity exchanges are demonstrating that competition for order flow spurs them to adopt best practices without compulsion.

For most of its history, the FMC had as its principal role the policing of illegal commodity futures trading, because the GoI kept periodically declaring specific commodities unlawful for commodity futures trading. Even in that limited policing role, the FMC was not very successful because the FMC did not have the power to shut down illegal exchanges. Only the local police had the legal authority to do that. The steps the FMC was required to take to get the police to close a futures exchange were cumbersome and mostly ineffective. These historical realities have resulted in the FMC being perceived as *other than* a full fledged regulator, because by GoI policy decision, it was not.

The following comparison between the FMC and SEBI is indicative of GoI policy makers' historical decisions on empowering the FMC and SEBI.

	FMC	**SEBI**
2004 Budget	$470,000 (Rs. 2.3 crore)	$8.7million (Rs. 40 crores)
Total # of Staff	87	450

Executive Organizational Structure	Members appointed by the Central Government: • Chairman • Maximum 3 other members	Members appointed by the Central Government: • Chairman • 2 members from Ministry of Finance • 1 member from the RBI • 5 other members, 3 of which must be full time.
Laws & Regulations that Govern the Industry	• Forward Contracts (Regulations) Act of 1952 • Forward Contracts (Regulations) Rules 1954	• Securities Contract (Regulations) Act of 1956 • SEBI Act of 1992 • Depositories Act of 1996 • Securities Law (Amendment) Act 1999 • SEBI Regulations
Autonomy	The FMC functions as a Subordinate Office of the Administrator's Department, the Department of Consumer Affairs. The FMC has limited financial autonomy.	SEBI is operationally independent, with full administrative autonomy. SEBI operates independently under the General Fund.
Hiring Authority	FMC must obtain approval to hire professional staff (lawyers, accountants, economists). Government Rules and Procedures on hiring apply, with applicable salary limits.	SEBI can hire professional staff with internal justification. The Government Rules and Procedures on hiring do not apply.
Procurement Authority	FMC procurement authority is likewise limited.	SEBI procurement authority is broad, subject to internal justification.

Agenda for FMC Regulatory Reform

The following material sets forth the current regulatory environment for the commodities futures markets in India, highlights gaps in legal and regulatory oversight, and offers a *Recommended Regulatory Approach* in each instance. This is intended as an ambitious workplan for reform to be incrementally implemented by the FMC. The goal of this plan is to assist India in developing a properly designed commodity futures regulatory scheme that has three principle aims: 1) preventing market manipulation to assure efficient and fair pricing; 2) maintaining the financial soundness of clearing associations and their member firms; and 3) preventing fraud.

Achieving these aims will require an effort similar to "changing the engines while the plane is in flight." The FMC must continue to monitor and supervise the futures industry, while at the same time it needs to introduce new requirements as it reinvigorates the regulation of the commodity futures industry in accord with international best practices. This effort will require a major commitment of resources and advisors to the FMC. The core recommendations for reform set forth in this section use the following international best practices framework:

I. <u>Financial Integrity</u>

1. Capital-based qualifications
2. Clearing facility requirements
3. Margin and credit extension requirements

II. <u>Monitoring, Market Surveillance, and Compliance</u>

4. Financial compliance programs
5. Customer funds protection
6. Default, insolvency, or bankruptcy provisions
7. Market disruptions
8. Recordkeeping

III. <u>Sound Business Practices</u>

9. Goodstanding: Qualifications and Competency
10. Order execution
11. Sales: Representations and Disclosure
12. Contract design: Delivery procedures and Settlement prices

"Best regulatory practices" have been well established internationally for commodity futures markets. An example of this is outlined in the following text box which details the tension that occurs between producers of a commodity, and the exchange trading it, when the futures price and physical price significantly diverge. "Best practices" exist that are directly applicable to the Indian guar contract trading on NCDEX in September 2004, and they require focusing on: 1) daily surveillance of the spot and futures markets prices; 2) rule enforcement and trade audit trails; and 3) financial surveillance.

Excessive Speculation and Profits? Required Regulatory Actions.

"Guar processors blame futures exchanges for high prices." The Hindu Business Line, Sept. 23, 2004
"Guar trade sows a seed of doubt." Central Chronicle, Mumbai, Sept. 28, 2004
"Guar seeds clock 67 pc returns in H1." Financial Express, Mumbai, Oct. 23, 2004

These headlines refer to spectacular volume and profits in the Guar Seed futures contract traded on the NCDEX. In response to the run-up in guar seed prices on the exchange, various spokespersons for the guar industry and NCDEX made the following points:

"There is a shortage of crop this year but we feel there is too much speculation in the futures exchanges which has affected the processing industry," said Mr. Giridhar Lal Saradha, President of Indian Guar Gum Manufacturers Association. According to Mr. Saradha, the daily turnover of guar futures is Rs 1,500 crore. "This is higher than the annual turnover of our industry," he said.

"Speculation has led to volatility in the market and we are unable to give quotes to our foreign buyer," said Mr. B. L. Soni of Shri Ram Gum and Chemicals, Jodhpur.

The Chairman and Managing Director of NCDEX, P.H. Ravikumar, responded: "We are aware of the speculative activities and have introduced three types of margins to curb speculation --- real time margin, concentration margin, and an ad-hoc margin…We have done whatever we could to ensure there is fair trade. We have raised margins and told some participants to cut their positions."

These differences of opinion by producers and exchanges are common in situations around the world. However, what is important is to apply "best regulatory practices," and remedial actions such as NCDEX imposed. Overall, "best regulatory practices" include the following:

1. The Regulator and the exchange surveillance division should work together daily checking the relationship between the spot and futures market prices. This involves observing the size of the positions held by traders, determining the quantity of the physical commodity owned by the trader, and analyzing traders' intentions regarding their futures and spot market holdings.

2. The Regulator should periodically conduct rule enforcement reviews to ascertain the level of compliance by the exchange, the clearing house, intermediaries, and traders with the statutes/regulations and the exchange's Bye-Laws. If the futures contract permits physical delivery, which the NCDEX Guar Seed contract does, the Regulator should examine the terms and conditions of the process of making/taking delivery to ensure they are in keeping with accepted trade practices. The Regulator should examine the results of the exchange's periodic audit trails as to how the broker executed the trade for the customer.

3. The Regulator should perform regular financial audits of the exchange's financial surveillance program, as it applies to the clearing house, intermediaries and traders. The audit will determine: a) if the clearing house has a sound methodology for determining the amount of margin due from every intermediary at any given time; b) if the intermediary adheres to a standard procedure for determining if the customer/trader is credit worthy, understands the risks of trading futures, and knows if the broker is acting as an agent only or is also trading for its own account; c) if the customers' funds are segregated and treated in accordance with all applicable rules.

The following section provides a *Recommended Regulatory Approach* for reform in each of the twelve categories previously presented on regulatory best practices. The goal is to establish international best practices for India.

Implementing each substantive recommendation will require a new FMC *process* to establish or monitor the necessary statutory or regulatory strengthening provisions. Establishing these *procedural* reforms in order to implement the *substantive* reforms will be an important part of the FMC reform process. That process would necessarily lead to (or have as its consequence) an organizational restructuring of the FMC. Each recommendation should also be refined through a comprehensive review process that includes the FMC, the commodity futures exchanges, and related commodity futures markets stakeholders.

In addition to the following section, see also Appendix B, "Comparative Analysis of Securities and Commodities Laws of India," which details gaps in the respective laws. That analysis, and this section, rely upon the following:

- Forward Contracts (Regulation) Act 1952 [FCRA]
- Forward Contract (Regulation) Rules of 1954 [FCR Rules 1954]
- Securities Contract (Regulation) Act 1956 [SCR Act]
- Securities and Exchange Board of India Act 1992 [SEBI Act]
- Securities Law (Amendment) Act 1999
- Securities and Exchange Board of India (Collective Investment Schemes) Regulations 1999

Best Practices: Financial Integrity

1. Capital-Based Qualifications

(a) ***Are there specific regulatory or self-regulatory capital-based qualifications for Indian exchanges?***

Answer. No. The FCRA does not have capital-based qualifications in order for an exchange to be registered by the FMC. Recently three screen-based trading exchanges were approved by the GoI, and none of them were required to have a minimum capital investment. While arguably, the size of the capital investment made by these exchanges in the technology and infrastructure indicates that they are sufficiently capitalized, that is not what capital adequacy is about. FCRA, Chapter III, Section 5, Application for recognition of associations; Section 6, Grant of recognition to association.

Recommended Regulatory Approach. Capital regulation requires enough liquidity to meet cash flow requirements until such time as an exchange is making a profit. Capital does not refer to the investment in infrastructure or equipment, but specifically to a quantity and quality of financial assets available over the time period until an exchange achieves profitability on a sustained basis.

The GoI should require that existing exchanges have a minimum capital investment as determined by the FMC through proper rulemaking. The FMC should verify that exchanges maintain these capital requirements. The FMC has recently adopted minimum capital requirements for new applicant exchanges.

(b) ***Are there specific regulatory or self-regulatory capital-based qualifications for clearing organizations or clearing members?***

and settlement process. Likewise, there are no specific self-regulatory capital-based qualifications for clearing organizations, but there are for clearing members. There is no provision in the Act for the FMC to register a clearing organization or clearing member period, exchanges are the only entity required to register. FCRA Chapter III, Section 5, Application for recognition of associations; Section 6, Grant of recognition to association.

Recommended Regulatory Approach. There is no necessity that a clearinghouse be affiliated with an exchange. Logically, each exchange wants to assure that its trades can be settled and cleared. However, clearing requires its own infrastructure and risk management and the markets could evolve in such a way that a clearinghouse could serve multiple markets. However clearing is structured, the same capital requirements should be met. The capital requirements should reflect at a minimum the volume of trading, the diversification among contracts cleared, and the volatility of the underlying. The GoI should require that exchanges must demonstrate that its clearinghouse and clearing members meet a certain minimum capital threshold.

(c) ***Are there specific regulatory or self-regulatory capital-based qualifications for financial intermediaries?***

Answer. Financial intermediaries, broker-dealers, must meet certain minimum capital requirements, under the SCR Act. However, the FMC has no regulatory oversight over broker-dealers. An amendment to the FCRA has been submitted to the Parliament that would require brokers to register with the FMC. The SCRA has been amended to allow a security broker to become a member of a commodity exchange. The broker must establish a subsidiary, a separate legal entity, with separate capital adequacy and minimum net worth in order to trade on a commodity exchange.

Recommended Regulatory Approach. The GoI should place the qualifications and criteria to become a licensed intermediary for the buying and selling of futures contracts on approved futures exchanges under the jurisdiction of the FMC.

2. Clearing Facilities

(a) ***Are there any regulatory or self-regulatory requirements regarding the relationship between the exchange and clearing facility?***

Answer. No. An entity functioning as a "clearing facility" is not mentioned in the FMC statutes/regulations. However, a “clearing member” is construed by the FMC as a specie of the broad category “member.” An exchange can, with prior approval of the Central Government, use Bye-Laws to establish an affiliated clearinghouse or enter into an arrangement with an independent clearinghouse; set fees/system usage charges/deposits/margins; define categories/qualifications/capital requirements of membership; and establish committees and provide for the process of exchange governance in general.

Most exchanges in India have clearinghouses that seek to "ensure default risk-free transactions and provide financial guarantees on the strength of funds contributed by its members and through collection of margins, marking-to-market all outstanding contracts, position limits imposed on traders, fixing the daily price limits and settlement guarantee fund." Chapter III, Section 11; Power of recognized association to make Bye-Laws.

(b) ***What is the relationship between the exchanges and the clearing houses? Affiliated? Independent?***

Answer. Both approaches exist. Most of the clearinghouses in India are affiliated with an exchange. However, for example, the National Commodity Derivatives Exchange (NCDEX) uses an independent clearinghouse. (See 2(a) above)

(c) ***Are there any regulatory or self-regulatory operational requirements for clearing facilities?***

Answer. An entity functioning as a "clearing facility" is not mentioned in the GOI/FMC statutes/regulations. (See 2(a) above)

(d) ***Are there any rules or regulations governing the scope, nature, and timing of guarantee of clearing members?***

Answer. See 2(a) above.

Most exchanges have Bye-Laws that set out the norms/procedures and terms/conditions for:

- i.) admission of clearing members;
- ii.) for clearing and settlement of deals for different clearing segments and different contracts/commodities;
- iii.) for guaranteed settlement by the Exchange;
- iv.) capital adequacy requirements for clearing members;
- v.) maintenance of books/records and inspection /audit of clearing members;
- vi.) disciplinary action/procedures against a clearing member;
- vii.) mode and manner for performance of contracts between clearing members and trading members and their constituents, clearing members themselves

and the fees they can charge.

Recommended Regulatory Approach. The FMC should be responsible for reviewing applications for registration as a trading member, clearing member, professional clearing member, or clearinghouse. In order to be approved to do business, an exchange should have to make application to the FMC explaining how it intends to establish and enforce rules providing for the financial integrity of any contracts traded on the exchange. The rules should apply to trading members, clearing members, professional clearing members, and the clearing house. They must also demonstrate that enforcement of the rules will include periodic audits of the books and records of those who handle customer funds.

3. Margin and Credit Extension Requirements

Margins are the first line of defense in ensuring contract financial integrity. They also provide one among several tools to force participants to reduce open positions when potential disruptions appear.

(a) *Are original margin requirements set by the clearing house?*

Answer. Original margins are set by the exchange in some instances and by the clearinghouse in others. Margins are not referred to in the GOI statutes, but in Section 12 (l) of the FCR Rules, exchanges are required to file an annual report that, among other things, responds to a request for information about what are the "rates of margin and amount of margin deposited from time to time."

The Bye-Laws of the three national multi-commodity exchanges explain how margins will be set. One exchange’s Bye-Laws state, for example, that margins should be set, "in such form and within such time as specified by the clearing house. Every exchange member has a continuing obligation to maintain margins at the level and for the period stipulated."

Recommended Regulatory Approach. Absent an emergency, margin levels for futures contracts should be set by exchanges, as the exchange must take responsibility for financial integrity. Emergency powers should be granted to the regulator to adjust margins on a temporary basis in an emergency, and the regulator should use the power only if there is no other tool available that would have the same effect. If the regulator starts enforcing higher margin levels, it can cause liquidity problems. The whole purpose of netting, cross-margining, etc., is to reduce inefficiencies and allow liquidity that is needed for orderly trading. Contingencies in the rules may improve on margin to accomplish regulatory goals. For example, the rules could state that in an emergency, the regulator could direct orderly liquidation—not merely the regulator stepping in and raising margins.

The FMC should require independent audits of the exchange's/ clearinghouse's computer system in order to determine if it is correctly calculating margin requirements and aging margin calls. In addition to a correct calculation, the more important issue is whether the algorithm or methodology used to set margins is appropriate for the commodity (parameter values) and whether regular back-testing of its sufficiency is performed.

(b) ***Are exchange/clearinghouse margin deposits collected on a: Net basis? Gross basis?***

Answer. Some exchanges/clearinghouses collect on a net basis, and others on a gross basis.

Recommended Regulatory Approach. Intermediaries should collect margins for customers on a gross margin basis, unless the intermediary can establish that the customer has an off-setting position. Margins should be collected on a gross basis on omnibus accounts, which an intermediary carries for another intermediary, because with many customers in an omnibus account, the off-setting positions cannot be readily accounted for. For those exchanges that have net margining clearing systems, there is no off-set between segregated and non-segregated accounts.

(c) ***Are original margin requirements calculated using: Simulated models? Specific margin per contract multiplied by number of contracts held (or similar simple calculation)?***

Answer. In some cases, original margin requirements are calculated using simulated models like SPAN (Standard Portfolio Analysis of Risk Margin System), developed by the Chicago Mercantile Exchange. The SPAN margining system margins futures positions on a portfolio basis measuring the aggregate risk of the combined positions. Some of the regional open-outcry exchanges appear to use a simple calculation process. While SPAN is a sound system, it requires accurate information on volatility, maximum price move, range, etc. This involves model validation, documentation, and back-testing. Proper questions need to be asked about the systems' reliability, so that the users maintain confidence in the system.

Recommended Regulatory Approach. See 3(a).

(d) ***Are settlement payments made daily?***

Answer. Yes. The FCRA does not deal with how or when settlement payments are made.

Recommended Regulatory Approach. The FMC should require that the intermediary must remain in a net positive margin position with regard to the clearinghouse. Intermediaries should be required to take a capital charge with respect to customer accounts which remain under margined for 3 consecutive days.

(e) ***Do exchanges/clearinghouses issue intra-day variation margin calls? On a routine basis? In cases of large market moves?***

Answer. Yes, clearinghouses do issue intra-day variation margin calls on a routine basis, and in cases of large market moves.

Recommended Regulatory Approach. Same as 3(a), 3(c).

(f) ***Are exchanges/clearinghouses required by legislation or exchange rule to segregate customer funds from any funds used in the firm's proprietary operation?***

Answer. Segregation of customer funds is not covered in the GOI/FMC statutes/regulations. However, clearing houses are required by exchange rules to segregate customer funds.

Recommended Regulatory Approach. Clearinghouse rules should document the safekeeping of funds. Rulemaking is recommended to preclude the commingling of customer funds with proprietary funds, obligating customer funds for any purpose other than to purchase, clear, and settle the products the clearing organization is clearing, or procedures regarding customer funds which are subject to cross-margin or similar agreements and any other aspects of customer fund segregation.

Capital requirements on exchanges and clearinghouses should serve to assure that public funds will not be used to support exchange or clearinghouse operations under stress conditions. This liquidity cushion allows the exchanges and clearinghouses to maintain orderly markets in unexpected market conditions, and if necessary, to achieve orderly liquidation. Customer funds should be used to close out positions of the customers and not for exchange or clearinghouse survival.

(g) ***Do the exchanges/clearinghouses accept the following as collateral: Cash? Securities? Letters of credit? Other?***

Answer. Acceptable collateral is not covered in the FMC statutes/regulations. Yes, clearinghouses do accept cash and securities. Bank guarantees, fixed deposit receipts, warehouse receipts or such other acceptable modes of collateral are also accepted.

Recommended Regulatory Approach. Whatever asset an exchange or a clearinghouse designates as collateral against margins should require the approval of the regulator. All the sources of collateral mentioned above are fine, provided that a significant proportion of the collateral is in an immediately liquid form (cash, near-cash securities). Terms of the letters of credit need to be documented, as this source of collateral must be available virtually immediately if needed. The FMC needs to understand how the RBI views letters of credit in terms of the liabilities of the bank. The issue has to do with other claims on the banking systems' liquidity in stress scenarios and whether the bank will be able to deliver funds when needed. Sometimes, a governmental authority may need to provide temporary liquidity to the system while the letters of credit and other collateral holdings can be used by the clearinghouses or the exchanges. As an historical note: the market "break" in the US securities and futures markets in 1987 was in large part a function of inadequate liquidity in the payment system. In more recent crises, the Board of Governors of the Federal Reserve has committed to maintain market operations in unusual market conditions.

Best Practices: Monitoring, Market Surveillance, and Compliance

4. Financial Compliance Programs

The GoI should charge the FMC with the responsibility for monitoring financial and market practice rule compliance. The FMC should develop guidelines on acceptable practices and determine sanctions, or compliance grace periods for correction, if their reviews demonstrate non-compliance.

(a) *Are there existing programs for continuous financial surveillance?*

Answer. There are no FMC statutes/regulations for *continuous* financial surveillance. Continuous surveillance requires costly electronic systems and a dedicated staff. As the volume of trading in a contract market and exchange grows, investment in technology evolves. The exchanges should demonstrate that they have real-time calculations of exposures, open positions, etc.—but for the time being this may only be possible among the three national multi-commodity exchanges. Large Trader Reports, open interest, and other market statistics should be tracked daily, in order to police any suspicious situation (apparent squeeze). In the case of any exchange that has received a certificate of registration from the FMC, the Central Government may direct the FMC to inspect the accounts and other documents of said association or of any of its members and submit its report thereon to the Central Government. Chapter III, Section 8, Power of Central Government to call for periodic reports or direct inquiries to be made.

(b) ***If so, do the entities subject to on-going surveillance include: Individual members? Clearing firms? Non-clearing firms?***

Answer. While there are no statutes in the FCRA or FMC regulations that require "continuous" financial surveillance, some of the exchanges have Bye-Laws and/or rules and/or regulations that specify financial requirements for trading members, clearing members, professional clearing members, and clearinghouses. Furthermore, said members and the clearinghouse shall furnish audited and/or unaudited financial statements, as well as all other books and records for inspection or audit by "the relevant authority."

(c) ***Are SROs by statute or regulation required to maintain financial surveillance programs?***

Answer. SROs are not required by FMC statues/regulations to maintain financial surveillance programs.

(d) ***Are periodic audits performed? If so are they required to be performed on a regular basis?***

Answer. Some exchanges *may* perform audits; none are required to perform them on a regular basis. There are no FMC statutes/regulations requiring periodic audits.

Recommended Regulatory Approach. The FMC should require that any exchange approved to do business shall explain to the regulator how it intends to establish and enforce rules providing for the financial integrity of any contracts traded on the exchange. The rules shall apply to trading members, clearing members, professional clearing members and the clearinghouse.

5. Customer Funds Protection

The FMC should require that all intermediaries protect customer funds, primarily through rules regarding segregation and minimum capitalization requirements. Enforcement of the rules is accomplished by oversight (conducting financial audits) of the exchange financial surveillance program.

(a) ***Are financial intermediaries required to segregate customer funds from their own funds? Is the term "customer funds" statutorily defined?***

Answer. No, the term "customer funds" is not statutorily defined. The FMC has no regulatory oversight over Brokers (Intermediaries). However, an amendment to the FCRA has been submitted to the Parliament that would require brokers to register with the FMC. The SCRA has been amended to allow a securities broker to become a member of a commodity exchange. The broker firm will have to set up a subsidiary, a separate legal entity, with separate capital adequacy and minimum net worth for being able to trade on a commodity exchange. Most exchanges have rules/regulations requiring intermediaries (brokers) to segregate customer funds. However, exchange financial compliance programs are not monitored by the FMC. This poses a problem because exchange rules without compliance are nothing more than words on paper. The FMC should periodically perform financial audits of the financial surveillance programs carried out by the exchanges and clearinghouses.

Recommended Regulatory Approach. The FMC should write regulations requiring that futures exchanges protect customers' funds. These rules include the clearing and settlement of trades, which involves trading members (brokers), clearing members, professional clearing members and the clearinghouse.

In most developed markets, intermediaries must be registered with the futures markets regulator. The FMC should write regulations requiring intermediaries to separately account for their customer's money, securities and property; to preclude commingling of firm funds with that of their customers, the use of the property of one customer to margin, or guarantee the trades of another, or to secure the credit for any customer other than the one for whom the funds are held. If the margin account of a customer falls into a deficit, concurrent with its issuance of a margin call, the intermediary is obligated to restore immediately the amount of such deficit out of its own funds or property; that is, the intermediary must "top up" its segregated accounts in order to avoid the use of the funds or property of any other customer to meet the obligations of the customer in deficit.

An Exchange/Clearinghouse Audit Committee could be established to make a full scope financial/compliance audit of each broker that carries customers' accounts. The Audit Committee would be responsible for prompt implementation of its regular surveillance and examination procedures, which consists of activities such as:

1) Reviewing the nature of the business being handled by the broker (e.g., speculative vs. hedging; retail vs. commercial; floor trader vs. public; etc.);
2) Ensuring the broker is in fact keeping customer funds segregated;
3) Examining the broker's internal controls and up-to-date record keeping on daily segregation calculations, monthly net capital computations, daily reconciliation of open commodity trades and the settlement account, monthly reconciliation of other control accounts, and posting of transactions and adjustments to account balances;
4) Rapidly responding to reports by the broker to the regulator concerning any infractions or non-compliance regarding the broker's financial condition.

(b) ***Are financial intermediaries required to keep records regarding customer funds?***

Answer. Yes, exchanges in India have regulations requiring trading members (brokers), clearing members, and all other intermediaries to maintain records and books of accounts. Chapter III, Section 8, Power of Central Government to call for periodical returns or direct inquiries to be made.

Recommended Regulatory Approach. See (a) and (b) above.

(c) ***Are there other programs in existence, such as insurance or other forms of guarantee, designed to protect investors?***

Answer. The Bye-Laws of many exchanges in India require clearinghouses to maintain a guaranteed settlement fund called a Trade Guarantee Fund (TGF). This fund guarantees settlement of bona fide transactions of the members of the Exchange. All the members of the Exchange are required to make an initial contribution towards the TGF. Each exchange member has a potential liability for an excess contribution if things go awry. The initial contribution is usually adequate, but the responsibilities of membership include a potential additional contribution – for example, in the case of bankruptcy of a member.

Recommended Regulatory Approach. In addition to whatever an exchange or clearinghouse may do in the way of insurance or other forms of guarantee designed to protect investors, there should be a number of statutory and regulatory provisions that protect investors. For example: segregation of customer funds (including priority for customers in a bankruptcy); net capital requirements for intermediaries; the clearinghouse guarantee of contract fulfillment; SRO/Regulator audit and ongoing surveillance programs; and audit trail requirements.

(d) ***Are there any restrictions on where customer funds may be invested?*** **Is there a requirement that segregated funds be maintained at a "good depository"?** ***Is it permissible under existing rules and regulations for a "good depository" to be: A domestic bank? A foreign bank? Another financial intermediary?***

Answer. Yes, through exchange Bye-Laws. The Act and Regulations do not specify where customer funds may be invested; whether or not segregated funds be maintained at a good depository; or if a good depository is a domestic bank, foreign bank or another financial intermediary.

Recommended Regulatory Approach. The permissible uses of customer funds should be prescribed. In the U.S. such funds may be invested in obligations of the U.S., or any state, and obligations fully guaranteed as to principal and interest by the U.S. Government. Such investments must be made through an account or accounts used for the deposit of customer funds. Proceeds from any sale of such obligations must be re-deposited in such account or accounts. Interest or any increment resulting from an investment of customer funds may be retained by the intermediary or clearing organization that invested those funds. The FMC should identify requirements for banks, trust companies, clearing organizations or another intermediary to be qualified as good depositories.

