USAID/India Commodity Futures Markets Project: FINAL REPORT

USAID Contract No: FFP-I-00-04-00095-00 Order No : FFP-I-04-04-00095-00

Submitted by
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USAID Contractor

December 7, 2007

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Report prepared for the United States Agency for International Development. USAID Contract Number FFP-I-00-04-00095-00 (Order No.FFP-I-04-04-00095-00)

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Executive Summary

When the Government of India (GoI) acted to permit modernized commodity futures trading in 2003, USAID contracted FMI to provide technical assistance to the Forward Markets Commission (FMC) and the exchange industry to determine the best approach to obtain the economic benefits of sound regulatory procedures and prudent exchange operations. FMI reviewed the FMC and exchange rules and operations, compared them to commodity futures markets best practices around the world, detailed the operations and practices of successful commodity futures exchanges, made extensive recommendations for improving the legal/regulatory environment of the FMC, and recommended actions to support the growth of the commodity futures markets infrastructure to enhance risk management. The resulting report, *The Road Map 2004: Commodity Futures Markets Development in India 2005 and Forward*, was widely read and circulated in the Indian public and private sectors. It was used by GoI policymakers as a guide to draft regulations and legislation to strengthen the country's commodity futures markets regulator, and to improve exchange operations.

In anticipation of substantial efforts toward strengthening the legal/ regulatory framework for commodity futures markets, the GoI requested continuing USAID technical assistance. The USAID Commodity Futures Market Project (CFMP) was designed to assist the FMC, the GoI's Department of Consumer Affairs (DCA), India's national multi commodity futures exchanges, and the agricultural sector to develop the legal, policy, regulatory, and operational environment for promoting a vibrant and safe commodity futures markets in India. FMI was contracted to implement the Project.

The CFMP called for providing technical assistance and training to achieve three principal objectives:

- Strengthen the institutional capacity of the FMC in the areas of rule making, surveillance, inspection and enforcement;
- Help develop institutional infrastructure and systems that are critical to transparent efficient functioning of the market; and,
- Institutionalize commodity futures market related state-of-the-art knowledge and skills.

The CFMP commenced in October 2006, with the support of the USAID, the FMC, the DCA, and the leadership of the three national multi commodity exchanges. The Project Workplan focused on the following areas for Year I: legal and institutional strengthening of regulation, surveillance, and enforcement in the commodity futures markets; and, institutional infrastructure for efficient commodity futures markets.

The CFMP organized and lead a series of meetings with senior officials and legal experts from the FMC and the leading national multi commodity futures exchanges in order to develop a consensus on priority areas of the legal/regulatory framework needing improvement. Based upon these inter-active sessions, FMI proceeded to develop six draft regulations for the FMC on intermediary registration, disciplinary actions, and electronic market surveillance systems. This was achieved via an iterative process to ensure the exchanges and FMC staff understood and valued the importance of these regulatory improvements.

However, during this process the FMC notified the Project that it was unable to properly review the draft regulations due to staff shortages. Further, in January 2007 the GoI announced that it would not present legislation strengthening the FMC to Parliament, and in February 2007 the GoI announced it would de-list from trading two food staple commodities, and limit trading in wheat and rice. The GoI then also announced the formation of a Blue Ribbon Committee to review the role of commodity futures markets in price inflation.

Responding to these significantly different circumstances, FMI and USAID initiated a series of meetings with the FMC, DCA, Minister of Agriculture, and Minister of Finance to develop a consensus on revised priorities and objectives for the project technical assistance. As a result, in February 2007, FMI set forth a revised Project WorkPlan. It focused on providing greater policy input to the GoI to clarify the fundamental economic benefits of commodity futures markets, especially to the agricultural sector of India, and to ensure these benefits became more widely understood among GoI policymakers.

FMI senior commodity futures markets advisers began to develop policy papers and seminars that outlined the proven benefits of commodity futures markets for the GoI, the exchanges, farmers, and the public. The papers and programs covered: successful wheat hedging on commodity futures markets in India; methods to prevent manipulation in commodity futures markets with the proper regulatory framework; review of agricultural markets and price aberrations; the economic benefits to farmers from hedging; and, the harmful effects of government intervention in market economies. These papers and their recommendations were presented by FMI to the FMC, DCA, Ministry of Agriculture, Ministry of Finance, and to the Blue Ribbon Committee members.

These efforts by FMI led to a series of requests by the GoI Blue Ribbon Committee, and other policy makers, for FMI to conduct large scale meetings focusing on the benefits of futures trading and the drawbacks of the ban on trading of certain commodity contracts. The CFMP then developed an assessment of successful futures trading in potatoes, menthe oil, and cardamom, and widely distributed these reports. Indeed, the Blue Ribbon

Committee wanted all reports of the CFMP widely distributed to GoI policymakers, members of India's futures industry, and major market participants.

Because of the need for greater policy outreach explaining the benefits of commodity futures markets to the agricultural sector, the CFMP with USAID support organized a series of farmer awareness programs. These programs sought to demonstrate the value of the price risk management and price discovery functions of commodity futures markets to farmers. The Project conducted farmer awareness programs in the rural regions of five Indian states: Punjab, Maharashtra, Haryana, Hyderabad, and Andra Pradesh. This effort was met with massive farmer interest and participation.

The Project successfully leveraged these farmer events through coordination with the leading commodity futures exchanges in India to expand the available resources and reach the largest audience possible. Thousands of farmers attended each event. Speakers at the programs included leaders of farmer unions and other agricultural organizations, specialists from India's commodity futures exchanges, members of the national and regional parliaments, FMC officials, and FMI experts.

These CFMP farmer awareness programs were the first major outreach programs in India to support commodity futures markets by bring prominent proponents of futures markets to rural regions where the vast majority of livelihoods depend on agriculture.

The CFMP continued to provide the FMC training and support, organizing seminars for its staff on product development, and surveillance and enforcement. The Project sponsored a training program led by specialists from the U.S. Commodity Futures Trading Commission (CFTC) for FMC officials. These seminars and programs strengthened the institutional capacity of the FMC, and helped improve the legal/regulatory environment for commodity futures markets in India.

Overall, the CFMP met the revised objectives set for it by the GoI and USAID, readily adapted to new obstacles, and assisted India in developing safe and transparent commodity futures markets. The Project successfully responded to the challenge of certain policy makers that are hostile to commodity futures markets. The Project demonstrated the benefits of futures markets and broadened support for these markets from farmers. The Project also strengthened the institutional infrastructure and legal/regulatory framework for efficient commodity futures markets through its technical assistance and training to the FMC.

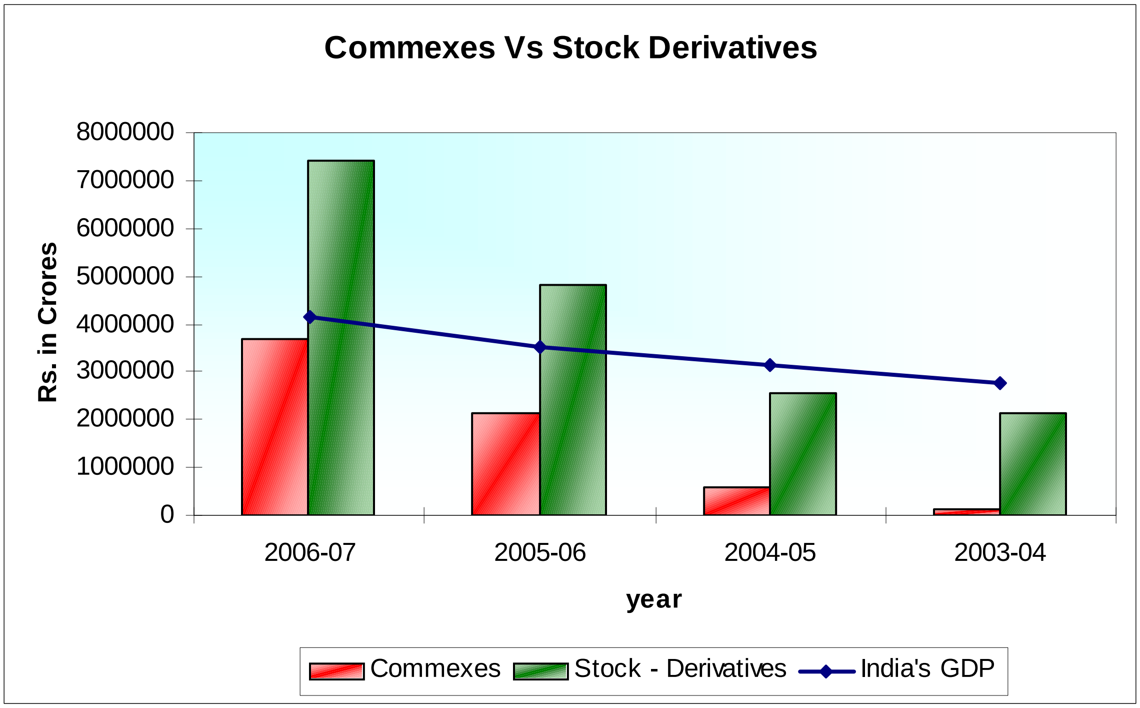
India's commodity futures markets continue to grow at a rapid pace, with improved understanding of the value of best regulatory practices and exchange operational procedures. USAID has played a key role in the development of these markets. The benefits of the USAID/GoI partnership for India are increasingly evident. India's commodity futures markets have gained the respect of the world, and Mumbai and India's commodity futures industry was the host for international Futures Industry Association annual Asia meeting in October 2007, with a prominent role played by the USAID CFMP. At the GoI request, USAID played a catalytic role in developing the commodity futures markets of India, with the consequent economic benefits to farmers and commodity users of price discovery and price insurance.

The following report details the activities and accomplishments of the USAID Commodity Futures Market Project as implement by FMI.

I. Introduction:

Forward trading in commodities started in India with the first contract introduced in cotton in 1875 by the Bombay Cotton Trade Association Ltd., which was barely about a decade after they started in Chicago. After India's independence, the Forward Contracts (Regulation) Act, 1952 (FCR Act) was passed by the Parliament to regulate this market and Forward Market Commission (FMC) was established in 1953 as the Regulator under the provisions of FCR Act. Consequent upon the introduction of The FCR Act, commodity options and cash settlement of commodity futures were banned. Later after the country was hit by several years of severe drought and India-China War, during the 1960s, forward trading was banned in many commodities considered primary or essential. However, after four decades of inactive futures markets, Government of India (GoI) realized the importance of commodity futures market in an era of open global market where Indian agri sector has moved beyond self-sufficiency and it can step up to compete internationally. The GoI's 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.

At present, there are 24 commodity exchanges in India trading in futures contracts of over 140 commodities that span agricultural commodities, precious metals, base metals, and energy products. The aggregate turnover in all the commodity bourses has showed a growth rate of 1004 per cent in the last 4 years from a meager USD 32 billion in 2003-04 to USD 919 billion in 2006-07 and at present stand at USD 476 billion (April 07to Oct 15, 07).



While commodity futures' trading is booming, the regulatory regime needs more autonomy and authority to properly regulate, to monitor and to undertake surveillance of trading in a technologically advanced commodity market. The current regulatory structure comprises the Forwards Markets Commission (FMC), which, in turn, with a reporting relationship with the Department of Consumer Affairs (DCA) in the Ministry of Consumer Affairs, Food & Public Distribution of Government of India (GoI). DCA, in turn, derives its authority to regulate the commodity futures markets from the Forward Contracts (Regulation) Act, 1952 (FCRA). In a bid to afford more autonomy to FMC to meaningfully undertake its rightful responsibility as an autonomous regulator, the GoI introduced an amendment to the FCRA in the Indian Parliament. The bill has been under the consideration of Parliament for quite some time. Meanwhile the Parliament appointed a Standing Committee to review the Bill. It is expected that the Parliament may finally take up the Bill for voting in the December 2007 Winter Session.

The amended Act will enhance FMC's powers and provide it the necessary authority and autonomy to regulate the commodity futures markets without having to play a secondary role to DCA. If passed without major changes, the amended Act will also help introduce new derivative instruments like options, Index futures, weather derivatives, etc. for the first time in Indian commodity markets.

II. Background:

In 2004, USAID and GoI commissioned Financial Markets International, Inc, to prepare a report *"The Road Map 2004: Commodity Futures Markets Development in India 2005 and Forward"* 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 was 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.

Under the US-India Knowledge Initiative in Agricultural Research and Education, US Government decided to help India in streamlining the commodity futures market and making its operations more transparent. The US Agency for International Development (USAID) and regulator of futures market in India, the Forward Markets Commission (FMC), launched a Rs 4.5-crore ($1 million) commodity futures market program on October 13, 2006 in

New Delhi. The program represented a practical benefit from co-operation between the US and India under the joint agricultural knowledge initiative launched by US President Bush and Indian Prime Minister Manmohan Singh in July 2005 and subsequently signed in March 2006 during Bush's visit to India.

Anticipating the changes to the legal/regulatory framework post-passage of the Amendment Bill, the GoI requested USAID to assist the development of commodity futures markets in India by strengthening the regulatory, operational, and facilitating framework for commodity futures markets in India. FMI was awarded the contract by USAID with the FMC as a principal project counterpart, with the overarching project goal being strengthening of regulatory capacity. The Project was framed to assist FMC, DCA, the leading Indian commodity futures exchanges, and the agricultural sector farmers and end-users in developing the legal, policy, regulatory and operational environment for promoting a vibrant and safe commodity futures market in India.

Under the CFMP, FMI was asked to provide technical assistance (TA) and associated training to:

1. Strengthen the institutional capacity of the FMC in the areas of rule making, surveillance, inspection and enforcement;
2. Help develop institutional infrastructure and systems that are critical to transparent efficient functioning of the market; and
3. Institutionalize commodity futures market related state-of-the-art knowledge and skills.

III. Project Launch, Staffing and Organization:

Immediately after the signing of the Task Order with USAID, the Project was launched in New Delhi on October 13, 2006 at a function attended by the DCA Secretary Mr. L. Mansingh, FMC Chairman Mr. S. Sundareshan, commodity futures industry leaders, and senior officials of USAID/India including the Deputy Mission Director Beth Hogan who opened the launch event (an agenda and list of attendees is included in (**Appendix 1**). Invitees included a broad cross-section of leaders from the private, public and NGO sector engaged in commodity futures, agriculture and related activities.

Simultaneously, FMI Vice President Peter Levine directed the administrative start-up of the Project from Mumbai, recruiting and training necessary staff, identifying and negotiating a lease on appropriate office space, and vetting local vendors for necessary office supplies and equipment. The project staff consisting of Resident Advisor, Mr. R. Jayaprakash, an Office Manager, and a part-time Training Coordinator were in place at the time of official launch of the Project and final interior work on the leased space completed within the month.

Soon after the kick-off event in New Delhi and related launch activities, a series of initial meetings took place with FMC in Mumbai and DCA in New Delhi. These focused on critical priorities for the Project and benefited from the presence of a broad cross section of industry experts in Mumbai for the FIA/Asia Derivatives Conference which was taking place at the same time. The Project was able to secure a high profile for key Indian counterparts at this prestigious meeting, including a last minute request from FIA President John Damgard that Charles Seeger moderate the high level wrap-up session.

