FMI
Financial Markets International, Inc.
A USAID Contractor

QUARTERLY REPORT
February – April 2007

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

Submitted by
Financial Markets International, Inc.
USAID Contractor

R. Jayaprakash, Resident Adviser, Mumbai, India
Peter M. Levine, Program Administrator and Training Coordinator, FMI/HQ

INDIA COMMODITY FUTURES MARKET PROJECT
MUMBAI, INDIA

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)

Implemented by:
Financial Markets International, Inc.
7735 Old Georgetown Rd., Suite 310
Bethesda, Maryland, 200814
Tel: 301-215-7840
Fax: 301-215-7838
Email: fmi.hq@fmi-inc.net

India Commodity Futures Market Project
208, Keshava, Bandra-Kurla Complex, Bandra (E)
Mumbai 400 051
India
Tel: +91-22-6710-9102
Fax: +91-22-6710-9105

Disclaimer

Table of Contents

I. Executive Summary

Under the USAID contract for the India Commodity Futures Market Project (CFMP, or the Project) Financial Markets International, Inc. (FMI) provides technical assistance and associated training to:

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

While the Project's core program in the first quarter focused on the FMC, FMI shifted the focus of its technical assistance in the second quarter towards the private and non-governmental sector to address a number of crucial issues in the market. This change was acknowledged in the CFMP's Revised Work Plan, February – September 2007.

Under the Revised Work Plan, FMI has made use of innovative methods of public outreach/awareness and education, in-depth research and writing, and advanced training programs to: clarify the benefits of commodities futures markets to the agricultural sector of India; convey "best policies" for facilitating commodity futures markets use to the agricultural sector's key organizations; and assist exchanges on proper rule applications and exchanges monitoring and surveillance.

In the Second Quarter, the CFMP has made substantial progress in accomplishing these new objectives. A series of five scholarly research papers on the benefits of commodity future markets especially to agriculture, the results of government market intervention, and the importance of regulatory strengthening were presented to the Government of India's (GOI) Blue Ribbon Panel on commodity future markets. The Project's Mike Gorham held a seminar on Product development for officials of the FMC and the national commodity exchanges. FMI and NCDEX held an awareness program for farmers in Punjab, on price discovery and price risk management, with high-level government and agricultural-union representatives. The Project, in collaboration with the leading Indian commodity futures exchanges, has planned several additional educational and outreach programs. The CFMP also completed a study of wheat hedging at state cooperatives and the effects of government intervention on wheat futures contracts.

Building on the successes of the Third Quarter, the Project's Fourth Quarter will see further work in the areas of regulation and capacity building, including technical assistance on regulatory "best practices," educational/awareness endeavors, conferences, research and drafting of policy papers, and training for GOI officials.

II. Project Status

As mentioned in the First Quarterly Report covering the period October 2006 to January 2007, there was a need to revise the original Work Plan due to the following reasons:

- Delay in the passage of the Amendment to Forward Contracts regulation Act under the consideration of the Indian Parliament; and
- The consequent administrative delay impacting the speed with which the FMC would receive expanded autonomy, launch institutional restructuring efforts and recruit additional professional staff.

Accordingly, the Project decided to increase work with the private and non-governmental sector to address a number of crucial issues in the market. In line with this decision, a greater emphasis will be placed on programs which raise awareness of commodity futures usage by farmers, co-operatives, millers, exporters, etc. Potential partners for such initiatives which will take place in different locations across India include the State Agricultural Marketing Federations (like HAFED in Haryana), Farmers co-operative organizations and agricultural research institutes.

III. Revised Work Plan, February – September 2007

A revised Work Plan was submitted to USAID in late February 2007, reflecting these changes **(Appendix 1).**

1. **Legal and Institutional Strengthening of Regulation, Surveillance and Enforcement in FMC**

   FMI will assist 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 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.

3. **Development of Institutional Infrastructure for an efficient Commodity Futures Market**

   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.

IV. Activities Accomplished under Revised Work Plan

Regulations

The objective under this task is to develop a legal, policy and regulatory environment that promotes a vibrant, efficient and safe commodity futures market. One of the activities planned under this objective was a Workshop on draft Regulations/Rules (ref. Selected Accomplishments and Deliverables on page 4 of First Quarterly Report) and/or an Investigation & Disciplinary Action Manual with the participation of representatives from the FMC and the exchanges.

