

PD-ABR-197
100709

THE FINANCIAL INSTITUTIONS REFORM AND EXPANSION (FIRE) PROJECT ● FINAL REPORT ● DECEMBER 1998

**THE FINANCIAL INSTITUTIONS REFORM
AND EXPANSION (FIRE) PROJECT**

**FINAL REPORT
DECEMBER 1998**

US AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID/INDIA)

TABLE OF CONTENTS

INTRODUCTION	4
EXECUTIVE SUMMARY	6
OBJECTIVES AND PLANNED OUTPUT	10
PROJECT ACCOMPLISHMENTS AND ACTUAL OUTPUT	15
IMPACT	28
SUSTAINABILITY AND RECOMMENDATIONS	32
CONCLUSION	35
APPENDICES	
I Fire Project Reports	38
II India Based Training	44
III US Based Training	53
IV (i) Performance of the FIRE Project	55
(ii) Research Topics	55
(iii) Index of Capital Market Development	56
V FIRE Project Consultants	57
VI Key Liaisons and Clients	58
VII Acronyms	65

**UNITED STATES AGENCY
FOR INTERNATIONAL DEVELOPMENT**

320 Twenty First Street, N W
Washington, D C 20523

The Administrator

Mr Dennis Grubb
Price Waterhouse LLP
128, T V Industrial Estate
Worli, Mumbai 400 025

Dear Dennis,

Thank you for the informative briefing on India's capital market development and for arranging the two meetings on this topic

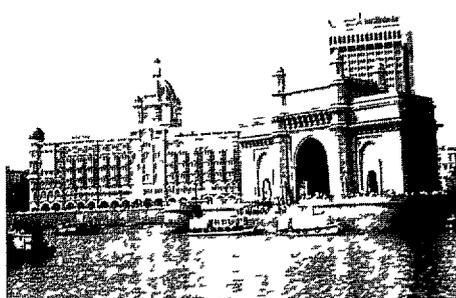
I have come away from your briefing and the Securities and Exchange Board of India roundtable not only with an appreciation of the problems facing India as it strives to bring its capital market up to international standards of transparency and efficiency, but also of the links between capital market development, economic growth and poverty alleviation. The meeting with the American brokerage community drove home that the development of India's capital market is a win-win situation. India's poor will benefit from the mobilization of capital for its critical infrastructure and industry and American investors will benefit from lower transaction costs and greater transparency in trading.

Again, my thanks to you and Price Waterhouse for deepening my understanding of the work USAID is funding under the Financial Institution Reform and Expansion (FIRE) project.

Sincerely,
J Brian Atwood

Many thanks Dennis, I admire your energy and fortitude

INTRODUCTION



PW Gateway Group (USA) comes to Gateway of India

The Financial Institutions Reform and Expansion (FIRE) Project was funded by a USAID (United States Agency for International Development) grant to the Government of India. The FIRE Project contract began in 1994 and ended in August 1998.

The FIRE Project was administered by PricewaterhouseCoopers (formerly Price Waterhouse) LLP, a world leader in technical consultancy with experience in over 150 capital markets projects in 40 emerging markets.

The project Chief of Party in Mumbai was Principal Consultant Mr. W. Dennis Grubb. The overall direction for the FIRE Project was provided by Dr. Auguste Rimpel, Partner and Mr. J. Richard Breen, Managing Director of the Capital Market Development Group, PricewaterhouseCoopers LLP, USA.

The FIRE Project employed the services of Development Associates of Arlington, Virginia to manage US-based training activity. Kim Shaak served as the Training Coordinator until October 1997. John Harris served as the Training Coordinator from February 1998. In addition, the FIRE Project was assisted by the staff of PricewaterhouseCoopers India, which employs over 2500 professionals in 8 offices throughout India, Sri Lanka, Nepal, and Bangladesh.

Long-term Indian staff were drawn from PricewaterhouseCoopers India employees, and included R. N. K. Prasad, Security Markets Operations Specialist, Paritosh Sharma, Security Markets Specialist, N. Sankaranarayanan, Business Manager, Vibha Parekh, Executive Secretary, and Genevieve Mendonca, Secretary.



PW FIRE Project Office

The project office in Mumbai was responsible for initiating, planning, and managing all in-country training, selecting and processing candidates for international training, defining the training objectives and selecting the training source. The project office also provided supervision and support of expatriate and local consultants in short-term assignments, reported on the progress of project activities and accomplishments to USAID, and prepared quarterly reports and work plans. The project office maintained effective relations with management and key staff of the main institutions of the capital markets in India and worked with them in developing reform programs. The project office provided advice and counsel to the heads and staff members of the key institutions of the Indian capital markets in India and provided liaison with USAID Delhi in all aspects of project implementation and administration.

The first tier agencies that the Price Waterhouse FIRE Project worked with include

- The Securities and Exchange Board of India (SEBI)
- The National Securities Depository Ltd (NSDL)
- Association of Mutual Funds in India (AMFI)
- Stock Holding Corporation of India Ltd (SHCIL)
- The Bombay Stock Exchange (BSE)
- The National Stock Exchange of India Ltd (NSE)
- The Over the Counter Exchange of India (OTCEI)
- Inter Connected Stock Exchange of India (ICSE)
- Delhi Stock Exchange (DSE)
- Madras Stock Exchange (MSE)
- Calcutta Stock Exchange (CSE)
- Infrastructure Development Finance Company (IDFC)
- UTI Institute of Capital Markets
- Registrars' Association of India (RAIN)
- Association of Merchant Bankers of India (AMBI)
- Fixed Income Money Market and Derivatives Association (FIMMDA)
- Fixed Income Brokers Association (FIBA)

EXECUTIVE SUMMARY

Capital Markets in India are facing tremendous change. The Indian Government realized early in the 1990's that to mobilize the resources required for its economic growth, it would need to increase the capacity of its capital markets. The challenges of increasing market transparency, systems technology and regulatory effectiveness faced by India are common throughout Asia. PricewaterhouseCoopers (PwC) brought considerable expertise in Asian emerging economies to the FIRE Project. Recent PwC Asian consulting experience includes projects in Indonesia, Sri Lanka, the Philippines and China. PwC experience in each of these areas added depth to the technical consultancy teams available for the FIRE Project. The combination of the Indian Government's commitment to substantial reform and PwC area expertise provided a solid base upon which the FIRE Project was able to build.

One of the primary objectives of the FIRE Project was to enhance investor confidence. Though it is difficult to quantify results, much was accomplished through implementing market oversight, surveillance and enforcement models patterned after the NASD's StockWatch Automated TrackingSM system (SWAT) concept. Improvements were made to disclosure practices by working with the Institute of Chartered Financial Analysts to make true and fair market information available to investors on a continuous and timely basis. Demanding higher professional standards from market participants and facilitating better regulation of market intermediaries generated improved investor confidence. To further this aim, the FIRE Project recommended professional testing similar to the NASD's Series 7 examinations.

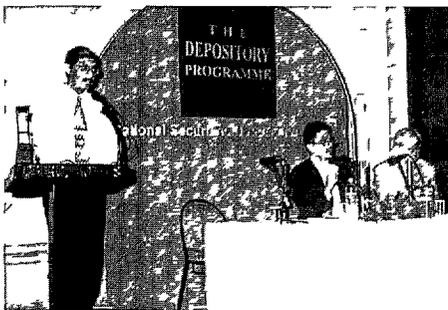
In India, the FIRE Project trained 15,000 industry intermediaries. Similarly, over 100 market regulators were trained in the US at the SEC, NASD, NYSE, CBOE, and through internships at Wall Street firms such as Merrill Lynch, Alliance Capital and others. India based training focused primarily on operational issues and organizational development. US training provided the regulatory authority and other industry personnel with supervisory training. The training programs gave participants international perspectives and in many cases led to the introduction of meaningful changes at the respective institutions. Laws were reviewed, amended and in some cases, restructured based on FIRE Project training.