At the request of USAID, additional briefings were prepared for senior staff at the U.S. Embassy, New Delhi, and for the U.S. Consul General in Mumbai. Furthermore, to insure a strong private sector voice in the initial strategic planning, meetings were held with secondary counterparties like the three national online multi-commodity exchanges namely, Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX), both in Mumbai, and National Multi Commodity Exchange of India Limited, Ahmedabad.

IV. Tasks, Work Plan and Revised Work Plan

A Work plan was prepared to provide the above mentioned technical assistance (TA) and associated training in consultation with FMC and USAID.
In order to facilitate the resolution of immediate issues in the Indian market, but reserve secondary areas for action contingent on funding and GoI support, USAID organized CFMP into primary activities and options (Work Plan: **Appendix 2**). The primary activities funded under Year 1 of the contract were as follows:

1. Legal and Institutional Strengthening of Regulation, Surveillance and Enforcement in the Commodity Futures Market

The overall objective of the activities under this task was to help develop a legal, policy and regulatory environment that promote a vibrant and safe commodity futures market. In order to achieve this, FMI worked closely with the FMC to modernize its systems and processes, while also upgrading the knowledge and skills of its staff in commodity futures regulation and supervision. The Project also delivered technical assistance and innovative training based on international best practices in: (a) development of a comprehensive regulatory framework for commodity futures exchanges, clearinghouses, and other intermediaries; and (b) building FMC's capacity in inspection of intermediaries, market surveillance and investigation, and enforcement of market manipulation and fraud cases.

2. Institutional Infrastructure for an efficient Commodity Futures Market

Commodity futures markets required a wide network of regulated warehouses, a system of grades and standards based on international `best practices', an extensive network of licensed testing facilities, and a system for collection and disseminating of spot market price information to the farmers and hedgers. In addition, it is critical that an enabling policy and regulatory environment be in place for banks to lend against commodities (assets) stored in warehouses. The activities under this task were to assist in developing the functioning institutional infrastructure necessary for efficient and sustainable operation of the Indian commodity futures market.

Options Tasks

In addition to the above main tasks, the Task Order had several Options built into the CFMP Scope of Work. These include:

Option 1: Legal and Institutional Strengthening of Regulation, Surveillance and Enforcement in the Commodity Futures Market

The major Option Tasks in this area, inter alia, may include:

- Review of existing regulations on capital adequacy and risk management aspects of brokers and intermediaries licensing.
- Assist FMC in the review of risk management and surveillance systems in the market.
- A comparative analysis of the laws that govern the Indian commodity futures market against other developed markets.

Option 2: Development of Institutional Infrastructure for an efficient Commodity Futures Market

- Assist selected State Marketing Boards and spot markets (called *mandis*) in development of an efficient price collection and dissemination system.
- Assist development of a uniform approach to commodity grades and standards.
- Fostering alliances between selected exchanges and agriculture universities to develop a network of facilities for testing grades and standards.

Option 3: Knowledge Development and Deepening of the Commodity Futures Market Outreach

Development of a robust and developed market requires innovative outreach programs to make sure that a significant percentage of India's farming community uses the market to hedge price risk of their agricultural produce. If this option was exercised, the Project would work with leading public, private and non-governmental organizations to:

- Design and implement innovative outreach programs with selected partners (e.g. banks and financial institutions, trade associations, agricultural universities).
- Assess the knowledge and skill gaps in the Indian commodity futures industry, develop an action plan to address key issues, and work with local champions to launch an effort to resolve these.

On the basis of the identified Tasks, the Project jointly decided to address the two core tasks (Tasks 1 and 2) in the first year October 1, 2006 to

September 30, 2007. A detailed outline of the Principal and Options Tasks, FMI activities there under and planned Outputs can be found in **Appendix 3**.

Revised work Plan

Two major events called for a shifting of project focus towards the end of January 2007. First, the key legislation critical (Amendment Bill) to a strengthened FMC was not presented in Parliament, and, to date, it still has not passed. Secondly, the in late January 2007 GoI required the FMC to de-list trading in two agricultural commodities, the diet staple pulses urad and tur. Further, the Project was told that there is no senior level official in charge of Legal Affairs in FMC at that time to review the submitted drafts and to provide any feedbacks on them.

A series of meetings with USAID, FMC, DCA, the Project, and the leading commodities futures exchanges during January, 2007, developed a consensus for a revised and differently emphasized focus for the technical assistance during the remainder of the first year of the project. The Revised Work Plan reflects these unanticipated events. Revised Work Plan is attached in **Appendix 4**

The new emphasis was to provide greater policy input in order to assist in clarifying the fundamental benefits of commodities futures markets to the agricultural sector of India; coordinate with the agricultural sector's key organizations in conveying the appropriate "best policies" for facilitating commodity futures markets use to gain the economic benefits for the farmer; and work closer with exchanges on proper rule applications and exchanges monitoring and surveillance. Accordingly, this Revised Work Plan set forth revised priorities consistent with the SoW.

The Project held several meetings with FMC officials, including newly appointed Chairman B.C. Khatua who expressed his interest in expert assistance to address critical issues in the market. Chairman Khatua confirmed that he is ready to move on finalizing the draft Regulations submitted by the Project in February 2007 and suggested holding follow-up roundtables with the prominent exchanges and the Project to discuss the drafts. Between July and August, five roundtable meetings took place with MCX and NCDEX participation, but while these discussions were productive, a consensus built that a more efficient method was required if the regulations were to be moved forward expeditiously. Accordingly, the Committee of FMC Directors decided that the two exchanges should carry out an internal review on the key regulation on commodity brokers, after which a meeting would be called by FMC to review comments and establish a plan for completion.

V. Regulations

The objective under this task was to develop a legal, policy and regulatory environment that promote a vibrant, efficient and safe commodity futures market. Following initial meetings in October with FMC Chairman, Members and other senior officials, it became clear that it was an organization facing an immediate and acute human resources constraint. FMC needs additional qualified personnel to fulfill its various regulatory functions. Passage of the FCRA amendment bill, with its grant of operational autonomy will allow the FMC to enhance its personnel capacities and therefore any training under the CFMP will be scheduled and tailored accordingly. In order to lay the foundation for such training, the following activities were identified via an interactive discussion with FMC as priorities the Project could provide assistance:

A. Drafting of new regulations

FMC initially identified 20 areas (**Appendix 5**) where new regulations would be required in anticipation of the passage of Amendment Bill to FCR Act (FCRA). Subsequently, FMC narrowed these areas down to twelve key regulations (**Appendix 6**) and requested assistance from FMI to both prioritize those issues which required new regulations and in the drafting thereof. Even in the eventuality of a delay in the passage of the FCRA Amendment bill, the FMC would still need to issue such regulations, although they would take the form of "Directives" under the existing regulatory structure.

FMI held extensive consultations with exchanges to seek their views/inputs on the drafts of regulations and manuals, by forming a discussion group. Thereafter the following sets of drafts were prepared and submitted to FMC and the exchanges:

- Intermediary Registration Rules
- Intermediary Registration Regulations
- Procedure for Holding Inquiry and Imposing Penalties by Adjudicating Officer Rules
- Procedure for Holding Inquiry by Inquiry Officer and Imposing and Penalties Regulations
- Outline of FMC Manual on Investigation and Disciplinary Actions and Review Investigations and Disciplinary of FMC Infrastructure
- Note on “Developing an electronic market surveillance system for FMC” and “Review of FMC and exchanges Regulatory Activities in Relation to IOSCO Best Practices in Market Surveillance”
- Paper on “Foreign Ownership of Indian Commodity Futures Exchanges”

B. Review of FMC's existing monitoring and market surveillance system

FMC requested assistance in evaluating existing market surveillance capabilities, and reviewed its design requirements for a real-time, IT-enabled surveillance system. See FMI Work Product: "*Developing a Comprehensive Electronic Market Surveillance System for the Forward Markets Commission* based upon *Developing an electronic Market Surveillance System, along with* a Review of FMC and exchanges Regulatory Activities in Relation to IOSCO Best Practices in Market Surveillance

C. Outline of an Enforcement Manual

At FMC's suggestion, FMI drafted outline of a manual for the FMC explaining how to initiate, investigate and conduct an enforcement action, and referencing the statutory/regulatory basis of these powers. (See FMI Work Product: *"Outline of Manual on Investigation and Disciplinary Action along with A review of Investigation And Disciplinary Action Infrastructure of FMC."*)

The manual, when completed on the basis of the outline, could be used as orientation material for new recruits and as stand-alone reference guide on enforcement issues was requested by the Division of Counseling and Enforcement. It would explain how to initiate, investigate and conduct an enforcement action, including references to the statutory/regulatory basis of these powers and examples.

In a meeting held on July 18, 2007, FMC Chairman confirmed that he is ready to move on finalizing the draft Regulations submitted by the Project in February 2007 and suggested holding follow-up roundtables with the prominent exchanges and the Project to discuss the drafts. Accordingly FMC formed a committee to review all the above drafts submitted by FMI. The Committee consisted of four senior officials of FMC and two representatives from the two largest national-level commodity exchanges Multi Commodity Exchange of India Limited (MCX) and National Commodity and Derivatives Exchange Limited (NCDEX) who, between them, account for about 95% of all commodity futures trade in India. Between July and August, five roundtable meetings took place with MCX and NCDEX participation, but while these discussions were productive, a consensus built that a more efficient method was required if the regulations were to be moved forward expeditiously. Accordingly, the Committee of FMC Directors decided that the two exchanges should carry out an internal review on the key regulation on commodity brokers, after which a meeting would be called by FMC to review comments and establish a plan for completion. At the time of writing this report The Committee is not known to have completed the review.

D. Unfinished Agenda in regulations:

Despite the Project's efforts, FMC was unable to engage in any meaningful discussion on several other areas of regulatory improvements. The unfinished agenda included assistance to review, evaluate and discuss the current practices of the exchanges relating to:

(a) Dealing with market volatility;
(b) Default handling;
(c) Investigating market manipulation and fraud, and the taking action against the alleged perpetrators thereof;
(d) Ensuring full documentation for and audit trail of commodity futures transactions;
(e) Imposing sanctions for non-compliance;
(f) Overseeing member firms' activities;
(g) Anti-money laundering provisions; and
(h) Self-regulation

VI. Blue Ribbon Committee and Policy Papers

In response to the public outcry against futures markets and their perceived role in causing inflationary trends in the prices of essential commodities, on January 23, 2007, the FMC, at the suggestion of the GoI, de-listed two commodities—urad and tur dal – both pulses from trading on futures exchanges out of concern about rising food prices which was perceived as caused by speculation in the futures markets. Later, on February 27, 2007, FMC limited the trading in wheat and rice futures to squaring off until the expiration of running contracts, for similar reasons. The regulatory uncertainty caused by these two government interventions has the potential to inhibit market growth.

On February 28, 2007 GoI followed up with the announcement of the formation of a Blue Ribbon Committee under the chairmanship of Prof. Abhijit Sen, Member of the Planning Commission of Government of India to:

(i) Study the extent of impact, if any, of futures trading on wholesale and retail prices of agricultural commodities;

(ii) Depending on (i), suggest ways to minimize such an impact;

(iii) Make such other recommendations as the Committee may consider appropriate regarding increased association of farmers in the futures market/trading so that farmers are able to get the benefit of price discovery through Commodity Exchanges.

Other members of the Committee are:

- Prof Prakash Apte, Director Indian Institute of Management, Bangalore
- Prof. Sidharth Sinha, Indian Institute of Management, Ahmedabad
- Mr. Sharad Joshi, Member of Parliament and farmer leader
- Dr. Kewal Ram, Member, Forward Markets Commission

A. Initial meetings with Prof. Sen Committee Members:

The Project sought and was granted an audience with the Committee to meet professor Sen on May 1, 2007. During the entire month of April, the Project engaged the services of four experts from the US and one from India to commission a set of five high quality scholarly research papers for submission to the Committee for its consideration. The authors, papers, and dates submitted are:

- Berg, Ann E. *The HAFED Experience—Wheat Hedging on NCDEX*, May 2007
- Berg, Ann E. *Wheat Futures Markets in India*, April 2007
- Collins, Grant. *Countering Manipulation with the Proper regulatory Framework*, April 2007
- Corcoran, Andrea. *Agricultural Markets and Price Aberrations-- Lessons from the International Market Place*, April 2007
- Hathaway, Kate (reviewed by Dr. Gopal Naik). *Potential Effects of Government Intervention in a Market Economy*, April 2007.

The extensive in-depth research commissioned under the Project and the recent completion of four high quality analyses has been utilized by the Committee in carrying out its work and is considered an important reference. In May 2007, the Project made an electronic presentation of the findings and recommendations to Prof. Sen and the Committee.

A report on the initial meetings with Prof. Sen and with the above members of the Committee is given in **Appendix 7**.

B. Follow-up Meeting with Prof. Sen Committee:

In order to further support and provide assistance to the Committee, the Project conducted several follow-up meetings with senior leaders in the last week of June 2007. These sessions focused on the benefits of futures trading and the drawbacks of the continued ban on trading on some commodity contracts, including in-depth discussions with the following key Committee members Prof. Abhijit Sen and Mr. Sharad Joshi, Member of Parliament, besides Dr. D. Subbarao, Finance Secretary

The Project also submitted to the Sen Committee several notes/documents for their use including:

- A short list of scholarly articles on agricultural commodity futures markets and benefits to farmers, covering areas like hedging, options and their benefits to the farmers **Appendix 8**; and,

- A note on the developments in agricultural commodity futures exchanges in China based on a presentation by Chinese government official at the FAO international Conference on Commodity Exchanges and their Role in Market Development and Transparency held in Istanbul, Turkey during May 15 & 16, 2007. The note is attached as **Appendix 9**

C: HAFED Study:

The Project engaged Chicago based Commodity Markets Expert Ann Berg to travel to travel to India to complete her analysis and research on market federation operations and case studies of successful commodity futures instruments. A case in point was the successful experiment of HAFED-Haryana State's co-operative marketing federation which successfully hedged wheat purchased in its trading book at NCDEX. Spurred by the success, HAFED planned to act as an aggregator for farmers with small holdings. However, the ban on futures in whet out paid to HAFED's ambitious foray into large scale hedging for the benefit of farmers. However, the bold experiment of government organization like HAFED was considered by FMI as an example that can be replicated by other state cooperative federations. Similarly the success of the futures contracts in potato, menthe and cardamom at MCX involved participation by farmers were also worthy of emulation by others. The Project, therefore, commissioned the following papers to the Committee:

- Berg, Ann E. *The HAFED Experience—Wheat Hedging on NCDEX*, May 2007.
- Berg, Ann E *Potatoes, Mentha Oil and Cardamom Commodity Futures Markets-An Assessment*, a study based on the performance of the three commodities on MCX. The paper has been reviewed by Prof. Sahadevan, Professor, IIM Lucknow.

All the documents prepared under the auspices of the Project for Sen Committee were widely distributed to all policy makers/academicians directly or indirectly concerned with futures markets in order to expand the impact.

D. Unfinished Agenda in Policy Papers

The GoI decision to de-list two commodities from trading on future exchanges illustrated the need for greater policy work and policy information dissemination. There was urgency for this activity because (for whatever reason or perhaps for fear of retaliation) the futures industry and market users were not complaining or making a public case to GoI policymakers. The following ideas, and others, were being explored as policy paper topics with related seminars for policy makers:

1. Paper on international parallels where Governments interfered with commodity futures trading and it proved a wrong/harmful action.