6. Default, Insolvency, or Bankruptcy Provisions

Capital requirements, margin levels, maintenance margin, segregation of funds, definition of appropriate collateral, registration criteria for market participants, exchanges, clearinghouses, and SRO/regulatory audits all function to mitigate the impact on the contract market, the exchange, the clearinghouse, and its members and public traders of any default, insolvency, or bankruptcy of a trader, a member or a clearing member. The orderly liquidation of positions in the event of failure of any market participant is feasible provided all of the prudential standards are monitored and maintained.

Recommended Regulatory Approach. The FMC should develop guidelines to ensure that the primary functions of the futures markets (price discovery and efficient risk transfer) are not disrupted by a default, insolvency, or bankruptcy. The FMC must do this in the context of the Bankruptcy Law of India. Regulation is necessary to set priority rules for repayment of creditors of the defaulting firm.

(a) Do customers receive priority for their claims against bankrupt or defaulting firms?
(b) Do the rules provide for the return or transfer of specifically identifiable property?
(c) Does a bankruptcy trustee or other entity have authority to, e.g., close out futures and options positions or to make or accept delivery on derivative contracts?
(d) Does a bankruptcy trustee or other entity have authority to transfer customer positions?

Answer. It appears that through exchange Bye-Laws, the answer is usually "yes" to all of the above questions. For example, the terms and conditions of one national multi-commodity exchange's Member/Constituent agreement provides "Provisions in case of Default," which state the following: "In the event of a default of a Member on his own account, the Constituent's money shall not be utilized to meet the Member's liabilities. In such cases, the Constituent's positions shall be either transferred to another solvent member or closed-out as per the provisions of the Rules, Bye-Laws and Regulations of the Exchange. The loss, if any, caused to the Constituent because of such action would be recoverable by the Constituent from the Member."

Recommended Regulatory Approach. Regulations should provide for a pro rata distribution of customer segregated funds among the public customers of the intermediary in priority to all other claims, except costs of administration.

In order to reduce the risk of an intermediary defaulting, there are a number of preemptive steps that should be taken by the SRO and regulator.

1. Exchanges and clearinghouses should perform periodic stress tests and use other appropriate monitoring tools to identify member intermediaries that would be affected by large or unusual price moves in particular products.

2. Exchanges and clearinghouses should develop and maintain the ability to evaluate quickly the level of risk a member is exposed to on their markets.

3. Exchanges and clearinghouses should develop and maintain programs to review settlement prices to determine if they are an efficient price and identify any manipulation or violations of trade-practices.

4. The FMC should work with the internal and external auditors to verify that skills are adequate for risk audit including the ability to assess the quality of risk management. The FMC should work with the industry to enhance the role and responsibilities of auditors to address intermediary risk management procedures.

5. The FMC should work with internal and external auditors to clarify the relative roles and responsibilities of the SRO and the exchange on which the relevant trading is taking place in the event of an intermediary financial emergency. It should be noted that a large clearing member may be active in other markets, and the actions of one exchange need to be coordinated among other related contract markets. Interconnected markets will see problems in one market quickly spill-over to others. FMC should coordinate actions and information flow between and among exchanges and clearinghouses.

7. Market Disruptions; Firm Financial Problems

Market disruptions affect exchanges, clearinghouses, and intermediaries, and the FMC should monitor the impact and assess what is needed to assist the markets.

(a) ***Are firms required to notify regulators when firms develop financial problems?***
(b) ***Are provisions in place for increased reporting in cases of market disruptions?***

Answer.
(a) Yes, but dependent upon exchange Bye-Laws. For example, one national multi-commodity exchange’s Bye-Laws state, “A trading member shall be bound to notify the Exchange immediately if there be a failure by any trading member to discharge his liabilities in full.” However, notifying the exchange or clearinghouse is not the same as notifying the regulator.
(b) Yes, but dependent upon exchange Bye-Laws. For example, one national multi-commodity exchange’s Regulations state, “If there is any funds default arising out of the

instructions received from the Exchange, the Clearing Bank shall inform the Exchange immediately." Same caveat as above.

Recommended Regulatory Approach. The FMC should develop reporting requirements to serve as early warnings; it should assess whether the current requirements are adequate or whether it needs increased reporting. The question whether further information is necessary should evaluate the burden it imposes on the industry.

Each intermediary who knows or should have known that its adjusted net capital was less than the minimum amount required must file written notice with the FMC within five days. Likewise, if an intermediary discovers or is notified by an independent public accountant of a material inadequacy in its account system or procedures it must notify the FMC within three days. An exchange or clearinghouse should have information on exposures of members or clearing members active in its contract markets, and it cannot know what has happened in other markets. Reliance on properly designed incentives and internal controls is probably the best answer.

(c) ***Do exchanges impose daily price limits on traded contracts?***
(d) ***Do exchange rules provide for emergency measures including cessation of trading during times of extreme volatility?***

Answer.
(c) Yes, limits on price fluctuations are imposed in order to allow cooling of market in the event of abrupt upswing or downswing in prices.
(d) Partially, through Bye-Laws. For example, one national multi-commodity exchange provides that "If in the opinion of the Relevant Authority of Exchange, an emergency exists or has arisen or is likely to occur - - the Relevant Authority of Exchange may by a resolution take such action as it deems fit for stabilizing the market. Any power by the Relevant Authority under this provision shall be subject to directions, if any, issued by the Forward Markets Commission."

Recommended Regulatory Approach. In general, exchanges determine the price limits for a particular contract traded at that exchange. However, the purpose of limits is to allow the clearinghouse and the exchange members to assess exposures, require additional margin, and to give market participants time to cover their exposures). In general, the bias should be to permit markets to operate to continue to register price opinions. In particularly tumultuous times (defined in advance by a price move of a certain percentage), the exchanges should take a brief pause--impose a "circuit breaker" for a brief 30 or 60 minute period--in order for market participants to reconnoitre and build liquidity.

(e) ***May an exchange or clearinghouse call for additional margins when market conditions and price fluctuations render it necessary to maintain an orderly market or to preserve fiscal integrity?***

Answer. Yes, achieved through exchange Bye-Laws. For example, one national multi-commodity exchange's Regulations state: "The Exchange shall from time to time, impose upon any particular Trading Member or category of Trading Member any special or other margin requirement."

Recommended Regulatory Approach. Absent an emergency, margin levels for futures contracts will be set by exchanges. The regulator should review margins from the perspective of ex ante assessment of their adequacy for the normal course of business in that commodity. In an emergency, the regulator must assure that orderly liquidation is available. See also 3(a) recommendation.

8. Recordkeeping

(a) ***Does the jurisdiction have detailed rules regarding financial recordkeeping? If so, must records be kept of: Financial condition of firms and brokers? Customer funds and property and treatment of customer funds and property? Customer orders and documents related to those orders?***

Answer. Yes, to all of the above questions. This occurs through exchange Bye-Laws. There are no statutes in the FCRA or FMC regulations that require "detailed rules regarding financial recordkeeping," the statutes/regulations permit requiring same if the GoI decided it wanted the information. As a result, it appears that most of the exchanges have Bye-Laws and/or rules and/or regulations that specify the manner in which members (trading members, clearing members), professional clearing members and clearinghouses will keep financial records. Furthermore, said members and the clearinghouse shall furnish audited and/or unaudited financial statements, as well as all other books and records for inspection or audit by the regulator.

Recommended Regulatory Approach. The FMC should develop detailed rules regarding financial recordkeeping. The following are examples:

1. All books and records are to be kept for a period of five years and to be readily accessible during the first 2 years of the 5-year period.

2. Intermediaries must prepare and keep current ledgers, which show each transaction affecting asset, liability, income, expense and capital accounts and make a formal computation of their adjusted net capital and their minimum financial requirements as of the close of business each month.

3. Each intermediary that invests customer funds must keep a record showing the details of the investment, including the size and type of investment, the date of the investment, and any disposition made of the investment.

4. Intermediaries must compute each day the amount of customer funds in segregated accounts and their residual interest in those funds. Likewise, they must prepare a monthly balance of all open positions.

5. Intermediaries must keep full, complete, and systematic records, together with all pertinent data and memoranda. Records to be kept include all orders (filled, unfilled, or canceled), trading cards, signature cards, street books, journals, ledgers, canceled checks, copies of confirmations, copies of statements of purchase and sale, and all other records, data and memoranda which have been prepared in the course of its business.

6. An exchange must keep records on daily trading records of all transactions that take place between buyers and sellers of futures contracts. The records of orders from buyers and sellers must cover each step of the process from placement with an intermediary through execution; including transaction date and time, quantity, price, and futures contact delivery month.

7. Before the beginning of each day, the exchange shall make public the volume of trading for each type of contract for the previous day. During each business day, the exchange is required to publish price (high, low, settlement), volume of trading, total quantity of futures for cash transactions included in the total volume of trading, and the total gross open contracts.

8. The exchange should submit "large trader reports" daily to the FMC. Those traders who hold reportable positions must submit reports concerning their position to the exchange. The trader is required to open its books and records upon request by the exchange or the FMC.

9. The SEBI has a Memorandum of Understanding with the U.S. Commodity Futures Trading Commission (CFTC) that covers the conditions under which information can be shared with another jurisdiction. The FMC has no such MOU with a foreign regulator, and it should. The FMC and SEBI should likewise have information sharing agreements. The FMC, like SEBI, should be a member of the International Organization of Securities Commissions (IOSCO), with a significant commodity derivatives regulator membership.

(b) ***Does the jurisdiction require the records to be retained for a specified period of time?***
(c) ***Does the jurisdiction limit access to the financial records?***

Answer. There are no FMC statutes/regulations that require records be retained for a specified period of time. Likewise, the FMC statutes/regulations do not limit access to the financial records.

(b) Yes, it appears that through exchange Bye-Laws, most of the exchanges have regulations specifying a period of time. For example, one national multi-commodity exchange requires

"Trading Members to maintain and preserve for a period of seven years a mapping of client IDs used at the time of order entry in the trading system - - with client name, address and other particulars given in the Know Your Client form." The exchange also requires that every "Trading Member shall maintain and preserve for a period of not less than six years after the closing of any Constituent's account any records which relate to the terms and conditions - - date of modification thereof, date of termination and representatives of such Constituent who signed in each case."

(c) Yes, through existing Bye-Laws. An example from the Bye-Laws of one of the three national multi-commodity exchanges is: "The Member hereby undertakes to maintain the details of the Constituent as mentioned in the Constituent registration form or any other information pertaining to the Constituent, in confidence and that he shall not disclose the same to any person/ entity except as required by the Exchange or as required under law."

Recommended Regulatory Approach. The FMC should require intermediaries which have documents with non-public information about customers to:

1. Provide notice to customers about its privacy policies and practices;
2. Describe the conditions under which a financial institution may disclose nonpublic personal information about customers to nonaffiliated third parties; and
3. Provide a method for customers to prevent a financial institution from disclosing nonpublic personal information to most nonaffiliated third parties.

Best Practices: Business Operations

Authorization, Qualification, and Good Standing Requirements in addition to Capital Adequacy should be clearly specified by the FMC and it should be charged with monitoring and assessing compliance with the standards.

9. Goodstanding: Qualifications and Competency

(a) ***Do regulators or exchanges set qualification requirements or competency criteria for exchange members and governing members?***
(b) ***Do regulators or exchanges set qualification requirements for clearing members and governing members?***

Answer. Yes to both. The qualification and competency criteria for trading members, clearing members, and governing members of the three national multi-commodity exchanges are described in the exchanges' Rules. Also see FCRA Chapter III 5. (2) clauses (a)-(f); 9 A (1) clauses (a)-(f).

Recommended Regulatory Approach. Persons with disciplinary histories and serious breaches of an Exchange's rules, regulations or by-laws, any federal or state statutes or

Regulator's rules should be prohibited from serving on any exchange or SRO's disciplinary committees, arbitration panels or governing board.

Regulators' rules should require a diversity of representation on exchange or SRO governing boards and disciplinary committees in order to improve the integrity of the self-regulatory process.

These requirements are intended to assure representational diversity in decision making, to foster integrity and impartiality in decision making, and to prevent preferential treatment in disciplinary proceedings.

(c) ***Does the jurisdiction set qualification requirements for other financial intermediaries? If so, do the qualification standards include: Consideration of the educational qualifications or experience of the applicant? Consideration of the applicant's character and criminal record? Consideration of previous refusal or revocation of license or membership in any financial services industry or association?***

Answer. See (a) and (b) above. FCRA Chapter III 5. (2) clauses (a)-(f); 9 A (1) clauses (a)-(f).

Recommended Regulatory Approach. Intermediaries should be required to submit an application containing the applicant's name, address, branch offices, and principals, as well as detailed information about the disciplinary and criminal history of the firm.

A "principal" is defined as any officer, director or general partner or any person occupying a similar position who exercises a controlling influence over the regulated activities of the firm, any holder or beneficial owner of 10% or more of the outstanding shares of stock in the firm, or any person who has contributed 10% or more of the firm's capital.

In the U.S., each application must be accompanied by a form executed by each person who is a principal of the applicant, along with the fingerprints of each principal on a card provided by industry association responsible for setting self-regulatory standards (the National Futures Association in the US). The form should require disclosure of information on the employment, residential, and educational history of the applicant, and requests detailed information about the disciplinary and criminal history of the principal.

10. Order Execution Requirements

Order execution involves all of the trade practice rules that ensure efficient price discovery and risk transfer activities. It also is important for market integrity and the liquidity of the markets; if orders are not treated equally or if the prices discovered are inaccurate, the contract market will not be useful to traders and will fail.

(a) ***Does the jurisdiction have competitive execution requirements such as open outcry or other methods such as posting of bids and offers, which are open and competitive?***
(b) ***Does the regulator or the SRO set priority rules for the execution of customer orders?***
(c) ***Does the jurisdiction have restrictions on the trading activities of persons who possess material, non-public information?***
(d) ***Does the regulator or the SROs restrict the practice of dual trading?***
(e) ***Other capacity restrictions?***
(f) ***Does the regulator or the SRO have rules, which address procedures for large or small orders?***
(g) ***Does the jurisdiction have specific rules which prohibit fraudulent activity such as cheating, bucketing orders, fictitious trading, etc.?***

Answer.
(a) Only for the designation as a national multi-commodity exchange, and three have been approved to operate screen-based trading systems. Other exchanges also approved by the FMC trade futures contracts by open-outcry and/or electronic methods.
(b) The exchanges set priority rules for the execution of customer orders.
(c) Yes.
(d) No, neither the FMC nor the exchanges restrict the practice of dual trading. Dual trading is permitted, but is handled, for example, on one national multi-commodity exchange as explained in its Regulations: "An Exchange Member, when dealing with a client, shall disclose whether he is acting as a principal or as an agent and shall ensure at the same time that no conflict of interest arises between him and the client. In the event of a conflict of interest, he shall inform the client accordingly and shall not seek to gain a direct or indirect personal advantage from the situation and shall not consider clients' interest inferior to his own."
(e) Yes.
(f) Yes.
(g) Yes, (see the FCR Act Chapter IV. 15.4 and Chapter V. 20 (e) Penalties and Procedures)

Recommended Regulatory Approach. The issue of order execution is best addressed by examining the most effective "*tool*" for achieving the regulatory goal of trading integrity. The GoI has already determined that electronic trading, with its accurate, automatic, and anonymous trading procedures, is subject to far less possible abuse than the open outcry method of trading among exchange owner-members well known to each other. Mandating electronic trading as the best tool for maintaining trading integrity would be a sensible regulatory approach, but it would carry obvious business implications. Regional exchanges that could not afford the electronic platform could either be forced out of business, or end up operating illegally.

If the GoI does not mandate electronic trading, ultimately the commodity futures markets users will decide the fate of open outcry exchanges, by migrating to the most liquid market. The GoI understands this choice. Whether the method of trading is electronic or open outcry, the following rules should apply:

(a) All futures contracts subject to the rules of an exchange should be executed openly and competitively.

(b) The FMC should require exchanges to adopt rules, which prohibit intermediaries from allocating trades among accounts except in accordance with exchange rules. Under the "customer first rule" each intermediary should be required to ensure that customer orders, which are executable at or near the market price are transmitted to the floor of the exchange before any order in the same commodity for the intermediaries account or for the account of any person affiliated with the intermediaries.

(c) It should be a felony for any FMC Commissioner or any employee to participate in an investment transaction for a commodity if any non-public information is used in the investment decision. Exchange officials who trade in futures on non-public information obtained through special access related to their duties; as well as a person who knows such information was obtained in violation of a statutory/regulatory provision, would be prohibited from trading based on that information. Violations should be punishable by substantial penalty, plus the amount of any profits realized from such trading or disclosure, and imprisonment.

(d) The FMC should require each exchange to adopt and submit a set of rules, which, among other things, prohibit an intermediary from trading ahead of a customer.

(e) An intermediary should be prohibited from knowingly taking the other side of an order of another person revealed to the intermediary or any of its affiliated persons as a result of their relationship with the other person without that person's consent. The intermediary may take the other side of an order if it has the other person's prior consent, and if it does so in compliance with exchange rules approved by the FMC.

(f) The FMC should consider an exemption procedure for contract markets with proposed large order execution (LOX) rules. Large orders of large institutions require special procedures as market depth is generally not sufficient to fill the order without significant price impact and increase in temporary price volatility. Additional rulemaking will be required to decide whether or not the orders already on the market will be included in the large order.

(g) The FMC should prohibit any exchange member or agent thereof from engaging in fraudulent transactions, including cheating another person or attempting to deceive any person regarding the disposition or execution of an order, or to "bucket" an order. Trade practice violations are readily enforceable based on records, while fraud goes to intent.

11. Sales Representations and Disclosure – Required and Restricted

(a) ***Are there prohibitions against providing a customer with false or misleading information?***

(b) ***Are there prohibitions against failing to provide a customer with information that may have a material effect on a customer’s investment decision?***

(c) ***Are there other standards regarding information or representations to customers?***
(d) ***Are firms required, pursuant to a "know your customer", or "suitability" rule, to determine a customer's aptitude for trading or understanding of investment risks?***
(e) ***Must firms provide written disclosure of the risks involved in trading before they effect transactions for or on behalf of customers?***

> **i.** ***Is such disclosure document required to be signed by the customer?***
> **ii.** ***Does the signature and the completeness of disclosure requirement vary with perceived ability or expertise of the customers?***

(f) ***Must promotional material be approved before it may be utilized?***
(g) ***Is promotional material reviewed in conjunction with the supervision of firm personnel?***
(h) ***Must advertisements contain risk disclosure?***
(i) ***Are there any other standards governing advertisements?***
(j) ***Do general anti-fraud provisions apply to statements made in connection with advertisements?***
(k) ***Are there any restrictions on fees that firms may charge?***
(l) ***Are there any restrictions against cold calling or telephone solicitation of new customers?***
(m) ***Do anti-fraud standards apply to sales representations in general?***
(n) ***Are procedures required regarding supervision of firm personnel?***
(o) ***Are there any additional standards of review of firms' sales practices?***

Answer. Unclear in most cases. However, certain exchanges' Bye-Laws do address some of these issues.

Recommended Regulatory Approach. Government statutes should have antifraud provisions that prohibit any registered entity doing business with a customer from providing any false or misleading information, or from failing to provide any information that can have a material effect on a customer's investment decision.

The FMC should require contract markets to publish daily information on the trading volume, open contracts, and prices. The information should be made available to the news media and the general public, but it should be recognized that exchanges have *property rights* to the information they have created.

Rules should require intermediaries to obtain from each customer his age, occupation, income, net worth and previous investment experience and to provide special risk disclosure where it appears necessary.

Before an intermediary may open a commodity account for any customer, the customer should be provided with a written risk disclosure statement approved by the FMC, which sets forth the risks, costs and mechanics of futures trading. Each intermediary should obtain from each customer an acknowledgement, signed and dated by the customer, stating that the customer received and understood the disclosure statement.

The exchanges should require all members to have written supervisory procedures for the review of all promotional material. Government statutes should prohibit any person, in connection with any order or contract of sale of any commodity for future delivery, from making false or misleading statements in connection with a transaction.

The FMC should require each intermediary to diligently supervise the activities of all its employees. Such supervision should include the use of all promotional material.

Advertisements must contain risk disclosure statements.

General anti-fraud provisions should apply to statements made in connection with advertisements.

There should be rules requiring disclosure of brokerage fees and commission.

Regulations governing "cold calls" are rarely advisable as they are difficult to enforce. However, guidelines should require that an intermediary may not enter an order for a new customer solicited by telephone until three days after the opening of the account and receipt of a customer signed risk acknowledgement statement.

The FMC should serve as an overseer, and in that capacity, it should conduct regular reviews of sales practices to determine whether programs meet FMC standards.

12. Contract Design – Delivery Procedures, Settlement Prices

(a) *Are there requirements regarding product design? Delivery procedures? Contract's terms and conditions? Settlement prices?*

Answer. Exchanges have this responsibility, as approved by the FMC.

Recommended Regulatory Approach. Exchanges have the greatest concern and incentive for contract development and success. There are a number of ways to improve the chances a contract will be liquid with high volume. In the case of contracts providing for physical delivery, the contract's terms and conditions are critical regarding delivery procedures. Exchanges should justify that the cash settlement of the contract price would occur at a price reflecting the underlying cash market, and will not be subject to manipulation or distortion. The exchange should also include an analysis of the price series upon which the settlement will be based and an analysis of the potential for manipulation or distortion of the cash-price series. The FMC should focus on these criteria because the national multi-commodity exchanges have been rapidly presenting for trading many contracts that develop little volume. Section IV of this report discusses the need for better contract development, and the critical need to involve the agricultural sector in contract design.

Compliance versus supervisorial approaches

This review of recommended regulatory reforms for the commodity futures markets' regulator is intended to provide sufficient guidance to better regulate developing markets. Regulators have the advantage of learning about international rules and approaches toward commodity markets regulation. Rather than reinventing the wheel, regulation should be designed with reference to best practices. Dialogue between the exchange, the clearinghouse, and the regulatory authority is the best way to achieve consensus in the design of regulations. At this early stage, the regulator is serving to coordinate the differing interests of users, hedgers, speculators, traders, members and clearing members as well as its own governmental mandate. A *compliance* regulatory approach is needed.

As markets become developed, reviews of compliance with regulatory guidelines are needed to align interests of the different market participants. Conflicts of interests or distortion of incentives by unexpected events can result in a weakening of controls and prudential safeguards. As markets mature, a *supervisorial* regulatory approach becomes possible.

The distinction between *compliance* and *supervision* is an important one. *Compliance* approaches assume that there are general principles and specific controls that must necessarily be applied to, and implemented in, all institutions. Compliance regulation is rule-based and reviews are designed to identify violations. *Supervision* allows each regulated entity to design its own business plan and risk management toolkit and works with the entity to assess its adequacy and asks questions assessing whether the firm has considered all relevant issues. In fact, all governmental regulatory agencies represent a mixture of the two.

Supervision allows more flexibility in how rules are implemented within the statute and must be designed around core principles and a minimum set of standards which must be achieved. Compliance approaches are indispensable when there are a large number of regulated entities (such as brokers, dealers, or investment advisors). Supervision improves on compliance based approaches with larger institutions which may have unique business problems which would not be captured with a standard set of tools. Clearly compliance with minimum standards is required in all regimes. The complexity of the lines of business, differences in volume, volatility, sophistication of participants, and nature of the risk should determine whether customized risk systems are needed or whether more standardized processes are sufficient.

Capacity Assessment

The FMC was conceived of, and has operated as, an advisory and recommendory body to the GoI, now under the Minister of Consumer Affairs, Food and Public Distribution. As noted earlier, direct comparisons of the FMC with an autonomous entity with full regulatory authority, is akin to the proverbial "apples v. oranges" comparison: the FMC and SEBI were deliberately structured differently.

Importantly, the functions of the FMC are sufficiently broad to permit its regulatory authority to be energized along the lines of the *Recommended Regulatory Reforms*, outlined earlier in this section. The important functions of the FMC, as specified under sections 3 and 4 of the FCRA of 1952, are as follows:

- To advise the Central Government on those issues relating to the recognition of exchange regulation of forward (futures) contracts, and the withdrawal of such recognition.

- To observe the forward (futures) markets, authorized to take necessary actions when deemed necessary.

- To collect and disseminate information on the trading conditions in forward (futures) markets, and to submit the Central Government periodic reports on the operation of the FCRA and on the operations of forward (futures) markets.

- To make recommendations for improving the organization and working of forward (futures) markets.

- To undertake inspection of the accounts and other documents of commodity futures exchanges, and exchange members, whenever necessary.

- To perform such other duties and exercise such other powers as may be assigned to the FMC by or under the Act, or as may be otherwise prescribed.

These broad functions are, in fact, compatible with implementing the substantial array of *Recommended Regulatory Reforms,* outlined earlier in this section.

Unfortunately, it appears that the FMC is hampered by the historical role that it has been assigned by the GoI - - largely that of a policeman over illegal futures trading, policing activity as the GoI continued to ban various commodities from futures trading over the decades. The FMC has <u>not</u> been charged with an historical mission to develop the best possible commodities futures markets, nor establish itself as a vigorous and credible hands-on regulator. This reluctance to proceed beyond its perceived mission, has been reinforced by various impressions. For example, new FMC appointees have on occasion been less than enthusiastic about their positions, and indeed sought and anticipated near-term transfers, rather than vigorously occupying their position in the FMC headquarters in Mumbai. The

impression is that an FMC post is not as prestigious as other assignments and does not provide an adequate profile to match with career aspirations of IAS/IES officers of additional/joint secretary level. This impression is reinforced by contrasting a visit to the FMC headquarters in Mumbai with the facilities of SEBI. Further, the FMC is substantially understaffed: it has a sanctioned strength of approximately 140 staff members, and yet its total current staff level is 87. While the future work of the FMC should be both legal and investigative intensive, the FMC has no lawyers and no accountants on staff.
The Commission is presently divided into three operating units.

1. Commodity Division. This division conducts market studies and develops commodities futures substantive domain knowledge applicable to the underlying physicals and futures markets, and monitors and analyzes price trends and tracks the price discovery process of commodities futures exchanges. It is the lead division for providing necessary intelligence for FMC policy decisions. The division is headed by a Director and assisted by a Deputy Director and research staff.