To reduce systemic risk for investors, the FIRE Project initiated the reform of trade clearance and settlement infrastructure, and was instrumental in establishing a depository, the NSDL. Its continuous trading program, up to date technology and operational systems represent a major step forward for the Indian marketplace. The FIRE Project's assistance drew upon among others experts from the New York based DTC and the Chicago Stock Exchange Clearing Corporation. The procedures for the sharing of information among India's 23 exchanges drafted by FIRE and assistance in technical advancements including electronic trading systems will have a significant positive impact on the Indian marketplace.

Improving investor confidence, reducing systemic risk and promoting a secondary market for equities are long term commitments. Despite significant improvements over the past four years, we believe that much work must still be done. Significant steps, for example, must be taken to improve the liquidity of

Investors Hail India's Move On Paperless Trading

ASIAN WALL STREET JOURNAL OCTOBER 17TH 18TH 1997



The National Securities Depository Ltd Road Show Presentations in 35 cities (L) Mr Ragovan Putran MD - (National Securities Depository Limited), (M) Mr C B Bhawe MD NSDL, (R) Mr W D Grubb

the marketplace and the bond market infrastructure. Liquidity problems will be eased, to some extent, as investor confidence improves. The development of the bond market, however, will prove more challenging. The benefits of debt market trading are clear. From an investor's perspective, a bond market offers an alternative investment and creates an opportunity to diversify risk. For corporations, a developed debt market will allow more sophisticated risk management techniques to be employed. Addressing the impediments to an Indian secondary debt market must be a priority of future capital market assistance projects in India.

Meeting the Indian Government's requirements of \$150-300 billion for long-term infrastructure financing over the next ten years will be a major challenge for India. Federal and State Bonds currently make up nearly 95% of India's debt market. Banks remain the primary buyers to meet statutory liquidity requirements. In terms of the government debt issued, India is second only to China in Asia.

Policy and trading infrastructure issues are being addressed by the Reserve Bank of India. An effective regulatory environment and efficient trading and settlement infrastructure are prerequisites of an active secondary market in India. In pursuit of these goals, FIRE promoted the establishment of two fixed income trade groups—Fixed Income Money Market and Derivatives Association (FIMMDA) and Fixed Income Brokers Association (FIBA)—to catalyze industry development. In addition, three private Credit Rating Agencies exist in India which promote legislation and standards for investor protection.

The FIRE Project was created with a seven fold objective. The areas are Post Trade Clearance and Settlement, Strengthening the Regulatory Framework, Market Enforcement, Oversight and Clearance, Debt Market Development, Mutual Funds, Derivatives and Other Activities. The FIRE Project had considerable impact of each of these areas. Highlights included:

1 Post Trade Clearance and Settlement

A transparent and efficient trade clearance and settlement reduces the systemic risk faced by investors. The establishment of the NSDL as a modern depository with management and operational systems, and a continuous training program is a major step forward for the Indian securities market. Technical consultancy to establish a clearing corporation, trade guarantee funds and a stock lending system has helped establish a more efficient market with appropriate risk containment measures.

2 Strengthening the Regulatory Framework

Technical consultancy to build strong regulatory organizations and enhance transparency in the market was a primary objective. Training to support the technical consultancy was provided for regulatory and exchanges personnel. Training topics included investor protection, insider trading and disclosure rules. Testing administration seminars for exchanges and sub brokers were provided together with seminars on the concept of the self-regulatory organization, market surveillance, and the NASD's StockWatch Automated TrackingSM (SWAT) system.

EXECUTIVE SUMMARY (CONTD)

SEBI invites US Surveillance team

FINANCIAL EXPRESS NOVEMBER 4TH 1997

3 Market Enforcement, Oversight and Surveillance

Minimal systemic oversight, surveillance and enforcement for the market were in place at the beginning of the FIRE Project. Movements toward reform had made little progress. FIRE was able to develop a consensus among key industry institutions recognizing the need for reform, and enter into a dialog with them outlining steps by which reform could be realized. Best practices were identified and are currently being implemented in stages.

4 Debt Market

The development of the Indian bond market is important if India is to mobilize domestic savings into long term investments and attract sustainable foreign investment. In addition, a developed bond market will help India to finance its ambitious plans for industrial and infrastructure growth. The primary market for bonds, in which banks act as the primary buyers, is relatively active. However, inadequate settlement infrastructure, and taxes and restrictions on investments by key institutional investors serve as key impediments to secondary bond market development.

5 Mutual Funds

The Indian mutual fund industry is over thirty years old, and is dominated by the Unit Trust of India (UTI) which accounts for 85% of the market. Since liberalization in 1991, many new funds have been established, including international names such as Alliance Capital, Morgan Stanley and Franklin Templeton. We believe that the mutual fund industry will bring many new investors to the market and thereby broaden base ownership and participation in economic growth. During its four years in India, the FIRE Project sought to increase levels of individual investments channeled towards the mutual fund industry by increasing the integration of the industry, enhancing self-regulatory standards, and improving industry regulation.

AMFI unwraps compliance manual

BUSINESS STANDARD SEPTEMBER 22ND 1997

6 Derivatives

In 1995, a task force began to explore establishing exchange traded futures and options. The FIRE Project provided technical consultancy experts from the CFTC, CBOE, CME and NASD to assist in the preparation of the regulatory framework and to outline steps needed to establish a derivatives exchange. The CBOE technical consultancy team provided a feasibility study on the benefits and costs of establishing a derivatives market. In July 1998, SEBI approved the establishment of separate affiliate exchange traded derivatives. The industry is expected to begin trading in derivative products in 1999.

7 Other Activities

The FIRE Project helped review Human Resource procedures and introduce worldwide innovations at key capital market institutions. Assisted by FIRE Project training, key market institutions have appointed experienced training supervisors, institutionalized capital market training and research and have begun to establish and develop their own management training programs.

Capital market reform will be critical to India's continued development. In order to mobilize the resources required for its economic growth, India needs to increase the capacity of its capital markets. Billions of dollars of infrastructure sector investment will be required to finance development in basic utilities such as power, transportation and communications. Transparent and efficient capital markets will provide the gateway to this investment.

Now is a critical time for India's capital markets. Since 1992, India has developed from a position of economic isolation toward an open interaction with the global economy. Much progress has been made, but an ongoing commitment to reform cannot be assumed. Many believe that the 'Asian Flu' that has infected many of India's neighbors will weaken India's commitment to economic reform. India must be supported in its efforts to reduce trade barriers and move toward full convertibility of its currency.



Indian Regulatory Trainees from SEBI at Entrance to New York Stock Exchange 1997

These challenges must not be allowed to alter the progress that has begun. Rather, they should provide the stimulus for the further development of India's capital markets. The FIRE Project has achieved much during its four years in India. Critical to the project's success was the depth of the team's understanding of the complexities of the Indian capital markets. For effective assistance to be given to India, local solutions need to be devised without sacrificing international standards of market operation.

It is imperative that the focus on capital market assistance continues. As a result of this project, PwC has developed local knowledge and contacts combined with respected international expertise which can be drawn upon in the future to ensure sustainable reform. Most importantly, PwC has a clear understanding of what remains to be done and the experience to accomplish it. Our recommendations for continued assistance to India are presented later in this document. India has the ability to be an important participant in the global market of the 21st Century. PwC's proven India capability makes it uniquely qualified to assist in achieving this goal.

OBJECTIVES AND PLANNED OUTPUT

Background and Environmental Constraints

The market reforms of 1992 provided India an unprecedented opportunity to satisfy its critical capital needs. These reforms followed four decades of extensive state control of the economy that had left India on the verge of defaulting on its external debt obligations. The objective of the reforms was to reverse the state control of the economy and expand the financial markets. The environmental constraints at the outset of the FIRE Project included inefficient clearing and settlement systems, a new regulator in need institutional strengthening, a lack of industry associations that could establish professional standards, and an inactive debt market. Addressing these environmental constraints provided a key focus to FIRE Project objectives.