2. Paper on the recent FMC action de-listing two pulses, examining supply and demand and price movements before and after de-listing, consequences for open positions, hedgers and risk management functions, status of price charges in the spot market.

3. Paper on how the introduction of futures contracts tends to reduce price volatility in the underlying cash markets.

4. Taxation paper incorporating the absence of a Value-Added Tax facility for inter-state sales, and limitations of Cenvat that could deter delivery-based trading in commodity derivatives in India.

5. Use of hedge exemptions in global commodity markets.

6. Net margining methodologies.

7. Contract assessment and approval by regulators.

8. Manipulation: its definition, prevention and prosecution.

9. Approach to fixing position limits for clients. Should there be an additional position limit for member at all?

10. Settlement price for compulsory delivery contracts. Polled spot price vs. exchange traded price.

11. Need for uniform penalty structure among exchanges.

12. FMC seems to be keen on market-wide position limit. It appears that there is no such practice in other countries. Is such a limit desirable?

13. Software changes in trading systems of exchanges now need FMC's prior approval. Desirable?

14. Should exchanges be given free hand in transaction pricing or not?

15. The current practice does not allow fresh position taking during 5 days prior to contract expiration.

16. Why not special margins and position limits be applied uniformly across all clients? Can exchange restrict the application of special limits to offending clients selectively?

VII. Practical Outreach

The Project, DCA, and USAID have all noted the need for much greater policy sector outreach. The premise was that commodity futures markets around the world are demonstrably of economic value to the agricultural sector through price risk management and price discovery. This demonstrable information needed to be told in India; and, told by non-exchange sources. Accordingly, the FMI project organized several conferences and seminars with agricultural sector organizations, in venues other than Mumbai.

Leverage also was a factor in the Project activity. This was commenced by CTO Larry Paulson in meetings with MCX and NCDEX. The Project encouraged their efforts, and augmented their activities in order to deepen the resources available. Similar coordination and leveraging was underway with the agriculture sector.

This resulted in a greater emphasis on research, policy papers, and conferences for and with the agriculture sector. Accordingly the Project wrote to the exchanges in March 2007, stating its willingness to sponsor awareness programs on commodity futures for farmers. The Project hired the services of a young specialist in agricultural economics in India to take charge of the outreach programs. The Project carried out several awareness programs at different regions in India along with national commodity exchanges like MCX and NCDEX with a view to creating an understanding about the futures market amongst the farmers and educating them on how they can maximize profit and minimize risk.

A. Farmers Awareness Program

The Project conducted several farmer awareness programs for educating farmers and other participants in the agricultural value chain in Moga (Punjab), Ramtek (Maharashtra), Karnal (Haryana), Hyderabad, Guntur and Anantpur (Andhra Pradesh) in association with commodity exchanges MCX and NCDEX. Each of these meetings was attended by nearly a thousand farmers from the respective area and nearby towns/ villages and all programs were held in local language and/or Hindi. Trading screen displays were used to assist farmers in understanding exactly how the futures markets worked. The program was meant to educate the local farming community about the benefits of commodities futures markets in terms of price discovery and price risk management.

Key speakers at these meetings included farmers' leaders, FMC officials, exchange specialists, and the Project's experts. Prominent among these were Rajya Sabha member Mr. Sharad Joshi (at the Moga, Karnal & Ramtek events), farmers union leader Mr. Bhupinder Singh Mann (at the Moga & Karnal events), and Mr. Chengal Reddy, Chairman, Federation of Farmers' Associations of A.P (at the Hyderabad event).

In particular, Mr. Joshi who is also a member of the Blue Ribbon Committee, cited above, delivered a dynamic speech and discussion, exhorting farmers to absorb emerging technology and to take advantage of it. He explained that futures markets will enable the farmers to get prices of commodities breaking the barriers of time and space (i.e. prices at a future date and prices at other markets). Mr. Joshi utilized simple and easy to understand language in explaining how the trading screens functioned and emphasized to the farmers that computer operations were not complex and could be learned by young persons in the villages who can open small kiosks for price dissemination. Furthermore, he assured farmers that when they choose to hedge, they will get the locked-in price from the exchange and played an active role in answering any questions that arose.

Each meeting also included an FMC presentation devoted to the critical role of the regulator in opening the markets and regulating the exchanges/ participants. FMC representatives emphasized that a robust, transparent and credible futures market was emerging in India as a result of the vigilant monitoring and surveillance the Commission performs over the activities of the exchanges and the members.

The significance of the amendment bill to the FCRA pending in the Parliament was also explained in order to continue building public support for this much needed legislative reform. Participants were updated on the status of the bill and engaged in a discussion of the benefits which will come with increased FMC autonomy including: institutional restructuring and recruitment of more professional staff; increased surveillance and monitoring; and broader market participation by all segments of the agricultural value chain.

A detailed report on the proceedings at each of the above meetings is attached in **Appendix 10**.

B. Hedging Awareness for State Agricultural Cooperative Marketing Federations

In April 2007, commodity futures market development expert Ms. Ann E. Berg was engaged by the Project to study the wheat hedging experience of Haryana State Cooperative Supply & Marketing Federation (HAFED) and find out if the experience can be shared with Cooperative Marketing Federations of other states.

HAFED has been using NCDEX wheat contract after its launch in 2004 acting as a standard "short hedger" in its trading operations. HAFED estimates that it gained INR 108 (US$2.60) on every tenth of metric ton of wheat, net of carry costs. This is an exemplary text book model of a state sector organization that, in a short span of three years, honed its hedging skills and took advantage of the fledgling futures market and earned profit.

Spurred by the success of its hedging operations, HAFED had plans to act as an 'aggregator' for farmers to share the benefit among the farming community. In spite of Haryana government's apparent support for this initiative, HAFED could not achieve its objective as the Indian government prohibited wheat futures contracts on Indian exchanges. At this point, in a dialogue with USAID consultant, HAFED explored the possibility of hedging on an international exchange. After a careful study of the wheat contracts on NCDEX and CBoT, Ms. Berg concluded that it made little sense in view of the 'basis risk.'

However, the interactions with HAFED threw out an interesting possibility. It was thought that other state government cooperative marketing federations would be interested in the case study of HAFED. They may be persuaded to follow a similar path with the commodities relevant to their geography.

Initially two federations, AP MARKFED of the State of Andhra Pradesh and Gujarat State cooperative Marketing federation Ltd., were contacted who evinced considerable interest in learning about HAFED's experience in hedging. Ms. Berg and Mr. R. Jayaprakash, Resident Advisor to FMI in India met with senior officials of the APMARKFED, and presented the case study of HAFED with examples relevant commodity of the state.

In May 2007, the Project explored a similar hedging program with Gujarat Coop Marketing Federation Acting Chief Executive Mr. Manoj Patel in Ahmedabad. The Federation was interested in hedging on Mustard and Castor seed, two essential products for its members, and during the meeting a detailed discussion of the strategy employed by HAFED to get warehouses accredited by NCDEX on whose platforms they were hedging. As a result, Mr. Patel is exploring possible hedging options using this model in order to improve efficiency and achieve savings for farmers in the region

VIII. Training

As mentioned elsewhere, the FMC conveyed to the Project that it was not in a position to review any of the regulations submitted by it owing to an acute shortage of suitably qualified personnel. It was also understood that FMC's resource constraint would not be eased until new personnel were recruited following the passage of the amendment to Forward Contracts (Regulation) Act. It was, therefore, mutually agreed that the number of training programs would be cut down to two or three.

A. One day Seminar on Product Development by Mike Gorham, Mar 25, 2007, Mumbai

FMI held a one day seminar on Product development by Mike Gorham on March 25, 2007, Industry Professor and Director IIT Stuart Center for Financial Markets, Illinois Institute of Technology for officials of Forwards Markets Commission and commodity exchanges. The program was held at Hotel Taj Land's End in Mumbai and was attended by about 40 officials.

A report on the program (**Appendix 11**), the program schedule (**Appendix 11A**), and a list of participants (**Appendix 11B**) are attached.

B. CFTC Commodity Futures Market Training Program for officials of FMC and exchanges in Mumbai May 23-29, 2007, Mumbai

A five-day training program was held by experts from the U.S. Commodity Futures Trading Commission (CFTC) in Mumbai during May 23 to 28, 2007 under the auspices of the Project. The audience was principally composed of FMC and Exchange officials, but also included participants from the Reserve Bank of India (RBI) and National Bank of Agricultural and Rural Development (NABARD). The CFTC Team was led by its Office of International Affairs, but also included specialists in all key areas such as:

- Ms. Myra Silberstein, Special Counsel for Technical Assistance, Office of International Affairs
- Robert Wasserman is Associate Director in the Division of Clearing and Intermediary Oversight
- Richard W. Q. Fung, Branch Chief, Division of Market Oversight
- David A. Kass, Senior Economist, Market Surveillance Section, Division of Market Oversight
- Paul G. Hayeck, Associate Director, Division of Enforcement

Details on the training program and participants can be found in **Appendices 12, 12A & 12B.**

IX. Commodity research & Conferences/Seminars

Commodity Futures Market Project was partly responsible for creating an atmosphere for the national commodity exchanges to set up commodity research institutes. Recently NCDEX set up NCDEX Institute of Commodity Markets and Research and MCX came up with MCX Academia of Economic Research.

At the initiative of NICR/NCDEX, FICCI & Ministry of Agriculture conducted a National Conference on Emerging Platforms for Agriculture Marketing organized by FICCI and Ministry of Agriculture on Sep 20-21, 2007 to which USAID/FMI was a principal co sponsor.

The main objective of the Seminar was to engage Policy makers, academics, Peoples' representatives, representatives of the farming community and the corporate sector in a threadbare discussion on the new emerging platforms for price discovery in agri-commodities and trading from the perspective of both the farming community and the private sector. It is expected that the Seminar will serve to create a greater understanding and awareness of the positive impact of futures trading platforms. The new platforms will include the futures and the spot platforms, as well as discuss the pros and cons of options contracts in agri-commodities besides look at other recent initiatives of the private sector. Ms. Ann Berg presented a paper on “Agri Trading and Hedging: Opportunities for Farmers”

Detailed report on the seminar is attached in **Appendix 13.**

MCX Academia of Economic Research conducted a one day seminar on “Futures Trading in Agricultural Commodity” on Sept. 28, 2007, Mumbai in association with Indian Society of Agricultural Economics. The seminars main focus was to provide a forum for an objective assessment of the functioning of futures market in agricultural commodities. Commodity Futures Market expert Ms. Ann Berg presented a paper on “Impact of Futures Markets on Rural Development.”

Futures markets confer significant benefits to producers and other value chain participants. These benefits include heightened awareness of pricing and marketing alternatives as well as improvements in price stability, producer incomes, and credit access. In addition, by boosting infrastructure development, *viz.* cold storage warehouses, standardized grading facilities, and navigable roads, futures markets reduce retail food price inflation. Finally, a futures market model that promotes organic growth, transparent symmetrical markets, and supply chain integration is an effective path for rural development.

X. Forward & Concluding remarks

Since the banning of futures trade in wheat and three other agricultural commodities in early 2007, the growth in volume of commodity futures markets, especially agricultural commodities, has slowed down. In February 2007, the Government appointed the Blue Ribbon Committee under the chairmanship of Prof. Abhijit Sen to study the impact of futures market on cash prices and inflation. The committee has yet to submit its report, though it is expected that it is unlikely to blame futures markets for food inflation. It would appear that any reversal of the decision of banning futures trading will take place only after the committee's report is released.

A secondary result of this policy development is further delays in passage of the crucial amendments to the Forward Contracts Regulation Act in the Indian parliament. This important legislative reform provides FMC with much needed autonomy, supports its growth into a stronger more effective regulator, and also opens doors for the introduction of more innovative derivative products like options, index futures and weather futures.

Appendix 1
Selected Material from Project Launch Event

"Commodity Futures Markets Project Launch"
October 13, 2006
Hotel Taj Mansingh, New Delhi

Mr. Charles Seeger Financial Markets International, Inc.	Mr. Grant Collins Financial Markets International, Inc.
Mr. L. Mansingh Department of Consumer Affairs	Mr. S. Sundareshan Forward Markets Commission
Mr. R. Jayaprakash Financial Markets International, Inc.	

ATTENDEES

Mr. Alok Kumar Agarwal Alankit Imaginations Ltd.	Mr. R.V. Anuradha Amarchand Mangaldas - Solicitors & Advocates
Mr. Yatin Arya Bharti Airtel Ltd.	Mr. Gokul Patnaik Cebeco India Pvt. Ltd.
Mr. N.K. Choubey Central Warehousing Corporation	Mr. Anurag Bhatnagar Ch. Charan Singh National Institute of Agricultural Marketing
Mr. S. Prabhakar CMIE	Mr. Dibyajyoti Bora Confederation of Indian Industry
Mr. Sarju Singh D1 Oils Ltd.	Mr. Ganesh Singh Dabur Ayurved Ltd.
Mr. Suranjan Upadhyay Dabur Ayurvet Ltd.	Mr. D.C. Devgune Department of Consumer Affairs
Mr. G. S. Negi Department of Consumer Affairs	Mr. Sudhir Shyam Department of Consumer Affairs
Mr. Paul Joseph Department of Consumer Affairs	Mr. Alok Chandra Department of Economic Affairs
Mr. Girish Agnani ICICI Bank Ltd.	Mr. Joseph Massey Multi-Commodity Exchange of India Ltd.
Mr. Madan Sabnavis National Commodity & Derivative Exchange	Mr. Ravindra Sachdeva National Commodity & Derivative Exchange
Dr. Anil Sharma National Council of Applied Economic	Mr. S. George National Multi-Commodity Exchange

Research	
Ms. Baljeet Kaur National Multi-Commodity Exchange	Mr. Surendra Mehta National Multi-Commodity Exchange
Mr. Kailash Gupta National Multi-Commodity Exchange	Dr. C. Prabhu Rabo India Finance Pvt. Ltd.
Ms. Elizabeth Hogan USAID	Mr. Ashok Jha USAID
Mr. Aleen Mukherjee USAID	Mr. Lawrence Paulson USAID
Mr. Venkat R. Chary Advocate - High Court	Mr. C.K.G. Nair Former Director - Department of Consumer Affairs
Ms. Poonam Barua Public Affairs Management	Ms. Aarti Malhotra Public Affairs Management

FMC, US agency launches futures market programme

http://WWW.financialexpress.com/fe_full_story.php?content_id=143401

ASHOK B SHARMA ECONOMY BUREAU Posted online: Saturday, October 14, 2006

NEW DELHI, OCT 13: The US has decided to help India in streamlining the commodity futures market and making its operations more transparent. This programme would be under the US- India Knowledge Initiative in Agricultural Research and Education.

The US Agency for International Development (USAID) and regulator of futures market in India, the Forward Markets Commission (FMC), launched a Rs. 4.5-crore ($1 million) commodity futures market programme on Friday in the capital.

Speaking on the occasion, US Agency for International Development's India mission deputy director Beth Hogan said, "Drawing on our experience, the US wants to help India improve futures markets support and the country's 120 million farming households. An effective commodity futures market here can help farmers to guide planting decisions and manage the risks of market fluctuations."