2. Enforcement Division. This division primarily concerns itself with the illegal trade of commodity futures, and organizes raids, surprise checks, police training programs. It scrutinizes all documents seized during raids, provides expert opinions on these documents, and appears before Courts of Law as prosecution witnesses. Its mandate includes collecting information relating to contravention of provisions of the FCRA, and working with the police on such information. This division is headed by a Director and assisted by a Deputy Director, Enforcement Officer, and research staff.

3. Administrative Division. This division provides necessary support to the other two divisions, and is charged with custodial and operational matters of the Commission. This division is headed by a Secretary, and is assisted by an Assistant Secretary and staff.

This tripartite structure has been the FMC structure from its inception. However, the GoI liberalization of commodity futures trading with the authorization of three national multi-commodity exchanges, coupled with the increasing complexities in the functioning of the futures markets, requires that the FMC substantially reorganize and expand. The deficiencies of the FMC are the result of its historical legacy of the role it was asked to play, and the role it has perceived itself playing, as a policeman rather than a regulator. With appropriate resources, restructuring, expanded staff, and a new “regulatory mentality,” the FMC could meet the regulatory responsibilities that comport with international best practices that have been detailed throughout this section.

The FMC is aware of its current deficiencies. Indeed, the FMC provided FMI with internal recommendations that it developed a year ago with the assistance of the Indian Institute of Management (IIM) and Professor K.G. Sahadevan. Among the better internal FMC recommendations is the restructuring of the FMC into five operating divisions, as outlined below, with newly structured authority:

1. Division of Markets and Trading. This division would have the responsibility of reviewing the applications for approval of new exchanges, new contracts and market intermediaries, scrutinizing the Bye-Laws of exchanges, examining contract design, and preparing the draft FMC regulations which would govern the operation of all exchanges and market intermediaries.

2. Division of Market Intelligence, Monitoring and Surveillance. This division would have the responsibility of ensuring that markets remain competitive and responsive to underlying supply and demand factors. This would occur through monitoring, detecting, and protecting against price manipulation by conducting daily market surveillance for actual or potential manipulations, congestion, or price distortion. It would thus collect and compile quantitative and qualitative statistical data and information from the recognized markets on a continuous basis. It would also conduct surprise inspections of exchange surveillance documentation.

3. Division of Market Research, Training and Development. This division would be responsible for the dissemination and maintenance of trading data and information, the analysis of data for providing inputs for enforcement investigations, conduct surveys and feasibility studies for creating a strong data base, and establish the substantive domain knowledge base that help the FMC in making policy decisions. The division shall also be responsible for organizing training programs on commodities trading and market operations for the benefit of the FMC officers and staff, and for various market intermediaries.

4. Division of Counseling and Enforcement. This division would perform the role of Legal Advisor to the FMC and review all regulatory, legislative, and administrative matters falling within the purview of the Commission. It would assist the FMC in judicial proceedings resulting from contravention of the FCRA, and provide legal advice to the Division of Markets and Trading on matters relating to vetting of Bye-Laws of exchanges.

5. Division of Administration and Finance. This division would be responsible for administrative and secretarial services, and information technology, support to the Commission. It would be responsible for employee recruitment and developing human resources policies.

This internal FMC roadmap is well considered. With appropriate resources as outlined, this restructuring and approach would permit the FMC to effectively implement the *Recommended Regulatory Reforms* outlined in this section.

III. Education and Training Initiatives on Price Risk Management

There is a recurrent event in Indian agriculture. A farmer finds himself indebted to a local money-lender, or a food processor, or a seed or fertilizer merchant, or a bank. Loan repayment is due upon harvest. And at harvest the supply is greatest, *mandis* are crowded with goods, and insufficient price information is available to the farmer. The pressure to repay the loan is great, re-transporting unsold goods is unthinkable, and the farmer is forced to sell his goods at a lower than optimum price.

This is a typical example of how a lack of understanding about price risk management through commodity futures hedging can leave a farmer without alternatives. Similarly, when erratic monsoon rains cause winter grain outputs to decline, the food processor faces unexpected price increases of raw materials that either reduce profits or increase his consumer's buying costs, or both. Again, the failure to hedge, the failure to manage price risk, harms India.

The need to provide extensive awareness and training programs to farmers and agriculture sector actors on the uses, benefits, and risks of commodity futures markets has been acknowledged by the GoI. In its 2001 report to the Department of Agriculture and Cooperation, the Group on Forward and Futures Markets noted:

> *"The level of general awareness, particularly that of farmers and their cooperatives, on futures trading and related issues, needs to be raised for increasing participation in the futures markets."*

Implementing an outreach and training program on the methods and benefits of futures markets in India, where 600 million people are either directly or indirectly involved in the agriculture sector, is a major and multi-faceted undertaking. Such a training program on agricultural price risk management could logically involve farmers' clubs, agriculture cooperatives, rural banks, warehouse owners, *mandi* boards, commodity exchanges, food processors, industrial associations, exporters, and other such organizations deeply rooted in the agriculture sector.

However, today in India the vast preponderance of these agricultural sector actors are not engaged in price risk management, are not hedging with commodity futures and options, and thus are not presently prepared to be leaders in training on price risk management. Indeed, the Indian agricultural sector as a whole is, in essence, acting as a massive speculator, with the agriculture sector's fate dependent upon the vagaries of weather. This needs to change.

Inculcating an effective price risk management culture in India is most timely now for three reasons: 1) India has moved well beyond agricultural self-sufficiency; 2) the GoI supports a market-oriented agriculture sector and economy, as emphasized with the GoI permitting broad futures trading; and 3) the GoI decided to license modern national commodity futures exchanges that meet international "best practice" standards in trading and clearing practices. These exchanges now provide the operational capacity to accomplish effectively the hedging and price discovery economic functions of futures markets.

The precursors for potentially vibrant commodity futures markets are in place. The potential will become reality with effective education and training on the benefits and methods of commodity futures trading, ultimately leading to expanded hedger use of futures markets. An effective education and training initiative will require a coordinated and interrelated program among four general categories: potential users of futures markets (and perhaps in the future, options); commodity futures regulators and commodity exchanges; other affected GoI policymakers; and facilitating institutions such as warehouse facilities, rural banks, agriculture cooperatives and state marketing boards and mandis.

1. <u>Potential Users of Futures and Options Markets</u>

- *Hedgers* are producers (i.e., farmers), or users (i.e., food processors), of commodities subject to price risk. Hedgers seek price insurance when they use futures markets, attempting to capture a reasonable profit and mitigate against loss.

- *Speculators* are those willing to accept price risk, and typically have no use for the underlying commodities, and no intention to take any delivery. Speculators are seeking to profit based upon their knowledge of underlying physical markets, their judgment of future events, and expectations of price movement over time. Some speculators may be position traders holding positions for some time. Others may engage in active buy and sell intra-day trading, providing important daily liquidity to the markets.

All successful commodity futures markets require *both* hedgers and speculators actively trading contracts. Overly abundant speculative participation, with minimal hedge use, will not result in a sustainable market.

2. <u>Commodity Futures Regulators and Self-Regulators</u>

- *The Forward Markets Commission* serves as the first GoI contact with commodity exchanges. The FMC's strengths and weaknesses have already been reviewed, and significant training on legal and operational challenges has been recommended to enhance the FMC's important role in the proper development of commodity futures markets in India.

- The commodity futures exchanges, which write and enforce their own Rules and Bye-Laws, act as self-regulators.

All successful commodity futures markets are in nations which have *effective* and *credible* government and exchange enforced regulatory schemes. Exchange users want to know that the regulator and the exchanges strictly enforce rules/regulations designed to greatly reduce the risk of attempts to manipulate, corner, or squeeze the market. Users want the regulator to demonstrate a credible commitment to meeting its licensing, monitoring, and enforcement functions.

3. Affected Regulators and Policy makers

- RBI, MoF, SEBI, Department of Agriculture and Cooperation, DCA, others.
- Members of Parliament

All successful commodity futures markets are in nations where the government policy and regulatory regime is consistent, predictable, and stable in support of a *market-based* agriculture sector and economy. An interventionist government policy toward commodity price maintenance will remove the natural hedger's need for the price risk management that futures and options provide, and will prove costly to everyone involved in agribusiness and the futures industry.

4. Facilitating Institutions

- Broker-dealers
- Warehouse facilities
- Rural banks
- State Marketing Boards (mandis)
- Bank participation potential

All successful commodity futures markets have a developed institutional infrastructure that supports futures trading activity. This includes such institutions as broker-dealers who enter the buy/sell orders for futures contracts; warehouses with strict commodity quality/quantity controls and a warehouse receipts system with bank approved negotiable instruments; banks that loan to agricultural producers, food processors, and providers of inputs (fertilizer, seed, equipment, etc.) can institute hedge programs for these borrowers; agricultural cooperatives and marketing boards can greatly facilitate the dissemination to farmers of reliable up to the minute commodity price information.

Each of these five categories of actors in commodity futures markets must receive and provide reinforcing education and training. The most knowledgeable actors in each category must engage in cross-education and cross-training of the other categories of actors. For example, a sophisticated food processor and major agribusiness company, ITC Ltd. (Indian Tobacco Company), has publicly announced that it will take its know-how in hedging soyabeans and wheat, and educate its farmer suppliers and their cooperatives on hedge benefits and methods. In this context, ITC's e-chouphal initiative in some states has already evoked a positive response from farmers. ITC and many other agribusiness companies could work with banks in the development of acceptable hedging programs using futures contracts to reduce price risk, which would result in lower interest rates on loans.

Futures exchanges could use the experiences of successful hedge programs that are being implemented by food processors, farmers, and rural banks, as a demonstrable part of the exchange's outreach efforts to other potential hedgers. All of these groups could convey the results of successful hedge programs to the GoI policy makers, and agriculture markets boards, and agricultural institutes.

Such a cumulative, inter-related, and reinforcing educational effort would inculcate an effective and broad based culture of risk management in India. This process needs to be encouraged. After initial technical assistance to provide a catalyst to begin this process, perhaps through GoI/USAID assistance, the educational effort will ultimately be driven by the *self-interest* of each actor: farmers and food processors want price insurance that futures and options can provide; banks want safer loans; commodity futures exchanges want greater volume to prosper; the GoI wants a stronger agriculture sector with better living conditions for farmers, and reduced expenditures on Minimum Price Support.

In order to maximize the effectiveness and reach of such an education and training program, several Indian entities could be selected to provide lead assistance in the training effort. Selected institutions could be given the catalytic training and support necessary to launch an educational campaign, perhaps through GoI/USAID assistance. Identifying appropriate partner organizations could be accomplished through a thorough evaluation process, which would vary with each target group. For example, when selecting an organization to lead the training of food processors, the criteria could logically include a commitment to the business interests of large and small agribusinesses; an interest in the development and growth of the Indian economy; a vast network of offices; and a staff that is capable of learning the material and re-teaching it to others. The Federation of Indian Chambers of Commerce and Industry (FICCI) is one possible entity that meets these criteria, however, there are many others as this section will detail. The costs and benefits of each candidate would need to be carefully evaluated.

> *"Hedging is nothing but insurance against price fluctuations. It is really a matter of prudent and scientific management against risks. So, to deny hedging is really to deny essential insurance. Imagine how outraged we would be if the government passed a law that you cannot insure your home against fire!"*
>
> **P.F. Jhunjhunwalla, President, East Indian Cotton Association, Financial Express, May 10, 1985**
>
> *"Even if the cultivators do not participate in the futures markets directly, such markets are beneficial to them in many ways. At the time of sowing operations a futures market serves as an advance indicator of the expected levels of prices during the marketing period and thus enables the cultivators to undertake proper crop planning. A properly organized and regulated futures market prevents any sharp decline in prices during the peak marketing period, when the cultivators sell the bulk of their crop. This enables the cultivators of that commodity to get a relatively better price for their produce than would be the case otherwise. The formation of a representative futures price and its dissemination throughout the country by modern methods of reporting and broadcasting enable the growers to realize a better price from the buyers of their produce. The integrated price structure which futures markets promote on account of arbitrage activities brings a more equitable return to the producers in different regions."*
>
> **Khusro Committee, 1980**

Training the Indian farmer community

Training the vast Indian farmer community is important for improving the lives of farmers, and will assist the successful development of commodity futures markets. Accomplishing this task, however, will require developing a training program that is carefully tailored to farmers' learning needs and capacities. For example, factors such as the 30% illiteracy rate (concentrated in the rural areas), and variations in regional dialects must be considered.

The selection of an organization to lead the training of farmers could be applied to certain existing candidate institutions, using the following criteria:

- Mission: The institution should have either a government mandate to assist and improve the lives of Indian farmers, or a pecuniary self-interest in doing so;
- Direct access: The institution should have access to a well organized network of employees, facilities, or partner entities, which are known and respected in rural districts;
- Professional staff and relevant expertise: The institution should have a large professional staff that is highly knowledgeable about agriculture sector issues, and able to communicate in the necessary local languages and dialects;
- Strong institutional relationships: The institution should have good working relationships with other entities relevant to the training (e.g., farmer associations, agricultural cooperatives, rural banks, GoI policymakers, etc.);
- Experienced educator: The institution should have experience in providing training, preferably to farmers and the agricultural sector.
- Willingness to act: The institution should be committed to providing the resources necessary to achieve the education and training objective over a sustained period.

A preliminary analysis shows that the following sampling of institutions would meet many of these criteria: the Agricultural Produce Marketing Committees (APMC), Cotton Corporation of India (CCI), the Indian Agriculture Research Institute, the National Institute of Agricultural Marketing (NIAM), the Department of Agriculture and Cooperation, the Department of Consumer Affairs, the Agricultural and Processed Food Products Export Development Authority (APEDA), the National Institute for Agricultural Extension Management (MANAGE), the Central Warehousing Corporation (CWC) and State Warehousing Corporations (SWCs), the Food Corporation of India, the Reserve Bank of India, the National Agricultural Co-operative Marketing Federation of India Ltd. (NAFED), the Agricultural Universities Extension Programme, and the National Bank for Agriculture and Rural Development (NABARD).

The evaluative process, applied to these types of institutions, would identify partners that could receive GoI/USAID assistance to build their capacity to conduct successful outreach efforts. An effective India-wide, large-scale, and multi-faceted education and training program would be the objective.

For illustrative purposes only, the following section provides a heuristic assessment of one potential partner in the education and training of farmers. The National Bank for Agriculture and Rural Development (NABARD) is the subject of this brief (and admittedly incomplete) capability analysis, based on the criteria established. This sample assessment is applicable to many Indian institutions that could play a vigorous and broad role in commodity futures markets development. This diagnostic should be widely applied.

Mission. NABARD was established as a development bank by the GoI in 1981. Its mission is to provide and regulate credit and other facilities for the promotion and development of agriculture, small scale industries, cottage and village industries, handicrafts, and other rural economic activities. Its objective is to promote integrated rural development and secure the prosperity of rural areas. At inception, NABARD assumed the functions of the former Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of the RBI, and the Agricultural Refinance and Development Corporation (ARDC). These functions include serving as the primary financing agency for the institutions that provide investment and production credit for developmental activities in rural areas; monitoring credit institutions and developing their capacity; and coordinating the rural financing activities of all institutions engaged in developmental work in rural India (e.g., international donor agencies).

Direct access. NABARD possesses an impressive outreach network for the implementation of rural education and training initiatives. It is headquartered in Mumbai and has regional offices in the capitals of all thirty states. In addition, NABARD has 330 District Development Managers (DDMs) spread throughout the 592 districts. It supervises and inspects all 420 Cooperative Banks and 196 Regional Rural Banks (RRBs). These Cooperatives Banks have ties to over 98,000 Primary Agricultural Credit Societies (PACS) while the RRBs have 14,600 branches of their own. NABARD also monitors the flow of rural credit to the 60,000 rural and semi-urban branches of the commercial banks and provides refinancing services to commercial banks, all rural Cooperatives Credit Banks, and RRBs. NABARD also supports over 10,000 farmers' groups throughout the country and has information kiosks at agri-clinics and agriculture fairs. A large network such as NABARD's could maximize outreach and training efforts, and would substantially minimize the costs of implementing such a wide-scale program because the necessary infrastructure and manpower are already in place.

Professional staff and relevant expertise. NABARD's staff is technically qualified and highly familiar with the relevant issues, including warehousing and agriculture marketing. The staff requires education and training on the benefits, methods, and risks of commodity futures trading.

Strong institutional relationships. NABARD maintains close ties with the GoI, State governments, RBI, the newly authorized national multi-commodity exchanges, and other institutions involved in the agricultural policy making process. NABARD's refinancing is available to State Co-operative Agriculture and Rural Development Banks (SCARDBs), State Co-operative Banks (SCBs), Regional Rural Banks (RRBs), Commercial Banks (CBs), and other financial institutions approved by the RBI. While ultimate beneficiaries of NABARD credit can be partnerships, companies, state-owned corporations or co-operative societies, production credit is generally given to individuals.

Experienced educator. NABARD historically has provided training to farmers' groups and associations, helping members to cope with and adapt to socio-economic changes and advances in farming technology.

Willingness to act. Because of its GoI mandate, and its significant presence in the rural areas of India, NABARD recognizes the urgent need to educate farmers in the uses, benefits, and risks of commodity futures markets. It is equally aware of the markets' need for the participation of large farmer cooperatives to increase commodity exchange liquidity and serve as a counterweight to speculative trading.

Illustrative Four Year Education and Training Program

The following chart offers an illustrative, and deliberately brief, outline of the types of activities that could be used to reach and train the agricultural sector in the rural community over a four year period. These tasks can theoretically be implemented by any organization that meets the above criteria, but must be modified according to that partner's strengths and institutional circumstances.

Period	Activities	Comments
1st 6 months	• Develop a model training manual on the uses, benefits, and risks of commodity futures markets, which explains the role of exchanges and FMC in policing market abuses, and can be translated into regional dialects and reproduced. The manual should have different versions for farmers, rural bankers, agricultural cooperatives, etc. It should be developed by the commodity futures markets' regulator, with an educational institution, the CWC, select commodity futures exchanges, and other commodity futures markets stakeholders. • Initiate commodity futures awareness campaigns in selected rural areas by use of radio and television spots (e.g., All India Radio, Doordarshan channel), and articles in relevant local newspapers that discuss the benefits of commodity futures markets, and announce upcoming training events which would use the manuals.	Start-up phase

	• Design posters and billboards, in regional dialects, with facts/information about futures markets and general announcements about future training events to be placed in all state bank branches (subject to approval by the State Level Bankers Committees). • Design brochures and pamphlets on the benefits and risks of futures trading, to be distributed at farmers group meetings, cooperatives, banks, rural haats, cattle fairs, GoI commodity boards, agricultural universities, etc. • Inform the appropriate institutions of this activity to create reinforcing communications, including the commodity futures markets' regulator, SEBI, DCA, MOF, GoI, exchanges, warehouse operations, State Marketing Boards, etc. This cross-notification would be an on-going element of the effort. • Determine the percentage of the target farmer population that is illiterate, and where they are located/concentrated regionally. Develop documentaries and films which can be used to educate them.	
2nd 6 months	• "Train-the-Trainer" Program: Begin training the partner organization's regional staff, as well as leading farmers and traders via district cluster training sessions. • Hold training events at farmer association meetings using the films and newly trained regional staff and other "Trainers". • Hold "Town Hall" style meetings in rural towns where farmers can ask questions about using commodity futures markets. • Continue with newspaper, radio, and television outreach. • Organize press conferences during State Seminars. • Coordinate with commodity futures exchanges and ensure that hedge participation on exchanges is being measured.	Throughout this period the primary activity will be to conduct over 100 "train-the-trainer" programs and have the newly trained trainers start training natural hedgers.
Year 2	• Train-the Trainer Program, farmer group, and rural banker training continues. • Continue to hold Town Hall meetings, encouraging farmers to ask questions and voice their concerns. • Work with university professors and other academicians, to design a course for the Institute on commodity futures markets, which can later be passed onto other universities. • Continue with newspaper, radio, and television outreach, as well as brochures and press conferences.	Maximize outreach and training to the farmer community.

	• Gain feed back from trainees via evaluation forms and the Farmers' Commission (which has been established to look into farmers problems and concerns), and revise/modify training techniques and curricula accordingly.	
Year 3	• Continue organizing and implementing training events at the farmer associations, involving the State Warehousing Corporations, national and regional commodity exchanges, and other stakeholders. • Assist trainers from the Year 2 program to train others at Cooperative Banks, Regional Rural Banks, Primary Agricultural Credit Societies, etc.	Continue full-scale with farmer training and fine-tuning the training programs.
Year 4	• Provide secondary training to trainers from Year 2 to ensure sustainability of the training program. • Continue training program for farmers.	The objective in year 4 is to ensure that various India-wide institutions will be able to continue awareness and training efforts beyond the close of the project.

The FMC and Self-Regulation

Education and training on regulation of the commodity futures markets is critical to the orderly development of India's commodity futures markets. The first and most important task is to identify and define *by law* the mix of government regulation and self-regulation that is most appropriate for India. These legal and regulatory needs have been identified and outlined in Section II of this report, and in Appendix B ("Comparative Analysis of the Securities and Commodities Laws of India"). A serious commitment of resources will be necessary to strengthen the FMC. The training for the FMC will have four components:

1. Training on *executive level decision-making* specific to commodity futures markets. This on-site, "how-to" training would be aimed at Commissioners and senior staff and provided by knowledgeable, experienced expatriate industry professionals. Topics would include techniques for supervising self-regulatory organizations, rule-making and regulatory issue analysis skills, procedures for managing the operating divisions of the FMC, market development and promotion activities with a focus on customer protection, crisis management planning and response techniques, and public and press relations. Most of this training should be provided in the form of coaching, with experts and regulators working side-by-side on real world problems that arise in the course of market regulation. However, some of the training can be provided in small group sessions to increase management skills in problem identification, analysis, and resolution, and the development of standard procedures for dealing with problems.

2. Training on *exposure to new methods*. Membership and active participation in international fora that focus on international best practices and exchange information on country experiences can be very valuable at expanding intellectual and experiential horizons. Similarly, carefully organized trips to selected countries to examine, in detail, how other markets are organized and structured; the respective roles of the government and the private sector in market regulation and promotion; and the relationships among various financial actors (banks, investment funds, insurance companies, exchanges, regulators) can be helpful in spurring innovation. In addition to study tours, regulators should also attend specialized training courses in mature market countries on compliance, fraud and enforcement, and investigative techniques, including forensic accounting.

3. Training on *key issues in market regulation*. Technical assistance should be provided to develop an in-house FMC training curriculum on commodity futures markets regulation. A training staff should be developed with the capacity to teach the following program in market regulation: Options, futures, and derivatives; risk management; financial markets regulation; regulation of financial intermediaries; exchange regulation; self-regulation and regulatory coordination; clearing and settling; financial integrity; accounting, auditing, and compliance; and ethics.

4. Training on the *development of procedures manuals and rulebooks* for FMC operating divisions. It is essential to review existing procedures manuals and modify these to take account of new market developments. Specialized educational programs could be developed on the following topics:

- Measuring and managing risk
- Operations management
- Accounting issues
- Registration and regulatory issues
- Overview of exchange operations
- Overview of compliance issues
- Compliance in clearing and settlement
- Balancing and reconciliation
- Issues in the auditing process
- Communication with the public

These courses could be open to other GoI market regulator personnel (e.g., from MoF, SEBI, RBI, DCA) to provide them with a better understanding of the workings of commodity futures markets.

There is also a market need for more general education beyond what the regulator and exchanges can provide. In particular, market development would be facilitated by the establishment of an institution – or perhaps a program within an existing Indian organization – that provides a forum for high-level discussion of policy and regulatory issues affecting the futures industry. This institution or program could conduct special policy analyses, conduct roundtables with GoI officials, members of the Parliament, and industry representatives on policy issues and futures markets developments, and organize an annual meeting for the purpose of an exchange of views and perspectives. This institution/program could also be responsible for outreach to the educated public on the commodity futures markets, implementing a series of general seminars for lawyers, accountants, auditors, and other professionals on futures and options, risk management, compliance, arbitration, and ethics.

Affected Regulators and Policymakers

Developments in the regulation of the commodity futures markets should be considered by the regulators and policy makers who will be affected by the changes. Examples include the RBI, Ministry of Finance, SEBI, and the Department of Agriculture and Cooperation. This type of outreach and coordination effort could include conducting a series of policy roundtables aimed at understanding and evaluating the implications of changes in the commodity futures markets regulatory scheme, and the possible convergence of the FMC and SEBI. Frequent briefings could be held (or distributed as a document via email) on significant regulatory changes and commodity futures markets developments.

The restructuring of the commodity futures regulatory regime may very well require statutory revisions. Accordingly, selected Members of Parliament should be briefed on important changes to the commodity futures regulatory regime through short, informative memos on the benefits of commodity futures markets.

Facilitating Institutions

India has one of the largest public warehousing networks in the world. The Central Warehousing Corporation (CWC) and the seventeen State Warehousing Corporations (SWCs) are public sector undertakings by the Ministry of Consumer Affairs, Food, and Public Distribution. They operate over 2000 warehouses with approximately 30 million metric tons of storage capacity in more than 1500 locations throughout the country. These two agencies are well embedded in rural India, and have a wide range of clientele including farmers, agriculturists, traders, importers, exporters, fertilizer manufacturers, and fertilizer dealers. Nonetheless, training for the warehouse staff of the CWC and SWCs, as well as of privately run warehouses, is required on topics such as warehouse management, grading of commodities, electronic warehouse receipts, and more. Because the warehouses are widely spread throughout the country, this could best be accomplished by conducting Train-the-Trainer programs for the senior staff of the CWC, larger SWCs, and private warehouses. Partner institutions may also have an interest in training other warehouses around the country. The partner institution would need to be selected, as before, based on relevant criteria. The CWC and SWC trainees could assume responsibility for training their own staff and other government owned warehouses in their vicinity, and the partner institution could focus on training the private and remotely located warehouses.

International Education Initiatives for the Agriculture Sector

Many small farmers in both developing and developed countries are unaware of how to manage price risk with commodity futures markets. Small farmers often regard these markets as too complicated, or worse. For this reason, campaigns on the benefits and mechanics of commodity futures markets can be extremely useful. This section outlines three examples of international efforts to educate farmers on price risk management, and facilitate their use of futures markets.