Objectives

In initiating the FIRE Project, USAID sought to support economic growth and develop India's capital markets to a level on par with international standards. In order to bring this about, the FIRE Project provided technical consultancy and training to India's key capital market institutions. Key goals included promoting "best practices" in market regulation, oversight and enforcement, and modernizing operating systems to promote efficiency and enhance investor confidence in the fairness and integrity of the market.

The FIRE Project was founded with a seven-fold objective. Priority areas were outlined as follows:

- 1 Post Trade Clearance and Settlement
- 2 Strengthening the Regulatory Framework
- 3 Market Enforcement, Oversight and Surveillance
- 4 Debt Market
- 5 Mutual Funds
- 6 Derivatives
- 7 Other Activities

The FIRE Project supported the Government of India in its efforts to improve the ability of the Indian capital markets to mobilize capital for its critical investment needs. FIRE provided technical consultancy and training to India's key capital market institutions in order to achieve this goal. These institutions included the Securities and Exchange Board of India (SEBI), the National Securities Depository Ltd (NSDL), the Bombay Stock Exchange (BSE), the National Stock Exchange (NSE), the regional stock exchanges and key industry associations. The activities of the FIRE Project were also coordinated with the Government of India through the Ministry of Finance.

Work Plans

The FIRE Project contract was awarded to Price Waterhouse on November 15, 1994. There were four Annual Work Plans, as follows

- The First Annual Work Plan dated March 3, 1995 covered the period November 15, 1994 through April 30, 1996,
- The Second Annual Work Plan dated September 15, 1995 covered the period November 1, 1995 through April 30, 1997,
- The Third Annual Work Plan dated April 24, 1997 covered the period November 1, 1996 through April 30, 1998, and
- The Fourth Annual Work Plan dated October 20, 1997 covered the period November 1, 1997 through August 14, 1998

The Work Plans were established in consultation with the Ministry of Finance, SEBI and USAID by Dr. Auguste Rimpel, PricewaterhouseCoopers Partner, Dick Breen, PricewaterhouseCoopers Managing Director, and Dennis Grubb, PricewaterhouseCoopers Principal Consultant.

Methodology

The planned outputs in the seven areas were to be delivered through consultancy, India-based and US based training.

Consultancy technical consultancy involved PcW consultants working directly with staff on the Indian counterpart institutions in helping them institute reforms.

Training The training provided supported technical consultancy initiatives. The two objectives of training were:

- Develop a core group of financial managers that could lead the Indian capital markets towards international standards of regulation, operations and investor protection, and
- Institutionalize capital market training programs.

India based training was to be delivered by visiting international experts who would deliver seminars and workshops.

US based training was planned to have two components:

- Classroom/seminar activities related to the job requirement of the identified participant, and
- Internships with relevant US capital market institutions such as the SEC, an exchange or market intermediaries.

OBJECTIVES AND PLANNED OUTPUT (CONTD)

We have also enclosed a report of the depository awareness seminar held in May, 1998



T. KOSHY
VICE PRESIDENT
NATIONAL SECURITIES DEPOSITORY LTD

SEBI received a request from the Registrars Association of India (RAIN) seeking the assistance of the FIRE Project for setting up a Self Regulatory Organization



L. K. SINGHVI
SENIOR EXECUTIVE DIRECTOR
SECURITIES AND EXCHANGE BOARD OF INDIA

Planned Outputs

1 Post Trade Clearance and Settlement

The planned activities in this sector included the establishment of a depository, a clearing corporation and stock lending facilities

A modern, efficient and transparent securities market that has appropriate risk containment measures requires a modern depository. The Indian Government approved the legislation to enable the establishment of a depository in 1996 and SEBI Depository Regulations were released in May 1996. The NSDL was to be provided with technical consultancy to establish a depository and to improve the transparency and efficiency of clearing and settlement of trades in stocks and bonds. SEBI had mandated that all stock exchanges establish clearing corporations with trade guarantee funds. The stock exchanges were to be provided technical consultancy to establish a clearing corporation and a trade guarantee fund. The establishment of a stock lending system can help reduce the high auction rates at settlement. It was planned that technical consultancy would be provided to establish stock lending facilities.

2 Strengthening the Regulatory Framework

The planned activities included developing and strengthening self regulatory organizations, developing broker licensing, testing and certification programs, improving disclosure norms and reviewing Indian securities laws. The objective of the planned activities was to provide technical consultancy to build strong regulatory organizations, enhance transparency and improve investor confidence in the market.

The stock exchanges were to be provided technical consultancy to adopt "best practices" in self regulation and market surveillance. A certification program for market intermediaries was also important to the capital market. The FIRE project was to provide technical consultancy to SEBI in establishing a certification program for capital market intermediaries. The development and growth of the capital market would require the participation of well informed investors. To achieve this, the planned activities also included technical consultancy to establish an investor information center at SEBI.

3 Market Enforcement, Oversight and Surveillance

The planned outputs included identifying SEBI's enforcement requirements, training its regulators and implementing surveillance systems. The planned outputs were directed at

- Assisting SEBI adopt "best international practices" in disclosure, market regulations, standards, oversight and enforcement
- Enhancing system integrity through the development of an information gathering and dissemination system to facilitate investors' access to quality information on a regular basis and
- Enhancing standards of market professionals through development of testing, certification and licensing programs

It was planned that technical consultancy would assist SEBI develop regulations and design and implement a surveillance, inspection and enforcement plan

4 Debt Market

The planned outputs included activities to promote the policy changes needed to stimulate debt trading. Assistance aimed at improving India's bond market expanding its capacity through the modernization of trading and settlement infrastructure and implementing appropriate changes in regulatory and policy framework. The development of India's bond market was identified as important in order to finance industrial and infrastructure projects.

The FIRE Project planned to work with SEBI, the exchanges and market intermediaries to identify and recommend proposals to develop the Indian bond market and to stimulate secondary trading in Government, public sector and corporate bonds. In addition, it was planned to establish dialogue between the regulators and market participants that would result in the policy changes needed.

5 Mutual Funds

The planned outputs included providing technical consultancy to SEBI in inspections and raising standards, and commencing broad based training and technical consultancy programs in order to strengthen AMFI's organization and structure. Developing the Indian mutual fund industry was a major goal of the FIRE Project. The planned activities included advising SEBI on mutual fund regulation and inspection, and technical consultancy and training to establish AMFI as a self regulatory organization that would establish and develop standards for the mutual fund industry.

Mutual funds are an important investment vehicle for small investors. The mutual fund industry in India, however, had not developed in an orderly manner with adequate and timely or standardized disclosure. The FIRE Project planned to provide technical consultancy to SEBI and the mutual fund industry with the objective of broadening base ownership and participation in the Indian share market.

6 Derivatives

The planned outputs included assisting in the establishment of a derivatives market and the implementation of exchange traded futures and options. The planned technical consultancy included helping SEBI and NSE establish a futures and options exchange. Technical consultancy and training was planned to be provided through the drafting of regulations, by laws for a derivatives exchange, guidelines for a clearing corporation and trading rules for futures and options.

7 Other Activities

The planned outputs included technical consultancy to strengthen local human resources institutions, sponsor research and assist OTCEI and regional exchanges.

OBJECTIVES AND PLANNED OUTPUT (*CONTD*)

An important goal of the FIRE Project was to develop the capacity of professional capital markets training in India. This included assisting institutions develop training programs to address training needs at each department and staff level. The organizational development and sustainability of industry trade associations was also to be enhanced. This would be achieved through providing technical consultancy in the area of information management and training program development.

In addition, the FIRE Project aimed to support research and studies at SEBI, the exchanges, capital market intermediaries, policy institutions and training institutions to enhance the development of the capital markets. The planned activities with the OTCEI and regional exchanges included technical consultancy and training on post trade clearing and settlement market surveillance, business operations and hardware and software platforms. Technical consultancy was also to be provided to establish a national market system which would feature a consolidated tape.