The Secretary, Department of Consumer Affairs, L. Mansingh and Forward Markets Commission Chairman, S Sundareshan also attended the launch.

- The Rs. 4.5-cr commodity futures market programme is part of US-India Knowledge Initiative in Agricultural Research and Education
- FMC to lead work on regulatory issues for the market place
- US Agency for International Development support to be used for technical assistance from
- Financial Markets International Inc and the US Commodity Futures Trading Commission

According to Hogan, the programme will promote vibrant and safe commodity futures markets by making the farm products market more transparent and available to the country's farmers.

The programme represents a practical benefit from co-operation between the US and India under the joint agricultural knowledge initiative launched by US President Bush and Indian Prime Minister Manmohan Singh in July 2005 and subsequently signed in March 2006 during Bush's visit to India.

Forward Markets Commission will lead the work on regulatory issues for the market place. US Agency for International Development support will be used for technical assistance from Financial Markets International Inc and the US Commodity Futures Trading Commission.

USAID to invest $3mln in commodity future market program

New Delhi, Oct 13 (UNI) In an effort to develop institutional infrastructure

for an efficient commodity futures market in India, the United States Agency

for International Development (USAID) and the market regulator Forward

Markets Commission (FMC) today launched a Rs 4.5 crore Commodity

Futures Market programme.

The programme will be carried on for three years on a year-on-year basis with a total investment of 3 million dollars.
The project will assist the FMC, Department of Consumer Affairs and leading Indian exchanges in developing the legal, policy, regulatory and operational environment necessary for promoting a vibrant and safe commodity futures market in India.

''Drawing on our experience, the US wants to help India improve futures markets support India's 120 million farming households,'' USAID India Mission India Director Beth Hogan told reporters here.

Secretary, Department of Consumer Affairs, L Mansingh said that an effective commodity futures market can help farmers to guide planting decisions and manage the risks of market fluctuations.

The programme will promote vibrant and safe commodity futures markets by making the farm products market more transparent and available to Indian farmers.

The Forward Markets Commission will lead the work on regulatory issues for the market place.

USAID support will be used for technical assistance from Financial Markets International (FMI) and the US Commodity Futures Trading Commission.

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Appendix 2

Commodity Futures Market Project
Work Plan

USAID/India Commodity Futures Market Project
Work Plan Timetable 2006-2007

Task/Activity Description	2006			2007									Staff/Partner	Deliverables
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept		
1. Legal and Institutional Strengthening of Regulation, Surveillance and Enforcement														
Drafting and Promulgation of new Regulations/Directives for FMC													Collins, Hathaway, Jayaprakash, Seeger	Necessary Regulations Drafted and FMC Approved (estimated at 25 regs.)
Review of the FMC's existing enforcement infrastructure and associated comments/recommendations													Collins, Jayaprakash, Seeger	Report published on FMC Enforcement Infrastructure
Development of an FMC Enforcement Manual													Collins, Seeger	Training Manual on Enforcement Published
Institutional strengthening of FMC's Division of Counseling and Enforcement													Collins, Seeger	FMC Staff Trained in No-Action Letter Process
Review of FMC's existing monitoring and market surveillance system													Hathaway, Jayaprakash, Collins	Assessment Published on Recommendations for Monitoring / Surveillance

Task/Activity Description	2006			2007									Staff/Partner	Deliverables
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept		
Review and comments on the GoI approved National Commodity exchanges' current practices on Task 1, Activity (vii) (a)-(h)													Collins, Hathaway, Jayaprakash, Seeger	Incorporated into FMC Regulation Drafting Process
Comments on the National Commodity exchanges' risk management systems													Hathaway, Jayaprakash, Collins	Assessment of Risk Management System
Development of FMC Manual for Inspection/Examination of Intermediaries													Hathaway, Collins, Seeger	Manual Published on Inspection
Assistance in formulating design of Electronic Surveillance System for FMC													Hathaway, Jayaprakash, TBD Expert	Best Practice Concept Drafted Surveillance
Acceptance by FMC of Electronic Surveillance System concept													Hathaway, Jayaprakash	Concept Accepted by FMC
Training - Investigation and Enforcement (fraud and manipulation) FMC and exchanges													Collins, Rodrigues	FMC Staff Trained
Training – Risk Management, Market Surveillance, Inspection/Examination of Intermediaries FMC and exchanges													Hathaway, Rodrigues, CFTC	FMC Staff Trained
Training – Promulgation of Regulations and Rule making/ SROs for FMC													Collins, Seeger, Rodrigues, Levine	FMC Staff Trained

Task/Activity Description	2006			2007									Staff/Partner	Deliverables
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept		
2. Development of Institutional Infrastructure														
Training – Bankers, on Warehouse Receipts and Hedge Lending; State Marketing Boards, and Agriculture Graduates on Grades and Standards/International Best Practices													Jayaprakash, Rodrigues, TBD expert	Professionals Trained in Train-the-Trainer programs

Appendix 3

Principal and Options Tasks

The following principal tasks were undertaken by FMI:

1: **Legal and Institutional Strengthening of Regulation, Surveillance and Enforcement in the Commodity Futures Market**

The overall objective of activities under this task will be to help develop a legal, policy and regulatory environment that promote a vibrant and safe commodity futures market. Under the task, the contractor will work closely with the FMC to modernize its systems and processes and upgrade knowledge and skill of its staff in the commodity futures regulation and supervision. The contractor will provide global `best practices' technical expertise and innovative training in the following broad areas: (a) development of a comprehensive regulatory framework for commodity futures exchanges, clearinghouses, and other intermediaries; and (b) building FMC's capacity in inspection of intermediaries, market surveillance and investigation and enforcement of market manipulation and fraud cases.

FMI's assistance may include but not be limited to:

- Review of FMC's existing monitoring and market surveillance system, including rules, regulations and procedures and high-level design of an IT-enabled real time surveillance system
- Review of the existing enforcement infrastructure, including investigatory and enforcement procedures, quality and timeliness of investigations
- Development of manuals for inspection and investigations;
- Institutional strengthening of FMC's legal department, including the system of adjudication, no-action letter process
- Review of exchanges' current practices with regard to (a) dealing with market volatility, (b) default handling, (c) investigation and enforcement of market manipulation and frauds, (d) full documentation and audit trail, (e) imposition of sanctions for non-compliance, (f) oversight of member firms' activities,(g)anti-money laundering provisions, and (h) self-regulation

Associated Training

The training support under Task 1 may include, but not be limited to:

- FMC and Exchange staff: Risk management, inspection (examination of market intermediaries), surveillance, investigation and enforcement
- FMC and Exchange staff: Self Regulatory Organizations (SRO)and rule-making

Planned Outputs

1. Comments on exchange risk management systems, including the inspection, compliance and surveillance, and necessary assistance in the implementation of the recommendations
2. Comment on the existing enforcement infrastructure, including investigatory and enforcement procedures, quality and timeliness of investigations
3. Manuals for inspection of market intermediaries;
4. Recommendations on enforcement policy and manuals for investigation and enforcement
5. Review and comments on current practices on (a) dealing with changes in market volatility, (b) default handling, (c) oversight of member firms' activities across different markets (cash, futures and options markets),(d) full documentation and audit trail, and (e) imposition of sanctions for non-compliance, and necessary assistance in the implementation of the recommendations
6. The Associated training under Task 1 described above delivered.

Wherever outputs require making recommendations and the institution to which these are addressed need TA to implement them, the contractor shall propose necessary TA for the prior approval of USAID/India which will be subject to funding availability.

2: Development of Institutional Infrastructure for an efficient Commodity Futures Market

Commodity futures market requires a wide network of regulated warehouses, a system of grades and standards based on international `best practices', an extensive network of licensed testing facilities, a system for collection and disseminating of spot market price information to the farmers and hedgers, and an enabling policy and regulatory environment for banks to lend against commodities (assets) stored in warehouses.

The activities under this task will assist in developing a functioning institutional infrastructure that is necessary for efficient operation of the Indian commodity futures market. FMI activities may include, but not be limited to:

Associated Training

- Training programs for bankers on warehouse receipt financing

Planned outputs

1. Training programs for bankers, state marketing boards, and agriculture graduates on grades and standards

Wherever outputs require making recommendations and the institution to which these are addressed need TA to implement them, the contractor shall propose necessary TA for the prior approval of USAID/India which will be subject to funding availability.

OPTIONS TASKS

The activities to be taken as options under each task are marked with an asterisk (*).

Option 1: Legal and Institutional Strengthening of Regulation, Surveillance and Enforcement in the Commodity Futures Market

FMI activities may include, but not be limited to:

Review of existing regulations on capital adequacy and risk management aspects of brokers and intermediaries licensing and assistance in alignment of the regulations to international standards*
Development of a framework for testing, certification and licensing of market intermediaries*
Assist FMC in the review of risk management and surveillance systems of commodity futures exchanges and clearing houses*
A comparative analysis of the laws that govern the commodity futures market with the legal framework that exists in the developed markets with a view to identifying the gaps and areas for improvement*
Assist in building FMC's economic and market research capabilities*

Analysis of regulatory gaps and overlaps in financial market regulatory jurisdictions to improve regulatory harmonization and coordination*

Associated Training

- FMC staff: Commodity futures markets data collection and analysis*

Planned Potential Outputs

1) Comments on existing regulations on capital adequacy and risk management aspects of brokers and intermediaries licensing*
2) Recommendations on developing a framework for testing, licensing and certification of market intermediaries*
3) A comparative study of Indian commodity futures laws with those in the developed markets completed and recommendations made*

Option 2: Development of Institutional Infrastructure for an efficient Commodity Futures Market

- Assist selected State Marketing Boards and spot markets (called mandis) in the development of an efficient price collection and dissemination system
- Assistance in the development of a uniform approach to commodity grades and standards that is in harmony with other existing standards
- Fostering alliances between selected exchanges and agriculture universities to develop a network of facilities for testing grades and standards of agriculture commodities*

Associated Training

- Training support to selected State Marketing Boards on how to improve the efficiency and price dissemination practices of mandis
- Institutionalization of `Train-the-trainers' programs on grading and standardization*

Planned Potential Outputs

- Assessment report on the development and implementation of a national grading and standardization system
- Implementation of a pilot program for the development of an efficient spot market price dissemination system
- A few alliances between selected exchanges and other agriculture institutions for testing grades and standards of agriculture commodities in place*

Option 3: Knowledge Development and Deepening of the Commodity Futures Market Outreach

In order to become a robust and developed market, the commodity futures industry will need a supply of quality professionals (regulators, traders, trainers, researchers and risk managers) in the near and medium-term. It will also need to develop and implement innovative outreach programs to make sure that a significant percentage of India's farming community uses the market to hedge price risk of their agricultural produce. Under the task, FMI may work with key institutions to build their capacity to design and deliver quality training and research programs.
FMI activities may include, but not be limited to:

- An assessment of knowledge and skill gaps in the Indian commodity futures industry and the development of an action plan to address key issues identified in the assessment report*
- Develop a plan for establishing Centers of Excellence for the commodity futures and agriculture risk management industries*
- Development of innovative outreach programs in collaboration with selected partners (e.g. banks and financial institutions, trade associations, agricultural

universities) and provide strategic assistance in the implementation of one or two programs*

- Assist selected agricultural universities and business schools in the development and delivery of state-of-the-art curricula on relevant commodity futures themes*

Associated Training

- `Train-the-trainers' for university, bankers training centers, co-operatives training and business schools
- Orientation programs for policy makers in NABARD, RBI and State Agricultural Departments

Planned Potential Outputs

1) Assessment report on the existing knowledge and skill gaps in the futures industry with recommendations to fill these gaps
2) Vision Statement and Business plan for the proposed FMC sponsored "Institute of Excellence" with possible collaboration with and international institution(s)
3) A few outreach programs developed in collaboration with key institutions
4) Curricula on various commodity futures training themes developed and selectively implemented in collaboration with selected agricultural universities, business schools and bankers training centers

Appendix 4

Commodity Futures Market Project
Revised Work Plan

I. Introduction

The original Work Plan had an operational predicate which was the prompt passage of the bill amending the Forward Contracts (Regulation) Act of 1952 ("FCRA").[2] That bill would enhance the Forward Markets Commission's ("FMC") standing by providing it with full authority to regulate the commodity futures markets, budget autonomy equivalent to SEBI, and facilitate expanding its personnel capacity.[3] Thus, the principal project counterpart, the FMC, had requested the following initial technical assistance for the USAID project:

1. Regulations. Extensive regulation drafting assistance.

2. Surveillance Technology Formulation. Provide analysis of FMC market monitoring capabilities and assistance in requirement for an IT system to offer real time surveillance.

3. Inspection/Enforcement Procedures. Provide detailed manuals for orientation materials for new recruits and as stand-alone reference guides are required by the following: a) Division of Counseling and Enforcement: explaining how to initiate, investigate, and conduct an enforcement action, and referencing the statutory/regulatory basis of these powers; and b) Division of Markets and Trading: explaining in a step-by-step manner the methodology of inspecting/examining an intermediary.

4. Training. Provide the newly expanded FMC staff with training.

5. Commodity Markets Awareness. Develop and implement "out-reach" program to the agricultural sector hedger and potential market-user community.

Numerous accomplishments and deliverables in accord with the original Work Plan occurred during October, 2006, through January, 2007, and these were detailed in the FMI First Quarterly Report to USAID.

However, two major events now call for a shifting of project emphasis. First, the key legislation critical to a strengthened FMC did not pass Parliament, and to date (late February 2007) it still has not passed. Secondly, the GoI required the FMC to de-list trading in two agricultural commodities, the diet staple pulses *urad* and *tur*.

This Revised Work Plan reflects these unanticipated events. A series of meetings with USAID, FMC, DCA, FMI, and the leading commodities futures exchanges during January, 2007, developed a consensus for a revised and differently emphasized

[2] The Forward Contracts (Regulation) Amendment Act, Bill No. 29 of 2006.

[3] Essentially, the FMC will be given comparable authority to regulate the commodity futures markets in India to that granted to the Securities and Exchanges Board to regulate the securities markets in India under the Securities and Exchange Board of India Act, 1992.

focus for the technical assistance during the remainder of the first year of the project.

The new emphasis is to provide greater policy input in order to assist in clarifying the fundamental benefits of commodities futures markets to the agricultural sector of India; coordinate with the agricultural sector's key organizations in conveying the appropriate "best policies" for facilitating commodity futures markets use to gain the economic benefits for the farmer; and work closer with exchanges on proper rule applications and exchanges monitoring and surveillance. Accordingly, this Revised Work Plan sets forth revised implementation priorities consistent with the SoW.

II. Implementation of the USAID/India CFMP SoW February through September 2007

1. Legal and Institutional Strengthening of Regulation, Surveillance and Enforcement in the Commodity Futures Market

FMI will continue to be available to assist in the development of a legal, policy and regulatory environment that promotes a vibrant and safe commodity futures market. That availability will extend to the FMC, DCA, commodity futures exchanges, and the agricultural sector. The proposed amendments to the FCRA, when enacted, will further this aim. FMI will also be available to the FMC and exchanges to modernize systems and processes, and to upgrade the knowledge and skill of its staff in commodity futures regulation and supervision. To that end, FMI will provide global 'best practices' technical expertise and innovative training in the following broad areas:

a) development of a comprehensive regulatory framework for commodity futures exchanges, clearinghouses, and other intermediaries; and

b) building FMC's capacity in inspection of intermediaries, market surveillance, and investigation and enforcement of market manipulation and fraud cases.