Mexico. The government established an organization, Apoyos y Servicios a la Comercializacion Agropecuraria (ASCERA), responsible for providing services to the agricultural sector, including the sale of subsidized put and call options. The program is designed for producers of grain, cotton, and coffee, as well as for grain processors. ASERCA is part of the Ministry of Agriculture, and ASERCA's principal mission is to facilitate the transition of Mexico's agricultural sector from one dominated by government intervention, toward a free market system.

Under this program commenced in 1991, farmers purchase put options from regional ASERCA offices, with ASERCA then purchasing the options on behalf of the farmer from the relevant commodity exchanges. Because there are no applicable commodity futures exchanges in Mexico, ASERCA uses the New York Board of Trade (NYBOT) for coffee and cotton, and the Chicago Board of Trade (CBOT) for grains and soybeans, through US brokers. In effect ASERCA acts by aggregating the price exposure from many growers, and hedging it at the appropriate exchanges.

For the first six years of the program, ASERCA paid two-thirds of the cost of the options' premium, and centrally managed all positions. ASERCA then lowered its premium subsidy to 50%. The program has been well received by producers. In the year 2000, 17% of wheat production was covered by put options bought under the program, 13% of sorghum production, and 32% of cotton production.

Guatemala. The National Coffee Growers' Federation (ANACAFE), a private non-profit organization, introduced a coffee credit system in order to improve the access of coffee producers to commercial bank financing. Hedging -- the use of risk management instruments -- is a mandatory requirement for participation in this credit program. The program considerably reduces the risk to banks, allowing them to provide credit to coffee farmers at lower interest rates. According to ANACAFE, this program led to interest rate savings for farmers of over 10% of the loan value. ANACAFE serves only as a facilitator: it does not provide the credits, nor does it act as a broker. Small farmers are the principal users of the ANACAFE program to obtain bank credit.

ANACAFE provides training to farmers in different areas: helping farmers to understand and calculate their production costs; explaining the mechanisms of agricultural credit, and the way that world markets affect the price of their coffee; and explaining how the inherent price risks can be managed. ANACAFE also provides market intelligence to farmers on a continuing basis: it distributes beepers, which signal the futures market price.

ANACAFE extension staff evaluate the production potential of a farmer, and assist him with necessary paper work for a loan. ANACAFE provides the farmer with a list of banks that it has approved, and the farmer chooses the bank. The loan application, with supporting documents, is then transmitted by ANACAFE to the selected bank. Normally, the bank would approve the loan, but disbursement only occurs *after* the farmer has obtained a hedge. The farmer can choose which instruments to use: a fixed-price forward sale, sale of futures, purchase of put options, a collar strategy, or other.

Farmers normally implement their hedge through an exporter with whom they negotiate a pricing formula. They are required to deliver to the exporter the quantity of coffee corresponding to the amount of coffee they hedged. Exporters manage the inherent risk by selling futures, or purchasing or selling options, on the NYBOT, where Arabica coffee futures and options are traded. Exporters generally pre-finance the risk management strategy: they pay option premiums up-front for later deduction from the price they pay to the farmers when they deliver coffee to them, and they finance margin calls.

All coffee farmers in Guatemala are, by law, associated with ANACAFE and can participate in the program. For small farmers -- and there are many such coffee farmers producing less than 3,000 lbs -- ANACAFE assists with aggregating the exposure of several farmers to meet the size of the 37,500 lb NYBOT futures contract. Cooperatives can also participate -- for example, a 400-member cooperative, including many illiterate farmers, voted to hedge their collective crop on the NYBOT.

As a result of ANACAFE's activities, the proportion of coffee farmers who hedged coffee production increased from zero, before the program began, to 20% of all coffee farmers. In interviews, participating farmers stated that their hedging practices had been crucial for their survival. Other farmers commended the level of price information that was available to them on the value of their coffee, through knowing spot and futures prices.

United States. The U.S. Department of Agriculture (USDA) supports the agricultural sector through a number of programs. The Cooperative State Research Education and Extension Services Program (CSREES) is responsible for advancing knowledge about agriculture, the environment, human health, and well being. It does so by funding state and local level research, education, and extension programs on topics such as agricultural and food bio-security; economics and commerce; pest management; and technology and engineering.

The Risk Management Agency (RMA), also within the USDA, helps U.S. agricultural producers manage their business risks through effective, market-based risk management solutions. RMA's primary function is the operation and management of the Federal Crop Insurance Corporation (FCIC). The FCIC has five basic plans designed to protect farmers against yield and price uncertainty. To assist farmers in protecting themselves against price uncertainty, RMA runs programs such as the Dairy Options Pilot Program (DOPP), which was designed to encourage the use of futures and options to reduce farmers' business risks. Under the DOPP, U.S. milk producers were given the opportunity to receive training and experience in the use of “put options” to hedge milk prices. This program was operational in 40 of the 50 U.S. states.

Within RMA is the Risk Management Education (RME) Division, which leads a comprehensive educational program that assists producers and agri-businesses in a) understanding their increased risk exposure and responsibility in the current economic environment; b) making effective use of risk management tools and strategies; and c) integrating these strategies in decision-making that enables them to meet business goals. RME holds regular training events for farmers, publishes and posts handbooks on its website, and conducts educational workshops throughout rural America.

The Economic Research Service of the USDA, studied corn farmers in the state of Indiana for their use of crop insurance and corn futures contracts. It found that these corn farmers reduced the risks to expected revenue by 29% when they used crop insurance alone; 24% when they used futures alone; but when they combined crop insurance with futures, the risks to expected revenue were reduced by 88%.

IV. Implementing Operational Reforms in Commodity Futures Exchanges

Indian commodity exchanges withered over a forty year period beginning in 1960, as various commodities were periodically banned from futures trading. Exchanges became separate trading communities in different regions with little interaction. They were unable or unwilling to make the investment for new capacities or modern systems. *Havala* markets developed as unofficial commodity exchanges, characterized by an absence of regulation, and doubtful clearance arrangements; financial and trading integrity was a function of the reputation of the main players. While that system, essentially based on trust, did work at a minimal level for many years, it could not serve as the basis for developing a vibrant nationwide commodities futures industry.

> India, unlike most developing economies, has a long history of commodity futures trading. The lineage begins with the Bombay Cotton Trade Association in 1875; the Bombay Cotton Exchange established in 1921, the Seed Traders Association followed in 1926. In the 1950s, commodity futures trading was a serious industry, and the president of the Bombay Oils and Oilseeds Exchange, Shri Ramdas Kilachand, was a highly respected and formidable person in trade and commerce.
>
> This legacy of commodities futures trading offers some advantages, especially due to the development of a government regulatory infrastructure through the FMC and the applicable laws and rules. However, the legacy is of little value from an exchange operational perspective. That is because the socialist policy of the GoI, coupled with a hostile misunderstanding of futures trading by policy makers, saw "…*the vibrancy of Masjid Bunder, Mulji Jetha and Tamba Kata stifled*."
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> **An except from remarks of Mukesh Ambani, Chairman and Managing Director, Reliance Industry Limited, at the opening of the Multi-Commodity Exchange, November 2003.**

National policy for commodity futures exchanges changed dramatically recently. The GoI authorized the formation of new exchanges that must operate in accord with advanced modern systems and international best practices. The required operational criteria included the following:

- Online electronic trading and settlement systems;
- Clearing and settlement based on the principle of novation, and with adequate risk containment provisions, like up-front margins;
- Trade guarantee funds through equity contributions of trading/clearing members designed to increase in proportion with increases in trading volume;
- Strong market surveillance and monitoring systems and practices instituted;
- Research and development capacities employed to study the performance of contracts, and suggest changes to meet the changing requirements of trade;
- Efficient delivery mechanisms through a certified warehouse receipt system, and
- Demutualized, for-profit company status, with diversified ownership.

The chartering of three new national multi-commodity exchanges revolutionized the commodity futures exchange industry. The National Commodity and Derivatives Exchange (NCDEX), the National Multi-Commodity Exchange (NMCE), and the Multi Commodity Exchange (MCX) are now world class institutions technologically, trading seventy commodities, with thoughtful business plans for the future.

FMI surveyed all commodity futures exchanges in India authorized by the FMC and found significant differences among them in terms of trading volume, number of contracts authorized to trade, margin systems, clearing and settlement systems, and trading systems of open-outcry versus electronic. A brief summary of the differences are presented in the following charts.[1]

Three National Multi-Commodity Exchanges

Name of Exchange	Year Established or Date Started Trading	# of Contracts Actively Traded	# of Members	Electronic or Outcry Trading	Settlement	% Delivery as Settlement	Real Time Price Dissemi-nation	Use of Designated Clearing Banks
Multi Commodity Exchange of India	Nov. 2003	22	739	electronic	delivery, cash	less than 1% for most comm.	yes	yes (4)
National Commodity and Derivatives Exchange	Recognized as of Nov. 2003	26	334	electronic	delivery, cash	not provided	yes	yes
National Multi Commodity Exchange	Nov. 2002	49	110 TCMs	electronic	cash, WRs	plus/ minus 1% for all commodities	yes	yes (1)

Regional Exchanges

Name of Exchange	Year Established or Date Started Trading	# of Contracts Actively Traded	# of Members	Electronic or Outcry Trading	Settlement	% Delivery as Settlement	Real Time Price Dissemi-nation	Use of Designated Clearing Banks
Ahmedabad Commodity Exchange	1956	1	213 members	outcry	delivery, cash	zero	no	yes (1)
Bhatinda Om & Oil Exchange	1973	1	90 shareholders; 28 TMs	outcry	delivery, cash	zero	yes	no
Bikaner Commodity Exchange	2003	6	51	outcry	delivery, cash	less than 1% for all comm.	no	yes (1)

[1] This data was compiled through repeated attempts, seeking survey responses from all exchanges listed, as approved by the FMC. The compiled responses were also submitted to the FMC for review. This information remains subject to further revision.

Bombay Commodity Ex.	1927	4	419 members	outcry	delivery, cash	n/a	not provided	yes (1)
Central India Commercial Exchange, Gwalior	1960	2	14-16 members	outcry	cash	n/a	yes	yes (3)
Chamber of Commerce, Hapur	1923	2	181 members	outcry	delivery, cash	zero	yes	no
Coffee Futures Exchange	1997	4 varieties of coffee	64 TMs; 6 TCMs	outcry (elec. from Oct 2000-Oct 01)	delivery or off-set	less than 4% for all comm.	no	no
First Commodities Exchange	2001	2	54 members	electronic	delivery, cash	less than 1% for all comm.	yes	yes (2)
Meerut Agro Commodities Exchange	1983	1	41 Trading Members	outcry	cash	n/a	prices posted every 30 min.	no
National Board of Trade	July 1999	6	118	both	delivery, cash	1.9% for soyoil	yes	yes (1)
Pepper & Spice Trade Assoc.	1957	3	187 members	electronic	delivery	all	yes	yes (1)
Rajdhani Oils and Oil Seeds Exchange Ltd.	1976	2	67	outcry	delivery, cash	zero	yes	no
Rajkot Seeds Oil & Bullion Merchants' Assoc.	1991	2	100	outcry	delivery, cash	zero	yes	yes (3)
Surendrangar Cotton Oil & Oil Seeds Assoc.	1964	3	90 members	outcry (going on-line)	delivery	Approx. less than 10%	yes	yes (1)
Vijai Beopar Chamber Ltd. Muzaffarnager	1950	1	112 shareholders	outcry	cash	n/a	yes	no
Haryana Commodities Ltd, Hisar	2004	1	59	outcry	cash	zero	no	yes (1)
E-Sugar India	2003	1	21	electronic	cash	n/a	Yes	yes

The most pronounced differences between the national and regional exchanges are summarized as follows:

- The average *monthly* transaction volume for the three national multi-commodity futures exchanges during the first six months of 2004 is far greater than for the regional exchanges:

National Multi-Commodity Exchanges		Regional Exchanges: 65,911
MCX:	2,703,979	(Average monthly transaction volume for the twelve regional exchanges that reported during the first six months of 2004)
NCDEX:	230,832	
NMCE:	888, 390	NBOT: 270,780

Thus, well over three quarters of the reported commodity futures volume in India occurs on just three exchanges.

- Eleven out of thirteen regional exchanges each have an average *daily* transaction volume of less than 5,000 for the period of January – June 2004. By contrast, the MCX had an average daily transaction volume of 103,999.

- For perspective on the still early stages of India's markets, contrast this MCX daily volume with a mature market, where the Chicago Board of Trade has transaction volumes of over 3,000,000 trades/day, 30 times greater.

- Approximately half of India's regional exchanges saw a decline in transaction volume between 2003 and 2004.

- All three national multi-commodity exchanges have electronic trading systems, compared with only three of the seventeen (18%) regional exchanges which responded to the survey.

Two-tier regulatory approach for exchanges and the FMC

The operational and trading volume differences between the three largest exchanges and the other exchanges call out for a two tier regulatory approach. For example, trading abuses in open outcry trading systems which can occur among individuals who know each other well, are difficult to police. Attempting such policing would require that FMC personnel be posted in every trading pit to monitor trading practices, or even film trading activity from above to later screen for abuses. This is a resource intensive process for exchanges and the FMC.

By contrast, trading system abuses are significantly reduced on electronic trading systems, because trading parties are matched anonymously, accurately, and automatically. The differences in exchange trade guarantee funds, margins, settlement, and default procedures, make the financial integrity of the two-tiers of exchanges vastly different. This calls out for far greater care by the regulator, and by the regional exchanges, in constructing safe margin systems, achieving accurate financial reporting, and monitoring the financial strength of exchange members.

The FMC should accordingly focus its regulatory emphasis differently for each tier of exchanges. By example, the focus on the national multi-commodity exchanges should be toward ensuring that hedge participation develops, and that the futures contract prices remain aligned with the underlying physical prices. Such tools as contract design, position limits, and margins are all important issues in this regard. By contrast, the FMC emphasis with regional exchanges would be on trading integrity and financial soundness for margining and settlement purposes.

This recommendation that two different regulatory focuses should be applied by national versus regional exchanges, and by the FMC in its oversight capacity, raises an important issue for the FMC. Should the regulator mandate electronic trading, or high capital requirements, or modern trading, clearing and settlement, and margin systems, for *all* exchanges as a requirement for maintaining a license, which could effectively terminate many regional exchanges? Or should market forces be permitted to make user preference the determiner of success?

As this illustrates, the GoI could easily be in the position of determining winners and losers among exchanges. However, the FMC should apply its regulations across the board with the same three objectives foremost: market integrity, financial integrity, and customer protection. While the regulatory focus on the two tiers of exchanges may be different, the objectives will not be. Accordingly, a regional exchange with a good reputation for financial and trading integrity, and trading few commodities, could continue to prosper in its current configuration, and with a proper regulatory focus, be monitored by the regulator. Yet, such an exchange may not be able to afford the cost of acquiring the modern electronic trading, clearing and settlement, or margin systems if the FMC were to mandate such systems as a condition of maintaining its license.

The FMC and exchanges can address the different technological and operational levels of futures exchange sophistication through different regulatory emphases. If a smaller regional exchange fails to meet its obligation to focus on, and ensure trading integrity and financial soundness, then it should be closed. But, that test must apply to all exchanges. With a fair-handed regulatory approach by the FMC, the result may well be consolidation of the industry. Exchange users will ultimately migrate to the most liquid markets, which will also be perceived as the safest and best regulated markets.

World Trend: Exchange Mergers

Futures exchanges go through periods of consolidation. This occurs through both market and regulatory pressures.

China: The number of exchanges came down from 50 in 1993 to 14 in 1995 and to 3 in 1999. The Shanghai Futures Exchange was formed in 1999 after the merger of three exchanges viz., Shanghai Metal, Commodity, Cereals and Oils Exchanges.

Japan: The process of consolidation brought down the number of exchanges from 17 in 1993 to 7 in 1998. The Tokyo Commodity Exchange (TOCOM) was created in 1984 through consolidation of three existing exchanges viz., the Tokyo Textile Commodities Exchange, the Tokyo Rubber Exchange, and the Tokyo Gold Exchange.

Malaysia: The Malaysia Derivatives Exchange Berhad (MDEX) was created by the merger of the Commodity and Monetary Exchange of Malaysia (COMMEX, formerly KLCE) and the Kuala Lumpur Options, and Financial Futures Exchange (KLOFFE) in 1998.

Singapore: The Singapore Exchange (SGX) was formed in 1999 by the merger of the Stock Exchange of Singapore and Singapore International Monetary Exchange (SIMEX).

Europe: The pan-European integrated cross-border single currency derivatives market Euronext was created in 1998 by merging three exchanges in Europe viz., Amsterdam Exchanges, Brussels Exchanges, and Paris Bourse.

United Kingdom: LIFFE merged with the London Commodity Exchange in 1996. In 2001, LIFFE integrated into Euronext.

United States: NYMEX merged with COMEX in 1994, and CSCE and NYCE merged in 1998 to form the Board of Trade of the City of New York.

Hedge participation

For the three national multi-commodity futures exchanges, the most critical operational challenge is to expand hedgers' participation. An exchange that has a vast preponderance of speculative trading runs the risk of vitiating both the price discovery and hedge functions. In September 2004, the NCDEX and FMC saw guar futures volume on one day have an estimated face value of Rs 1831.4 crore (U.S. $400 million equivalent), compared to the value of the actual physical crop production for an entire year at Rs 1144.6 crore (US $250 million equivalent). That is an extraordinary volume development, but not necessarily a positive one. Such volume could indicate overwhelming speculative activity, with little connection to hedging activity. Sustained trading with such lopsided volumes would indicate that the economic function of futures was not being achieved, and that a contract might be veering toward mere gambling. While high volume and liquidity are good, hedge activity is also essential.

To offer perspective, in a mature futures trading market in agriculture commodities, such as the Chicago Board of Trade (CBOT), the value of the underlying futures contracts for a year is always a multiple greater than the annual value of the underlying cash crop. For example, corn futures on the CBOT trade about 86,000 contracts a day (actual August 2004) and each contract is worth 5,000 bushels, so 430 million bushels per day in futures. With about 250 trading days per year, that means about 107.5 billion bushels of corn traded via futures contracts per year. The annual physical production of corn is about 10 billion bushels. So the annual value of the futures contracts would exceed the annual value of the underlying physical commodity by about 10 to 1. The similar ratio for soybeans is approximately 23 to 1; for cotton this ratio is about 11 to 1. By contrast, annualizing the exceptional guar numbers seen in September, this would be a ratio of 400 to 1.

As noted earlier in Section II, there are established international best practices to ensure that futures prices and physical prices remain aligned. The high guar futures volume and prices in September, 2004, offer a hypothetical review on how to examine whether a market has excess speculative activity that may be coupled with a corner or squeeze attempt. For example, perhaps holders of the futures open positions were also holding large positions in the spot or cash market through actual possession, or forward contracts, or warehouse receipts, which could permit market manipulation. An exchange should immediately demand all books and records of the large position holders *including* information on their cash (physical market) positions. The exchange should simultaneously report this demand to the FMC. If the position holders fail to respond, the FMC should be informed, and the FMC should immediately demand that they provide their books and records on both futures and cash positions. Should the position holder respond that the information is confidential, the FMC should inform them that it has the authority under the FCRA to *demand* and *receive* these books and records, including the cash market positions. The information on the cash market positions will indicate the possibility of a corner or squeeze - - attempted market manipulation - - and that permits the exchange and FMC to take remedial action, and impose penalties if warranted.

The exchange and the FMC have the authority and responsibility to close out positions of potential manipulators. That can be done by a forced liquidation within a certain timeframe, or by placing an ever increasing margin requirement on the position holder, such as 50% margin one day and 100% margin on the next. Forced liquidation, or increased margins, will have the same result and eliminate the manipulative activity.

It is imperative to ensure that futures prices reflect a supply and demand rationale for the relationship between futures and physical commodity prices. When futures and cash prices appear misaligned, the exchange and the regulator should rapidly find out why, and act as necessary to stop market manipulation.

Finally, there is also the simple issue of how an exchange *counts* its volume: is a contract *trade* one transaction, or is a *trade* both a *buy* and a *sell* and thus two transactions? The first method is more conventional, and a uniform method should be established. How an exchange counts clearly affects the measure of hedge versus speculative activity against underlying value.

One reason for the multiples in value for futures over physicals in mature futures markets is strong hedge activity, matched by even stronger speculative participation. Speculators are taking positions with relatively small initial margins, based upon their opinion of price movement. They are not constrained by the physical quantity of the underlying commodity, because the speculator has no intention of making or taking delivery. And, the futures markets participant's only cost is the relatively small initial margin, and any other margin calls to the extent the positions are held beyond day trading. An initial margin between 5% and 10% of the underlying value is fairly common in mature agriculture commodity futures markets. Thus, comparisons between *value* of the futures contracts and value of the underlying physical market are often misleading; it does not clarify the significant leverage available with futures contracts. A relative small amount of margin money can "control" great value via futures.

Building hedge participation in commodities futures markets is extremely difficult. Major hedgers are slow to enter the futures markets until they are convinced that there is sufficient liquidity. Of course, their reluctance to enter the futures markets before there is liquidity, reduces liquidity. This dilemma underscores the need for exchanges to work with major agribusinesses and their associations in order to educate them on successful price risk management through futures markets. One mark of success in this effort is to see major agribusinesses commence educating their own network of suppliers and peer firms so that the knowledge about successful price risk management builds out of self-interest.

Fortunately, India has a network of agricultural sector associations with many agribusiness members. Recently, one major agribusiness, ITC Limited, a major consumer of soybean and wheat, announced that it would commence a vigorous hedging program in both commodities, with intentions to proceed into mustard, pulses, and coffee. ITC announced its plan to help educate the producers, commission agents, and processors that they deal with so that they all can better manage their price risk, and positively impact ITC. Building hedge volume on exchanges will make them better forums for the farmer as the natural hedger on the other side of the food processor’s transaction. Time and again, liquidity begets liquidity.

Several remedies to build greater hedge participation are within the exchanges’ control. These include contract development conducted with significant input from the natural hedgers; and education directed at the hedger community on risk management uses with futures. These steps for contract development are well known to the commodities futures exchanges in India; but they are reviewed here for the non-exchange, agricultural sector readers.

Exchange contract development

Developing new futures contracts requires extensive research of the physical or "cash" market structure, operations, and practices. The first step is market demand research based on the observations of the natural hedgers' practices in the physical market. The research methodology is as follows:

Preliminary research. Examine the practices of the producers, commodity intermediaries, and end-users of the particular commodity. Examine market size and composition, market concentration, price volatility, lack of close substitutes, absence of regulatory barriers, ability to arbitrage. Obtain a "name-list" of firms and other firm-specific information, such as, firm location, type and size of firm, and contacts in the firm that will provide feedback as research is conducted.

Product design research. Based on conclusions drawn from preliminary research, pursue the development of a new contract by surveying industry participants, develop working groups of firms in the industry, or a membership advisory committee. Gather information on contract design issues for drafting specific terms and conditions.

Market demand research. Conduct more comprehensive research on the potential use, and users, of the new contract. Identify the economic incentives and interests of potential users of the new contract. Assess the firms' need for a risk management product (based on the firms' perception of their price risk, their current means of managing their price risk-forward contracting, joint marketing and production arrangements, fixed pricing, vertical integration, and their current costs in managing that risk); or their need for price discovery.

If this research concludes that there is a need for a futures contract as a hedge vehicle, then exchanges proceed with contract design in full accord with the market requirements of the natural hedgers. The following guidelines for evaluating contract terms are important to follow in order to gain natural hedge "buy-in" before contract launch.

GUIDELINES FOR EVALUATING CONTRACT TERMS

Contract Terms:	*Guidelines for Developing Terms*
Size of contract	Accepted commercial practices. Size of commercial conveyance; predominant mode of transportation; the total value and minimum price change of the futures contract; capital market infrastructure; capitalization of commercial merchandisers and futures market traders.
Deliverable grades	Accepted cash market standards; consistent product grades or grade variances.
Delivery months	Cash market planting and harvesting cycles, demand cycles, and cash market price trends.
Minimum price fluctuation (tick size)	The size of cash market price changes; capital markets infrastructure; capitalization of commercial merchandisers and futures markets traders.
Maximum daily price change (price limits)	Daily price changes and the distribution of daily price changes; capitalization of commercial firms and BCE member firms; credit availability; capital markets infrastructure.

These guidelines are logical and imperative. For example, the Chicago Board of Trade wheat contract is for 5,000 bushels of wheat, because that is how many bushels fit into a train car load, and that is how grain is generally shipped, and that is what the grain elevator requires if the contract is to be an effective hedge tool. A coffee contract on the New York Board of Trade is for 37,500 pounds of coffee, because that is the capacity of a steel shipping container; a cotton contract there is 50,000 pounds because that is 100 bales. The point is that all future contracts have essential terms that must be found in consultation with natural hedgers.

This is not an easy process. For example, cotton futures in India would seem to offer a highly successful contract. India has many spinning and weaving companies and the raw material cotton comprises 60% of expense as a proportion of sales. With about Rs 20,000 crore (U.S. $4.4 billion) worth of cotton cloth produced each year, there is massive hedging potential. Yet, it was reported that a cotton purchaser for a major textile company complained that the futures contract at issue was deficient: the grade was specified, but not the State from which it came, and this results in a difference of up to 3mm in staple length.

However, the exchange’s response is equally compelling. The exchange official explained that the exchange needs to allow some flexibility within the deliverable grade to prevent price manipulation. Further, a textile manufacturer that requires a very specific quality of cotton should use futures solely for price management, and not for taking delivery of the commodity. It should use the futures contract as a hedge against price fluctuations, and continue to buy the physical cotton from its regular supplier.

These two perspectives, from an end-user and an exchange official, reveal an often misunderstood tension between the two parties. Hedgers, whether farmers or end-users, always want more *delivery points* for the futures contracts. They view the futures markets as terminal markets, into which farmers will make (or end-users take) physical delivery of their product. The more delivery points they have, the more alternatives they have. Exchanges do not want this because it creates numerous surveillance and operational issues. With many delivery points, exchanges must worry about quality of the storage facility, issues involved in certifying delivery at warehouses, as well as the potential for market manipulation because all it takes for a squeeze is for someone to corner the deliverable supply at a single location.