However, the FMC was not prepared to review the Regulations/Rules submitted by us because of an acute shortage of suitably qualified personnel. This situation will not be eased until new personnel are recruited following the passage of the Forward Contracts (Regulation) Amendment Act, the passage of which has again been delayed. Also, FMI learned that FMC had asked members of the Working Group of officials of the exchanges to submit their responses and comments on the draft Regulations/Rules directly to it rather than to FMI, thus rendering the proposed workshop moot.

Under the circumstances, the focus was shifted to the preparation of an Enforcement Manual by Mr. Grant Collins. Although an initial draft was given to the FMC seeking commentary thereon, none was forthcoming. Therefore the subsequent draft relied heavily upon comments received in individual meetings held with MCX and NCDEX to discuss the initial draft. The resulting draft was then submitted to FMC.

Blue Ribbon Committee and Policy Papers

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.

In response to the public outcry against futures markets and their perceived role in causing inflationary trends in the prices of essential commodities, the Government announced on February 28, 2007 the formation of a Blue Ribbon

Committee under the chairmanship of Prof. Abhijit Sen, Member of the Planning Commission of Government of India. Other members of the committee include farmer leader and parliamentarian Mr. Sharad Joshi, Indian Institute of Management professors Mr. Prakash Apte and Mr. Sidharth Sinha, besides the current Acting Chairman of FMC Dr. Kewal Ram. The Blue Ribbon Committee is 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.

FMI sought and was granted an audience with the Committee to meet professor Sen on May 1, 2007. During the entire month of April, FMI 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.

In May 2007, the Project made an electronic presentation of the findings and recommendations was made to Prof. Sen and the Committee.

The Committee received the presentation positively, asking multiple in-depth questions and making request for additional information on the experts' views of GOI's market intervention. The presentation was also made to senior officials of Economic Advisory Council of Prime Minister of India. FMI has also offered its complete services to help the Blue Ribbon Committee complete its study and prepare a report.

At the meeting, there were questions on the regulatory reforms required for the development of Indian commodity futures market. Besides briefly addressing the issues involved during the meetings, all the above policy makers were sent a copy of the volume *"Roadmap: Commodity Futures Markets Development in India 2005 and Forward"* prepared by FMI in 2004 to help determine the best approach to develop the commodity futures market in India. This examination included, *inter alia*, the legal and regulatory environment governing the industry besides the risk management needs of the agricultural sector.

Training

As mentioned above, the FMC conveyed to FMI that it was not in a position to review any of the regulations submitted by us 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.

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.

The program schedule (**Appendix 2**), A report on the program (**Appendix 3**) and a list of participants (**Appendix 4**) are attached.

Outreach Program

One of the key elements of the revised Work Plan was the need for practical outreach programs to educate farmers and other participants in the agricultural value chain. Such demonstrable information needs to be told to the target audience through independent agencies besides the exchanges.

FMI wrote to the exchanges in March 2007, stating its willingness to sponsor awareness programs on commodity futures for farmers. FMI plans to support under CFMP between ten and fifteen programs by the two leading national commodity exchanges. It is also envisaged to seek opportunities to develop these materials into book form and thus have a lasting legacy of the effort that can serve well future educational efforts. The Project has hired the services of a young specialist in agricultural economics as Research Associate in India to take charge of the outreach programs

Farmers Awareness Program at Moga, India

The first such program was done on collaboration with NCDEX on March 27, 2007 at Moga, Punjab, near the north Indian town of Ludhiana. Moga is a major wheat trading centre and the areas surrounding it are wheat growing. The program meant to educate the local farming community about the benefits of commodities futures markets in terms of price discovery and price risk management. About 900 farmers attended the program from the surrounding areas of Moga. The meeting was addressed by several speakers, the most prominent among them being:

- Sharad Joshi, Member of Parliament (MP), founder of the Shetkari Sanghatana (Farmers Organization) in Maharashtra.
- Bhupinder Singh Mann, MP and a champion of the causes of Punjab farmers.

More such programs in collaboration with MCX and NCDEX are under way.

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.

Egged on 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 and 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. The meeting with Gujarat State cooperative Marketing federation Ltd is planned for May 2007.