A. Activities

The following activities, as detailed in the initial Work Plan of October 30, 2006, have been the focus of the first quarter tasks, and will remain tasks with on-going responsibilities.

(i) Drafting and Promulgation of new Regulations/Directives

Key regulations were drafted for the FMC. The FMC will later require significant assistance upon the enactment of its new authorizing legislation.

FMI formed a Working Group that comprises the two Mumbai-based National Commodity Exchanges.[4] That informative sharing process will continue.

(ii) Policy Papers

The GoI requirement to de-list two commodities from trading on future exchanges illustrated the need for greater policy work and policy information dissemination. There is urgency for this activity because (for whatever reason or perhaps for fear of retaliation) the futures industry and market users are not complaining or making a public case to GoI policymakers. The following ideas, and others, are being explored as policy paper topics with related seminars for policy makers:

1. Paper on international parallels where Governments interfered with commodity futures trading and it proved a wrong/harmful action.

2. Paper on the recent FMC action de-listing two pulses, examining supply and demand and price movements before and after de-listing, consequences for open positions, hedgers and risk management functions, status of price charges in the spot market.

3. Paper on how the introduction of futures contracts tends to reduce price volatility in the underlying cash markets.

4. Taxation paper incorporating the absence of a Value-Added Tax facility for inter-state sales, and limitations of Cenvat that could deter delivery-based trading in commodity derivatives in India.

5. Use of hedge exemptions in global commodity markets.

6. Net margining methodologies.

7. Contract assessment and approval by regulators.

8. Manipulation: its definition, prevention and prosecution.

9. Approach to fixing position limits for clients. Should there be an additional position limit for member at all?

10. Settlement price for compulsory delivery contracts. Polled spot price vs. exchange traded price.

11. Need for uniform penalty structure among exchanges.

[4] FMI anticipates that the Working Group will shortly begin to function as a 'virtual team' utilizing Internet communication. When this is attained, the National Multi-Commodity Exchange of India in Ahmedabad and the National Board of Trade in Indore will become integral members of the Working Group. Thus, the Working Group will represent exchanges accounting for about 98% of Indian commodity futures contracts by turnover.

12. FMC seems to be keen on market-wide position limit. It appears that there is no such practice in other countries. Is such a limit desirable?

13. Software changes in trading systems of exchanges now need FMC's prior approval. Desirable?

14. Should exchanges be given free hand in transaction pricing or not?

15. The current practice does not allow fresh position taking during 5 days prior to contract expiration.

16. Why not special margins and position limits be applied uniformly across all clients? Can exchange restrict the application of special limits to offending clients selectively?

(iii) Policy and Practical Outreach

FMI, DCA, and USAID (via its consultant Don Greenberg with Larry Paulson and Ashok Jha) have all noted the need for much greater policy sector outreach. The premise is that commodity futures markets around the world are demonstrably of economic value to the agricultural sector through *price risk management* and *price discovery*. This demonstrable information needs to be told in India; and, told by non-exchange sources. Accordingly, the FMI project is organizing numerous conferences and seminars with agricultural sector organizations and holding these conferences in venues other than Mumbai.

Leverage will also be factor in the FMI activity, as this was commenced by CTO Larry Paulson in meetings with MCX and NCDEX. FMI will encourage their efforts and augment their activities in order to deepen the resources available. Similar coordination and leveraging is underway with the agriculture sector.

The result will be a greater emphasis on research, policy papers, and out-reach conferences for and with the agriculture sector.

The following activities of the initial Work Plan remain either underway or completed:

- Review of the FMI's existing enforcement infrastructure

FMI has finalized an assessment of the FMC's investigatory and enforcement procedures, as well as the quality and timeliness of investigations.

- Development of an Enforcement Manual

FMI drafted a manual for the FMC explaining how to initiate, investigate and conduct an enforcement action, and referencing the statutory/regulatory basis of these powers. See FMI Work Product: *"Outline of Manual on Investigation and*

Disciplinary Action along with A review of Investigation And Disciplinary Action Infrastructure of FMC."

- Institutional strengthening of FMC's Division of Counseling and Enforcement

The publication of the enforcement manual described in above and its use in the orientation of new recruits to the Division of Counseling and Enforcement will form an essential element in the institutional strengthening process. FMI will focus on this capacity building post enactment of the FCRA amendments.

- Review of FMC's existing monitoring and market surveillance system

FMI has evaluated the FMC existing market surveillance capabilities, and reviewed its design requirements for a real-time, IT-enabled surveillance system. See FMI Work Product: "*Developing a Comprehensive Electronic Market Surveillance System for the Forward Markets Commission* based upon *Developing an electronic Market Surveillance System, along with a Review Regulatory Activities of FMC and Exchanges in relation to IOSCO best practices in Market Surveillance."*

- Review of exchanges' current practices

FMI will continue to work with the NCDEX and MCX (representing over 95% of commodity futures markets volume) to assess the role of the exchanges in: (a) dealing with market volatility; (b) default handling; (c) investigating market manipulation and fraud, and the taking action against the alleged perpetrators thereof; (d) ensuring full documentation for and audit trail of commodity futures transactions; (e) imposing sanctions for non-compliance; (f) overseeing member firms' activities; (f) anti-money laundering provisions; and (h) self-regulation.

B. Associated Training

FMI will proceed with previously scheduled training for the NCDEX, MCX, NMCE, NBOT, and FMC staff on the following:

i. Risk management techniques;

ii. Inspection/examination of market intermediaries;

iii. Market surveillance;

iv. Investigation and enforcement (fraud and manipulation); and

v. Promulgation of Regulations at the FMC and Rule-making at the Exchanges, including the role and responsibilities of SROs.

The various training sessions and conferences are detailed in the appended Work Plan Timetable. Recognizing that the FMC is not likely to have a 'critical mass' of employees requiring further training until 3Q'07, FMI expects that the bulk of the training support to occur during the period 4Q'07 and 1Q '08.

C. Planned Outputs / Deliverables

i. Draft Policy Papers and disseminate via briefing sessions, seminars, policy sessions, and conferences with policy makers;

ii. Support/spnsor agricultural sector conferences on the pratcial use and merits of commodity futures markets;

iii. Draft Regulations/Directives for the FMC's consideration;

iv. Comments on the existing FMC enforcement infrastructure, including investigatory and enforcement procedures, quality and timeliness of investigations;

v. Recommendations on enforcement policy and manuals for investigation and enforcement;

vi. Manuals for inspection/examination of market intermediaries;

vii. Comments on the exchanges' risk management systems, including the inspection, compliance and surveillance, and any necessary assistance in the implementation of recommendations thereon;

viii. Review and comments on the exchanges' current practices on (a) dealing with changes in market volatility, (b) default handling, (c) oversight of member firms' activities across different markets (cash, futures and options markets), (d) full documentation and audit trail, and (e) imposition of sanctions for non-compliance, and any necessary assistance in the implementation of resulting recommendations thereon; and

ix. Delivery of associated training.

2. <u>Development of Institutional Infrastructure for an efficient Commodity Futures Market</u>

Commodity futures markets require a wide network of regulated warehouses, a system of grades and standards based on international 'best practices', an extensive network of licensed testing facilities, a system for the collection and dissemination of spot market price information to farmers and hedgers, and an enabling policy and regulatory environment for banks to lend against commodities (assets) stored in warehouses.

A. Activities

FMI's activities under Task 2 will be geared to the development of a functioning institutional infrastructure that is necessary for efficient operation of the Indian commodity futures market.

B. Associated Training

i. Training programs for bankers on warehouse receipt financing.

C. Planned Outputs / Deliverables

i. Training programs for bankers on warehouse receipts and hedge lending; state marketing boards, and agriculture graduates on grades and standards/international best practices.

III. Option Tasks under the USAID/India CFMP SoW

The SoW identifies a series of Option Tasks for Years 2 and 3 of the CFMP that reflect the complexity of commodity futures markets and the interdependence of its various constituents. These Option Tasks incorporate an increasingly granular approach to Tasks 1 and 2 under the SoW, and add another – "Knowledge Development and Deepening of the Commodity Futures Outreach." FMI remains convinced of the merits of these activities to ensure the CMFP's overall success. Indeed, as was noted earlier, the FMC and various exchanges have stated that innovative outreach programs are required to educate Indian society as a whole about the benefits of commodity futures markets. Therefore, wherever possible, and without detracting from the tasks under this Work Plan, FMI will seek throughout Year 1 of the CFMP to build the foundation for the roll-out of the Option Tasks envisaged in Years 2 and 3.

IV. No Budget Modification Necessary

This Revised Work Plan reflects a revision in activity *emphasis*, and therefore it carries no Budget impact. Importantly, substantial accrued savings are occurring due to the USAID approved rates for staffing of local personnel at rates lower than anticipated.

Appendix 5

FMC's First List of Regulations required for Commodity Derivatives Market

1. Regulation of Commodity Pool Operators
2. Regulations for Depositories in Commodity Derivatives
3. Criteria for Fit and Proper Person Regulations
4. Regulations for Foreign Institutions Investors in Commodity Derivatives
5. Guidelines for Investors Protection Funds at Commodity Derivatives
6. Awareness and Investors Protection Rules
7. Regulations for Market Making
8. Regulation for Central Database of Market Participants
9. Rules for Commodity Derivatives Portfolio Managers
10. Guidelines for fair practice/code of conduct for public representatives and FMC Nominee Directors
11. Regulations for Self-Regulatory Organizations
12. Regulations for Commodity Brokers and Sub-brokers
13. Regulation for Prohibition of Fraudulent and Unfair Trade Practice Relating to Commodity Derivatives
14. Regulations on Procedures for Commission Meetings
15. Capital Adequacy Regulations for Exchanges and Commissions Meetings
16. Regulations for Protection of Customers Interests and Funds
17. Certifications of Intermediaries Regulation
18. Regulations on Financial Record Keeping
19. Systems Audit Regulations
20. Margin Calculations Methodology Regulations

Appendix 6

FMC's revised List of regulations required on a priority basis

1. Members/Brokers and Sub-brokers Regulations
2. Clearing members, professional clearing members, Assayer, Registrar and Depository regulations
3. Guidelines for Net worth requirements for all intermediaries in the commodities market, especially Assayer, Registrar and Depository Participant
4. Regulations to retain records of intermediaries for a specific period of time and access limits of such financial records pertaining to privacy policies
5. Regulations for SROs, including Commodity Exchanges/Associations, Depositories
6. Fit and Proper Person Regulations
7. Portfolio Management Services Regulations
8. Guidelines for appointment of CEO, Governing Commission and Statutory Committees
9. Insider trading prohibition regulations
10. Prohibition of Fraudulent and Unfair Trade Practices Relating to Commodities Derivatives Trading Regulations
11. Procedure for holding enquiry and imposing penalties by adjudicating officers Regulations (sic)
12. Procedure for holding Enquiry by Enquiry Officer and Imposing penalty Regulations

Appendix 7

Brief Proceedings and Conclusions on the Meetings of FMI with Members of Prof. Abhijit Sen Committee

Prof Abhijit Sen Committee. FMI also prepared a summary power point presentation. The following reports on the sessions with each member of the Sen Committee in May. The overall response was very positive, keen interest in our research, and the Committee appears quite strongly convinced of the economic benefits of futures trading from both the price discovery function and the hedging function. All mentioned that they thought the delistings were purely politically motivated, but did not dismiss the importance of politics.

All the members of the Committee were offered FMI's assistance in preparing any further research or study that would help it in its work. Most indicated they would quietly welcome this.

Prof. Abhijit Sen, New Delhi

Our first meeting was with the Chairman of the Committee and he spent considerable amount of time trying to understand why the HAFED wheat hedging experience was successful. He was keen to understand deeply why the wheat contract was considered well designed. His main concern was whether FMC is capable of handling the expanding volume of trades in the futures markets, and what regulatory reforms are needed to strengthen FMC. Briefly we discussed the Roadmap for Commodity Futures Markets prepared by FMI in 2004, and especially Chapter II pp 24-53 that outlined detailed regulatory improvements. (A copy of the Roadmap has since been sent to all members of the Committee). We also discussed the international prices of wheat, that India's were the lowest, and about India's opportunity to become world benchmark for white wheat.

Prof. Prakash Apte, Indian Institute of Management, Bangalore

Prof. Apte was quite in agreement with the contents of our presentation and showed deep interest in the research papers that FMI had prepared. He asked questions on governmental interventions in other countries. We left with an impression that the professor's views on the matter were unambiguously positive. A brief discussion also took place about associating with the Institute and the leading exchanges in supporting research programs on commodity futures. He hoped the CFMP might be able to support this. Prof. Apte suggested a few alternatives which will be reviewed by Mr. Seeger in the light of discussions with the exchanges, and available budget before submitting to USAID.

Prof. Sidharth Sinha, Indian Institute of Management, Ahmedabad

Prof. Sinha is also convinced about the utility of future markets. He noted with keen interest the international experience of government interventions in Ms. Corcoran's paper.

Prof. Sinha wanted to know if HAFED would have lost money had they not hedged. Our response which was sent to him subsequently, after collecting data is that, in hind sight, there would have been an additional price benefit of Rs.20. But it would have been impossible for HAFED to foresee the price in April when they hedged in the absence of a liquid futures market. Prof. Sinha also said that the functioning of futures market has to be seen in the light of broad contours of the government's agricultural policy encompassing MSP, PDS, import duty, export controls, etc. Hence the coexistence of futures market with food security requirements of the government needs to be closely examined.

Dr. Kewal Ram, acting Chairman & Member, Forward Market Commission

In the meeting with Dr. Kewal Ram, the other member Mr. Rajiv Agarwal and Economic Adviser Mr. D.S. Kolamkar were also present, along with other senior officials of FMC.

FMC was fully in agreement with the views expressed in our papers. FMC had defended the futures market at the government level and fought very hard against the ban. But the decision was clearly political and has not been justified out of economic considerations. Under these circumstances, the presentations funded by USAID (however excellent) will not convince the leftist parties. Thus, Dr. Ram felt that the arguments in support of futures markets in agricultural commodities should come from authors who are perceived as truly independent Indian authorities, or who are known to be leftist supporters. The FMC officials also discussed any evidence of benefits of futures markets to the farmers and infrastructural problems and other inefficiencies associated with cash markets coming in the way of unlocking full benefits of futures market.

Mr. Sharad Joshi, Farmer Leader

Mr. Sharad Joshi, farmer leader from Maharashtra, is a vocal supporter of the futures markets and its beneficial impact on the livelihood of farmers. This has been borne out at various awareness programs conducted by FMI in association with exchanges and addressed by Mr. Joshi and reported to USAID. The FMI team could not meet Mr. Joshi as he was traveling. Mr. Seeger, however, spoke to him over phone when he expressed his eagerness to see our presentation. A meeting will be arranged to brief him fully on the subject shortly on his return from US later this month.

Conclusions

All members were in favour of futures markets and they do feel that the current inflationary trend in prices is due to demand and supply mismatches, and not due to the existence of futures markets.

At the same time the Government is concerned about the rise in prices of agricultural commodities that cater to the basic needs of the poor viz., pulses and food grains. Thus, the Committee members realize that their Report is highly sensitive. While the Committee members believe the ban on certain commodities was not justified, they are not certain the Communist Party will be mollified by their Report.