PROJECT ACCOMPLISHMENT AND ACTUAL OUTPUT

"ICSE all set to begin mock trading"

THE HINDUSTAN TIMES MAY 2 1998

"OTCEI to assume new role as NSE supplementary"

BUSINESS STANDARD MAY 20 1998

I am looking forward to the Concept Paper which is under preparation at your end. However, I would also request you to give your views on the second issue pertaining to Multiple Corporation vs One Clearing Corporation

S S SODHI
CEO

THE DELHI STOCK EXCHANGE ASSOCIATION LTD

We are enclosing herewith a format of the letter sent to the register and transfer agents and Registry work being carried in house for your information



B NARASIMHAN
FIRE PROJECT COORDINATOR
REGISTRARS ASSOCIATION OF INDIA

1 Post Trade Clearance And Settlement

A transparent and efficient trade clearance and settlement system reduces the systemic risk for investors. The establishment of the NSDL as a modern depository with management systems, operational systems, and a continuous training program is a major step forward for the Indian securities market. Technical consultancy to establish a clearing corporation, trade guarantee funds and stock lending system has helped establish a more efficient market with appropriate risk containment measures. Highlights of FIRE Project accomplishments in this area include

A Consultancy

i) Depositories

- Facilitating the introduction of Depositories legislation in 1996,
- Assisting the establishment of the NSDL by providing assistance in public education and awareness. The NSDL is now a fully functional depository with an organizational plan, management and operating systems, and a continuing training program,
- Reviewing and improving NSDL management reports,
- Establishing and developing the NSDL Human Resources Department,
- Preparing an organizational development plan for the NSDL
- Preparing management and staff training procedures manuals for the NSDL,
- Developing a pilot study of control procedures for the NSDL
- Performing cost studies for the BSE and DSE, and
- Preparing a report on a Clearing and Depository system to the SHICC

ii) Clearing Corporations

- Helping to modernize the BSE clearing corporation by advising on tax and legal issues with regard to establishing a trade guarantee fund
- Assisting the BSE Clearing Corporation interface with the NSDL depository,
- Assisting clearing corporations of regional exchanges interface with the NSDL depository,
- Advising the OTCEI on the design and implementation of training programs to be administered through a World Bank grant,
- Reviewing NSE data security and preparing for it a data center operations manual and a business continuity plan,
- Preparing a back office systems review for the NSE and
- Reviewing the cash settlement processes of the BSE and advising on its proposed securities depository

PROJECT ACCOMPLISHMENT AND ACTUAL OUTPUT (CONTD)

Depository to entice foreign investors to market

THE ECONOMIC TIMES
AUGUST 23ED 1996

NSDL to begin operations by month-end

BUSINESS STANDARD OCTOBER 10TH 1996

We enclose a copy of the application submitted to SEBI for setting up of a Settlement Guarantee Fund by the Exchange, for your reference



S RAAMASSUBRAMANIAM
PRESIDENT
MADRAS STOCK EXCHANGE LTD

I genuinely feel that without direction from you and your colleagues, it would have been very difficult to put together the automated environment with proper systems and controls as you have done for NSE

CITIBANK  ©RAM BHAGWAT
VICE PRESIDENT
CITIBANK

iii) Stock Lending

- Helping SHCIL develop stock lending capability

B India Based Training

The FIRE Project conducted numerous seminars, workshops, and other training programs with key market participants Highlights include

- Participating in numerous conferences, in particular the annual Invest India Securities Industry Summit The FIRE Project sponsored and provided extensive input to the conference for three consecutive years
- Conducting seminars on depositories for custodians,
- Conducting seminars on rules and regulations for a depository for the NSE, OTCEI and the NSDL
- Planning and developing formal procedures documentation for the NSDL and providing training on organizational development and human resources planning,
- Holding workshops on management reports for the NSDL,
- Conducting training workshops on the clearing and settlement process for the OTCEI and regional exchanges
- Preparing data security and information systems training for the SHCIL, NSE and OTCEI,
- Holding a training seminar on clearing corporations for the BSE and OTCEI, and
- Conducting seminars on product definition and cash settlement

C U S Based Training

The FIRE Project was instrumental in exposing Indian clearance and settlement market participants to their international counterparts Highlights of this activity include

- Organizing a program and internship on depository operations and clearance and settlement for the NSDL with the Depository Trust Company in April, 1997,
- Organizing a course and internships on clearing and settlement for the NSE at the New York Institute of Finance in December, 1995,
- Arranging for meetings between the NSDL and members of the National Securities Clearing Corporation and the Depository Trust Corporation organizing internships and a course on clearing and settlement for the same in April and May, 1996 and
- Developing a study tour for officials from the Ministry of Finance, SEBI and BSE of New York Chicago and London in October 1996 This trip involved internships at the Depositories Trust Company, New York Stock Exchange Chicago Board Options Exchange, London Stock Exchange and Morgan Stanley

SEBI set to bring openness into negotiated deals

“The measures are aimed at bringing transparency into negotiated deals ”

THE ECONOMIC TIMES JULY 16 1998

Dhanuka committee suggests consolidated securities bill
“The Dhanuka Committee has recommended making SEBI the sole regulatory agency for the securities market ”

THE BUSINESS TIMES JULY 4 1998

2 Strengthening The Regulatory Framework

The FIRE Project helped invigorate India’s regulatory environment. Technical consultancy to build strong regulatory organizations and enhance transparency in the market was a primary objective in this area. Training to support the technical consultancy was provided for the regulatory and exchange personnel on investor protection and insider training. The FIRE Project was influential in establishing SEBI as a credible regulatory agency. SEBI regulatory staff grew from 40 to its current level of 150 during the FIRE Project.

A Consultancy

The FIRE Project provided ongoing assistance toward developing and strengthening Self Regulatory Organizations, creating a broker licensing, testing and certification program, improving information disclosure, and strengthening Indian Securities Laws. Highlights of this activity include:

- i) ***Developing and Strengthening Self-Regulatory Organizations***
 - Reviewing and recommending changes to NSE rules and regulations to help it become a more effective SRO,
 - Advising SEBI on regulations for SROs based on international examples, and
 - Preparing a Procedures Manual for RAIN
- ii) ***Creating a Broker Licensing, Testing and Certification Program***
 - Identifying retail capital market intermediaries for SEBI to register, and assisting with the registration and regulation of these intermediaries,
 - Developing Testing and Certification Programs for licensing market intermediaries,
 - Assisting SEBI to establish a data base of industry intermediaries, and
 - Developing for SEBI financial responsibility standards and regulations, a code of conduct for market intermediaries, and record keeping, arbitration and net capital rules
- iii) ***Improving Information Disclosure***
 - Conducting a series of seminars in numerous major cities to determine the information currently available to investors,
 - Studying the information that the regulator required from issuers, management officials, and other potential sources of inside information,
 - Making recommendations on the frequency of reporting obligations,
 - Advising SEBI on the adoption of an information management and dissemination system, and
 - Establishing the organizational structure for a group within SEBI to be responsible for monitoring reporting obligations

PROJECT ACCOMPLISHMENT AND ACTUAL OUTPUT (CONTD)

SEBI panel moots detailed Securities Bill

"Panel wants SEBI to be the sole regulator for the securities market "

ENS JULY 6 1998

You will very kindly recollect that at the last meeting of the Committee on Infrastructure For Capital Market - A Priority Agenda, Mr M R Mayya had mentioned that he would be able to provide a copy of "Self Regulatory Role of Stock Exchanges "



Indian Training at USSEC in Washington, D C

iv) Reviewing Indian Securities Laws

- Recommending significant revisions of Indian Securities Law to the Committee for Amendment of the Securities Law (Dhanuka Committee) The Committee endorsed the FIRE Project's recommendations that SEBI be the sole agency to oversee the Securities Market and that a new securities law be drafted,
- Providing a draft comprehensive securities law for review by the Dhanuka Committee, and
- Preparing a report on Indian securities law strategy