In the coming weeks between May and July 2007 FMI plans to replicate this kind of efforts in other major states by meeting the senior executives of the cooperative marketing federations. This sort of educational program is expected to have a salutary impact on the growth and development of futures markets in agricultural commodities which, in turn, will benefit the Indian farming community.

V. Current Developments and Planned Upcoming Activities

The Indian Commodity futures markets are passing through a critical phase in its existence. During the last three years after its resurrection, Indian futures markets have made gigantic strides both in terms of the number of contracts and the volume of trade. During the year ending in March 2007 (FY 2006-07), the aggregate volume of commodity futures markets touched INR 36.77 trillion up from a meager INR 1.29 trillion in FY2003-04. However the ban on trading in futures of major pulses and cereals early this year has put fetters on this remarkable growth. Many activities that need to be are in the areas of regulation and capacity building. However the ability of the Project to pursue these goals depends upon two events in the next quarter:

1. The findings and recommendations of the Blue Ribbon Committee.
2. The ability of the government to pass the amendment to the Forward Markets Regulation Act.

Regulation

Subject to the above, FMI plans to pursue the goals stated in the New Work Plan, namely, providing ‘global best practices’, technical expertise ad innovative training in the following areas:

a) development of a comprehensive regulatory framework for commodity futures exchanges, clearing houses 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

At the same time FMI will actively try to work with the two major exchanges MCX and NCDEX accounting for 95% of the volume of trade to improve upon their current practices in area like:

(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.

Training

1. CFTC Regulatory Training (May 2007):

A training is planned which will be conducted by experts from US Commodity Futures Trading Commission for four or five training days in Mumbai for FMC officials and representatives of the leading exchanges.

2. CFTC International Regulators Training Seminar (Fall 2007)

CFTC International regulator's seminar is an annual affair which FMC has been participating in the last few years. Subject to approval for funding by USAID, it is contemplated that the travel expenses of two or three senior officials may be considered under the Project.

Education and Awareness

Meanwhile the political elite and large cross section of officialdom still suffer from the myopic vision that futures markets are harmful to agricultural commodities. The farmers are thus deprived of any opportunity for price discovery and hedging. Clearly the answer to the ills afflicting the Indian markets lies in education and awareness at different levels.

During the next five months ending September 2007 the following activities are planned:

1. Several farmer awareness programs in association with exchanges
2. Individual meetings with various state-level cooperative marketing federations to explain the concepts and benefits of hedging to senior level executives

3. Publication of a booklet (including a Hindi version) the contents of the various speeches at the sponsored awareness programs
4. Publication of a booklet explaining the very basic concepts of futures trading for farmers

Policy Papers and Conferences

It is also proposed to continue to prepare high quality scholarly research papers with the help of US experts and their Indian counter parts and academicians either independently or collaboratively on various policy issues as mentioned in pages 4 and 5 of the Work Plan. Some of the policy papers in the list have already been prepared as part of the submissions to the Blue Ribbon Committee.

A revised list of proposed policy papers is contained in **Appendix 5.**

These policy papers will be supplemented with briefing sessions, presentations and conferences with policy makers.

Appendix 1

USAID/INDIA

COMMODITY FUTURES MARKET PROJECT

REVISED WORK PLAN

2006-2007

Charles M. Seeger
R. Jayaprakash

February 26, 2007

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").[5] 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.[6] Thus, the principal project counterpart, the FMC, had requested the following initial technical assistance for the USAID project:

1. <u>Regulations</u>. Extensive regulation drafting assistance.

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

3. <u>Inspection/Enforcement Procedures</u>. 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. <u>Training</u>. Provide the newly expanded FMC staff with training.

5. <u>Commodity Markets Awareness</u>. 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*.

---

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

[6] 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.

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 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

4. 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.

(iv) 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.[7] That informative sharing process will continue.

(v) 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:

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

18. 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.

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

20. 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.

21. Use of hedge exemptions in global commodity markets.

22. Net margining methodologies.

23. Contract assessment and approval by regulators.

24. Manipulation: its definition, prevention and prosecution.

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

---

[7] 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.

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

27. Need for uniform penalty structure among exchanges.

28. 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?

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

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

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

32. 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?

(vi) 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.

- <u>Development of an Enforcement Manual</u>

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."*

- <u>Institutional strengthening of FMC's Division of Counseling and Enforcement</u>

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.