In short, as this cotton example illustrates, there may be contract design flaws, or there may be a serious educational need with hedgers on techniques of price risk management using futures. In either case, closer work with the natural hedger is required by the exchanges.

The contract development process described here often takes sophisticated exchanges months, or years, in order to do the necessary research and to develop the precise contract terms with the commercial user, so that the finished futures contract will entice hedgers to use the markets.

Yet, the three national multi-commodity exchanges which are relatively new operationally, have designed and listed for trading a total of almost 70 commodities futures contracts in the brief period November 2003 to September 2004.

That pace of contract development, coupled with relatively low volumes (against potential volumes), implies that a review of all contracts should become a priority for the national multi-commodity exchanges. They should apply all due diligence to work closely with the natural hedgers and incorporate the intense contract development process outlined in this section to entice hedge participation.

V. Facilitating Issues

Commodity futures markets have different requirements than do securities markets for facilitating trading, margins, settlement, and other aspects. For example, warehouses need to exist so that delivery on agricultural futures contracts can occur. A warehouse receipts system, ideally with receipts serving as negotiable instruments, can assist farmers and payment transfers. Standards for grading commodities can assist hedging, and grading can provide confidence for delivery or provide a basis for discounts. Greater price transparency at *mandis* could offer farmers greater marketing alternatives and more information in order to better use futures markets. This section briefly addresses these commodity industry facilitating issues that, if properly addressed, would help develop the industry.

This section also addresses ancillary policy and legal issues that could facilitate the development of commodity futures markets. These issues include authorizing options trading on commodity futures; authorizing institutional participation in commodities futures markets by certain banks and mutual funds; authorizing foreign participation in the commodities futures markets; adopting conducive tax policies; and broadening the legal definition of "commodities" that may be subject to futures trading.

Warehousing issues

Warehouses obviously need to be physically secure and reliable as storage facilities. The facilities of the Central Warehousing Corporation (CWC) and the State Warehouse Corporations (SWCs) meet this test. However, they are not well integrated with commodity futures exchanges. Commodity futures exchanges could better align their interests with the CWC and SWCs, and notable efforts are underway by the NMCE in Ahmedabad. Additionally, the NCDEX is taking innovative steps

Banking in India is basically collateral based, where a bank needs to have some assurance that recovery through sale of collateral is possible in case a borrower is not able to repay the amount. If a bank were to lend against commodities, it is never too sure about whether the produce has really been kept in a warehouse, the specifications are what the farmer claims them to be, the receipt is genuine, the validity of shelf life, etc. Hence, the loan given could turn sour in case the farmer is not able to repay the amount. The bank may not be in a position to recover the full amount on the collateral placed with the warehouse as the quality could have deteriorated and the market value could be quite different from what was originally agreed upon.

There is a solution here which can revolutionize the entire face of commodity finance and elevate it from being finance to a 'sensitive sector' to one comparable with a loan provided to a blue chip company.

Suppose warehouses are rated on the same lines as corporate financial instruments are evaluated. This rating could be done by a recognized centralized company on the basis of specifications of warehouses. Therefore, just like we have triple A rated companies and their like, we could have triple A rated warehouses which meet stringent conditions. The produce could be certified by reputed assayers or certification agencies so that the warehouse receipt issued, which should ideally be in electronic form, would truly state the balances actually held along with the grade and shelf life.

The farmer can use this receipt to take a loan from any bank of his choice as the latter is assured of the authenticity of the goods against which it is lending…The quality of the loan improves and the farmer is able to procure credit at a more competitive rate as the rating of the loan improves.

From the bank's perspective, the quality of its loan portfolio improves...Capital is spared, and as the probability of non-performing assets fall, funds are released for deployment in more productive areas resulting in improved profitability.

Madan Sabnavis, Chief Economist, NCDEX, Op-Ed, Economic Times, August 11, 2004.

with electronic warehouse receipts for commodities held in NCDEX accredited warehouses.

Effective warehouse receipts systems could remove doubts relating to the reliability and credibility of the warehouses. Accreditation of warehouses by a government agency such as the CWC, or an autonomous statutory body, would be an approach to increase reliability and credibility of warehouses. This would encourage the banking sector to lend against commodities stored in accredited warehouses. This would in turn increase the holding power of the farmers.

A next step would be to establish the negotiability of warehouse receipts (WR) and make WR a freely transferable instrument. It would pass good title to the buyers of the commodity lying in the warehouses by the process of transfer of warehouse receipts. The goal would be to free transfer of credit of the commodity from one person to another in the same way as securities transfers, and thus encourage banks to lend against warehouse receipts.

Currently, WR issued by the CWC or a SWC are, by and large, treated as negotiable instruments, and can sometimes be used by farmers to obtain financing from certain banks. But in order to maximize the benefits to farmers, all WR should *formally* be made negotiable. This requires changes to the Negotiable Instruments Acts, or action by the RBI. Further, a dematerialized warehouse receipt does not have recognition under any statute similar to the Depositories Act, 1996; rather its status is based on the individual agreements between the participants. And because there is presently no agency to accredit and register warehouses, there remains a potential for malpractice by some warehouses that could issue warehouse receipts without having the corresponding commodity balances. The CWC is now trying to obtain approval from the GoI to serve as such an accreditation agency for both the public and private sector.

A broader solution could involve a coordinated GoI initiative between the appropriate entities (perhaps RBI, DCA, FMC) to establish GoI procedures to register and accredit warehouses, formally recognize electronic or dematerialized warehouse receipts, maintain demat accounts for credit of commodities with Depositories through Depository Participants, establish the recognition of noting pledges in favour of any lender, and for transfer of pledged commodities to the lender upon invocation of pledge similar to the provisions of Depositories Act. If these results cannot be accomplished under current GoI authority, then a statutory approach could proceed.

Standardization and grading of agricultural commodities

There needs to be a formal and rational relationship between the quality of a product and its price. This can be achieved by grading the product in conformity with certain accepted quality standards viz. shape, size, form, weight, and other physical and technical characteristics. The product brought to the market is very often contaminated with dust, stones and other foreign matter added either by accident, or deliberately. Sometimes the product is immature, not properly dried, contains shriveled grains or damaged and rotten material. Such a product brings a lower price to the farmers. Control should be exercised while assembling the product of different farmers so that the good material is not mixed with the inferior material brought in by some farmers.

Categories of commodity grade, established through standards, permit the quality and price equation to work, and permits more effective standardized futures contract terms, and allowances for discount from the specifically standardized. These steps will facilitate commodities futures hedging.

The first requirement toward this result would be to have good standards and quality assurance/certification procedures, as well as standard quality tests and testing equipment. A good system of grading allows commodities to be traded by specification. Presently, there are two main organizations involved in this process: the Directorate of Marketing & Inspection through APGM Act 1937 popularly known as "Agmark," and the Bureau of Indian Standards through the BIS Act, 1986, popularly known as 'IST'. Apart from these two organizations, under the present concept of self-quality assurance certification system, a number of other agencies have been authorized to certify the quality of a product, especially standards for export oriented commodities. Uniform standards need to be developed that are closely aligned to commercial practices.

If the intention is to assist the agricultural sector, then efforts must be taken to bring in more players, hedgers and arbitrageurs, and that argues for greater physical settlement of commodities. This requires improving both standards and testing/certification methods. It may mean the Central Authority will institute a system of designated surveyors to inspect and certify delivery. The Central Authority, perhaps through the Ministry of Agriculture, could establish a system of inspection, monitoring, and surveillance to ensure that the licensed graders comply with the prescribed standards, and the commodities truly reflect the quality and quantity. This would improve the collateral value of the goods, and consequently the credit flow to the commodity sector.

Improving price transparency of mandis

Mandis are the first point of contact for the farmer when he sells product. Quite often, he transports the product from his village and is forced to sell the product at whatever price is offered to him, since it is practically unthinkable for him to take the product back. As the model APMC Act developed by the Ministry of Agriculture is adopted by all states, the current mandatory requirement that farmers sell only through mandis will no longer exist. Farmers, in such a case, are likely to sell directly to processors, particularly in the case of contract farming.

The role of *mandis* will then undergo a transformation. However, there is already an unrealized value in the *mandis* infrastructure, because they could be better used as spot price discovery centres for the agricultural commodities that they trade in today. In that sense, they could become extended arms of commodity exchanges. Greater interface between the *mandis* and the commodities futures exchanges would make eminent sense; spot prices are one of the most important ingredients in the evolution of futures prices.

A key step in this direction would be to establish a pilot program in several States, linking major *mandis* with appropriate national multi-commodity exchanges, and making the *mandis'* operations include electronic and transparent price boards. These pilot *mandis* could then display both spot and futures prices, and provide new advantages to farmers as they decide when to move their produce to the *mandis* to sell. This should be done irrespective of the implementation of the APMC Act.

This pilot approach should help build more liquid and deeper commodity markets, by strengthening the link between spot and futures markets. Greater transparency in the price discovery process would improve, and farmers would have knowledge of prices *a priori*, before moving produce to the *mandis* for sale. The results of the pilot program should be summarized and shared with the Ministry of Agriculture, the DCA, the Inter-Ministerial Group, and others. The intended result would be a paper on the subject for discussion, and subsequent adoption and implementation by State governments and their *mandi* boards.

Authorize options on futures in commodity markets

Commodity futures contracts permit the parties to lock into a pre-determined price, to be paid at contract expiration. This ensures that the seller of a product is buffered against the downside of prices falling at the time of settlement or harvest. However, should the price move favorably, then the seller cannot take the benefit of the upside. If options were permitted, then the seller would have the right, *but not the obligation*, to sell at the end of the contract for which an option premium is paid. Options would give farmers the right, but not the obligation, to sell their product at a pre-determined price, for a small premium. Today, commodity options are not allowed, whereas options in the securities markets are permitted.

Options would benefit the farmers who would like to capture the gain of the upside of price movements, while protecting against the downside. Farmers today, through futures can limit the potential loss due to a decline in the price of their product when the crop is ready for sale. With options, the only loss would be the option premium, which is known at the time of sowing.

Further, options could be a substitute for Minimum Support Price, with no obligation on the part of Government to physically buy food grains and other agricultural produce. Today, the MSP program of the government acts as an option, whereby the farmer has the right, but not the obligation, to sell his crop to the government at the predetermined price.

Presently, farmers tend to sell all their produce to the government, which in turn is selling the food-grains at the ration shops at a low price, thus running a large food subsidy bill estimated at Rs 250 bn (US $5.5 bn equivalent). Instead, the government could permit options, whereby farmers would be able to procure a higher price on the exchanges at market related prices, and the government in turn could eschew the subsidy element. Alternatively, the government could subsidize the option premium payable by the farmers for entering into option contracts.

The major legal impediment is Section 19 of the FCRA, which prohibits options in goods. It should be amended to permit options in goods through the new national multi-commodity exchanges.

Bank presence in commodity markets

Banks could play a valuable role in expanding their business while assisting the farmer with hedging activity. Farmers, individually, are often not in a position to hedge their price risks for their crops on commodity futures exchanges. This is so because of accessibility constraints and because the quantities that they are trading may not be in line with the commodity futures contracts specifications. A farmer may be producing 5 quintals of wheat, while the minimum contract size could be 50 quintals or 1 tonne. Therefore, the farmer requires an aggregator who can suitably represent the farmers' interests on the commodity futures exchange on commercial terms. These aggregators should not have a trading interest in commodities to suitably address the farmers' concern. Banks that have a strong rural presence, and also have sufficient financial expertise and infrastructure, could be appropriate intermediaries.

Banks already have strong treasury offices which deal with government securities and foreign currencies, besides securities derivative products. Dealing with commodities would be an extension of the same expertise, with the commodity desk hedging all the orders received from its rural branches as aggregators for farmers. Therefore, expertise in the area of commodities need not be pervasive across the entire banking system, as it would be the responsibility of only the specialists. This could add depth and liquidity to the commodity futures markets, and further enhance the markets' hedging capabilities. Certain banks could be allowed to deal with commodities in the process of market making, or furthering the hedging activity of end-users.

However, the Banking Regulation Act, 1949, Section 6 read with Section 8, does not permit banks to deal in commodities or commodity derivatives. These legal impediments could be removed in the following ways:

- Issuance of notification by the Central Government under Section 6(1)(o) of Banking Regulation Act, 1949, permitting banks to deal in commodities and commodity derivatives subject to guidelines of the RBI.
- Amendment in Sections 6 and 8 of the Banking Regulation Act, 1949, to include commodity and commodity derivatives within the activities permitted by banks.
- Permit banks to do business in commodity and commodity derivatives through a subsidiary. The RBI, with the prior approval of Central Government, may issue notification for this purpose under Section 19 of Banking Regulation Act, 1949.

Mutual funds in commodity markets

Mutual funds today are leading investors in equity and debt markets in India, and could bring liquidity and professional skills to commodity markets too. Mutual Funds could mobilize small savings from the public and invest in commodities and commodity derivatives. The small investor, who may hesitate to invest in commodity markets on his own, may invest through mutual funds. Mutual funds would have an opportunity to diversify their portfolios to cover commodities, and seek to deliver better returns to the end investors. Commodities could offer a good vehicle for risk mitigation for mutual funds.

According to Regulation 43 of SEBI (Mutual Fund) Regulations, 1996, mutual funds can invest only in "transferable securities in the money market or in the capital market or in privately placed debentures or securitized debts." Amending this regulation to include commodities and futures would enable mutual funds to diversify portfolios, mitigate risk, and broaden these opportunities at the retail level.

Permit foreign investors in commodity markets

Foreign investors are not allowed to invest in India's commodity futures markets, while they are allowed to invest in the equity and debt markets. Foreign investors have been a driving force for Indian equity markets, and for fostering integration with the globalization processes. The presence of foreign players would not only add liquidity, but also bring in their expertise and better align markets with the leading global futures exchanges.

The GoI should allow and encourage foreign participation in commodity markets, including permitting foreign investment in member/broker companies. Trading in India is already being aligned with global developments, as seen by the large volumes of trade on exchanges like NCDEX during the evening hours, where traders track movements in commodity prices on global exchanges.

There is no permissive regulation for commodities markets that is equivalent to SEBI (FII) Regulations, 1995, for foreign indirect investment, and therefore no clarity with regard to foreigners' indirect investment in commodity derivatives. There is also no clarity on foreign direct investment in the commodity sector. As per brokerage services, that are covered by the term 'Service Sector', any foreign investment such as becoming a member of a commodity futures exchange, would not be covered under automatic route. One solution is to amend the foreign indirect investment (FII) regulation for investment in commodity derivatives to parallel SEBI (FII) Regulations, 1995. Also, the automatic route for promoting or investing in a commodity broker company should be permitted.

Sales tax issues

Every State has its own sales tax rules relating to commodities, depending on its structure and revenue requirements. Sales tax rates on commodities need to be uniform across States in order for commodity exchanges to function smoothly and with a single price language.

In the national multi-commodity exchanges, the buyers and sellers from any place in India can enter a quote in the trading system. Location and identity of parties are known to each other, and deliveries of goods lying in warehouses are given by transfer of credit from the seller's account to the buyer's account in dematerialized form, similar to securities demat accounts. Levying a sales tax at the stage of transfer of demat entry would require each participant to get sales tax registration with each State, and comply with sales tax obligations of each State. Complex sales tax structures and multiple levies such as purchase tax, turnover tax, surcharge, additional charge, resale tax, etc. all discourage the participants. This is a hindrance for buyers to take deliveries, which works against the interests of markets seeking price convergence as effected by the commodity futures exchange delivery process.

There exist various tax impediments: Firstly, the *point of levy* of taxes differs from State to State, namely first point, also point of value added tax, etc. Secondly, the *rate* of sales tax varies from State to State which leads to uncertainty over the most appropriate State to sell and purchase commodities. Thirdly, *multiple provisions* for levy of taxes and additional levies, recoverability from the purchasers, exemptions and deductions, etc., create complexities. Lastly, issues involved in co-mingling of graded commodities with the common stock at the designated warehouses result in restrictions on the place of delivery of the commodities.

The solutions could be fairly straight forward. The introduction of VAT may address most of the issues. Further, there is no need to levy sales tax when delivery takes place in electronic form. Purchase tax may be levied as and when commodities are withdrawn from the accredited warehouses. The purchase tax on the basis of the settlement price would be paid by the holder. Further, the requirement of issuance of invoices could be dispensed with, and the statement generated by the commodities futures exchanges could be the basis of such purchase tax.

Income tax issues

The income tax regulations do not accord with the economic practices of commodities futures markets for hedgers and speculators. There should be off-set of losses/profits from trades in commodity derivatives with the profits/losses from the regular business.

One reason there is significant trade in commodity derivatives on illegal markets is the non-adjustment of profits and losses from speculative business with regular business. With a regulatory offset permitted, this illegal trade would shift to the legal platforms, and add substantial liquidity to the commodity markets. Hedging by farmers or food processors is possible only when there are sufficient counter-parties willing to take market risks, and that is the function of speculators. By not allowing such tax offsets, the farmers' interests could be hurt when there are insufficient numbers of traders willing to take opposite positions.

Section 43 (5) of the Income Tax Act defines "speculative transaction" to be one where the contract for sale or purchase is settled otherwise than by actual delivery. Therefore, the cash settled transactions in commodity derivatives are treated as 'speculative transactions'. The provision does exempt hedging if the person has already entered into contract for sale or delivery at the time of entering into commodity derivatives for hedging. However, it is practically impossible for any trader to link each transaction in commodity derivatives to the contract for sale in the underlying business. Section 73 of the Income Tax Act provides that any loss from speculative business can be offset only against profits from speculative business. Thus, losses in trades in commodity derivatives cannot be off-set against the regular business in physical commodity. This defeats the objective of hedging.

One solution is to permit losses/profits from trading in commodity derivatives to be allowed to be off-set against profits and losses from the other business of the person. Another solution is to exempt trading in commodity derivatives from the speculative activity definition. Alternatively, in the case of manufacturers of any products or traders in any commodity, the profits or losses arising out of sale or purchase turnover in derivatives of any commodity to the extent of 12 times in value of the actual sale turnover of the manufacturer (or trader or both, as the case may be) in any commodities, should not be considered as profits or losses arising out of speculative transactions. The multiple of 12 of actual physical turnover is suggested because the hedger would typically like to cover price risks for his requirements spread over an entire year, through monthly contracts. This would make his turnover in commodity derivatives a minimum of 12 times his actual requirement.

Definition of commodities

India's current legal definition of what constitutes a 'commodity' that may be subject to futures trading is similar to the definition applicable in the United States over thirty years ago: it is restricted to goods. The current definitions of 'Forward Contract' and 'Goods' in the FCRA state:

" 'Forward Contract' means a contract for delivery of goods and which is not a ready delivery contract".
" 'Goods' means every kind of movable property other than actionable claim, money and securities".

This "goods" definition does not permit the development of those new contracts that have already developed in international markets, such as contracts on weather, or a rainfall index, or futures relating to indices of prices of commodities, or on macroeconomic indices.

The definition of what constitutes a permissible underlying for commodity futures contracts should be amended to include "*goods, services, rights, or interests*", so long as the economic function of risk management can be shown. While this is not an urgent issue compared to building agricultural sector hedging, such a change would, over time, permit greater innovation in developing risk management vehicles. It would also end the disparity where indices on securities are permitted on stock exchanges, but similar products on commodity prices are not permitted on commodity futures exchanges.

APPENDICES A-C

ROADMAP:

COMMODITY FUTURES MARKETS DEVELOPMENT IN INDIA

2005 and Forward

FMI
Financial Markets International, Inc.

APPENDIX A

REVIEW OF SELECTED REPORTS AND STUDIES ON THE DEVELOPMENT OF COMMODITY FUTURES MARKETS IN INDIA

The following is a review of selected reports and studies that have been conducted on the development of commodity futures markets in India. This review emphasizes the recommendations of the reports that have sparked the dramatic liberalization and modernization of commodity futures markets.

<u>Khusro Committee</u> (June 1980)

A Committee on Forward Markets was constituted by the Government of India, Ministry of Commerce, Civil Supplies and Cooperation, under the Chairmanship of Professor A.M. Khusro.

<u>Terms of Reference</u>

a) Review the role that forward trading has played during the last decade;
b) Assess the role that forward trading can play in the prevailing economic conditions and marketing/distribution system in commodities in which forward trading is possible, particularly in commodities in which resumption of forward trading is generally demanded;
c) Examine how forward trading in commodities could be of direct or indirect benefit to producers and consumers;
d) Examine if forward trading has a special role to play in promoting exports;

e) Suggest measures to ensure that forward trading (in the permitted commodities) remains constructive and helps maintain prices within reasonable limits;
f) Suggest amendments to the Act regarding enforcement, and to check illegal forward trading; and
g) Suggest measures for strengthening the FMC to achieve the objective of making futures trading socially purposeful.

Selected Report Recommended Amendments to FC(R) Act

- Amend the definition of NTSD (Non Transferable Specific Delivery) contracts to make it precise and to provide for certain facilities required by genuine trade;
- Provide that all trading in transferable contracts (i.e., forward contracts other than NTSD contracts), which is not regulated or controlled by an Association, shall be illegal;
- Provide that no Association regulating and controlling transferable contracts shall do so without obtaining a certificate of recognition from the Government;
- Tighten penal provisions by increasing the maximum and minimum fines and imprisonment, to provide for compulsory imprisonment for the first offense, and to remove discretion to the Magistrate to release the offenders under the FC(R) Act, 1952, by using provisions of the Probation Offenders Act;
- Require registration of all non-members trading in futures markets, submission of periodical returns by all operators showing the volume of trading and proportion of the open position as hedge and speculative, requiring all business of non-members to be put through trading rings of associations by public outcry, and requiring minimum margin deposits for trades of non-members, with the margin held in segregation without commingling with personal funds.
- The Committee concluded that commodity futures trading could be beneficial to producers and should be permitted, however, only in commodities that have little economic significance (e.g., castorseed, jaggery, jute, pepper, etc.).

Kabra Committee (September 1994)

Commissioned by the Government of India, Ministry of Civil Supplies, Consumer Affairs and Public Distribution, to assess the role of the Forward Markets Commission (FMC) in the changing economic conditions in order to make it compatible with international commodities markets. Chaired by Professor K.N. Kabra. This report follows the Khusro report of 1980, and was developed at a time when agricultural exports were growing as was the concept of a market economy, but one that was to be "socially oriented." As the Kabra Committee report was written in 1994, trading in futures was allowed only in castor seed, hessian, gur, potatoes, turmeric, and pepper. Additionally, trading in NTSD contracts was allowed in cotton, raw jute, and jute goods.

Terms of Reference

1. To assess the role of the FMC to make it compatible with international commodities markets and to see how effectively it can cope with the realities of a fast changing economic scenario;

2. To review the role that forward trading has played in the Indian commodity markets over the last decade;
3. To examine if forward trading has a special role to play in promoting exports;
4. To suggest amendments to the FC(R) Act with a view to efficient enforcement and to check illegal forward trading;
5. To suggest measures to ensure that forward trading (in the permitted commodities) remains constructive and helps in maintaining prices within reasonable limits.
6. To assess the role that forward trading can play in marketing/distribution systems; and particularly in commodities in which resumption of forward trading is generally demanded.

Key Conclusions & Recommendations

- Increased production of agricultural commodities will see increased futures and forward markets trading. Such increased futures trading must not be overwhelmed by speculative forces.
- The growers' participation in the commodity futures exchanges needs to be increased.
- Futures trading should be allowed in: basmati rice, cotton, kapas, raw jute and jute goods, groundnut (and its oil and cake), rapeseed/mustardseed (and its oil and cake), cotton seed (and its oil and cake), sesame seed (and its oil and cake), sunflower (and its oil and cake), safflower (ditto), copra, coconut oil and its oilcake, linseed, silver, and onions. (Total *12* new commodities).
- Trading in NTSD contracts in all commodities should be freely permitted.
- Futures exchange membership should be expanded, capital adequacy norms ensured, and computerization among the exchanges encouraged.
- The majority of the Committee recommended that options be introduced (the Chairman disagreed, out of fear of excessive speculation).
- The FMC should adopt a "watch-dog" approach. Amendments to rules, regulations, and Bye-Laws of exchanges should require the approval of the FMC. Give FMC the power to nominate Directors of the exchanges (instead of the Central Government). FMC should be given more offices and modern computers.
- Urged that the previous Khusro Committee's recommendations for amendments to the FC(R) Act be implemented as soon as possible.
- Suggested upgrading commodity exchanges to the level of international futures markets, with foreign participation permitted.
- Proposed levying transaction fees in the forward/futures markets.
- Suggested raising penalty fines to curb illegal forward trading.

World Bank & United Nations Conference on Trade and Development (UNCTAD) Report
Managing Price Risks in India's Liberalized Agriculture: Can Futures Markets Help? (L. Rutten, D. Umali-Deininger, and B. Blarel, November 1996)

Background

This study is part of a larger set of studies undertaken by the World Bank in collaboration with the Government of India to review the constraints, opportunities, and approaches for improving the performance of Indian agriculture markets. It concentrates on the actions needed to ensure the orderly development of agricultural futures markets as a risk management tool.

Terms of Reference

1. To describe the generic roles which futures markets play in agricultural marketing;
2. To describe the current structure and operations of Indian futures markets;
3. To assess the performance of Indian futures markets and identify its key policy determinants;
4. To examine the policy, regulatory, and institutional conditions and options for expanding and improving the contribution of commodity futures to agricultural marketing, including the potential for the internationalization of Indian exchanges and the introduction of new futures contracts.