B India Based Training

Highlights of FIRE Project activity in this area include conducting

- Training for SEBI, NSE and OTCEI on rules and regulations for SROs,
- Workshops on market surveillance, enforcement, the StockWatch Automated TrackingSM system (SWAT) and SRO concepts for exchange officials,
- Sub broker workshops on financial responsibility,
- Seminars on broker licensing and testing for SEBI and the UTI Institute of Capital Markets,
- Training for SEBI, NSE, BSE, OTCEI on broker dealer financial responsibility,
- Seminars on registration and investor protection for SEBI, CII, NSE, OTCEI and market intermediaries,
- A testing and administration seminar for sub brokers and exchanges,
- An investor education series at numerous financial centers around the country, and
- Training on disclosure rules for SEBI, the exchanges, ICAI and ICFAI

C U S Based Training

Highlights of FIRE Project activity in this area include

- SEC internships for three SEBI regulators in May 1996 for exposure to the SRO concept,
- SEC Institute training on enforcement for four SEBI regulators November 1996,
- SEC Institute training for two SEBI regulators to study the SRO concept in April and May 1997,
- Internship in December 1995 for members of the Institute of Financial Management and Research Madras to study US disclosure procedures at the New York Institute of Finance
- A two week study tour at the CFTC including practices for broker licensing, testing and certification, and
- Training as part of the SEBI/CBOE derivatives regulation training in July 1998 to emphasize broker licensing, testing and certification programs

“SEBI is placing an increasing thrust on enforcement ”

BUSINESS INDIA MAY 4 17 1998

3 Market Enforcement, Oversight and Surveillance

Minimal systemic oversight, surveillance and enforcement for the market was in place at the beginning of the FIRE Project and little movement had been made toward reforms. The need for improvements was acknowledged and the project entered into dialog with the government, stock exchanges and other market participants from the start. Best practices were identified and are and currently being implemented in stages. The FIRE Project was influential in promoting interaction between SEBI and the exchanges a safe and well-regulated marketplace.

A Consultancy

i) *Improving Market Enforcement and Oversight*

Highlights of this activity include

- Preparing a review of SEBI enforcement activities,
- Making recommendations to SEBI on market manipulation and insider trading,
- Working with SEBI enforcement staff to enhance market surveillance skills,
- Training SEBI in investigating and prosecuting ongoing cases,
- Assisting SEBI on establishing enforcement priorities,
- Designing training programs and training materials for SEBI, and
- Providing technical consultancy to professional educational institutions in India in developing capital market courses for law enforcement agencies

ii) *Improving Market Surveillance*

- Preparing investigation modules on market manipulation for the BSE, NSE and OTCEI detailing investigative techniques for detecting market manipulation,
- Preparing modules on insider trading, front running, matched orders and StockWatch Automated TrackingSM system (SWAT),
- Reviewing and providing comments on exchange inspection manuals,
- Drafting a Memorandum of Understanding patterned after the US model for formalizing procedures for sharing information between the 23 Indian exchanges. Topics included in the MoU included surveillance, inspections and investigations, and
- Working with SEBI and the exchanges to outline a program of continuing staff education in market surveillance

B India Based Training

The FIRE Project conducted numerous seminars, workshops and other training programs to strengthen market enforcement, oversight and surveillance. Highlights of this activity include conducting

- Organizational development seminars for SEBI. Two such seminars were held: one in August 1995 towards the beginning of the FIRE Project's association with SEBI, and the other in August 1998, at the end of the association,

Fire Project Programmes In Madras

NATIONAL INVESTORS DIGEST MAY 1996

PROJECT ACCOMPLISHMENT AND ACTUAL OUTPUT (*CONTD*)

“The Bhave Committee recommendations will go a long way in raising the level of transparency in the Indian corporate sector ”

BUSINESS INDIA, MAY 4 17 1998

“Sanity returns as SEBI wields margins’ stick

BUSINESS STANDARD, JUNE 15 1998

B India Based Training (*contd*)

- Enforcement and regulation workshops in August and September 1996,
- Training in enforcement procedures for SEBI in January 1996,
- Workshops on enforcement, market surveillance and self regulation for SEBI regional offices in New Delhi and Chennai in March and April, 1996,
- Training on the development of surveillance and enforcement strategies in capital market regulation for SEBI in July 1996, and for investment bankers in October 1996,
- Market surveillance training for officers of the BSE and OTCEI in March 1997,
- StockWatch Automated TrackingSM system (SWAT) training for SEBI and the regional exchanges in April 1997,
- A workshop on market regulation and surveillance for SEBI and the regional exchanges in November 1997,
- Training on the enforcement of capital market laws for SEBI, CBI and law enforcement agencies in February and March 1998, and
- Workshops on the investigation of market manipulation and other violations for the BSE, NSE, OTCEI and regional exchanges in May 1998

C US Based Training

The FIRE Project provided international training to numerous industry participants. Highlights of this activity include conducting

- Training and internships for SEBI and NSE officials at the SEC and NYSE in April and May 1995,
- Training programs and internships for SEBI, BSE and CSE officials at the Depository Trust Corporation and Merrill Lynch in October 1996,
- Internships at the SEC, NYSE and DTC for SEBI officials in November 1996,
- A study tour of the NYSE for SEBI’s Chairman, Mr. D. R. Mehta in April and May 1996. This trip received significant coverage in the Indian press,
- Training courses and internships at the SEC for SEBI and regional exchange officials in November 1997,
- A course on securities law at Baruch College for SEBI officials in November 1997, and
- A training course on the regulation and oversight of derivatives training for SEBI, BSE and NSE officials at the CBOE in July and August 1998

Price Waterhouse calls for setting up debt dealers body

FINANCIAL EXPRESS
AUGUST 24TH 1997

“National Stock Exchange set to flag off retail debt market segment in July”

FINANCIAL EXPRESS MAY 25 1998

On behalf of the FIMMDA Adhoc Committee, I would like to thank you and your colleagues, Mr R N K Prasad, Mr Khush Choksy and Mr Ajith Devesurendra, for all the assistance and guidance that was given to us in launching FIMMDA. Without your assistance, I am sure we would have taken longer and been less well-prepared.



Bank of America

ARVIND SETHI
FIMMDA ORGANIZING
COMMITTEE
BANK OF AMERICA

MANAGING DIRECTOR GLOBAL CAPITAL MARKETS GROUP
INDIA

4 Debt Market

The development of the Indian bond market is important if India is to mobilize and channel domestic savings into long-term investment and attract long term foreign investment. A developed bond market will also enable India to finance its ambitious industrial and infrastructure development plans. Although the primary market for bonds in India is substantial with the banks as primary buyers, inadequate settlement infrastructure, taxes and restrictions on investments by key institutional investors were identified as key impediments to bond market development. The FIRE Project was influential in establishing two industry groups, FIBA and FIMMDA, that will serve as catalysts for development.

A Consultancy

The FIRE Project assisted in stimulating India's Debt Market by

- Presenting a report on the structural impediments to developing the debt market,
- Developing a report on retail debt marketing in India,
- Assisting the IDFC in preparing a business plan,
- Working with Indian and foreign banks and presenting a proposal for a Debt Dealers Association of India that would facilitate the development of secondary trading in bonds. Both FIMMDA and FIBA are seen by RBI and SEBI as key players in developing the Indian debt market,
- Presenting a report to SEBI and industry participants which set forth the key legislative, regulatory, market practices, infrastructure, awareness and training issues that need to be addressed to develop the Indian debt market,
- Assisting the preparation of a business plan for FIMMDA,
- Preparing a business plan for FIBA,
- Assisting in the incorporation of FIMMDA and FIBA,
- Assisting the inauguration of FIMMDA,
- Preparing a substantive agenda for FIMMDA and FIBA,
- Preparing a business plan for IDFC, and
- Creating a proposal for the establishment of a debt dealers association in India.

B India Based Training

- The FIRE Project presented a seminar on infrastructure development to ASAF and ICAFI in December 1996.