- This could also mean that the government may come under pressure in other futures-traded agricultural commodities too *whenever* the consumer prices rise.

- They hope their Report will clear the air, permit renewed trading, and offer some information to blunt future political attacks (but uncertain on the last point).

- The Government may find the going *tough* for promptly passing the amendment bill to FCRA.

Appendix 8

Additional Research on Agricultural Commodity Futures

To further assist the Sen Committee a compilation of the following short list of scholarly articles on agricultural commodity futures markets and benefits to farmers was forwarded to Prof. Sen and Committee Members

1. Curtis, Charles E., Jr., Kahl, Kandice H., McKinnell, Cathy S., Risk-Efficient Soybean Marketing: The Contribution Of Commodity Options To The Producing Firm, Review of Futures Markets, Vol: 0006, Issue 002, 1987.

   The purpose of this paper is to evaluate the contribution of options as a new market risk-management tool available to the soybean producer. Conclusions are drawn by comparing the efficient portfolios identified with and without the use of options as a pricing tool.

2. Gilbert, Christopher L., Futures Trading, Storage, And Price Stabilization, Review of Futures Markets, Vol: 0008, Issue 002, 1989.

   This paper argues that futures trading facilitates storage and thereby stabilizes cash commodity prices. The argument is illustrated by numerical calculations of Stationary Rational Equilibrium price and storage functions with and without futures trading using a recently developed contraction-mapping procedure.

3. Haigh, Michael S., Holt, Matthew T., Hedging Multiple Price Uncertainty In International Grain Trade, Research Symposium Proceedings, Vol: 1999, Issue 001, 1999.

   In this study, commodity and freight futures contracts are analyzed for their effectiveness in reducing price uncertainty for international traders. Results confirm that the unique freight futures market is a useful mechanism for reducing price uncertainty. The research provides valuable information about reducing uncertainty for traders and gives a better understanding of the linkages between related markets.

4. Mattos, Fabio, and Philip Garcia, Price Discovery and Risk Transfer in Thinly Traded Market: Evidence from Brazilian Agricultural Futures Markets, Review of Futures Markets: Vol 14, Issue 4, 2006.

   The paper investigates price discovery and risk transfer of Brazilian agricultural futures contracts. It appears that futures markets facilitate the transmission of information even when trading is insufficient to warrant systematic hedging.

5. Tesar, Robert, Agricultural Options: Practical Usage By A Commercial Firm, Review of Futures Markets, Vol: 0005, Issue 001, 1986.

This paper concentrates on how farmers and the commercial entities that help farmers can use options in place of and in addition to other tools available to them in the marketplace. The results confirm the usefulness of using agricultural options to manage risk.

6. Wilson, William W., Hedging Effectiveness Of U.S. Wheat Futures Markets, Review of Futures Markets, Vol: 0003, Issue 001, 1984.

The purpose of this study is to evaluate the effectiveness of hedging wheat at major United States cash markets against the three US wheat futures markets. The study shows it is possible to cross hedge as well as spread hedges across more than one futures contract.

All of the above listed scholarly articles are available online, at http://www.rfmjournals-archive.com/, with the exception of report authored by Mattos Fabio and Philip Garcia.

Appendix 9

A note on commodity futures markets in China & India submitted to Prof. Abhijit Sen Committee based on a presentation By Mr. Li Xgui at FAO Conference

FMI recently forwarded you a presentation made by Mr. Li Xgui, who represents the Chinese government with the China Grain & Oils Information Center. This presentation at the FAO (Food & Agricultural Organization of the UN) *International Conference on Commodity Exchanges and their Role in Market Development and Transparency,* May 15, is relevant to Indian agricultural and futures markets.

Mr. Li Xgui described the positive role that futures exchanges are playing in China, and how the Government is assisting agricultural development via commodity futures exchanges. The Chinese government asserts keen interest in developing and overseeing robust futures markets (and indeed has been autocratic in some of its actions in these markets), whereas the Indian government has recently stopped exchange futures trading in several commodities.

According to Mr. Li Xgui, the Chinese government is currently pursuing the following:

- Introduction of more commodities for futures trading;
- Regulatory reforms, including better surveillance and risk management systems;
- Inclusion of financial institutions in commodity futures markets;
- Integration of domestic and international commodity markets by permitting domestic entities to trade on international bourses;
- Permitting public sector hedging programs.

By contrast, the Indian government acted to suspend futures trading in pulses and wheat, in the hope of combating food inflation. However, food inflation, of vital concern to all countries and especially to India, appears to be rising on a global basis. Many experts are now describing this inflation as a structural phenomenon, precipitated by growing global prosperity and the recent surge in bio-fuel production diverting corn and other crops to energy uses.

When wheat and pulses futures prices rose earlier this year, the commodity futures markets in India were merely broadcasting supply and demand imbalances. The wheat market price in India has gained between 15 to 20% since the ban on futures trading, reflecting the tight supply situation. Since farmers tend to be very responsive to futures prices that signal supply shortfalls, by acting to increase output, they have been deprived of a valuable tool in making rational planting decisions. As a result, the price inflation India is now experiencing could be aggravated by the banned futures contracts.

It is worth noting that in the United States, where deferred corn futures prices were at record highs relative to soybean and wheat prices during March 2007, farmers shifted an unprecedented number of acres to corn planting, resulting in a retreat of corn prices by 20%. As has often been observed, the best cure for high prices is high prices.

In addition to helping curb inflation through price discovery, futures markets provide valuable hedging and risk mitigation tools to all participants in the agricultural supply and value chain.

To achieve well functioning and integrated commodity and futures markets, India could consider several policy initiatives that include:

- Improve the storage and grading infrastructure of agricultural commodities;
- Enable bankers to provide commodity financing;
- Establish an independent, autonomous futures market regulator with adequate market surveillance, enforcement powers, and knowledgeable staff;
- Encourage the healthy growth of exchange self regulatory operations and organizations, with appropriate monitoring systems;
- Permit the use of options.
- Increase the awareness of the benefits of futures trading as well as mechanics of trading.

It is heartening to note that several of the above measures are being taken, or contemplated, by the Government of India. In this context the passage of the amendment bill to FCR Act pending before the Parliament is crucial. One hopes that the recent governmental interventions do not put a hold on the passage of the amendment in its original form.
Regarding the point on *awareness,* the Dalian Commodity Exchange of China has an initiative called a "*Thousand villages and ten thousand farmers*." This initiative urges farmers "to master the essence of commodity markets and relevant marketing skills". With USAID support, FMI has actively sponsored many such awareness programs throughout India in close association with MCX, NCDEX, as well as the FMC. The response to these farmer awareness programs has been overwhelming. At each such gathering, close to a thousand farmers came to hear eminent speakers from the agricultural community explain futures markets, and how they can help farmers realize the '*right'* price. Also, the attending farmers embraced the technological aspects of modern futures markets, grasping the informational advantage such markets convey to them.

India has a bright future as a leading player in the world economy. It also has the unique opportunity to become the world pricing benchmark for several agricultural commodities that India produces and consumes in great quantity. In order to take its place as an agricultural giant, India will need to adopt far-sighted and consistent policies proven to promote sustained growth.

Appendix 10

Report on the farmer awareness programs held under the CFMP during April –July 2007

- **Moga, Karnal March 27, 2007**

A joint awareness program between FMI CFMP and NCDEX at Moga was attended by 900 farmers. Mr. R. Jayaprakash pointed out that the program was meant to educate the local farming community about the benefits of commodities futures markets in terms of price discovery and price risk management. The futures markets will help the farmers in realizing better prices. He assured that FMC, the regulatory body, is keeping strict vigil on the working of the futures exchanges. He also clarified that the passage of the Amendment to Forward Contracts regulation Act is under the consideration of the Indian Parliament since 19th December, 2006. The amendment will lead to expanded autonomy, launch institutional restructuring and recruit additional professional staff under FMC. Mr. Sharad Joshi put forth that it was necessary for farmers of Punjab which is called the wheat granary of India to take advantage of technology. It was told that the operations were simple which can be learnt by young persons in the villages who can open small kiosks for price dissemination. He also assured the farmers that in case they choose to hedge, they would be assured of the locked-in price by the exchange. The other prominent speakers like Mr. Bhupinder Singh Mann and Mr. Ratan Mann focused on the farmers not getting fair price for grains as well as other commodities and vegetables. They also lamented the role played by "Adatiyas" (spot market brokers/aggregators) and the exploitation faced by the farmers. The need was also expressed for good warehousing facilities and for bank finance for commodities stored in warehouses.

- **Ramtek, Maharashtra April 6, 2007**

About 600 farmers from the neighboring villages attended the Ramtek seminar. Farmer leader Mr. Ram Neole enumerated the benefits of commodities futures markets to the audience pointing out the point that the futures market will help in better price realization. Banker Mr. Aditya Jha mainly spoke of finance available to the farmers for short and medium term loans on the basis of warehouse receipts. Dr. Prabhakar Patil, Director, FMC spoke about the regulatory measures of FMC to ensure smooth and transparent functioning of the exchanges. He pointed out that the Government has taken this important initiative of going ahead with the resurrection of futures market for the benefit of everyone in the value chain that included the farmers. The futures markets will protect the farmer against fluctuations in the prices of farm produce. The market can flourish only through larger participation of farmers.

- **Karnal, Haryana Apri1 11, 2007**

The Karnal program was attended by over 600 farmers from the town and neighboring villages. Mr. Sharad Joshi and Mr. Bhupinder Singh Mann explained to the farmers that they could lock in a future price by hedging on exchange platforms and that, come what may, the exchanges would guaranty that they would get the contracted price. The farmers can also access loans on the basis of the warehouse receipts. The farmers were assured that they could rely on the working of the commodity exchanges as it is being supervised by the FMC structured under government of India. The body will get further autonomy from the government in the coming months, which will increase its efficiency. This went well with the farmers who attentively listened to their leaders. There were several local farmer leaders present who used a forum for voicing the concerns of the farmers in not getting market related prices for their produces. Officials from the Bank explained various schemes that are available to the farmers including warehousing finance.

- **Hyderabad April 30, 2007**

FMI supported the awareness program at Hyderabad conducted by MCX in association with Federation of Farmers Association (FFA), an association working for the farming community at grass root level with innovative programs. Around 250 farmers attended the program. Addressing the participants, Mr. D.S. Kolamkar, Economic Adviser, Forward Markets Commission (FMC), highlighted the fact that the government has encouraged futures market for the benefits of the farmers. As a regulator, FMC is taking adequate steps for orderly and proper functioning of the market. Reserve Bank of India executive Mr. R. Gandhi, even while raising concern for food security in India, tried to dispel myth about futures trading resulting in increase in food grain prices. In fact, futures markets would help in averting crisis arising out of crop shortages and crop failures. Mr. P. Chengal Reddy, Chairman, Federation of Farmers Associations stated that they the futures market will benefit the farmers but it will take time for the farmers to realize its significance. A.P. Finance Minister Mr. K. Rosaiah stressed the need for allowing farmers to have a say in fixing the prices of agricultural commodities and also asked the farmers to build self-help groups to disseminate inputs and along with that information on futures market.

- **Guntur, Andhra Pradesh, May 7, 2007**

The chilli and cotton-growing belt of Guntur along the coast of Andhra Pradesh witnessed a huge gathering of around 1500 farmers. Mr. Venkatesulu, GM, AP Markfed clearly voiced the concerns of the farmers, as price realizations are not taking place at grass-root level. The Markfed plans to help the farmers and come forward as aggregators. Mr. R. Ajit Kumar, Commissioner for Agriculture, emphasized on the importance of efficient supply chain and also for efficient warehousing facilities to reduce spoilage which was a major hindrance in agricultural growth. Dr. Y. Shivaji, former Member of Rajya Sabha, explained to the farmers that they face exploitation, as they are not able to get the remunerative prices of their produce because of micro level presence. FMI representative Mr. Indranil Mukherjee stated that the futures exchanges give a national level price discovery mechanism and thereby better price realization. In fact, price discovery and hedging are the major economic uses of futures market. FMC is also taking adequate steps for the smooth functioning of these markets and further powers will be rendered upon them once the standing committee clears the amendment Bill in the Parliament.

- **Anantpur, Andhra Pradesh, July 6, 2007**

Federation of Farmers Association organized the farmers awareness program at Anantpur along with MCX and Andhra Pradesh State Remote Sensing Applications Centre (APSRAC). The program was primarily intended to create a consciousness about the use of space technology for agricultural development and creating greater awareness among farmers about the financial benefits of agricultural futures markets. The program was well attended by about 250 farmers. Dr. K. Radhakrishnan, Director, National Remote Sensing Agency, stated it has developed a rich array of data on natural resource applications and the emergent farm advisory mechanism of Village Resource Centre blends remote sensing and satellite communications for enhanced societal impact and the center can also act as a price dissemination and awareness hub for the farmers. Dr. Prabhakar Patil, Director, FMC highlighted the fact that it is very important for the farmers in remotes area like Anantpur to understand the price cycle of the crop. The Village Resource Centres will serve as information kiosks where the farmers can get to know the future prices of commodities. The farmers can also aggregate their produce and store in warehouses and access loans from Banks on the basis of warehouse receipts. FMC under the government of India is working for the improvement of the commodity futures markets in the country. FMC is further likely to strengthen their institutional capacity and develop strategies for upgrading their trading bye-laws and clearing operations.

Appendix 11

A Seminar on Product Development
For the Forward Markets Commission
Organized by FMI
Sunday
March 25, 2007
9 AM – 4 PM

Presented by
Michael Gorham
Industry Professor and Director
IIT Stuart Center for Financial Markets

Report on the Program:

As part of CFMP, FMI arranged a seminar on Product Design and innovations by Dr. Mike Gorham, Director and Industry Professor, IIT Stuart Center for Financial Markets for the benefit of officials of FMC and national level multi-commodity exchanges in Mumbai, India on March 25, 2007.

The seminar was attended by over 40 participants consisting of officials of Indian commodity futures market regulator Forward Markets Commission and the national level commodity exchanges like MCX, NMCE and NCDEX. The session was highly interactive and thought stimulating with main emphasis given on contract development. Several case studies a variety of problem contracts as well as many innovations like CME Hurricane contract, NYMEX ADP were discussed. There was some discussion on some of the Indian contract designs as well.

Recent trends in US exchanges

Kicking off with a discussion on the volumes at various international exchanges with the help of FIA industry reports, Dr. Gorham dwelt upon the growth of the industry in the last decade. Though over the years each exchange specialized in certain contracts, the trend is now changing with exchanges introducing successful contracts of competing exchanges (e.g. CBOT vs. NYMEX in metals, ICE vs. NYMEX in energy, etc.). Recent trend of mergers among mega exchanges across the globe were discussed. There was also a lot of discussion on new products, innovations and investor friendly products.

The growth in volumes has been accompanied by certain significant developments:

- Most of the agricultural commodities which had highest volumes have been wiped off by interest rate and energy contracts
- Most of the commodities are improvements on own contracts (internal imitations)
- Recent innovations in energy contracts
- Average life of a contract is less than 8 years

Talking of innovations, Dr. Gorham mentioned CME's Hurricane contract, ADP (Alternative Delivery Procedure), Floating expiration, floating position limits, etc.