Key Conclusions & Recommendations

- Unlike many other developing countries, India has a long, well-established tradition of regulating and operating commodity futures trading.
- Most trading practices are sound but the delivery system is a major weakness in Indian trading procedures. Delivery to exchange warehouses is possible but not mandatory, and financial settlement is allowed. The arbitrariness of the financial settlement system undermines the economic usefulness of Indian futures markets by breaking their link with the underlying physical markets and supports the artificial backwardation of futures markets whenever ceilings on futures prices are imposed.
- The usefulness of Indian futures markets is severely reduced by the selective and restrictive implementation of the regulatory framework. This has led to excessive illegal trading and has caused legal exchanges to have poor liquidity.
- The economic usefulness of Indian futures markets is further reduced by government interventions on the physical commodity markets.
- The presence of futures markets can encourage those active in physical trading to improve their market practices if government restrictions are relaxed.
- The regulatory and institutional environment which governs the operations of futures markets needs to be improved to ensure orderly development. The FMC should curb its discretionary interventions and revert to the original intent of the three-tier regulation model provided by the FC(R) Act.
- Low volume of trade and regulatory concerns will likely limit internationalization of Indian commodity exchanges to a few select commodities, such as pepper, and some oilseeds and oils.
- Commodity exchanges need to do the following:

  - Improve the transparency of trading procedures;
  - Remedy the arbitrary settlement system;
  - Strengthen trading supervision;
  - Move gradually towards a safer, enforceable margining system;
  - Strengthen promotion and development activities;
- Commodity exchanges should be permitted to design and offer contract specifications that best respond to the needs of their clients.
- A two-tier national system of brokerage regulation for the specific purpose of consumer protection should be introduced (at the government level and the broker organization level).

World Bank Report: Brokerage in Commodity Markets
(Jamal Mecklai and David Chin, January 2000)

Background

The global futures industry is undergoing a period of immense change. Commodity exchanges and brokers are facing severe contraction in the number of players, though not necessarily of the total volume of business. Therefore, previous international brokerage models may no longer be as appropriate to guide India's brokerage industry development.

Key Conclusions & Recommendations

- There are around 1,700 commodity brokerages in India today, many of which are single proprietary concerns. Few, if any, trade on more than one of the 18 existing commodity exchanges; equally, few, if any, intermediate in contracts in more than one commodity.
- Virtually all of the brokerages are family-run operations that have been handed down through generations of trade. In general, there is a lack of a professional focus which is crucial for the development of a successful modern brokerage industry.
- Regulations have prohibited financial institutions from participating in commodity futures. Commodity futures trading skills among financial players need to be developed.
- Other brokers (in equities, fixed income and/or foreign exchange markets) have been regulated by bodies other than the FMC.
- Broker structures should be streamlined amongst exchanges into four broker categories, these being:
  - *Direct access*
    1. Broker-traders
    2. Brokers only
    3. Proprietary traders only
  - *Indirect access*
    4. Introducing brokers
- New exchanges should implement these broker categories immediately. Existing exchanges should have a one-year transition period.

- Encourage large institutions to become brokers. By doing so, the smaller brokers will be forced to improve to match the resources and skill base of the larger institutions.
- Capital adequacy for the brokers should be introduced based on the broker category type. Setting the capital requirement as a percentage of client monies appears to be the most appropriate and flexible approach.
- While new exchanges should introduce these capital requirements immediately, a one-year period, where capital requirements are introduced for all broker types on existing exchanges, is recommended.
- Brokers need to be licensed with the exchanges providing the bulk of the registration procedures.
- Existing brokers with a minimum of two years of experience can be grandfathered with the licenses, provided that they comply with stipulated processes of reporting of financial position, audits and client records.
- Financial institutions should be encouraged to build commodity trading desks, and stockbrokers encouraged to investigate the possibilities of buying futures brokerages. The different regulators of these organizations will need to discuss how they can work together in terms of co-regulation.
- The FMC and the exchanges need to work with and train the existing and potential brokers. There exists a large pool of market intelligence within the current broker community but many of them simply lack the resources to develop themselves into either specialist brokers or national commodity brokers.
- The FMC needs to assist the exchanges in creating lists of brokers rated according to (a) capability, (b) resources, and (c) commitment. The exchanges' marketing departments may also be in a position to provide lists of other entities, currently not brokers, who have indicated interest in participating in futures trading.
- Brokers who have resources, but a fear of commitment, should be encouraged to participate in revenue-sharing agreements either with existing brokers or new entrants who are willing to put up the capital for the newly structured enterprise (perhaps, banks, non-bank financial corporations or equity or fixed income brokerage houses).

World Bank Report: Guidelines for Clearinghouse Ownership, Operations, and Bye-Laws
(Suzanne Jeffery and G. Ramachandran, July 2000)

Terms of Reference

1. To upgrade and strengthen the clearing functions in the exchanges so that trades are guaranteed and the clearing functions improve the confidence of market participants and thus the breadth and liquidity of markets.
2. To work towards one, or a limited few, clearinghouses that clear and guarantee the contracts traded in the several commodities exchanges.
3. To evolve an effective system of margins for the clearing operations.
4. To have an action plan to move from the present system to new system in a phased manner, accomplished over next one to two years.
5. To strengthen the capacity of the FMC to assess the quality of clearinghouse operations and practices by commodity exchanges.

6. To hold a workshop where the necessity and importance of clearing is put across and the action plan can be explained along with the role of various functionaries and institutions in this process.

Key Conclusions & Recommendations

- Most Indian commodity exchanges are characterized by an inadequate capability to support the creation and maintenance of open interests of a large magnitude. This is a result of the overemphasis on margins on open positions by the FMC and price and position limits, which has obviated the need for exchanges to develop skills related to credit and liquidity risk mitigation.
- Multilateral netting and novation should be a requirement of all commodity exchanges, imposed by the FMC. Without multilateral netting and novation, commodity exchanges should cease to be registered as contract markets.
- Commodity exchanges should be allowed to opt for ringing settlement (clearinghouse is not a common counterparty but assigns obligations after netting) or complete clearing (clearinghouse is the common counterparty).
- The shift from bilateral or direct netting and settlement to ringing settlement, guaranteed performance through a settlement guarantee fund should be made compulsory. Exchanges should be encouraged to size the fund appropriately and pursue netting and settlement efficiencies and reliability.
- Exchanges that have reliable internal clearinghouses or subsidiaries should be encouraged to pursue cost effectiveness and to offer their services to other exchanges. Exchanges that have not opted to institute a settlement guarantee fund, or initiated establishment of an internal clearinghouse or a subsidiary, should be encouraged to choose the services of an external clearinghouse. Such a clearinghouse could be part of another exchange or an independent institution.
- Regardless of the choice, the FMC should ensure that all legal ambiguities pertinent to the chain of obligations and claims pertaining to exchanges, clearinghouses, customers, trading members, clearing members and settlement banks are eliminated.
- An independent commodities clearing corporation, the National Commodities Clearing Corporation (NCCC) should be established.
- The London Clearing House (LCH) is the most suitable model of ownership and capitalization for the NCCC and to meet the hedging needs of a large economy like India's. Technological changes and the emergence of new commodity exchanges would not adversely affect the suitability of the LCH model.
- Commodity exchanges that have not opted to institute a settlement guarantee fund or initiated steps towards establishing an internal clearinghouse or a subsidiary or towards affiliating with an independent clearinghouse should be encouraged to avail the services of the NCCC.
- Based on the situation analysis of current practices in the Indian commodity exchanges, enable exchanges to choose from the above alternatives. The FMC would play the role of facilitator along with the principal users of the exchanges.
- The involvement of banks as clearinghouse members would have a very favorable impact on the Indian commodity sector, especially on the agriculture produce sector. The involvement of co-operative banks should be encouraged.
- The role of the co-operative sector should be emphasized in the context of sustaining large open interests. Agriculture co-operatives should be encouraged

to invest in commodity exchanges and clearinghouses in order to offer clearing and settlement services to farmers and processors across the country.
- The FMC should encourage the vigorous use of warehouse receipts for meeting margin requirements imposed by clearinghouse systems.
- With the establishment of a warehouse receipts system along with reliable clearing and settlement, commercial and co-operative banks would be able manage the interests of their clients in both commodity lending and hedging. Lending risk will be reduced considerably. This is a collateral gain of a very large magnitude. In any case, banks are less likely to be illiquid and insolvent.
- All clearing members should be registered with the FMC in order to enable better monitoring of open positions and open interests in the market.
- Computerized real-time (online) matching and registration of trades and online margining and clearing should be practiced regardless of the structure of the clearing process adopted by commodity exchanges. This process has been practiced in India by IPSTA and has since then been accepted and adopted by other commodity exchanges in India.
- The current practice of levying margin on the greater of long and short positions is quite appropriate in the case of single commodity exchanges. Even in the case of a multi-commodity exchange, linear margins would provide an adequate first line of defense. Margins should be absolute but should reflect potential price changes as a percentage of contract prices.
- Establish clear rules for netting at each level. Flows, positions and risk of flows and positions should be dealt with at the lowest possible levels where they can be monitored most comprehensively, effectively and continuously. The centralization of risk management at the level of the clearinghouse should be principally for the benefit of clearing members. Netting rules should reflect the principal-to-principal relationship between the clearinghouse and its clearing members. Netting rules should reflect the principal-to-principal relationship between each clearing member and its constituent non-clearing members. Netting rules should reflect the principal-to-principal relationship between each non-clearing member and its customers.
- The FMC and the RBI should jointly monitor clearing operations. The requirement is primarily aimed at mitigating one or more components of systemic risk.
- With the imminent arrival of commodity brokerages, significant emphasis on cross-margining should be placed so that it acts as an incentive for their businesses.

World Bank Report: Project for the Improvement of the Commodities Futures Markets in India (Frida Youssef, October 2000)

Increased globalization and liberalization means increased exposure to international competition. This makes tools for the transfer of risk more important. Globalization has also forced exchanges internationally to compete with each other, globalize their operations, seek international alliances, and demutualize in order to raise new capital, particularly for technology.

Key Conclusions & Recommendations

1) Legal & Regulatory Issues

- Tax issues need to be clarified so that futures losses can be offset against profits on the underlying physical trade and vice versa.
- Stamp duties on trade in commodity futures exchanges should be nil, except when physical delivery is made. Now, stamp duty can be arbitrarily imposed by the state in which the futures exchange is located.
- Rules preventing the participation of financial institutions in commodity futures trading should be modified.
- Government participation in commodity trade should be limited to direct participation in the commodity futures markets through exchanges. This would ensure effective market intervention, most importantly because the effect on prices will be immediate.
- The FMC needs a stronger role with improved oversight of the exchanges.
- Abolishing of NTSD and TSD contracts is recommended. Options contracts should be permitted.
- The FMC policy of approving futures contracts for exchanges near the regions producing the underlying commodities should be discontinued. Instead, FMC approval should be given to exchanges with the acceptable infrastructure and a potentially large trading membership, irrespective of its location in relation to the commodity-producing centre.
- Because the FMC is small, it should not devote its time to attempting to modernize the existing single commodity exchanges. Instead, it should develop the skills and procedures necessary to manage a multi-commodity exchange.
- The FMC must change the requirement that the FMC approve a new futures contract each time a contract expires on a commodity exchange; and eliminate the establishment of minimum and maximum prices for futures contracts.
- The FMC should develop brokerage regulation, and enhance its promotional role by marketing the exchanges to financial institutions, traders, and speculators, and help to clear banking and tax regulatory hurdles.
- The FMC should work with RBI and SEBI to encourage the development of commodity funds, either by banks, bank subsidiaries, mutual funds, or non-bank financial institutions.
- The FMC should provide as much self-regulatory powers as possible to exchanges and to the brokerage community.
- The FMC should establish a group of surveillance and monitoring experts within its staff.
- A broad definition of manipulation (like in the US) and good recordkeeping by the FMC is needed to allow regulators to intervene early and avoid market crises.
- The FMC should be able to monitor all large market positions. This should be complemented by speculative position limits with exemptions for those with commercial hedging needs.
- Brokers should have to meet capital adequacy requirements and should be licensed.

- The FMC should take on the role of protecting customers of the exchanges by ensuring they are properly informed of risks, able to obtain information about brokers, and by handling/responding to complaints, etc.
- The FMC needs to ensure that brokers follow Conduct of Business Rules regarding advertising, customer agreements, and suitability.
- The FMC should be given the authority to fine “bucket shops”.
- The FMC should create a national education resource center that exchanges can use to educate and register their members and staff.

2) Exchange Issues

- Owners of the exchange need to be separated from access to the trading system; demutualization of exchange ownership should be required.
- Every exchange should have a Board with appointed executives and independent committees. Directors should be truly independent, supervising the boards and reviewing decisions.
- Market surveillance and order on the trading floor must be improved.
- The FMC should ensure that exchanges eliminate all legal ambiguities pertinent to the chain of obligations and claims pertaining to exchanges, clearinghouses, customers, trading members, clearing members, and settlement banks.
- The FMC should enable and encourage the vigorous use of warehouse receipts for meeting margin requirements imposed by clearinghouses, and for effecting deliveries.
- The FMC should encourage and enable investments in commodity exchanges and clearinghouses by warehousing corporations, companies, and co-operatives
- All clearing members should be registered with the FMC.
- Indian exchanges need to focus on ensuring a good delivery process through a network of approved warehouses. In order for these to be used, deliverable grades of material, deliverable warehouse receipts and warrants, and approved warehouses must be published by the exchange.
- Exchanges should provide comprehensive training to all staff and members.

3) Multi-Commodity Exchanges

The FMC should stimulate and facilitate the development of a national commodity exchange by large, creditworthy entities. Given the difficulties in reaching the many potential users of commodity futures contracts, the FMC should encourage the existing exchanges to be part of such a new scheme. In return for giving up part of their corporate identity and their "goodwill" with those currently hedging and speculating in commodity markets, the exchanges and their members would gain access to national markets, strong credit ratings, and top-level technology. Exchanges that are not willing to make this step should be allowed to continue trading, but under proper regulatory standards, which ensure both market integrity and customer protection.

World Bank Report: A Strategy for the Development of a Warehouse Receipt System for Agriculture in India (Jonathan Coulter, October 2000)

Key Conclusions & Recommendations

- India can use warehouse receipts (WR) to make it more attractive for banks to lend to the agricultural sector, reduce the cost of public support for agricultural marketing, to reduce transaction costs and to improve price-risk management.
- While government warehouses have hitherto mainly served the public sector, they constitute a major asset that can be used to further the use of WR.
- The government warehouses are not well integrated with private supply chains; they do not inspire confidence among some lenders, particularly international banks; they lack certain forms of autonomy, and they need to improve services.
- The two major obstacles to capturing the benefits of WR are: 1) legal and policy frameworks; and 2) lack of fiduciary trust between warehouse operators, banks, and depositors.
- Commodity exchanges can play a vital role in the promotion of the WR system and usage of warehouse receipts.
- The FMC has not authored a cohesive and consistent set of business rules related to WR. Therefore, the emergence of a WR system in India requires external stimulus in order to have the internal components of the commodity economy to work toward establishing such a system.
- The Central Warehousing Corporation (CWC) and State Warehousing Corporations (SWCs) have not yet been acknowledged by the commodity exchanges as important economic allies.
- The National Agriculture Policy is a catalyst that would enable the commodity exchanges, the FMC, and other stakeholders to work towards establishing a WR system in India. The establishment of a national commodity exchange requires a WR system.
- Commodity exchanges in India have poor visibility. Therefore, the first step towards facilitation and promotion of WR necessarily requires the promotion of commodity futures contracts and price risk management.
- The propagation of grades, standards, and storage is most critical to the propagation and viability of a WR system. The Indian economy is characterized by an indifferent disposition towards grades and standards, though the storage practices of the CWC and SWCs are sound.
- Prospective users of WR are generally unaware of the positive externalities of WR system on grades, standards, and storage. The Bureau of Indian Standards (BIS) and the Ministries of Agriculture and Consumer Affairs should promote accreditation of these positive externalities. The orientation of futures markets towards rigorous contract specifications would also be very useful.
- The draft Warehouse Receipts Bill of 1978 (which was initiated by the Banking Laws Committee but never moved beyond the level of a draft) has numerous infirmities, with a focus on fungibility and negotiability of paper-based warehouse receipts to the exclusion of other issues.
- The establishment of an institutional framework that comprehensively addresses fiduciary responsibilities is a prerequisite for the viability of a WR system. The system should necessarily support the issuance of electronic WR.

- Grades and standards should be propagated such that all commodities and commodity baskets can achieve a score of 90 and above in two years.
- Any monopoly powers of the Agricultural Produce Marketing Committees (APMC) should be revoked; the market for procurement and trading in commodities should be opened to competition.
- The Essential Commodities Act, 1955, should be revoked since it has the potential to be invoked in a manner than restricts trade, transport, and storage of agricultural commodities. Several provisions of the Act have already been modified with the aim of facilitating trade, transport, and storage. (The Ministry of Consumer Affairs, DCA, Order G.S.R.104(E), dated 15 Feb. 2002, removed licensing requirements, stock limits, and movement restrictions on wheat, paddy/rice, coarse grains, sugar, edible oilseeds, and edible oils).
- The FMC should enunciate its policy pertinent to contract specifications. Contracts that envisage delivery through WR should be given fast track approval. Cash settlement should be disallowed until WR become entrenched in the cash market. Exchanges that trade the same underlying commodity, say gur, or one or more derivatives of rapeseed and mustard, may be co-opted by the FMC to design a unified WR system.
- The CWC, the SWCs and the private sector warehousing companies should have a MOU with the FMC and the commodity exchanges to support storage of commodities in a manner consistent with the contract specifications.
- Two factors make policy issues particularly important in the case of agricultural commodities: a) the considerable political sensitivities attached to agriculture and food, and the consequent tendency for governments to intervene in both a strategic and ad hoc manner; and b) the fact that there are *two* levels of intervention--the Central and State levels.
- Minimum Support Prices (MSP) and Monopoly Procurement encourage farmers to neglect quality control and offload produce onto the State. When inferior grades are eligible for MSP, the expected price for superior grades falls.
- End MSP for crops that can be better stored and hedged by the private sector.
- Sales taxes pose the strongest impediment to the use of WR. Such taxes often represent more than the total gross margin earned by market intermediaries, so as long as they exist and are chargeable on goods changing hands in warehouses, no secondary market for WR will develop because tax will be payable on each sale.
- Adopt a policy of static import tariffs on all agricultural produce, while avoiding unforeseeable changes.
- In March 2000, the National Association of Food and Civic Supplies Corporations (NAFCSC) called for the removal of statutes that limit inter-state movement of agricultural produce. It also urged the removal of all statutes that enable state governments to limit the quantity of produce that may be stored by the private sector.
- Lack of fiduciary trust is based primarily on concerns of the performance of warehousemen, inability to recover debts in the event of fraud or mismanagement by the warehouse, and fear of insolvency of the depositor. Legal remedies through the courts can take 7-15 years.
- WR are not unambiguous documents of title but simply a statement that goods are kept in a warehouse. The status of a pledge is unclear under Indian law.
- Banks and traders complain that “negotiable” WR such as those issued by the CWC and SWCs are not in fact negotiable. They may be endorsed by a depositor

to a bank, but subsequent endorsements to secondary purchasers or other banks never occur. Further endorsements are prevented by fear of fraud and the absence of timely legal remedies.

- If it is unambiguously specified in law that WR are negotiable instruments, lawbreakers will be exposed to the full penalty prescribed by the Negotiable Instruments Act, 1881.
- A strong case can be made for a regulatory framework that sets standards for companies issuing WR, licenses them, and provides for their regular supervision. Such legislation is needed because there are no existing statutes that address them.
- The ideal WR system would use *electronic* WR whereby they can be readily transferred between successive holders free of any outstanding claims, an aim which is unlikely to be achieved with paper-based systems. Such a system would enhance confidence in WR and make it much easier to borrow against them. Lenders could be registered with the central registry and be provided with online access to verify as well as report their lending information.
- If the institution of co-operative credit, currently led by NABARD, can be nursed back to health, they can be very useful vehicles for the propagation of the WR system.

<u>Guru Committee on Strengthening and Developing of Agricultural Marketing</u>
(June 2001)

In the context of liberalization and increased agricultural production, issues relating to the development of agricultural marketing assumed great significance. The Department of Agriculture & Cooperation commissioned this committee, chaired by Shri Shankerlal Guru.

<u>Terms of Reference</u>

1. Review the system of agricultural marketing in the context of increasing production and liberalization.
2. Examine the set-up of the State Agricultural Produce Marketing Boards and make recommendations for improvement.
3. Make recommendations for promoting pledge finance, direct marketing, and alternative marketing systems.
4. Study infrastructure requirements, supply chain management from farmer to consumer and other facilities for the marketing system for the next ten years, and make recommendations for encouraging the public, private, and cooperative sectors to make investments.
5. Examine the requirements of market intelligence for the farmers, exporters, traders, and consumers and to make recommendations in this regard.
6. Examine and make recommendations on the requirements of market extension, research, and training for the marketing system.
7. Recommend measures for effectively using modern IT tools.

Key Conclusions & Recommendations

- The institution of regulated markets has achieved limited success. These markets were supposed to ensure smooth and orderly development of agri-marketing by ensuring fair trade practices and market forces. Over a period of time these markets have, however, acquired the status of restrictive and regulated markets, providing no help in direct and free marketing, organized retailing, smooth raw materials supplies to agro-processing, competitive trading, information exchange and adoption of innovative marketing systems and technologies. Monopolistic practices and modalities have prevented development of free and competitive trade in agri-marketing, futures markets, use of latest technologies in post harvest technology and handling exports, agro based industries, warehousing, etc.
- An efficient agricultural marketing system is essential for the development of the agricultural sector. In as much as it provides outlets and incentives for increased production, the marketing system contributes greatly to the commercialization of subsistence farmers.
- Today, state governments alone are empowered to initiate the process of setting up a market for certain commodities. These provisions will have to be replaced by providing an omnibus provision that anybody can set up a market, provided compliance with minimum standards, specifications, formalities and procedures which may be established by the GoI.
- Restrictive legal provisions governing the markets did not augur well with the competitive market structure. Promoting competition in the trade, and facilitating farmers with supporting services like grading, standardization, storage with pledge finance, have become secondary activities. Funds from the Agricultural Marketing Boards have been siphoned off in many states to Public Ledger Accounts by state authorities. Consequently, modernization of and infrastructure at the markets have suffered. The Committee recommended an amendment of the Act to make funding of these activities mandatory.
- The linkage between the spot and futures markets seems to be poor due to the domination of speculators. The government has to strengthen commodity exchanges and instill confidence among market players.
- It is necessary to review all laws which regulate participation in markets, such as registration/licensing, commodities traded, controls on packaging and labeling, laws affecting the market place, and laws affecting supply, including controls on the movement of produce and volume of commodities traded, and laws related to access to credit and a capital dispute mechanism.
- The Essential Commodities Act, 1955, which has resulted in restrictions on storage and free movement of stocks should be repealed to make way for play of free market forces.
- A study by the Indian Institute of Management in Ahmedabad indicated that the Indian commodity futures markets are deficient in infrastructure, logistic management, linkages with financial institutions, reliability, integrity, and an efficient information system which encourages a large group of market players to trade.
- Poor credit flows have had an adverse effect on the development of agricultural marketing systems. Certified warehouses and a system of negotiable WRs could lead to improved credit delivery, better loan recovery, and convenience in asset management. The existing government warehousing corporations should play a

leading role in the development of warehousing. However, they can only cover part of the field, which should be opened up to private operators, particularly those who already provide storage services. The institutionalization of the WR system through the commodity exchanges is most likely to yield the best results in the context of promoting and propagating WR, in particular electronic receipts, and a national system of WR.

- There is a need to create facilities for cleaning, grading, and packaging, not only in spot markets but also in the villages where produce is brought to the market for sale. There is need to promote proper packaging after grading to minimize the further chances of adulteration. In addition, there is a strong need to educate the farmers in proper packaging and grading before they bring produce to the market. Scientific packaging should be encouraged by way of incentives. The Committee recommended earmarking Rs.2000 crores for these training activities over the next ten years.
- The Committee recommended that the government make addressing the various needs of agricultural marketing a top priority.

The Group on Forward and Futures Markets (December 2001)

The Group's report was prepared in response to a request by the Department of Agriculture and Cooperation to examine ways to implement the recommendations of the Committee on Agricultural Marketing (report dated June 2001, see previous summary). The report specifically covers constraints related to commodity forward and futures markets and how to resolve them.

This Group included:

Chairman Dr. Kalyan Raipuria
Shri Anand Kumar Bhatt, Former Chairman of the FMC
Shri Sudhir Kumar, Managing Director, SFAC
Shri J.G. Gupta, General Manager, RBI
Shri R. Gandhi, General Manager, RBI
Shri C.K.G. Nair, Director, Department of Consumer Affairs

Key Conclusions & Recommendations

- Commodity futures trading suffers from a number of limitations. The limited and closed nature of membership, absence of many hedgers who have substantial underlying positions, absence of transparency, limitations of prudential regulation, absence of a legal framework for WR system and its negotiability and transferability etc. are serious constraints under which the current system operates. The system is open to criticism that little price discovery and risk management is currently taking place.
- The objective should be to permit all 'candidate commodities' for futures trading.
- The regulatory framework needs to be strengthened by making the regulator autonomous and by strengthening the interface with other market regulators.
- The exchanges and other stake-holders need to better address the challenges facing commodity futures trading and 'upgrade' their action plans.
- The level of general awareness on futures trading and related issues, particularly that of farmers and their cooperatives, needs to be raised.