PROJECT ACCOMPLISHMENT AND ACTUAL OUTPUT (CONTD)

AMFI holds seminar on compliance in Mutual Funds

TIMES OF INDIA
DECEMBER 5TH 1997

Price Waterhouse to help AMFI narrate mutual funds story

BUSINESS STANDARD
MAY 22ND 1996

Please refer to your letter dated May 5, 1997 nominating Shri P P Shastri, GM, IRC to attend the AMFI Leadership Training Programme and Internship in Washington from May 9, 1997 to May 31, 1997



A K SRIDHAR
MANAGER
UNIT TRUST OF INDIA

5 Mutual Funds

The mutual fund industry is over thirty years old in India and is dominated by the Unit Trust of India, which accounts for 85% of the market. Since liberalization in 1991, many new funds have been established including several international names, such as Alliance Capital, Morgan Stanley, and Franklin Templeton. We believe the mutual fund industry will bring millions of individual investors to the market and thereby broaden the base of ownership and participation in economic growth. The objectives of the FIRE Project activities were to assist the integration of the Indian mutual fund industry to facilitate increased mobilization of individual savings investments and enhance the overall self-regulatory like standards and regulation of the industry.

A Consultancy

Highlights of FIRE Project activity in this area include

- Preparing a Strategic Plan for AMFI,
- Strengthening AMFI as an organization, including providing assistance in the development of an AMFI Business Plan,
- Developing self regulatory functions within AMFI, including
 - ◆ Preparing AMFI's Code of Ethics,
 - ◆ Drafting AMFI's Model Compliance Manual, including updating for amendments to SEBI's Mutual Fund Regulations,
 - ◆ Providing a draft version of AMFI Model Advertising Guidelines,
 - ◆ Drafting AMFI Valuation Guidelines, "AMFI Valuation Policy for Non-Traded Debt Securities"
 - ◆ Preparing an Assessment of SEBI's Mutual Fund Regulations,
- Creating an AMFI Investor Awareness Campaign, including
 - ◆ "Making Mutual Funds Work For You" AMFI's Concise Guide to Investing In Mutual Funds,
 - ◆ "Selling Mutual Funds Made Easy," AMFI's Concise Sales Agent's Handbook,
 - ◆ The "AMFI Membership Directory" (executed by UTI ICM), and
 - ◆ Guiding CRISIL in structuring its "Analysis of Mutual Fund Performance,"
- Advising SEBI over changes in its policies, rules and forms which affect the mutual fund industry,
- Commenting on Draft SEBI Form N S Standard Offer Document for Mutual Funds,
- Establishing procedures for evaluating Mutual Funds
- Helping SEBI to establish accounting standards for mutual funds and
- Commissioning the Credence Report entitled "Study of the Costs Benefits and Regulation of India's Guaranteed and Assured Return Mutual Fund Schemes" which was presented to SEBI in August 1998

“The Association of Mutual Funds in India (AMFI) has submitted a list of 10 demands to the Ministry of Finance ”

THE HINDU MAY 31 1998

We have slotted Mr Augusto Iglesias, as the speaker on Mutual Funds

MAHIM HISHT
SECRETARY (INSURANCE)
FEDERATION OF INDIAN CHAMBERS OF COMMERCE AND INDUSTRY

The Price Waterhouse LLP FIRE Project will be giving a presentation on various aspects of valuation of debt securities



SHRI A. P. KURIAN
CHAIRMAN
ASSOCIATION OF MUTUAL FUNDS IN INDIA

B India Based Training

The FIRE Project organized, presented and participated in a broad variety of in depth training programs and conferences relating to the sale, operation and regulation of mutual funds for representatives of the fund industry, brokers, regulators, policy makers, accountants and the investing public between July 1996 and August 1998. Highlights of this activity include

- Formulating AMFI’s Investor Awareness Campaign in August and November 1996,
- Arranging, designing and presenting a SEBI Inspection Workshop, *“Quality Control and Consistency in Mutual Fund Inspections Insights from the U S SEC Inspection Process”*
- Delivering the Keynote Address at the Third Annual UTI ICM AMFI Seminar titled *“Reflections on Regulation the Role of Industry and leading panel discussion on the “Regulation of Mutual Funds,”* Sixth Technical Session (January 20-21, 1997),
- Leading Seminars and Discussions with Department Heads of the Ministry of Finance on *“The Mutual Fund Regulatory Environment* in January 1997
- Facilitating panel discussion at the *“Mutual Funds Through 2000,”* UTI AMFI Seminar, January 21, 1997,
- Addressing AMFI’s General Membership meeting on the topic of *“The Role of the Investment Company Institute in Promoting the US Mutual Fund Industry A Model for AMFI?”* January 20, 1997,
- Leading round-table discussions, workshops and seminars with securities industry leaders and sellers of mutual funds on the future of India’s mutual funds in January 1997,
- Presenting a seminar entitled *“An Overview of Mutual Fund Accounting with Focus on Indian Issues”* to AMFI, the ICAI and representatives of SEBI in November 1997,
- Conducting a Workshop on Compliance, *“Meeting Our Professional Responsibilities”* to Mutual Fund CEOs and Compliance Officers on December 4 and 5, 1997,
- Presenting a SEBI Inspection Workshop, *“Quality Control and Consistency in Mutual Fund Inspections Insights from the U S SEC Inspection Process”* to SEBI staff members and SEBI independent inspectors on December 15, 1997, and
- Recruiting speakers and shaping presentations for The Second Annual Invest India Conference, *“ The Future of Fund Management in India, 1998”*, co-sponsored by the FIRE Project on April 16 17, 1998

PROJECT ACCOMPLISHMENT AND ACTUAL OUTPUT (CONTD)

BSE close to technology pact with SIMEX for derivatives
"The Bombay Stock Exchange (BSE) is close to signing an agreement with the Singapore International Monetary Exchange (SIMEX) "
THE ECONOMIC TIMES AUGUST 20 1998

C US Based Training

Highlights of this activity include conducting

- An intensive three week "Mutual Fund Leadership Training" program in the US for the Chairman of AMFI, members of AMFI's Board of Directors, and Officers from UTI, SEBI and the Ministry of Finance (MoF). The program was designed to help participants understand and appreciate the operation of the U S Mutual Fund Industry, including the regulatory framework, compliance systems, the role of independent directors, observance of professional standards, mutual fund accounting, merchandising, product development and customer services. The team studied materials about, visited and held discussions with industry representatives including the SEC, the NASD, the ICI, the NYSE, DTC, NSCC and selected mutual fund complexes.

6 Derivatives

In 1995, a task force began to explore establishing exchange traded futures and options. The FIRE Project provided technical consultancy experts. The project provided more than ten US experts from CFTC, CBOE, CME, NASD to the task force and SEBI to assist in the preparation of the regulatory framework and steps needed to establish a Derivatives exchange. The Chicago Board Options Exchange technical consultancy team provided a feasibility study on the benefits and costs of establishing a derivatives market. In July 1998, the SEBI approved the establishment of separate affiliate exchange traded derivatives. The exchange industry is expected to proceed with preparations for trading in 1999.

A Consultancy

The FIRE Project assisted the development of Derivatives trading in India. Highlights of this activity include

- Preparing a feasibility study of a derivatives exchange in India,
- Developing a detailed work plan on issues to be addressed by SEBI and the SEBI appointed L C Gupta Industry Committee in order to facilitate the introduction of derivatives trading. Technical consultancy was subsequently provided to these groups,
- Preparing a report on index derivatives trading and the Indian Equity Market. The report assessed the probable benefits to the Indian capital market from the trading of equity index derivative products and recommended regulations to maximize the benefits of introducing these products.
- Preparing a Derivatives Regulatory Development Work Plan for SEBI and outlining the regulatory, legal, trading and training practices and regulations that the exchanges would need to adopt to qualify as a derivatives exchange.
- Creating a report on the issues that SEBI should address and the steps that it needs to take in order to permit and regulate derivatives trading,
- Outlining a plan for the design and implementation of the regulatory framework based on internationally accepted regulatory objectives.