- <u>Review of FMC's existing monitoring and market surveillance system</u>

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."*

- <u>Review of exchanges' current practices</u>

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:

vi. Risk management techniques;

vii. Inspection/examination of market intermediaries;

viii. Market surveillance;

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

x. 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

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

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

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

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

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

xv. Manuals for inspection/examination of market intermediaries;

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

xvii. 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

xviii. 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

ii. Training programs for bankers on warehouse receipt financing.

C. Planned Outputs / Deliverables

ii. 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 2

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

Topics

9. Overview of developments on commodity exchanges internationally.
10. A history of contract development in the US over the past 50 years
11. 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
12. 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
13. Role of exchanges in the delivery process
    a. CBOT grains
    b. CME livestock
    c. NYBOT sugar
    d. Zhengzhou wheat (China)
14. Cool innovations
    a. NYMEX's ADP
    b. Floating expiration in CME's Hurricane Contract

    c. Position limits floating with volume
15. Comments on some Indian commodity contracts
16. 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
17. Designing options contracts
    a. Expiration
    b. Strike
    c. Exercise & assignment
    d. Position limits
    e. Price – minimum change, daily limits?

****

Appendix 3

Report on the USAID FMI CFMP Seminar on Product Development by Dr. Mike Gorham in Mumbai on March 25, 2007

As part of USAID 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 on their own platforms (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. The seminar lasted about six hours.

****

Appendix 4

<u>List of Participants for the Seminar on Product Development by Dr. Mike Gorham on 25th March 2007, from 9:00 a.m. to 4:00 p.m. at Hotel Taj Land's End, Bandra (West), Mumbai – 400 050</u>

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

42. Shri D. S. Kolamkar, Economic Adviser
43. Shri Bharat Tripathi, Director
44. Shri Sanjay Lunia, Director
45. Shri P. K. Singhal, Director
46. Dr. Prabhakar R. Patil, Director
47. Shri Anupam Mishar, Director
48. Shri Shivanand S. Ajur, Director
49. Shri S. K. Shukla, Deputy Director
50. Shri Suvendu Ganguly, Deputy Director
51. Shri K. Jayant, Deputy Director
52. Shri R. Dharmarajan, Deputy Director
53. Shri Sandip Biswas, Deputy Director
54. Shri S. G. Kulkarni, Deputy Director
55. Smt. Shylaja Nair, Deputy Director
56. Shri Dinesh Kumar Soni, Deputy Director
57. Shri Vishal V. Nair, Assistant Director
58. Smt. Ashwini Lal, Assistant Director
59. Shri J. D. Vaishmpayan, Assistant Director
60. Smt. C. R. Dhawale, Assistant Director
61. Kumari U. K. Tharthare, Assistant Director
62. Smt. Rashmi Aggarwal, Assistant Director
63. Shri V. N. Shivathare, Assistant Director
64. Shri D. N. Bagali. Economic Officer
65. Shri S. D. Mulay, Economic Officer
66. Smt. Nutan Biwalkar, Economic Officer
67. Smt. K. K. Parte, Economic Officer
68. Smt. Rekha Nair, Economic Officer

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

69. Shri Anjani Sinha, Director
70. Shri Sumesh Parasrampuria – Chief Business Officer
71. Shri Chiragra Chakrabarty, Vice President, Training & Research & Development
72. Shri V. Shunmugam, Chief Economist

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

73. Mr. Mahesh Kewlani, Deputy Manager, Clearing & Settlement
74. Mr. Rishikesh Tamaskar, Manager, Market Watch
75. Mr. Shreyans Vijay, Deputy Manager, Risk
76. Ms. Sanvali Kaushik, Vice President, Products
77. Mr. Subrata Dutta, Manager, Compliance

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

78. Ms. Poonam Gupta, AVP- Business Development
79. Mr. K. S. Awari, Associate Vice President, Mumbai Region
80. Mr. Jesudas Pillai, Manager, Member Service

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

81. Shri P. D. Thakkar, President
82. Shri Kaushikbhai B. Shah, Vice President

Appendix 5

An indicative List of Possible Policy Papers

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

2. 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.

3. Use of hedge exemptions in global commodity markets.

4. Net margining methodologies.

5. Contract assessment and approval by regulators.

6. Manipulation: its definition, prevention and prosecution.

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

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

9. Need for uniform penalty structure among exchanges.

10. 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?

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

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

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

14. 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?