- There are serious physical/infrastructural limitations on the development of commodities futures trading, such as near absence of online trading, online surveillance and monitoring; prohibition on major products for derivatives trading; and limitations on the warehouse receipt system.
- There is limited interest in commodity futures markets by corporate bodies, banks, and foreign investors. Banks are reluctant to loan on the basis of ‘pledge receipts’, which are different from negotiable warehouse receipts.
- The overall levels of trading of all exchanges are marginal compared to the production levels.
- Amendments to some of the provisions of the Forward Contract (Regulation) Act, 1952 are currently with the Parliamentary Standing Committee. These amendments include removal of the ban on *options* trading, provision of registration of brokers, further strengthening of FMC.
- Suggested Reforms:
  i. A system of daily mark-to market margining to improve financial integrity of the markets.
  ii. A system of simultaneous reporting under which the member/brokers are required to put the transactions slips in a sealed box within fifteen minutes of execution of transaction.
  iii. Trading ring discipline to be ensured by appointing a ring inspector, issuing of badges, prohibiting the entry of unauthorized persons in the trading ring, surprise check of the embers by the exchanges etc.
  iv. The exchanges to appoint a qualified Secretary (CEO) to look after its day-to-day operations.
  v. Representation on Boards of diverse interest groups like growers, processors, exporters, importers etc.
  vi. The commodity exchanges to introduce a system of guaranteeing performance of the contract.
  vii. The commodity exchanges should amend their Rules to provide at least one third of the Board of Directors are independent and non-trading directors. Lists of such independent Directors would be prepared by the exchanges themselves, from which the Commission would select suitable Directors.
  viii. Exchanges should furnish price and trading details to the FMC.
  ix. Encourage on line trading platforms.
- The exchanges should implement the following practices:
  - Participation of diverse interests – growers, processors, exporters, importers, trade speculators;
  - ‘On-line’ system of trading;
  - Efficient clearing, settlement and guarantee systems;
  - Delivery of underlying commodity backed by a warehouse receipt system;
  - System of well-organized and capitalized brokerage houses;
  - Real-time price and trade information dissemination;
  - Transparency in operations and decision – making;
  - Reliable, effective and impartial management, preferably demutualized form of organization; and
  - Investment support from investors, including institutional investors.
- Banks, while extending loans to the farmers for various agricultural related activities, can impress upon them the need for managing the risk properly. This would help ensure recovery of the loan extended but also inculcate among the

farmers the need for understanding the risks associated with their investment decisions and managing them in an efficient and cost effective manner.

- The interface between the exchanges, banks, and the warehousing agencies is crucial in developing a mature warehousing system based on legally valid receipt system, supporting transferability and negotiability.
- The WR should act as a document of full title, like a bill of lading. This implies that a farmer or trader can transfer his agricultural produce so warehoused to his consignee or to the purchaser by transferring the WR by endorsement. Comprehensive legislation on Warehousing needs to be created on the lines of Indian Multi-model Transportation of Goods Act, 1993 to provide to the WR attributes similar to bill of lading namely document to the title to the goods, documents containing rights and liabilities of holder and Warehouse keepers as well as negotiability.
- For a commodity to be suitable for futures trading it must possess the following characteristics:
    - The commodity should have suitable demand and supply conditions i.e., volume and marketable surplus should be large.
    - Prices should be volatile to necessitate hedging through futures trading.
    - The commodity should be free from substantial control from Govt. regulations (or other bodies) imposing restrictions on supply, distribution, and prices of the commodity.
    - The commodity should be homogenous or, alternately it must be possible to specify a standard grade and to measure deviations from that grade. This condition is necessary for the futures exchange to deal in standardized contracts.
    - The commodity should be storable. In the absence of this condition arbitrage would not be possible and there would be no relationship between spot and futures markets.
- Specific approvals are given to the Exchanges at every stage, both in terms of commodities in which they are permitted for forward/futures trading as well as in terms of the number of contracts they are allowed to trade in at any point of time. It is recognized that this approach to futures trading may be stifling innovative design of contracts.
- The exchanges should be free to choose the product, to design the contract(s), and choose between the various forms of derivatives (futures, options etc.) while designing the contracts.
- The market based tools need to be allowed to operate in a market friendly environment. The piecemeal approach to futures trading needs to go. Commodity-wise approach and contract-wise permission need to be done away with. There may be a small negative list of commodities. All others may be made 'free' commodities in which any exchange, on the basis of an evaluation/feasibility study, could apply to the regulator for permission for specified contracts (all forms of derivative contracts). The regulator, based on set norms may allow them to undertake trading under conditions of prudential regulation.

<u>The Committee Appointed by SEBI on Participation by Securities Brokers in Commodity Futures Markets</u>—Ramamoorthy Committee (February 2003)

Members of the Ramamoorthy Committee included the following individuals:

Chairman K.R. Ramamoorthy, Advisor, CRISIL
Shri Pratip Kar, Executive Director, SEBI
Shri N. Parakh, Chief General Manager, SEBI – Member Secretary
Shri C.K.G. Nair, Director, Ministry of Consumer Affairs, Food & Public Distribution
Dr. Shashank Saksena, Joint Director (Stock Exchange), Ministry of Finance
Shri D.S. Kolamkar, Director, Forward Markets Commission
Shri S.T. Gerela, Director, Bombay Stock Exchange
Shri P.K. Singhal, Executive Director, Delhi Stock Exchange
Ms. K. Kamla, Executive Director, Bangalore Stock Exchange
Shri J. Ravichandran, Senior Vice President, National Stock Exchange
Shri Suresh Kotak, President, Indian Merchants' Chambers
Shri Vijay Bhushan, President, Federation of Indian Stock Exchanges
Shri Rajesh Bajaj, Representative of Association of NSE Members of India
Shri R.B. Khandelwal, Representative of BSE Brokers' Forum

<u>Terms of Reference</u>

The Securities and Exchange Board of India (SEBI) established this Committee under the Chairmanship of K.R. Ramamoorthy to examine permitting the participation of securities market brokers in the commodity markets, with a focus on the following issues:

1. Whether securities brokers could participate in the commodities market;
2. What should be the risk containment measures, so that risk of one market does not spill over into the other; and
3. Whether the existing infrastructure of stock exchanges could be used for the commodities futures market.

<u>Key Conclusions & Recommendations</u>

- Participation of intermediaries like securities brokers in the commodity futures market is welcome, as it could increase the number of quality players, infuse healthy competition, boost trading volumes in commodities, and provide greater liquidity and impetus to the overall growth of the commodity markets.
- In order to avoid regulatory overlap, securities brokers intending to participate in the commodity futures market would go through a separate legal entity. This entity should conform to the regulatory prescriptions of the FMC, with reference to capital adequacy, net worth, membership fee, margins, etc.
- The Committee recommends amending/removing the provisions in the Securities Contracts (Regulation) Rules, 1957, that forbid a person to be elected as a member of a recognized stock exchange if he is engaged in any business other than that of securities, except as a broker or agent not involving any personal financial liability.

- Given the differences in commodity futures trading and securities trading, the Committee recommends the FMC take significant initiatives in training market participants, including participants of the securities market.
- There are no legal/regulatory impediments that prevent the stock and commodity exchanges from sharing physical infrastructure. Only commercial considerations apply.
- On the issue of convergence and integration of the securities and commodity markets, the Committee feels that both issues need further analysis, in order to clearly define the scope of regulatory purview and responsibility. Also, given the concerns that integration may lead to further fragmentation of volumes and liquidity in the commodity markets, the Committee feels the issue should be taken up later, when the two markets have further matured.

The Inter-Ministerial Task Force on Convergence of Securities and Commodity Derivatives Markets (May 2003)

The Finance Minister sent a communication to the Minister of Consumer Affairs, Food and Public Distribution, on the idea of convergence of the commodity futures and securities markets, in terms of markets, institutions, players, and regulation. This Inter-Ministerial Task Force was created in response. The Task Force included the following individuals:

Shri Wajahat Habibullah, Chairman
Shri Nagendra Parakh, Member
Dr. Kewal Ram, Member
Shri Paul Joseph, Member
Dr. Kalyan Raipuria, Member
Shri Ashok Lahiri, Member

Inputs and support were provided by:

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Comments on the Status of the Commodity Markets

- The back-office operations in the majority of the regional exchanges have been computerized.
- Exchanges have amended their articles to provide for induction of independent directors on their boards to the extent of one third of the total strength (per the recommendations of the Report of the Group on Forward and Futures Markets, 2001).
- Until April 2003, there was a ban on futures trading in most of the important commodities, thereby restricting the scope for growth by diversifying to new commodities. Even now, the freedom to diversify does not exist for most of the exchanges (except the three national exchanges), as they have to seek FMC approval for every new contract.

Benefits of convergence could include:

- More rapid development of commodity futures market;
- The infrastructure of the securities markets could be used to obtain trading in commodity derivatives at a small incremental cost;
- Clearing corporations holding a single settlement guarantee fund benefit from diversification;
- The collateral required to obtain a given level of "safety" is lower when the clearing corporation does novation for a wide variety of products with low correlations, as compared with having separate clearing corporations for each;
- Possible strengthening of the commodity spot market;
- Brokerage firms can function in a wider range of financial instruments/derivative products;
- Users would also benefit from the wider range and the set of rules that could govern both markets.
- If the approved markets are able to rapidly migrate into sophisticated, liquid, low-cost platforms, many users of the informal markets would turn to the formal markets.

- The GoI engages in many policies measures that interact with agricultural spot markets. These policies are unaffected by the convergence question. Whether commodity futures markets are closely integrated with securities markets, or not, has no impact on the conduct of GoI policies such as public procurement, support prices, etc.

Differences between the two markets and concerns:

- Because financial futures generally have actively traded cash markets, cash prices are generally not "discovered" in the futures market. Also, the delivery and settlement process for the two markets are different.
- For financial derivatives transactions, exchange delivery mechanisms or oversight are less necessary and can be alternatively accomplished as cash transactions through other institutions or inter-institutional arrangements.
- In the context of a goal to protect producers, particularly farmers, and consumers, there is a fear that in the large securities exchanges there would be a lack of focus on agricultural commodities.
- Where the impact of price volatility is primarily on willing participants of the securities markets, the impact of price volatility in commodities is borne by the entire economy.
- Unlike the securities market, the factors affecting commodity prices are more complex and commodity specific.
- There are strong concerns that removing restrictions on stock exchanges from trading commodity derivatives would affect the viability of the three national exchanges, which have made huge investments in modern infrastructure. Changing their competitive environment raises issues of fairness.
- Stock exchanges have huge reserves that can be leveraged to wipe out competition. Additionally, the existing commodity exchanges will not be able to meet the high regulatory standards set by SEBI for grant of recognition.

Legal, Regulatory and other Impediments to Convergence

- The FMC is largely a recommendatory body, which draws most of its delegated powers from the government. On the other hand, SEBI is largely autonomous. This difference would pose difficulties in attempting any of the approaches to convergence.
- "Stock Exchanges and Futures Market" is a subject under the Union list in schedule VII of the Constitution of India, thereby bringing both spot and derivative trades in securities under the jurisdiction of the *Central Government*, which makes it easy to develop and regulate securities markets. However, "trade and commerce", and, "agriculture" are subjects in the State list of the Schedule, which implies that spot/cash trade in commodities is within the jurisdiction of the *States* whereas the futures trade rests with *Union government*. The regulator of commodity exchanges does not have jurisdiction over spot markets, yet futures prices draw heavily on spot prices. Therefore, it is argued that the regulator of commodity markets in India should have a mandate to regulate the spot markets in commodities. This makes harmonization of spot and futures markets difficult as State taxes and physical restrictions on spot trade fragment the commodities markets. Unless these issues are resolved the full benefits of convergence cannot be realized.
- SUPPLEMENTARY LEGISLATION, SUCH AS DEPOSITORY ACT ETC., WHICH MAKE THE FUNCTIONING OF SECURITIES MARKETS SMOOTH. SUCH SUPPLEMENTAL INSTITUTIONS COMMODITY FUTURES MARKETS (LIKE NEGOTIABLE WAREHOUSE RECEIPTS) DO NOT EXIST. THIS MAKES THE DELIVERY MECHANISM COMPLEX, LIMITING THE FULL BENEFITS OF FUTURES TRADING FOR THE PROMOTION OF AGRICULTURE.
- ALL PARTICIPANTS IN SECURITIES MARKET, VIZ. BROKERS, MERCHANT BANKERS, REGISTRARS, DEPOSITORY PARTICIPANTS, ETC. HAVE TO SEEK REGISTRATION FROM THE SEBI. THIS ENSURES COMPREHENSIVE CONTROL OF THE REGULATOR ON THE SECURITIES MARKET. AT PRESENT THERE IS NO SUCH REQUIREMENT UNDER FC(R) ACT, THOUGH AS AMENDMENT TO THIS EFFECT IS PROPOSED. THUS REGULATORY BARS IN TWO MARKETS ARE DIFFERENT.
- THE CASH MARKET OF SECURITIES IS HIGHLY ORGANIZED AND EFFECTIVELY REGULATED BY OTHER AGENCIES LIKE DCA, RBI ETC. THE SPOT MARKET FOR AGRICULTURAL COMMODITIES IS NOT SO ORGANIZED, THOUGH THERE ARE MANY LAWS THAT CURB THE FREE MARKET IN AGRICULTURAL SECTOR LIKE APMC ACT, ECA, AND THE BLACK MARKETING ACT.
- THE FC(R) ACT, AT PRESENT COVERS FORWARD TRADING IN "GOODS" ONLY. THE SCOPE OF COMMODITY FUTURES MARKET WILL NEED TO BE BROAD-BASED TO INCLUDE THE INTANGIBLES RELATED TO COMMODITY SECTOR, SUCH AS, COMMODITY INDICES, SPREADS AND BASIS CONTRACTS, WEATHER, ELECTRICITY, FREIGHT, ETC. THE PROVISION FOR PURELY CASH-SETTLED CONTRACTS ALSO NEEDS TO BE INTRODUCED AS DELIVERY IN SUCH CONTRACTS IS NOT POSSIBLE.
- It would be valuable to modify the legal structure so that WR become fully negotiable. The adoption of uniform standards, grading, packing, etc., and certification of warehouses need to precede this.
- The use of cash settlement in the commodity futures market will assist convergence.
- Permissible use of cash settlement in the commodity futures market will not develop unless the settlement price is well trusted. This is difficult because the spot market is fragmented and commodities are not sufficiently standardized.

Recommendations on Convergence

1. *CONVERGENCE AT THE LEVEL OF BROKERAGE FIRMS.*

IN VIEW OF THE RECOMMENDATIONS OF RAMAMOORTHY COMMITTEE SET UP BY SEBI, THE TASK FORCE FEELS THAT SECURITIES BROKERS SHOULD BE PERMITTED TO TRADE IN COMMODITY DERIVATIVE MARKETS BY SETTING UP A SEPARATE LEGAL ENTITY, AND BY COMPLYING WITH

SEPARATE NET WORTH REQUIREMENTS, ETC. THIS IS CONSIDERED NECESSARY IN ORDER TO ENSURE THAT THE RISK IN ONE MARKET DOES NOT SPILL OVER TO THE OTHER MARKET WHEN THE TWO MARKETS ARE REGULATED BY TWO DIFFERENT ENTITIES.

2*. CONVERGENCE AT THE LEVEL OF POLICY MAKERS.*

INDUCTING THE SECRETARY, CONSUMER AFFAIRS, IN THE HIGH LEVEL COORDINATION COMMITTEE ON CAPITAL MARKETS WAS ACCEPTED BY THE TASK FORCE. THIS IS IMPORTANT NOT ONLY FOR THE SAKE OF CONVERGENCE OF MARKETS BUT ALSO TO REPRESENT THE CONSUMER'S INTEREST (I.E. INVESTORS) IN THE HIGHEST COORDINATING BODY.

3. *CONVERGENCE AT THE LEVEL OF REGULATORS*

THE TASK FORCE CONSIDERED THE FOLLOWING TWO OPTIONS:

A) FMC TO BE A PART OF SEBI, RETAINING THE PRESENT ORGANIZATIONAL SET UP AND A REPRESENTATIVE OF DEPARTMENT OF CONSUMER AFFAIRS TO BE ON THE BOARD OF SEBI.

B) FMC TO BE STRENGTHENED AND RESTRUCTURED AND REPRESENTATIVES OF FMC TO BE ON THE BOARD OF SEBI AND VICE-VERSA. A FINAL VIEW ON EITHER OF THESE TWO OPTIONS WILL BE TAKEN AFTER RECEIVING COMMENTS FROM PEOPLE AT LARGE ON THE DRAFT REPORT OF THE TASK FORCE.

4. *CONVERGENCE AT THE LEVEL OF EXCHANGES.*

TASK FORCE RECOMMENDS THAT STATUS QUO SHOULD BE MAINTAINED AT THIS STAGE.

APPENDIX B

COMPARATIVE ANALYSIS OF THE SECURITIES AND COMMODITIES LAWS OF INDIA

This analysis compares the laws governing the commodities and securities markets of India through the prism of various international "best practices," as well as the International Organization of Securities Commodities (IOSCO) Core Principles. The laws at issue are the following:

- Forward Contracts (Regulation) Act 1952 [FCRA]
- Forward Contract (Regulation) Rules of 1954 [FCR Rules 1954]
- Securities Contract (Regulation) Act 1956 [SCR Act]
- Securities and Exchange Board of India Act 1992 [SEBI Act]
- Securities Law (Amendment) Act 1999
- Securities and Exchange Board of India (Collective Investment Schemes) Regulations 1999

Principles Relating to the Regulator

1. The responsibilities of the regulator should be clearly stated.

Commodities

The basic law relating to commodities, clearly lays down the functions of the regulator, the Forward Markets Commission (FMC). Section 4, FCRA.

Securities

The basic law for the securities regulator, clearly lays down the functions of the Securities and Exchange Board of India (SEBI). Section 11, SEBI Act.

2. The regulator should be operationally independent and accountable in the exercise of its functions and powers.

Commodities

The FMC functions as a Subordinate Office of the Administrative Department within the Department of Consumer Affairs. The FMC has limited financial autonomy. It is operationally independent and accountable.

Securities

The SEBI is operationally independent and accountable. Under Section 14 of the Act, a General Fund has been created for the SEBI. As a result, it has full administrative and financial autonomy. Sections 11, 11B, 11C and 11D of the SEBI Act lay down the powers of the SEBI.

3. The regulator should have adequate powers, proper resources and the capacity to perform its functions and exercise its powers.

Commodities

The FMC has adequate powers under the law to carry out its functions, however, its proscribed functions are quite limited. It is dependent on the Administrative Department for its financial resources and a part of its human resources.

Securities

The SEBI has adequate powers, proper resources, and the capacity to perform its functions and exercise its powers.

SEBI and FMC Comparison		
	FMC	**SEBI**
2004 Budget	$470,000 (Rs. 2.3 crore)	$8.7million (Rs 40 crores)
Total # of Staff	87	450
Executive Organizational Structure	Members appointed by the Central Government: • Chairman • Maximum 3 other members	Members appointed by the Central Government: • Chairman • 2 members from Ministry of Finance • 1 member from the RBI

		• 5 other members, 3 of which must be full time.
Laws & Regulations that Govern the Industry	• Forward Contracts (Regulations) Act of 1952 • Forward Contracts (Regulations) Rules 1954	• Securities Contract (Regulations) Act of 1956 • SEBI Act of 1992 • Depositories Act of 1996 • Securities Law (Amendment) Act 1999 • SEBI Regulations

<u>Comment</u>:

On a comparative basis, the SEBI has been granted substantially greater powers than the FMC. Through notifications issued by the Central Government under Section 29A of the Securities Contracts (Regulation) Act, 1956; powers exercisable by it under Section 4(5) (Amendment of rules of recognized stock exchanges relating to governing body, its constitution and powers of management, powers and duties of office-bearers of stock exchanges, admission of various classes of members, their qualifications, and expulsion, and suspension of members); Section 7 (Annual reports to be furnished by stock exchanges); Section 8 (Power to direct recognized exchanges to make or amend rules in relation to all or any of the matters specified in Section 3(2)); Section 11(Power to suspend governing body); Section 12 (Power to suspend business of exchange), Section 3(Application for recognition); Section 4(1)(Grant of recognition); Section 4(2)(Conditions for grant of recognition); Section 4(3)(Publication of grant of recognition in Official Gazette); Section 4(4)(Refusal of recognition to be communicated); Section 5(Withdrawal of recognition); Section 7A(2)(Approval of rules restricting voting rights, etc.); Section 13(Contracts in notified areas illegal); Section 18(2)(Applicability of provisions of section 17 to spot delivery contracts); Section 22(Right of appeal to SEBI against refusal, omission or failure); Section 28(2)(SCR Act not to apply to any class of contracts), shall also be exercisable by SEBI.

4. **The regulator should adopt and enforce clear and consistent regulations.**

Commodities

The FCRA gives all the powers of a civil court under the Code of Civil Procedure, 1908, to the FMC under Section 4A(1). Subject to the laws relating to privileged information, all persons are deemed, under S. 4A(2) of the Act, to be legally bound to furnish information required by the FMC in any matter before it. Under Section 4A(3), the FMC is deemed to be a civil court, and when certain offences under the Indian Penal Code, 1860, are committed in the view or presence of the Commission, it can forward the case to a Magistrate having jurisdiction to try the same. Under Section 4A(4) of the Act, proceedings before the FMC shall be deemed to be judicial proceedings for certain purposes. Section 16(4) of the FCRA gives powers to the FMC to inspect books of accounts and other documents of recognized associations and every member thereof, and it can specify periods of preservation of such documents. Section 12B of the Act gives the FMC power to suspend members of recognized associations or to prohibit them from trading after giving them due opportunity to be heard. Section 14A makes provision for the obtaining of certificate of registration by the associations and for the refusal of such registration by the FMC. The Forward Contracts (Regulation) Rules, 1954, lay down the procedure for application for recognition and for registration, payment of fees, power of the FMC to call for additional information, grant of recognition by the Central Government after considering the advice of the FMC, FMC's power to give directions to associations, renewal of recognition, withdrawal of recognition, refusal to grant recognition, submission of periodical returns and communion of information relating to offences.

Securities

The SEBI, under Section 11(3) of the SEBI Act, has the same powers as are vested in a civil court under the Code of Civil Procedure Code, 1908, while trying a suit, like the FMC. Under S. 11 (4) of the SEBI Act, it can suspend trading, restrain persons from accessing the securities market, prohibit persons to buy, sell or deal in securities, suspend office-bearers from holding positions, impound and retain proceeds or securities, attach bank accounts and direct persons not to dispose of or alienate assets.

Comment

Both FMC and SEBI have been enabled to adopt clear and consistent regulatory processes under the respective enactments. SEBI has stronger enforcement powers (detailed at Principle 9).

5. The staff of the regulator should observe the highest professional standards including appropriate standards of confidentiality.

Commodities	Securities
There is no provision in this regard either in the FCRA or in the Forward Contracts (Regulation) Rules, 1954. The office of the FMC is a Subordinate Office of the Department of Consumer Affairs. Officers belonging to the Indian Economic Service are sent on deputation to man the senior positions in the Commission. Other staff are recruited by the GoI and are subject to the Conduct and Discipline Rules, including the provisions of the Official Secrets Act, since they are public servants.	Similarly, Section 22 of the SEBI Act provides that all members, officers and other employees of the Board shall be deemed to be public servants within the meaning of section 21 of the Indian Penal Code, 1860. They would also be subject to the provisions of the Official Secrets Act.

Principles for Self-Regulation

6. The regulatory regime should make appropriate use of Self-Regulatory Organizations (SROs) that exercise some direct oversight responsibility for their respective areas of competence, to the extent appropriate to the size and complexity of the market.

Commodities	Securities
Authorized commodity exchanges exercise elements of self-regulation and are required to report to the FMC.	Authorized securities exchanges exercise elements of self-regulation and are required to report to the SEBI. Under Section11 (2)(d) of the SEBI Act, 1992, one of the functions of the SEBI is “promoting and regulating self-regulatory organizations”.

Comment

Other than commodity and security exchanges, there are no other “Self-Regulatory Organizations” in existence either in the commodities or the securities markets in India. By contrast, the United States laws have authorized the National Futures Association (NFA) and the National Association of Securities Dealers (NASD) as SROs with considerable powers over their respective industries.

7. <u>SROs should be subject to the oversight of the regulator and should observe standards of fairness and confidentiality when exercising powers and delegated responsibilities</u>.

<u>Commodities</u>

No provisions.

<u>Securities</u>

No provisions.

<u>Principles for the Enforcement of Regulation</u>

8. <u>The regulator should have comprehensive inspection, investigation and surveillance powers</u>.

<u>Commodities</u>

The FMC has comprehensive inspection, investigation and surveillance powers. In the matter of applications for recognition, Rule 6 of FCR Rules, 1954, gives the power to call for additional information to the FMC. See provisions of Sections 4A, 8(2) and 8(4) of the FCRA.

<u>Securities</u>

The SEBI also has comprehensive inspection, investigation and surveillance powers. See Section 11(2), 11(2A), 11(3) and 11(4) of the SEBI Act.

9. The regulator should have comprehensive enforcement powers.

Commodities

Enforcement powers can be of two types: (1) in the case of recognised exchanges and (2) in the case of illegal futures trading. In the case of futures trading in recognised exchanges, the FMC has comprehensive powers. Recognised exchanges can make Bye-Laws for the regulation and control of forward contracts subject to the previous approval of the Central Government. Invariably, such approval is given only after consultation with the FMC. Provision is made in these Bye-Laws regarding prescription of margin requirements by the FMC, regulation of fluctuations in rates and prices, emergencies in trade and FMC's intervention, power to fix maximum and minimum prices, calling of special margins, limitations on the volume of trade of any individual member, etc., under Section 11 of the FCRA. They also deal with expulsion or suspension of members and other penalties. Under Section 12 of the FCRA, the Central Government can amend the Bye-Laws of the exchanges from to time. This is also done only in consultation with the FMC. Under Section 12B of the FCRA, the FMC can itself suspend a member of a recognised association or prohibit him from trading. These provisions also give the FMC authority to stop trading of contracts on the exchange if it suspects cornering of goods in the spot market with a view to fixing prices and gaining in the futures contracts or where it apprehends overheating on the exchange.

Securities

In the securities market, the SEBI has very comprehensive powers of enforcement in the recognized stock exchanges. As mentioned above, by a series of notifications, the Central Government has vested the regulator with broad powers which were being exercised previously by the Government. What has been stated in the context of illegal futures trading in commodities has equal validity in the case of illegal trading in stocks and shares.

Comment

Enforcement by the FMC is weak when it comes to combating illegal futures trading. Futures trading in a number of commodities was banned in India for several decades till the ban was recently lifted. This ban, lasting decades, only helped to drive futures trading underground. The role of the FMC was changed from that of regulator to "policeman." This proved to be counterproductive since it was very difficult to gather credible evidence in such cases which would bear scrutiny in a criminal court.

10. The regulator should have authority to share both public and non-public information with domestic and foreign counterparts, and set forth how it will do so.

Commodities	Securities
No provisions.	No provisions.

Comment

There are no express provisions either in the FCRA or in the SEBI Act or in the Securities Contracts(Regulation) Act, 1956 or in the Rules or Regulations framed thereunder on the question of sharing public and non-public information with domestic and foreign counterparts. Nor is there any express provision which bars such sharing of information.