- Providing assistance to SEBI in drafting rules for regulating derivatives trading, and
- Providing technical consultancy to SEBI in drafting Guidelines for different types of derivatives contract,

B India Based Training

The FIRE Project presented seminars, workshops and other training programs to develop Indian derivatives trading. Highlights of this activity include conducting

- A training program on derivatives for officials from SEBI and NSE in May 1995,
- A seminar on financial futures and options for USAID, ADB and DSE in February 1996 and for the NSE in July 1996,
- Derivatives orientation training programs for market participants in Bombay, Ahmedabad, Chennai and Calcutta in August 1996
- A program in futures and options trading for UTI in October 1996,
- Workshops for investment bankers in October 1996, and
- A seminar on the regulation and oversight of derivatives trading for officials of SEBI, BSE, NSE and brokers in February 1998



Conference on introducing of Derivatives sponsored by Fire Project (L) Mr Leo Melamed Chairman Chicago Mercantile Exchange, (M) Mr Grubb, (R) Mr Goud MD of SHCIL

C US Based Training

The FIRE Project promoted Indian Derivatives trading through establishing internships and other training in the US. Highlights of this activity include conducting

- Internships at the CBOE for NSE officials in 1995,
- Training and internships at the CBOE, National Securities Clearing Corporation and the DTC for NSE officials in April 1996,
- An information risk management course for NSE and OTCEI officials at the SEC,
- Training programs and internships at the CFTC, New York Institute of Finance, Commodities and Futures Commission and CBOE for SEBI officials, and
- Internships at the CBOE and IIT for SEBI, NSE and BSE officials in July and August 1998

PROJECT ACCOMPLISHMENT AND ACTUAL OUTPUT (CONTD)

NYSE – Nasdaq duel over desi software firms

FINANCIAL EXPRESS MAY 28 1998

“FICCI pens blueprint to boost bourses ”

BUSINESS STANDARD JUNE 15 1998

7 Other Activities

The FIRE Project helped review human resource procedures and introduce internationally recognized procedures at key capital market institutions. As a result, training programs were held and experienced training supervisors have been appointed, capital market training and research has been institutionalized and these institutions are now in a position to establish and develop their own management training programs.

A Consultancy**i) Strengthening Local Human Resource Institutions**

Highlights of this activity include

- Designing and delivering a seminar for senior management on the role of a human resources department in a modern capital markets institution,
- Preparing case studies of the methods by which respected American financial institutions organize their human resources departments and employ internal professional training programs,
- Providing technical consultancy to the BSE and OTCEI to establish training programs,
- Working with senior management at SEBI to design and implement training modules in surveillance and enforcement, and
- Working with senior managers at SEBI, BSE, NSE, NSDL and OTCEI to expand their professional training curriculum, particularly in key areas such as surveillance and enforcement

ii) Research Topics for participating institutions

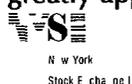
- The FIRE Project and CBOE provided guidance to the NSE on the design of the “Nifty 50” Index, and
- The FIRE Project sponsored research on trading systems and price discovery in the regional exchanges by the India Institute of Management Science, Bangalore

B India Based Training

Highlights of this activity include conducting

- Workshops for SEBI, BSE, NSE, NSDL and OTCEI where HRD strategy of international financial institutions was presented. These institutions subsequently appointed experienced managers to oversee training in their organizations,
- Individual investor awareness seminars for Bombay investors in January 1997,
- A workshop on the interconnectivity of exchanges for the Federation of Stock Exchanges in January 1997
- A presentation on competition between exchanges at the Securities Industry Summit in May 1997,
- Seminars on HRD development for OTCEI in June 1997,
- Training programs and “Train the Trainer” Workshops for the NSDL and BSE in May 1998, and

Dennis Grubb made sure we met the proper people in the Indian capital markets, including the Chairman of SEBI, and he coordinated meetings in Bombay and Delhi with major companies which we consider candidates for listing on the NYSE. His efforts were greatly appreciated.



GEORGES UGEUX
GROUP EXECUTIVE VICE PRESIDENT
INTERNATIONAL AND RESEARCH

JAMES SHAPIRO
MANAGING DIRECTOR
INTERNATIONAL LISTINGS ASIA PACIFIC

NYSE
NEW YORK STOCK EXCHANGE INC

B India Based Training (*contd*)

- Two Human Resources Management conferences for SEBI, the first at the outset FIRE in 1995, and the second at the conclusion in August 1998

C US Based Training

Highlights of this activity include conducting

- Internships to study exchange products and trading in unlisted securities at the NYSE and NASD by OTCEI officials in December 1997, and
- Internships on clearing corporations at the National Securities Clearing Corporation for OTCEI officials in December 1997

IMPACT

“Working closely with the Government and the private sector, we helped launch India’s over-the-counter stock market. We helped strengthen capital market regulation and operations to facilitate billions of dollars of potential new investment in India.”

J. BRIAN ATWOOD
ADMINISTRATOR, USAID
INDO - U.S. CHAMBER OF COMMERCE
MUMBAI, INDIA
SEPTEMBER 29, 1997

“Today, India is the recipient of more foreign investment than at any time in its history. Additionally, private sources of capital represent a larger share of total investment than ever before.”

J. BRIAN ATWOOD
ADMINISTRATOR, USAID
INDIAN BANKING ASSOCIATION
MUMBAI, INDIA
SEPTEMBER 29, 1997

1 Post Trade Clearance and Settlement

When the FIRE Project began in early 1995, clearance and settlement problems inhibited foreign investment into India. Foreign institutional investors identified problems involving duplicate share certificates and share transfer delays as key factors in their decision not to invest in India. Clearing corporations were inefficient and trade guarantee risks were not mitigated.

The FIRE Project facilitated the introduction of depositories legislation in 1996 and the subsequent establishment of the NSDL. Technical consultancy was also provided to modernize clearing corporations at the BSE and NSE. The creation of new institutions for scripless trading and settlement as well as the establishment of trade guarantee funds by the NSE and BSE were significant. These steps brought greater efficiency and transparency to the marketplace and signaled the institutions' desire to attain international organizational standards. India now has the clearing and settlement infrastructure necessary to support an efficient and modern capital market.

The FIRE Project provided extensive clearance and settlement training. Over 1,500 industry participants from the NSDL, BSE, NSE, OTCEI and other organizations received FIRE sponsored training from industry experts. This training has strengthened these institutions and helped to establish management information systems. US based training provided over 15 officers with exposure to and hands on training at institutions such as the NSCC and the DTC. These officers in turn will help ensure the long-term sustainability of technical consultancy provided to institutions such as the NSDL and NSE by the FIRE Project through supporting training and organizational development efforts.

2 Strengthening the Regulatory Framework

When the FIRE Project began in 1995, both SEBI and NSE were young organizations. SEBI had not established itself as an effective regulatory force, and the NSE was looking for ways to implement its technologically intensive objectives. In addition, the concept of self regulation was not developed, issues relating to broker licensing, testing and capital adequacy were not sufficiently addressed, systematic information disclosure was not prevalent, and the India securities law required significant revision.

The FIRE Project played a key role in strengthening SEBI and providing analytical work and technical consultancy for the NSE. SEBI was the FIRE Project's primary client, and received considerable technical consultancy and training. Although its enforcement capability still needs strengthening, SEBI has been established as a credible regulatory agency. In addition, the FIRE Project prepared and recommended a new draft securities law.

The NSE leads the Indian market in technological innovation and is according to some measures, now India's largest stock exchange. Assisted by the FIRE Project, the NSE has spent over \$100 million developing its nationwide screen based trading system. This has compelled other

exchanges to upgrade to computerized systems. The combined effect has significantly improved the efficiency and transparency of the Indian market.