Contract Design:

The basic principles to be followed in contract design are:
- Meet the needs of the commercial participants
- Able to attract speculative capital
- Increasing the number of delivery centers
- Bias towards the shorts in terms of time, location and grade can minimize the risk of manipulation.
- Well-thought limits on positions

Citing the example of wheat futures in NCDEX with 12 delivery centers he wondered if it made sense to have so many with restrictions on inter-state movement of commodities in India. India, Dr. Gorham said, discourages cash settlement. But internationally exchanges like CME encourage cash settlement over physical delivery for the following reasons:
- Reduces delivery costs as in the case of livestock.
- Risk of market manipulations such as cornering and squeezing is minimized.
- Enables convergence at maturity.

Dr Gorham concluded that the exchanges and regulator have to put in lot of research while designing contracts. He said that, "good design is a combo of art and science".

Defective designs and Problem contracts:

There was a discussion on several problem contracts in bringing home the point of defective contract design. Some of the cases briefly discussed include:
- Onions 1958 – the only product banned by Congress
- Potatoes 1976 – the worst commodity default in the US
- Feeder cattle manipulation 2005
- NYBOT's ethanol problem 2004
- CBOT's fertilizer fiasco
- Mad Cow and price limits 2004
- Failure of Chicken contracts

Many a futures contract has failed at international exchanges due to serious design defects. There was also a brief discussion on option contracts.

Appendix 11A

Topics of the Seminar:
1. Overview of developments on commodity exchanges internationally.
2. A history of contract development in the US over the past 50 years
3. Basic principles of contract development
    a.) Choice of the commodity

- b.) Contract design
  - i. Mimic cash market practices
  - ii. Remember you're matching two strangers
  - iii. Minimize risk of manipulation
  - iv. Maximize deliverable supply
  - v. Minimize uncertainty to long and short
  - vi. When to use cash settlement
- c.) Monitor cash market evolution and revise contract as needed

4. Problem contracts:
   - a) Onions 1958 – the only product banned by Congress
   - b) Potatoes 1976 – the worst commodity default in the US
   - c) Freight rates drive lumber futures crazy
   - d) Cattle become pumpkins 1979
   - e) Feeder cattle manipulation 2005
   - f) NYBOT's ethanol problem 2004
   - g) CBOT's fertilizer fiasco
   - h) Disappearing pork bellies
   - i) Mad Cow and price limits 2004
   - j) Chickens fail four times
5. Role of exchanges in the delivery process
   - a.) CBOT grains
   - b.) CME livestock
   - c.) NYBOT sugar
   - d.) Zhengzhou wheat (China)
   - e.) Cool innovations
   - f.) NYMEX's ADP
   - g.) Floating expiration in CME's Hurricane Contract
   - h.) Position limits floating with volume
6. Comments on some Indian commodity contracts
7. Discussion of design choices
   - a. Compulsory delivery vs. optional delivery
   - b. The right price for cash settlement
   - c. Matching longs and shorts for delivery
   - d. Delivery periods
8. Designing options contracts
   - a. Expiration
   - b. Strike
   - c. Exercise & assignment
   - d. Position limits
   - e. Price – minimum change, daily limits?

<u>Appendix 11B</u>

List of Participants for the Seminar on Product Development to be presented by Prof. Mike Gorham on 25th March 2007

I. Representatives from Forward Markets Commission (FMC), Mumbai

1. Shri D. S. Kolamkar, Economic Adviser
2. Shri Bharat Tripathi, Director
3. Shri Sanjay Lunia, Director
4. Shri P. K. Singhal, Director
5. Dr. Prabhakar R. Patil, Director
6. Shri Anupam Mishra, Director
7. Shri Shivanand S. Ajur, Director
8. Shri S. K. Shukla, Deputy Director
9. Shri Suvendu Ganguly, Deputy Director
10. Shri K. Jayant, Deputy Director
11. Shri R. Dharmarajan, Deputy Director
12. Shri Sandip Biswas, Deputy Director
13. Shri S. G. Kulkarni, Deputy Director
14. Smt. Shylaja Nair, Deputy Director
15. Shri Dinesh Kumar Soni, Deputy Director
16. Shri Vishal V. Nair, Assistant Director
17. Smt. Ashwini Lal, Assistant Director
18. Shri J. D. Vaishmpayan, Assistant Director
19. Smt. C. R. Dhawale, Assistant Director
20. Kumari U. K. Tharthare, Assistant Director
21. Smt. Rashmi Aggarwal, Assistant Director
22. Shri V. N. Shivathare, Assistant Director
23. Shri D. N. Bagali. Economic Officer
24. Shri S. D. Mulay, Economic Officer
25. Smt. Nutan Biwalkar, Economic Officer
26. Smt. K. K. Parte, Economic Officer
27. Smt. Rekha Nair, Economic Officer

II. Representatives from Multi Commodity Exchange of India Limited (MCX), Mumbai

28. Shri Anjani Sinha, Director
29. Shri Sumesh Parasrampuria – Chief Business Officer
30. Shri Chiragra Chakrabarty, Vice President, Training & Research & Development
31. Shri V. Shunmugam, Chief Economist

III. Representatives from National Commodity and Derivatives Exchange Limited (NCDEX), Mumbai

32. Mr. Mahesh Kewlani, Deputy Manager, Clearing & Settlement
33. Mr. Rishikesh Tamaskar, Manager, Market Watch
34. Mr. Shreyans Vijay, Deputy Manager, Risk
35. Ms. Sanvali Kaushik, Vice President, Products
36. Mr. Subrata Dutta, Manager, Compliance

IV. Representatives from National Multi-Commodity Exchange of India Limited (NMCE), Ahmedabad

37. Ms. Poonam Gupta, AVP- Business Development
38. Mr. K. S. Awari, Associate Vice President, Mumbai Region
39. Mr. Jesudas Pillai, Manager, Member Service

V. Representatives from Ahmedabad Commodity Exchange Ltd, (ACE) Ahmedabad

40. Shri P. D. Thakkar, President
41. Shri Kaushikbhai B. Shah, Vice President

Appendix 12

Report on CFTC Commodity Futures Market Training Program for officials of FMC and exchanges in Mumbai May 23-29, 2007

As part of USAID/FMI India Commodity Futures Market Project, a five-day training program on "Commodity Futures Market" by Commodity Futures Trading Commission (CFTC) was being organized from May 23 to 28, 2007 (excluding Sunday) for officials of Forward Market Commission and commodity exchanges. Participants from Reserve Bank of India and National Bank for Rural and Agricultural Development also attended the program. In all there were 41 participants. A list of participants is attached in Appendix 1.

The curriculum was well designed to provide an overview of the CFTC Futures Regulation with emphasis given on market related trade practices and manipulation, surveillance, compliance, clearing related issues and enforcement practices.

The speakers from CFTC were:

Ms. Myra Silberstein, Special Counsel, Office of International Affairs
Mr. David Kass, Senior Industry Economist, Market Surveillance Section, Division of Market Oversight
Mr. Robert Wasserman, Associate Director, Division of Clearing and Intermediary Oversight
Mr. Richard Fung, Branch Chief. Market Compliance Section, Division of Market Oversight
Mr. Paul Hayeck, Associate Director, Division of Enforcement

Mr. Kewal Ram, acting Chairman, FMC inaugurated the program. He outlined the phenomenal growth of the commodities futures market in India during the last three years and spoke about the transitional phase, which the commodities market has gone through during the last few decades. He specifically mentioned the contribution of USAID in making this program available in India, which in turn, helped wider participation from FMC officials besides enabling them to seek clarification on day-to-day issues encountered by them.

Overview of CFTC by Ms. Myra Silberstein

The main objective behind the establishment of CFTC is to protect the participants against manipulation, abusive trade practices and fraud. Ms. Silberstein highlighted the tasks functioning of each Division and the phenomenal growth of the U.S. market in the last few years. She went through the evolution of the US. futures market right from the Commodity Exchange Act (CEA, 1936) enacted by the Congress under U.S. Department of Agriculture up to the Commodity Futures

Modernization Act of 2000 (CFMA) which was based on the 1999 report of President's Working Group on Financial markets. CFTC has bilateral cooperative arrangements with other domestic regulators and also through its association with International Organization of Securities Commissions (IOSCO) for creating high standards of regulation, exchange information sharing and providing support for further development with close integration.. Besides it has also international cooperation arrangements with several regulators in other countries, FMC included.

Trade Practice Surveillance and Investigations by Mr. Richard Fung

Mr. Fung explained the functioning of the National Futures Association and other governmental agencies like Securities and Exchange Commission, Federal Energy regulatory Commission and Department of Justice. NFA, which has taken up several responsibilities like member education and also its commitment to technology, has been a key factor in the growth of US futures market that grew by about 328 per cent between 2000 and 2006. He spoke of NFA' commitment to technology, which is supported by the Background Affiliation Status Information Centre, and telemarketing rules and risk based auditing.

Mr. Fung gave a presentation on electronic markets. He discussed several issues related to electronic environment and electronic trading including order entry, electronic trading including order routing and trading card, liquidity, credit risk issues, system failures and errors. He also discussed in detail electronic trading from its basic elements to procedures for e-trading surveillance with relevant examples.

Mr. Fung dwelt long on trade practice violations. Two major areas identified were fraud on customers and threats to market integrity. The various types of trading floor fraud against customers including trading against or bucketing, trading ahead of customers, filling by offset or matching orders, disclosing orders, changing prices, allocating fills and other prearranged executions were discussed in depth. The threats to market integrity dealt with different types of wash trading and noncompetitive wash sales. He also outlined various investigative techniques to prevent or check frauds or non-competitive trading. In addition, several trade practice issues relating to electronic trading were also discussed briefly.

Contract Design and Market Surveillance and Compliance by Mr. David Kass

Mr. David Kass outlined the growth of the U.S. Futures Market. The impact was seen across the market on the advent of single stock futures in 2003 and the electronic markets replacing the OTC. The most interesting part of Mr. Kass's session was on Futures Contract Design. The products are reviewed on the basis of its volatility, market size and deliverable supplies to ensure that they are not susceptible to fraud or manipulation. Further, any new contract should satisfy certain criteria to demonstrate that it meets the economic requirements for the commodity. The deliverable system should be properly matched to satisfy both the buyer and seller as Mr. Kass showed it through specific examples of corn and soybean delivery points along the Illinois Waterway wherein the buyer prefers delivery downstream and the seller upstream.

Taking the example of lumber industry, Mr. Kass explained that basic economic uncertainty and price volatility together offer both opportunity as well as risk for firms. Since 1969, companies and individuals engaged in producing, processing and marketing lumber products have been able to reduce their price risk by hedging on the Chicago Mercantile Exchange's Random Length Lumber futures. In May 1987 the lumber industry added a new tool to manage its inherent price risk-options on lumber futures.

Mr. Kass guided the participants through the design of a market surveillance program and the objectives of CFTC in doing so. Market surveillance is intended, in combination with appropriate contract design and enforcement activities, to ensure that trading activity does not disrupt the appropriate functioning of the market or the contract. In spite of wide diversities in products the surveillance can be grouped into three categories, which are delivery of a physical commodity; delivery of a financial instrument; and cash settlement (including cash settlement by a foreign currency, as in foreign exchange contracts).

Mr. Kass pointed out that basic purpose for Position Limits is to reduce the potential threat of market manipulation or congestion. The different kinds of position limits and the core principle '5' as per the Commodity Futures Modernization Act of 2000 were discussed. He emphasized that identification of different market players like hedgers, arbitragers and speculators, determination of position limits, exempting certain hedgers through a computerized system, etc. were very crucial. He categorized manipulations on the basis of its extent of impact. Regulator's attempt to prevent manipulation and deterrence by conviction would be more efficient if manipulations could be detected with high probability. The motives of manipulation (intention) have to be clearly demarked and the various markets that are susceptible to manipulation should be closely watched. Manipulation emanates from factors like supply constraints (and related issues like hoarding), premium and discounts at with non- par delivery centers, numerous, complex, or time-consuming logistics against adequate supplies of the deliverable commodity, markets and marketing channels that are susceptible to disruptions due to weather, etc.

Audits of Intermediaries and the clearing Process by Mr. Robert Wassermann

Mr. Robert Wassermann explained the role of the CFTC's Division of Clearing and Intermediary Oversight (DCIO). At the point where the trade gets disrupted, the clearing guarantee becomes effective. This means that the clearinghouse guarantees the obligations of each clearing member. Good clearing mechanism only minimizes, not eliminate, credit risk it. In U. S., commodity brokers carrying customers (FCMs) are required by the CFTC to meet specific conditions of financial strength. However, clearinghouses frequently set higher requirements.

The importance of "Intra-Day Settlement Cycle" was discussed. Some clearinghouses undertake mark-to-market and performance bond calculations intra-day. The financial parameters are well monitored and default management is clearly reassessed periodically. He briefly touched upon SPAN - Standard Portfolio Analysis of Risk is used to assess risk for a portfolio. SPAN is the official performance bond (margin) mechanism of 53 registered exchanges, clearing organizations, service bureaus and regulatory agencies throughout the world. Derivatives Clearing Organizations (DCOs) roles, its financial resources, operational and managerial resources and eligibility and compliances were also specified. He concluded his session with some discussion on money managers and its overview. The CFTC regulatory scheme for commodity pool operators (CPOs) and (Commodity Trading Advisors) CTAs is premised upon "full and fair disclosure," both in offering documents and in periodic and annual financial reports.

Enforcement Issues by Mr. Paul Hayeck

Mr. Paul Hayeck gave an overview of the Enforcement Authority in which under the Commodity Exchange Act (CEA) the Statutory powers of investigation as per Section 8(a) of the Act gives the Commission (CFTC) the authority to conduct investigations as it deems necessary, keep investigations confidential and it has subpoena power that enables CFTC to compel anybody to produce documents and give testimony. It can seek information from entities ranging from small customers to media or foreign government agencies. Investigation of possible violators, gathering information and continuous monitoring is a tedious task and there are several types of cases and abuses, which are being taken care of by the Division.

Among the core provisions of the Act is a prohibition against price manipulation. Because price manipulation can undermine the hedging and price discovery functions of, and diminish public confidence in, these markets, the Commission, when necessary, focuses its enforcement resources on responding to potentially manipulative activity. Mr. Hayeck also discussed in detail the Sumitomo and the BP Propane cases to explain several aspects of manipulation. He also referred to the Indiana Farm Bureau case in which the respondents manipulated the congested market to make profits.

The concluding session was on Fraud and the role of CEA, which acts as a protector for the innocent individual. The fraud case of the Harrington Advisory Services and Sterling Trading Group was presented in a highly structured manner. The enforcement division keeps an eye round the clock on the market to safeguard the interest of small investors when an era of increasing individual participation is on the rise.

The five-day training program came to a conclusion with a valedictory address by Mr. Rajeev Agarwal, Member, FMC. Mr. Agarwal thanked the joint efforts made by CFTC and USAID/FMI and such type of workshop would be helpful in training the officials and creating a better environment of futures market in India. He expected more such interactive training sessions to go a long way in strengthening Indian commodity markets and regulatory mechanism. Mr. Agarwal gave away the certificates to the participants.

The program was highly valuable for all the participants. There was lot of interaction between the delegates and the speakers adding value to the sessions. The CFTC officials took participants' feedback at the conclusion of each session.