11. The regulatory system should allow for assistance to be provided to foreign regulators who need to make inquiries in the discharge of their functions and exercise of their powers.

Commodities	Securities
No provisions.	No provisions.

Principles for Issuers

12. There should be full, timely and accurate disclosure of financial results and other information that is material to investors' decisions.

Commodities

Rule 10(2) of the Forward Contracts (Regulation) Rules, 1954, lays down that every member of a recognized association or of a registered association shall send to the FMC returns relating to his affairs in such form and at such times as may be specified in this behalf by the FMC.

Securities

Among the functions of the SEBI are those relating to prohibiting fraudulent and unfair trade practices in securities markets (S.11(2)(e) of the SEBI Act); promoting investors' education and training of securities markets intermediaries (S.11(2)(f)); and prohibiting insider trading in securities(S.11(2)(g)). Further, under Section 11 of the SEBI Act, the SEBI has issued detailed Guidelines called the Securities and Exchange Board of India (Disclosure and Investor Protection) Guidelines, 2000. These Guidelines are meant to ensure full, timely, and accurate disclosure of financial results and other information that is material to investors' decisions.

Comment

This principle has relevance chiefly to the securities market.

13. Holders of securities in a company should betreated in a fair and equitable manner.

Commodities

Not applicable. Will be a relevant principle if Commodity Pools or Managed Futures Trading Accounts are permitted in the future.

Securities

Section 11B of the SEBI Act lays down that the SEBI may, in the interest of investors, issue such directions as may be appropriate in the interest of investors in securities and securities markets to any person or class of persons or to any company.

14. Accounting and auditing standards should be of a high and internationally acceptable quality.

Commodities

Section 8 of FCRA refers to the power of the Central Government to call for periodical returns from the recognized associations relating to its affairs or its members' affairs as may be prescribed. Section 8(2)(b) states that the Government can direct the FMC to inspect the accounts and other documents of any recognized association or of any of its members and submit its report thereon to the Government. Rule 10 of the FCR Rules, 1954, states that that every recognized association and every registered association and their respective members shall send these returns to the FMC in such manner and at such times as may be specified in this behalf by the FMC.There is no express provision either in the FCRA or in the Rules framed there under regarding accounting and auditing standards.

Securities

As regards the securities market, Section 15A prescribes the penalty for failure to maintain books of account or records or returns. Further, there is reference in the SEBI (Disclosure and Investor Protection) Guidelines that the Management Discussion Analysis(MDA) and 'Accounting and other Ratios' computed should be based on the Financial Statements prepared on the basis of Indian Accounting Standards and other Accounting Standards. This would apply not only to companies but also to partnership firms which have since been converted into companies. The financial statements have to be certified by a Chartered Accountant stating that the accounting standards of the Institute of the Institute of Chartered Accountants of India(ICAI) have been followed and the financial statements present a true and fair picture of the firm's accounts.

Principles for Collective Investment Schemes

15. The regulatory system should set standards for the eligibility and the regulation of those who wish to market or operate a collective investment scheme.

Commodities

The FCR Act and the FCR Rules do not make reference to collective investment schemes at all. Should mutual fund participation be permitted in futures, then regulations on this principle will be necessary.

Securities

The SEBI Act initially had no reference to collective investment schemes. However, through the Securities Laws (Amndt) Act of 1999, a new Section, S.11AA, was inserted in the SEBI Act, which created a specific provision for such schemes. The SEBI (Collective Investment Schemes) Regulations, 1999, have been framed under this section, which sets standards for eligibility. Section 27A of the Securities Contracts (Regulation) Act, 1956, also has provisions for the right to receive income from such collective investment schemes.

16. <u>The regulatory system should provide for rules governing the legal form and structure of collective investment schemes and the segregation and protection of client assets</u>.

Commodities

Not applicable. Would become relevant if mutual fund participation is permitted in commodity futures markets.

Securities

The Securities and Exchange Board of India (Collective Investment Schemes) Regulations, 1999 provided for such rules and for segregation and protection of client money and assets. (Regulations 34 and 35).

17. <u>Regulation should require disclosure, as set forth under the principles for issuers, which is necessary to evaluate the suitability of a collective investment scheme for a particular investor and the value of the investor's interest in the scheme</u>.

Commodities

Not Applicable. Would become relevant if mutual fund participation is permitted in commodity futures markets.

Securities

The Securities and Exchange Board of India (Collective Investment Schemes) Regulations 48 (Periodic and continual disclosure), Regulation 49 (Quarterly disclosure) and Regulation 50 (Disclosures to the investors) of these Regulations meet with this requirement adequately.

18. Regulation should ensure that there is a proper and disclosed basis for asset valuation and the pricing and the redemption of units in a collective investment scheme.

Commodities	Securities
Not applicable. Would become relevant if mutual fund participation is permitted in commodity futures markets.	The Securities and Exchange Board of India (Collective Investment Schemes) and the Nine Schedules framed thereunder ensure this requirement adequately.

Principles for Market Intermediaries

19. Regulation should provide for minimum entry standards for market intermediaries.

Commodities	Securities
No provisions in the FCRA and Rules in this regard. The rules of the commodity exchanges provide entry conditions for brokers and other market intermediaries. Since the law enjoins that these rules require the approval of the Central Government/FMC before recognition is granted, this issue of minimum entry standards has review.	In the case of the securities market, however, under Section 30 of the SEBI Act, the SEBI Stock Brokers and Sub-brokers Rules, 1992, have been made by the Central Government. Further, the SEBI, in turn, has framed the SEBI (Stock-Brokers and Sub-brokers) Regulations, 1992. Regulations 5 and 6 provide for the consideration of applications from intending brokers and the procedure for registration. This takes care of minimum entry standards. Similarly, Regulation 11 deals with the application for registration of sub-brokers.

20. <u>There should be initial and ongoing capital and other prudential requirements for market intermediaries that reflect the risks that the intermediaries undertake.</u>

<u>Commodities</u>

No provisions in the FCRA and Rules in this regard. The rules of the commodity exchanges would provide for entry conditions for brokers and other market intermediaries. Since the law enjoins that these rules require the approval of the Central Government/FMC before recognition is granted, this issue of minimum entry standards has review.

<u>Securities</u>

As regards the securities market, SEBI has issued a Circular on 21-10-1993 to all the stock exchanges asking them to amend their Bye-Laws and regulations to incorporate SEBI's capital adequacy norms and to enforce the same, completing the process by 1-12-1993. Similarly, particulars to be furnished for making an application for registration under Section 12 of the SEBI Act for different categories of intermediaries have also been prescribed.

21. <u>Market intermediaries should be required to comply with standards for internal organization and operational conduct that aim to protect the interests of clients, ensure proper management of risk, and under which management of the intermediary accepts primary responsibility for these matters.</u>

<u>Commodities</u>

No provisions in the FCRA and Rules in this regard. The rules of the commodity exchanges would provide for entry conditions for brokers and other market intermediaries. Since the law enjoins that these rules require the approval of the Central Government/FMC before recognition is granted, this issue of minimum entry standards has review.

<u>Securities</u>

Under Regulations 7 &15 of the SEBI (Stockbrokers and Sub-brokers) Regulations, 1992, the SEBI has prescribed detailed Codes of Conduct for Brokers and sub-brokers for protecting clients' interests, etc. in the securities market.

22. There should be procedures for dealing with the failure of a market intermediary in order to minimize damage and loss to investors and to contain systemic risk.

Commodities	Securities
Sections 11(2)(f), 11(2)(j), 11(2)(o), and 12B of the FCRA.	Section 11(4) of the SEBI Act, Section 12 of the SCR Act, Chapter 10 Risk Management of SEBI Model Bye-Laws of Stock Exchanges.

Comment

In both the commodities and the securities markets, the FMC and the SEBI respectively can intervene effectively to deal with market intermediaries who contravene the Bye-Laws and impose punishments such as fines, expulsion from membership, suspension from membership for a specific period or any other penalty of a like nature. Power of declaring a member as defaulter, which is of a quasi-judicial nature, can also be exercised in suitable cases. To prevent the system from collapsing, timely imposition of margins and special margins on the market intermediaries to force a reduction in open positions can be resorted to. Trading can also be halted for some time to help the exchange avoid over-heating problems.

Principles for the Secondary Market

23. There should be on-going regulatory supervision of exchanges and trading systems which should aim to ensure that the integrity of trading is maintained through fair and equitable rules that strike an appropriate balance between the demands of different market participants.

Commodities	Securities
Yes. Applicable commodities laws and rules as cited in the preamble and administered by the FMC.	Yes. Applicable securities laws and rules as cited in the preamble and administered by the SEBI.

Comment

On-going regulatory supervision of exchanges and trading is a central premise of the commodities and securities laws of India and the operational functions of the FMC and SEBI.

24. Regulation should promote transparency of trading.

Commodities	Securities
Yes.	Yes.

Comment

The provisions of the Forward Contracts(Regulation) Act, 1952, the Securities Contracts(Regulation) Act, and the Securities and Exchange Board of India Act, 1992, provide for a regulatory system that promotes transparency of trading in the commodities and securities markets.

25. <u>Regulation should be designed to detect and deter manipulation and other unfair trading practices</u>.

<u>Commodities</u>

Section 11(2)(g) of the FCRA addresses the consequences of default or insolvency on the part of a seller or buyer or intermediary and provides for their regulation by suitable Bye-Laws. Section 11(2) (o) of the Act refers to Bye-Laws for meeting the emergencies in trade which may arise and the exercise of powers in such emergencies, including the power to fix maximum and minimum prices. Section 14 of the Act gives power to the Central Government/FMC even to suspend the business of recognized associations if it is in the interest of trade or in the public interest to do so.

<u>Securities</u>

For the securities markets, Section 9(2)(k) and Section 9(2)(s) of the SCRA, 1956 provide similar powers. Section 12 gives the SEBI power to suspend the business of stock exchanges. Section 16 gives power to prohibit contracts to prevent undesirable speculation. Further, the SEBI has finalized model Bye-Laws in 2003 which would be applicable to all stock exchanges. These model Bye-Laws provide for suspension of trading for market manipulation price rigging or any other similar reason(Bye-law 6.32), Risk management and surveillance (Bye-law 8.2.5) and make several other provisions aimed to ensure the proper management of large exposures, default risk and market disruption.

In addition, for the securities markets, there is the SEBI (Prohibition of fraudulent and unfair trade practices relating to securities markets) Regulations 1995, and the SEBI(Prohibition of fraudulent and unfair trade practices relating to securities markets) Regulations, 2003, specifically for the purpose of detecting and deterring manipulation and other unfair trading practices.

26. Regulation should aim to ensure the proper management of large exposures, default risk and market disruption.

Commodities

See previous response.

Securities

See previous response.

27. Systems for clearing and settlement of securities transactions should be subject to regulatory oversight, and designed to ensure that they are fair, effective and efficient and that they reduce systemic risk.

Commodities

For the commodities markets, Section 11(2)(b) of the FCRA gives power to recognised associations to frame Bye-Laws, subject to the FMC's oversight, to provide for a clearinghouse for the periodical settlement of contracts and differences thereunder, the delivery of, and payment for, goods, the passing on of delivery orders and for the regulation and maintenance of such clearinghouse. Section 11(2)(c) provides for the number of classes of contracts in respect of which settlements shall be made or differences paid through the clearinghouse. Section 11(2)(d) gives power to make Bye-Laws relating to the fixing, altering or postponing days of settlement. Similarly, Section 11(2)(e) gives the power for framing Bye-Laws for determining and declaring market rates; including opening, closing, highest and lowest rates for goods.

Securities

On the securities market side, Section 9(2)(b), (c),(d), (h), (n) and (r) give the power to recognized stock exchanges to make Bye-Laws, under the SEBI oversight, for clearing and settling securities transactions. The SEBI has to ensure that these Bye-Laws are fair, effective and efficient and that they reduce systemic risk.

APPENDIX C

INTERNATIONAL REGULATORY APPROACHES

AUSTRALIA

Regulatory Approach. One regulator for the securities and commodity futures markets: the Australian Securities and Investments Commission (ASIC).

The ASIC is an independent Commonwealth government body which regulates Australian companies, financial markets, financial services organizations, and professionals who deal and advise in investments (including securities and commodity futures), superannuation, insurance, deposit taking and credit. The role of the ASIC is to enforce and regulate company and financial services laws in order to protect consumers, investors, and creditors.

History of the Australian Securities and Investments Commission

Prior to 1989, the corporate sector and financial markets were regulated by the individual State and Territorial governments through the National Companies and Securities Commission (NCSC) and the Corporate Affairs Office of the States and Territories. Regulations were not uniform or well enforced. A series of massive unit trust collapses in the 1980s, including the demise of Australia's largest unit trust, the Estate Mortgage Group, at that time worth over US$1.3 billion, led to a rapid decline in investor confidence and a demand for change in the regulatory structure.

In 1989, the Australian Securities and Investments Commission Act established the Australian Securities Commission (ASC) as a federal government regulator. It was given the following responsibilities:

- Registration of companies
- Registration of company auditors and liquidators
- Processing and distribution of information to the public about companies, prescribed interest schemes and other securities schemes
- Exercising statutory discretions to relieve from compliance with provisions of the *Corporations Law*
- Regulation of the securities industry, licensing of intermediaries and so on
- Supervision of mechanisms for futures contracts and market regulation of the futures industry
- Investigation of suspected contraventions of the *Corporations Law*
- Enforcement of compliance with the *Corporations Law*
- Enforcement and investigation of suspected contraventions of consumer protection provisions under Pt 2 Div 2 of the ASIC Act.

In 1998, the ASC was given additional consumer protection responsibilities and renamed the Australian Securities and Investments Commission (ASIC).

The Australian Securities and Investments Commission	
Regulates the following entities:	Regulatory Procedures:
1.3 million companies.	• Register each company with a unique number, and record the name, directors, and other company information on a public register. • Grant or refuse requests for relief from the law. • Receive prospectuses before money is raised. • Uphold the law on financial reporting and company mergers and acquisitions.
7,025 company auditors, 832 registered liquidators, and 363 official liquidators.	• Register them before they start operating. • Investigate and act against misconduct.
5 financial markets authorized by the Minister, including: - The Australian Stock Exchanges (ASX) - Sydney Futures Exchange	• Investigate and act against misconduct by listed companies, brokers, and traders. • Assess and report to the Minister on market supervisory arrangements. • Advise the Minister about rule changes and whether to approve new markets. • Monitor what ASX does as a listed company, and trading in its shares.
3,899 financial services businesses, including: - fund managers - stockbrokers - financial advisors - insurance brokers	• License or register them before they start operating. • Set standards for education, training, and operations. • Investigate and act against misconduct. • Record their details and their authorized representatives on a public register.
3,487 managed investment schemes, registered by ASIC.	• Register them before they start operating. • Investigate and act against misconduct. • Record their details on a public register.
Australian Prudential Regulation Authority (APRA) regulated financial services businesses, including: - Banks and deposit taking institutions - Superannuation funds - Life insurance and general insurance companies.	• Report on how they comply with codes of practice. • Approve consumer complaint resolution schemes. • Investigate and act against misconduct affecting consumers or misconduct as corporations.
Credit providers operating under State and Territory laws.	• Investigate and act against misleading and deceptive conduct affecting consumers. • Cooperate with State and Territory regulators.

HONG KONG

Regulatory Approach. One regulator for the securities and commodity futures markets: the Securities and Futures Commission (SFC).

Hong Kong uses a one regulator, three tier, regulatory framework, as follows:

1. The SFC is the statutory regulator, which oversees both the securities and commodity futures markets. It was established in May 1989 under the Securities and Futures Commission Ordinance.

2. The exchanges and their associated clearinghouses, which are grouped under Hong Kong Exchanges and Clearing Limited (HKEx) function as Self Regulatory Organizations (SROs). The clearing houses perform the clearing and settlement functions for the different segments of the securities and futures markets.

3. The Government of Hong Kong, which deals with policy and legislative matters, does not handle day-to-day issues related to the markets. Their role is to ensure that Hong Kong maintains and advances its status as an international financial center.

History of the Hong Kong Securities and Futures Commission

The securities and commodities futures markets in Hong Kong were largely unregulated by the Government, but operated under exchange rules until the market crash of 1973-74. This crash led the Government to enact legislation that established a part-time Securities Commission and a part-time Commodities Trading Commission. These two Commissions were supported by the Office of the Commissioner for Securities and Commodities Trading, which was part of the Executive Branch of the Government.

As financial markets developed during the next decade, Hong Kong's regulatory structure did not simultaneously adapt. In October of 1987, there was a world-wide market crash which resulted in the closure of both the Hong Kong stock and stock index futures markets for four days; the markets were severely criticized for a lack of ethics and professionalism. Following this catastrophe, the Government commissioned a six-member Securities Review Committee to examine the existing, and evidently insufficient, regulatory structure, and to make recommendations for its improvement.

The Securities Review Committee released its report in May 1988 and concluded that the Office of the Commissioner for Securities and Commodities Trading had insufficient resources to properly regulate the rapidly growing and changing financial markets. Furthermore, the Securities and Commodities Trading Commissions were found to be ineffective because they lacked regulatory influence. As a result, the Committee recommended that the existing structure be replaced with a single statutory body outside the civil service, headed and staffed by full-time professional regulators, and funded primarily by the market, with limited support from the Government. From this recommendation the Securities and Futures Commission was established.

Hong Kong Securities and Futures Commission	
Regulates the following entities:	**Regulatory Procedures:**
Licensed corporations and individuals carrying out the following regulated activities: • Dealing in securities • Dealing in futures contracts • Leveraged foreign exchange trading • Advising on securities • Advising on futures contracts • Advising on corporate finance • Providing automated trading services • Securities margin financing • Asset management	• Sets licensing standards to ensure that all practitioners are fit and proper. • Approves licenses and maintain a public register of licensees. • Issues codes and guidelines to inform the industry of its expected standard of conduct. • Ensures licensees' financial soundness and compliance with ordinances, codes, guidelines, rules and regulations. • Sets standards for the authorization and operation of investment products. • Authorizes investment products and their promotion. • Handles misconduct complaints against licensed persons. • Investigates and take action against misconduct.
Hong Kong Exchanges and Clearing Limited (HKEx)	• Oversees the performance of its role as the frontline regulator of listing-related matters. • Approves the creation of new markets, new products and changes to exchange rules and regulations. • Monitors HKEx's compliance with Listing Rules. • Monitors the trading of shares, options and futures on its markets. • Oversees its systems and technology.

Companies listed for securities trading	• Approves changes to the Listing Rules. • Monitors announcements and vet listing application materials under the Dual Filing regime. • Administers the takeovers and share repurchases codes. • Monitors share dealings of directors and substantial shareholders. • Monitors share buy-backs by listed companies. • Considers exemptions of prospectus requirements. • Investigates listed companies suspected of prejudicial or fraudulent transactions.
Approved share registrars	• Approves the Federation of Share Registrars as an association whose members shall be approved share registrars • Requires approved share registrars to comply with the requirements of the Code of Conduct for Share Registrars
Investor Compensation Company Limited (ICC)	• Recognizes the ICC as an independent compensation company • Approves the rules and any amendment of rules of the ICC • Requires the ICC to prepare and regularly submit financial statements, auditors' report and other documents to the SFC
All participants in trading activities	• Monitors unusual market movements and direct trade suspension of related stocks to maintain an informed and orderly market • Investigates and take action against market misconduct, and other breaches of the law.

SINGAPORE

Regulatory Approach. One regulator for the securities and commodity futures markets: the Monetary Authority of Singapore (MAS).

The MAS serves as a central banker and capital markets regulator for the Government of Singapore. Its mission is to promote sustained, non-inflationary economic growth in Singapore, and a sound and progressive financial sector. Its primary functions include:

- Supervising the banking, insurance, securities and futures industries;
- Conducting monetary policy and issuing currency;
- Managing the official foreign reserves and the issuance of government securities.

History of the Monetary Authority of Singapore

Prior to 1970, the various monetary functions associated with a central bank were performed by several government departments and agencies. As financial markets developed in Singapore, the demands of an increasingly complex banking and monetary environment necessitated the streamlining of regulatory functions to facilitate a more dynamic and coherent policy on monetary matters. The Monetary Authority of Singapore Act established the MAS in 1970. This Act gives MAS the authority to regulate all monetary, banking, and financial aspects of Singapore, and the power to act as a banker to and financial agent of the Government.

In April 1977, the Government gave MAS the responsibility of regulating the insurance industry. In September 1984, the regulatory functions under the Securities Industry Act (1973) were also transferred to MAS.

The MAS now administers the various statutes pertaining to money, banking, insurance, securities, commodity futures, and the financial sector in general.

Structure of the Monetary Authority of Singapore

The MAS is composed of ten key Departments, with one responsible for securities and futures regulation:

Securities and Futures Supervision Department – Supervises capital markets and administers the Securities and Futures Act. Regulates the origination and trading of securities and their derivatives products, supervises capital markets intermediaries, regulates prospectuses and collective investment schemes, and oversees takeover issues. It has regulatory oversight of securities and futures exchanges, and clearing houses. It also enforces the civil penalty regime for market misconduct.

Other key MAS Departments include:

Economic Policy Department – Formulates monetary policy and conducts surveillance and analysis of the domestic economy.

Macroeconomic Surveillance Department – Conducts surveillance of Singapore's financial system to identify emerging trends and potential vulnerabilities. Monitors and evaluates developments in international economies.

Reserve and Monetary Management Department – Implements Singapore's monetary policy by managing the exchange rate, issues government securities, and invests Singapore's foreign reserves internationally.

Market and Business Conduct Department – Formulates and implements market and business conduct policies in the interests of depositors, investors, and policyholders.

Banking Supervision Department and Complex Institutions Supervision Department – Responsible for licensing and supervising banks, merchant banks, and finance companies.

Insurance Supervision Department – Administers the Insurance Act and has as its primary objective the protection of policyholders' interests.

Prudential Policy Department – Responsible for formulating capital and prudential policies for banks, insurance companies, and securities firms, to promote a sound and dynamic financial sector.

Specialist Risk Supervision Department – Provides the financial and technology risk expertise necessary for MAS's supervisory and regulatory functions.

Currency Department – Responsible for the issuance of currency and the administration of the Currency Act.

KOREA

Regulatory Approach. One regulator for the securities and commodity futures markets: the Financial Supervisory Commission (FSC).

The FSC regulates the entire Korean financial sector, including banks and non-bank financial institutions (i.e., insurance companies, brokerage firms, mutual funds, etc.). It is responsible for promulgation and amendment of financial supervisory rules, regulations, and penalties; the approval of financial sector businesses and their operations; and inspection of financial institutions.

Within the FSC, the Securities and Futures Commission (SFC) is responsible for handing issues related to the securities and futures markets. Specifically, the SFC investigates market abuses, conducts audit reviews, and oversees accounting standards.

The Financial Supervisory Service (FSS) is the executive arm of both the FSC and the SFC. Its responsibility is to inspect the assets and business practices of financial institutions and impose penalties when necessary.

History of the Korean Financial Supervisory Service

Prior to 1998, the Korean financial sector was regulated by four independent supervisory organizations: the Office of Bank Supervision; the Securities Supervisory Board; the Insurance Supervisory Board; and the Non-Bank Supervisory Authority. Advances in global finance and the devastating financial crisis of 1997, which the Korean government attributed in part to poor regulation and weak supervision of the financial sector, led to the demand for a better coordinated and more efficient regulatory framework. In response, the FSC was established as the sole financial sector regulator under the Act for the Establishment of Financial Supervisory Organizations (AEFSO) of December, 1997.

JAPAN

Regulatory Approach. Japan uses a "product-based" regulatory approach, as follows:

- The securities markets are regulated by the Securities and Exchange Surveillance Commission (SESC), which is under the Financial Services Agency (FSA; split from the Ministry of Finance in June 1998).
- Agricultural commodity futures are regulated by the Ministry of Agriculture, Forestry and Fisheries (MAFF).
- Commodity futures trading in metals and oil is regulated by the Ministry of Economy, Industry and Trade (METI; known as MITI prior to 2001).
- The Commodity Futures Association of Japan is a self-regulatory organization which also imposes and enforces commodity futures trading rules; parallel Securities SROs exist.
- Financial futures fall within the jurisdiction of the Ministry of Finance.

History of Commodity Futures Trading Regulation in Japan

Japanese commodity futures trading dates back to 1730, with its futures market for trading rice, established in the Dojima District. In 1893, the first Commodity Exchange Law established the Tokyo Rice Exchange, which listed rice, cotton, sugar, and raw silk. The Japanese futures markets were highly liquid, and used by both hedgers and speculators. Futures trading was suspended at the start of World War II in 1939 and remained suspended until 1950.

The Commodity Exchange Law of 1950 (enacted after the Securities and Exchange Law of 1948), established a strictly governed commodity futures trading market, which was (and continues to be) separate from securities trading. Trading was permitted only in select goods, such as sugar, grains, red beans, domestic soybeans, and potato starch. Commodity exchanges were (and still are) required to be non-profit entities, and foreigners were not permitted to participate in the markets.

With the dramatic evolution of financial futures in the 1980s, and a greatly increased presence of U.S. financial firms in Tokyo, the Japanese government moved to liberalize and modernize commodity futures markets. In 1990, the Commodity Exchange Law was amended to allow the participation of foreign commodities firms and banks in the markets (however, eligibility for direct participation is limited to those which engage in the purchase, sale, brokerage, production, or processing of commodities listed on an exchange; all others must participate through a Japanese broker). Important older exchanges (Tokyo Grain Exchange, Tokyo Sugar Exchange) merged and smaller regional exchanges became dormant.

In 1999, amendments to the Commodity Exchange Law relaxed the complex requirements for listing commodity futures, and liberalized commodity brokerage commissions. As a result, many new futures contracts were introduced on goods such gasoline, kerosene, shell egg, and broiler chickens. The Commodity Futures Association of Japan was established as a commodity futures markets self-regulatory organization. The Tokyo Commodity Exchange (TOCOM, the largest commodity exchange in Japan), the Tokyo Grain Exchange, the Central Japan Commodities Exchange, and others serve as their own exchange clearing houses, with no centralized or offset mechanisms. In June 2004, TOCOM became the first Japanese commodity exchange to introduce an in-house clearinghouse.