Appendix 12A

CFTC India Training 2007, Agenda

U.S. COMMODITY FUTURES TRADING COMMISSION
Three Lafayette Centre
1155 21st Street, NW, Washington, DC 20581
Telephone: (202) 418-5000
Facsimile: (202) 418-5521
www.cftc.gov

CFTC Training for the
Forward Markets Commission
Mumbai, India

AGENDA and CURRICULUM

Wednesday - May 23, 2007

9:00 - 12:00
Overview of U.S. Futures Regulation
Myra Silberstein, Special Counsel
Office of International Affairs

A. The Role and Function of the CFTC - What we do; How we do it; and Why we do it
   1. How the Commission is organized

      a) The Role of each Division

B. Development of Futures Markets in the U.S.

   1. History of the Exchanges

a) Transformation:
   i) Floor to Screen

   ii) National to Global Competition

   iii) Private Club to Public Company (demutualization)

C. History of Legislation and Development of the Commodity Futures

Modernization Act (CFMA)

D. The Role of the National Futures Association (NFA)
E. The Role of Other Governmental Agencies - SEC, FERC, Department of Justice;

and State Authorities

F. International Cooperation

1. Coordination with Other Authorities

2. Interactions among Domestic Regulators
3. Inter-agency Cooperation
4. Developing Relationships with Foreign Regulators
   a) Coordination and cooperation with foreign regulators
   b) Technical Assistance MOUs

G. Information Sharing Arrangements

(There will be a 15 minute break during the presentation.)

12:00 - 1:30 LUNCH

1:30 - 5:00
Contract Design: David Kass, Senior Industry Economist
Market Surveillance Section, Division of Market Oversight

A. Designing Future Contracts

1. Which Underlying Asset? Volatility, Market Size and More

2. Cash Settlement or Physical Delivery?
3. Physical Delivery
   a) Adequate Deliverable Supply
   b) Who Chooses Grade, Location and Time?

B. Cash Settlement
   1. Adequate Underlying Transaction
   2. Reliable, Un-manipulatable Index
   3. Avoid Leaks and Insider Trading

C. Successes and Failures: Interest Rates, Stock Indexes, Currencies Commodities

(There will be a 15 minute break during the presentation.)

Thursday - May 24, 2007

9:00 - 12:30
Market Surveillance and Compliance - Part I
David Kass, Senior Industry Economist, Market Surveillance Section
Division of Market Oversight

A. Market Surveillance
   1. Primary Purpose of Market Surveillance
   2. Monitoring Large Trader Positions
   3. Definition of a Large Trader

   4. Identification of Large Traders
   5. Daily Collection of Large Trader Position Information

B. Manipulation in Physical Delivery Futures Markets
   1. Market power - Positions Large Enough to Control the Market
   2. Adequacy/Availability/Control of Deliverable Supply
   3. Price Distortion or Artificiality - Basis and Spread Relationships
   4. Manipulation in Cash Settled Futures Markets

C. Position Limits/Speculative Limits
   1. Position Limit Exemptions

D. Systems for Market Surveillance

E. Other Tools for Market Surveillance
(There will be a 15 minute break during the presentation.)

12:00 - 1:30 LUNCH

1:30 - 5:00
Trade Practice Surveillance and Investigations - Part I

Richard Fung, Branch Chief, Market Compliance Section
Division of Market Oversight

A. Key Focus of Trade Practice Surveillance

1. Collecting, Maintaining, and Ensuring the Quality of "Audit Trail"Data to Facilitate Market Reconstruction
2. Detecting Violations of Trading Rules and other Abusive Practices
3. Creating Effective Tools for Surveillance
4. Prompt Response to Customer Complaints

B. Market Reconstruction and Audit Trail

1. Participant Information

   a) Intermediaries
   b) Liquidity Providers
   c) Customers

2. Order Information
3. Transaction Information
4. Market Data

C. Principal Types of Trade Practice Violations

1. Disclosure of Customer Orders

2. Frontrunning/Trading Ahead
3. Prearranged or Non-Competitive Trading
4. Trading Against Customer Orders
5. Wash Trades

D. Tools for Trade Practice Surveillance

1. Databases
   a) Information on Traders and Related Accounts
   b) All Transactions
   c) All Orders and other Audit Trail Messages
   d) All Market Data (prices, quotes etc.)

2. Query Tools and Reports
3. Profiles - an automated system for creating profiles of:

   a) Traders

   b) Accounts
   c) Firms
   d) Products/markets

   e) Profit/Loss analysis

4. Exception Reports for Identifying Possible Instances of Each Major Type of Trade Practice Violation
5. Automated Access to Clearing House and Position Information
6. Staffing

E. Investigations

1. The Key Elements of Investigations are:
    a) Collection/Analysis of all Relevant Audit Trail Information
    b) Collection/Analysis of Account Statements and other Account Documentation (gathered from firm/broker)
    c) Review of Audio or Video Tapes
    d) Interviewing Subjects and Witnesses

2. Jurisdiction, Coordination and Cooperation
3. Prosecution of Disciplinary Matters

4. Disciplinary Actions

(There will be a 15 minute break during the presentation.)

Friday - May 25, 2007

9:00 - 12:00
Market Surveillance and Compliance - Part II
(See Part I for details)

(There will be a 15 minute break during the presentation.)

12:00 - 1:30 LUNCH

1:30 - 5:00
Intermediary Supervision
Robert Wasserman, Associate Director
Division of Clearing and Intermediary Oversight

A. Registration
  1. Minimum Capital Requirements

  2. Segregation Requirements

B. Sales Practice
C. Supervision of Brokers by Self-Regulatory Organizations
D. Oversight of Self-Regulatory Organizations by the CFTC
E. Money Managers
  1. Commodity Pool Operators

  2. Commodity Trading Advisors

(There will be a 15 minute break during the presentation.)

Saturday - May 26, 2007
9:00 - 12:30
Audits of Intermediaries and the Clearing Process
Robert Wasserman, Associate Director
Division of Clearing and Intermediary Oversight

A. How to Conduct an Audit
1. How Often to Audit
2. Reporting Results
3. Implementation of Findings

B. Clearing
1. What is Clearing
2. Participants in a Clearing House
3. Forms of Clearing House Organizations
4. The Clearing Process
   a) Trade Processing and Positions Management
   b) Financial Management
   c) Risk Management

5. Default Management & Financial Safeguards
6. Regulation of Clearing Houses by the CFTC

(There will be a 15 minute break during the presentation.)

12:30 - 2:00 LUNCH

2:00 - 5:00
Trade Practice Surveillance and Investigations - Part II
(See Part I for details)

(There will be a 15 minute break during the presentation.)

Monday - May 28, 2007

9:00 - 12:30
Enforcement Issues - Part I
Paul Hayeck, Associate Director
Division of Enforcement

A. Authorization

1. Commodity Exchange Act
   a) Statutory Powers of Investigations
   b) Division of Enforcement Empowered Through Regulation
2. Code of Federal Regulations: Chapter 17, Part 11
   a) Confidential Investigations

b) Subpoena Power - Documents and Testimony

B. Sources of Information Indicating Possible Misconduct

1. Customer Complaints - Telephone; Letters; E-mail; and Website Forms
2. Whistleblowers
3. Anonymous Informants
4. Other Commission Divisions and Offices
5. Other Federal, State, or Local Governmental Agencies
6. Self-Regulatory Organizations
   a) National Futures Organization
   b) U.S. Futures Exchanges
7. Foreign Governmental Agencies and Foreign Futures Authority
8. Media Surveillance
9. Internet Surveillance

C. Investigation of Possible Violators

1. Sources of Information Available Without Subpoena Authority

a) Information Included in Governmental or Commercial Databases.
   i) National Futures Association (NFA) Financial Analysis and Audit Compliance
   Background Affiliation Status Information Center (BASIC)
   ii) Financial Crimes Enforcement Network (FinCen)
   iii)Federal Trade Commission (FTC) Consumer Sentinel
   iv)National Association of Securities Dealers (NASD)
   v) North American Securities Administrators Association (NASAA) database
   vi) Westlaw and Lexis/Nexis
   vii)ChoicePoint

b) Information Available Through Cooperation with Other Regulators
   i) DOJ/SEC/FTC/DSROs
   ii) Customs
   iii) Postal

c) Information Found in DCIO and DMO
   i) Exemptive, No-action, Interpretative letters
   ii) FCM Identification and Contact List

d) Requests to Registrants Pursuant to the Act and Commission Regulations

i) Section 4g

ii) Section 4i
iii) Section 4n
iv) Commission Regulations 4.23 and 4.33
v) Reports Required Under Commission Regulations Parts 15, 16, 17, 18, and 19

vi) Commission Regulation 32.7

e) Voluntary Cooperation
f) Internet
g) Customer Surveys

2. Information Requiring Subpoena Authority

a) Witness Testimony

b) Trading Records (OTC/Cash Markets
c) Telephone: Tapes and Records
d) Bank Records
e) FedEx and Other Delivery Records

D. Concluding an Investigation

1. Review and Assess Evidence

2. Wells Notice?

3. Recommendations to the Commission

a) If Action Taken, Which Venue - Federal or Administrative
b) Criminal Violations/Referral

(There will be a 15 minute break during the presentation.)

12:30 - 2:00 LUNCH

2:00 - 5:00 **Enforcement Issues - Part II**

A. Types of Violations
1. Market Integrity

a) Manipulation
b) False Reporting
c) Trade Practice
d) Insider Trading and Trading Ahead

2. Fraud or Deceptive Sales Practices
a) Solicitation Fraud
b) Misappropriation
c) Financial Reporting

3. Regulatory
a) Registration and Fitness
b) Record Keeping
c) Illegal Off-Exchange Activity

4. Derivative Liability

B. The Legal Process

1. Civil Injunctive Proceedings
2. Administrative Proceedings

C. Case Studies

1. Manipulation
a) Cornering a Market
b) False Reported/Attempted Manipulation

2. Misappropriation

a) Harrington Advisory - Purported Offshore Companies Soliciting U.S. Customers; Funneling Millions of Dollars through Nevis to South Florida
i) Involved Cooperation with Regulators from Spain, Nevis, and Netherland Antilles
ii) Money Laundering Implications
b) Internet fraud - Tracking the Violator

3. Solicitation Fraud

(There will be a 15 minute break during the presentation.)

5:00 **Adjournment**

USAID FROM THE AMERICAN PEOPLE

FMI Financial Markets International, Inc.
A USAID Contractor

Appendix 12B

List of participants of the CFTC Training Program May 23 to 28, 2007 at Mumbai for FMC and exchanges

Name	Organisation
Mr. K Jayant - Joint Director	FMC
Mr. S. K Shukla - Deputy Director	FMC
Mr. R. Dharmarajan - Deputy Director	FMC
Mr. Sandip Biswas - Deputy Director	FMC
Mr. Vishal Nair - Assistant Director	FMC
Ms. Ashwini Lal - Assistant Director	FMC
Mr. Sanjay Chadha - Assistant Director	FMC
Ms. C R Dhawale - Assistant Director	FMC
Ms. U. K . Tharthare - Assistant Director	FMC
Mr. V N Shivathare - Assistant Director	FMC
Mr. S D Mulay - Assistant Director	FMC
Ms. Nutan Biwalkar - Assistant Director	FMC
Ms. K K Parte - Assistant Director	FMC
Mr. A K Sharma - Hindi Officer	FMC
Mr. K Rajkumar - Personal Secretary	FMC
Mr. D N Bagali - Economic Officer	FMC
Ms. Rekha Nair - Economic Officer	FMC
Ms. V. V. Purohit - Junior Research Officer	FMC
Mr. S.K. Parida - Junior Research Assistant	FMC
Mr. N. J. Kadam- Junior Research Assistant	FMC
Mr. D. B. Kamthe - Junior Research Assistant	FMC
Mr. S. D. Sambre - Junior Research Assistant	FMC
Ms. A. A. Raut - Junior Research Assistant	FMC
Mr. D. D. Patel- Junior Research Assistant	FMC
Mr. R H Singh - Junior Hindi Translator	FMC
Mr. Nitin Haria - Gujrati Translator	FMC
Mrs. Mini Pawar	FMC
Ms. S. S. Sawant	FMC
Ms. Manisha Jana	FMC
Mr. B. N. Jha - Deputy Director	FMC
Mr. Neelambunj, Assistant Director	FMC
Mr. Sampath Jagannathan - Head - Mkt.Watch Surveillance	NCDEX - Mumbai
Ms. Sanvali Kaushik - Vice President - Products	NCDEX - Mumbai
Ms. Poonam Gupta - Asst. V P - Business Development	NMCE - Ahmedabad
Ms. Chitra Gothi - Executive - Product Development	NMCE - Ahmedabad
Mr. Pankaj Kumar - Research Officer -Div. of Rural Economics	RBI - Mumbai
Mr. Narayan Chandea Pradhan, Manager, Financial	RBI - Mumbai

Markets Dept.	
Mr. Jayash Shah - Vice President - Operations	MCX - Mumbai
Mr. Ramalingam - Vice President - Operations	MCX - Mumbai
Mr. Saptak - Vice President - Research	MCX - Mumbai
Mr. Sunil Kumar - AGM - DPD-FS	NABARD

Appendix 13

Report on National Conference on Emerging Platforms for Agriculture Marketing

FMI/USAID under the CFMP jointly organized a National Conference on Emerging Platforms for Agriculture Marketing on September 20-21, 2007 at Federation House, New Delhi along with FICCI and the Union Ministry of Agriculture, GoI.

The main objective of the Seminar was to engage Policy makers, academics, Peoples' representatives, representatives of the farming community and the corporate sector in a threadbare discussion on the new emerging platforms for price discovery in agri-commodities and trading from the perspective of both the farming community and the private sector. It is expected that the Seminar will serve to create a greater understanding and awareness of the positive impact of futures trading platforms. The new platforms will include the futures and the spot platforms, as well as discuss the pros and cons of options contracts in agri-commodities besides look at other recent initiatives of the private sector.

The conference was well received by leading farmer organizations; representatives of agri-based companies; Commissioners of Agriculture Marketing of major States; Senior officers of the Ministries of Agriculture, Food and Consumer Affairs; Members of Parliament; Selected banking sector officials; people from leading agi-cooperatives and Media personals.

Mr. Sharad Pawar, Union Minister for Agriculture, Consumer Affairs, Food and Public Distribution, while inaugurating the Conference stated that an efficient and seamless supply chain management has become a necessity for higher growth in agriculture. The Centre have circulated a set of draft Model APMC Rules to the states and other stakeholders to deregulate the marketing system in the country. He underlined the need to closely look at alternative models for marketing which can assist farmers in better price discovery. The demand and supply mismatch has to be narrowed down which was the main cause for surge in prices of food products. He emphasized the importance of marketing infrastructure development programmes and public-private partnership mode. Efforts are required to be made to further strengthen infrastructure for warehousing, grading and packaging. There is a great deal of urgency for expediting various regulatory changes, introduction of options and exotic products like weather derivatives and indices and implementation of Negotiable Warehouse Receipt System.

Mr. Onkar S Kanwar, Past president, FICCI voiced broader concerns about agricultural growth and export competitiveness. He suggested that the multiplicity of agencies and schemes for infrastructure or food processing should be amalgamated and brought under one umbrella. FDI should be allowed in food