The FIRE Project provided India based training for officers from SEBI, BSE, NSE, OTCEI and the regional stock exchanges as well as brokers and individual investors. Topics covered included self-regulation, market surveillance and enforcement, licensing and certification, broker activities and capital standards, broker registration and investor protection. The frequent discussion of issues relating to the regulation and licensing of brokers in public forums, magazines and newspapers indicates the impact that the FIRE Project had in bringing the attention of industry groups onto these issues.



The future of the Sub Brokers Workshop conducted in 20 cities by Mr. Thomas Keyes, Consultant and President of Securities Training International.

3 Market Enforcement, Oversight and Surveillance

In 1995, SEBI had neither the skills nor the requisite staff to implement adequate market enforcement, oversight or surveillance. The lack of information sharing between SEBI and the stock exchanges hindered effective enforcement.

Benefited by FIRE Project technical consultancy, SEBI now has a market enforcement plan, has prosecuted insider trading cases and has established staff development programs. SEBI has sought to improve the structure and functioning of stock exchanges and to assure disclosure norms and investor protection. It has grown from an initial staff of 40 to a current level of 150. In addition, SEBI and the stock exchanges now combine to monitor market activity and share relevant information.

India based training on enforcement and market surveillance was provided for nearly 500 industry participants. In addition, 29 persons were given enforcement and surveillance training at the SEC and NYSE. The Chairman of SEBI visited the NYSE on a study tour. These training activities acquainted key industry participants with the international regulatory environment, and assisted to create a framework in which regulatory reform can be implemented.

4 Debt Market

The Indian bond market was rudimentary in 1995. A Primary Dealer network was not established and the corporate bond market was inactive. The importance of bond markets in the development of long-term industrial and infrastructure financing had not been realized.

The FIRE Project identified many structural impediments to the development of the Indian bond market. Government policy and infrastructure issues still present major impediments to the development of a secondary market. However, the importance of a debt market is now realized, and the impediments facing its introduction are widely discussed. The FIRE Project has had an impact by facilitating the creation of two industry groups, FIBA and FIMMDA, that will serve as catalysts for change. Aided by FIRE Project assistance, measures to implement an active secondary bond market are now being considered.

IMPACT (CONTD)

UTI points to pot of gold at end of equity Mutual Funds
"There is good money to be made by investors through equity-linked mutual fund products "

THE ECONOMIC TIMES JULY 9 1998

Given the stage of market development, training was not a FIRE Project priority in this area. FIRE did, however, sponsor a seminar on infrastructure development, and included debt market discussions at several industry conferences it organized. These served to create an initial awareness of the need to develop the Indian bond market.

5 Mutual Funds

The mutual fund industry in India was inadequately regulated in 1995. Liberalization of the financial sector in 1992 had encouraged private sector mutual funds. However, instances of malpractice eroded investor confidence in the mutual fund industry.

The FIRE Project worked with AMFI to establish it as a model self-regulatory organization and to create standards for the mutual fund industry to follow. These developments have enabled SEBI to better regulate the industry. As a result, investor confidence has improved, and the retail investor base has broadened. Furthermore, additional investment opportunities have been created to service the broadened investor base.

The FIRE Project provided mutual fund training to over 1,200 market participants. Primary objectives of the training were to strengthen AMFI, improve SEBI mutual fund sector regulation, and create an awareness of best practices and standards of conduct among industry participants. AMFI was trained on leadership issues and investor protection. The FIRE Project assisted it become a role model for other self-regulatory organizations. Furthermore, industry participants have accepted the AMFI code of conduct. SEBI training focused on inspections and investigating violations of mutual fund regulations. SEBI is better able to regulate the industry, and investor protection has been enhanced.

US based training was provided for SEBI and AMFI officers as well as key industry participants. This training was designed to help participants understand and appreciate the operation of the US Mutual Fund Industry, including the regulatory framework, compliance systems, the role of independent directors, observance of professional standards, mutual fund accounting, merchandising, product development and customer services. These officers have in turn served as catalysts for beneficial change in India.

6 Derivatives

In 1995, the Indian Government expressed an interest in establishing a derivatives exchange. At the outset of the FIRE Project however, no further steps had been taken.

The FIRE Project provided technical consultancy toward a feasibility study for a derivatives exchange and assisted the industry committee on derivatives. In addition, necessary regulations were prepared for SEBI. Aided by this technical consultancy, India has become aware of the benefits of, and regulatory issues associated with, a derivatives market. It has recently announced plans to commence derivatives trading.

The FIRE Project provided India based derivatives training to nearly 1,200 industry participants. As a result of this training, issues pertaining to the establishment of a derivatives exchange are better understood. US based training exposed participants from SEBI, NSE and OTCEI international practices and regulatory issues. This exposure enabled these participants to contribute toward the preparation of regulations for a derivatives exchange in India.



*Indian Presentation to IOSCO meeting
October 1997 (L) Mr Garillia
- Bombay Stock Exchange,
(M) Mr Ravi Narian-National Stock
Exchange, (M) Mr Dennis Grubb - FIRE
Project, (R) L K Singhvi - Senior
Executive Director / Enforcement
- SEBI*

7 Other Activities

At the beginning of the FIRE Project, human resources management at key capital market institutions was weak and training programs had not been established. In addition, research at capital market institutions and academic institutions had not developed as a supplement to market information available on the financial industry.

The FIRE Project facilitated the establishment of human resources departments at SEBI, BSE, NSE, NSDL and OTCEI. In addition, FIRE commissioned studies from several research institutions and universities. Aided by FIRE Project assistance, capital market training and research has been institutionalized as a market practice.

FIRE Project India based training assisted SEBI, BSE, NSE, NSDL, OTCEI, and the regional exchanges strengthen their human resources departments. As a result, these institutions are now better able to establish and develop their own management training programs. In addition, they have appointed experienced managers to supervise internal training and initiated action to modernize their management systems.

SUSTAINABILITY AND RECOMMENDATIONS

I would like to express my gratitude to you on behalf of the World Bank for participating in the Financial Sector Conference at Goa. If the conference has been a success, it owed in no small measure to your presence and contribution.

SANJAY KATHURIA
PROJECT OFFICER
THE WORLD BANK
INTERNATIONAL BANK FOR RECONSTRUCTION AND
DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

Sustainability

The FIRE Project strategy of addressing market concerns in the 7 focus areas through technical consultancy and training was effective. The platform of the seven-fold objective provided the FIRE Project and its counterpart capital market institutions a framework through which to analyze issues, prepare regulations, propose policy changes, measure progress and implement training. Given the magnitude and complexity of India's capital markets, implementing change is a slow and challenging process. To be implemented, policy recommendations often required the review and approval of various industry committees. In addition, various institutions had to be strengthened, and in some cases created, before substantive assistance could be delivered.

The accomplishments of the FIRE Project are significant. In order to ensure sustainability in these areas, however, much remains to be done. Although the framework for sustainable capital market growth has been established, a continued program for capital markets development is imperative for India to continue the reform of its capital markets. The FIRE Project has identified four areas in which future assistance should focus.

Recommendations

The next five years will be important for India's capital markets. In spite of the negative developments of recent months, we hope that the achievements of the FIRE Project will serve as base for continued innovations in technology and system advancements. Technical consultancy will be an important part of the continued reform process. Based on our experience in India during the last four years, we believe that continued assistance should focus on four general areas. These are: improving regulations and legislation, stimulating the debt market, increasing investor protection, and systems infrastructure improvements.

Regulations and Legislation

Reforming and improving market regulations are ongoing processes around the globe. As in any market, India constantly strives to improve the detection and enforcement of unfair market practices, including market manipulation, insider trading violations and false and misleading disclosure. India, however, faces unique challenges in the regulation of its markets. SEBI is a young organization, having been founded in 1992, and is still implementing systems required for adequate surveillance. Methodologies for detecting trading market abuses, insider trading and market manipulation are still being developed.

While significant steps have been made, India still needs to enact a comprehensive securities law which would empower SEBI to oversee the Indian securities market more effectively. The Dhanuka Committee is calling for increased enforcement powers and fining authority for SEBI. It is important that the law enacted contains only the most basic legal principals, authority and structure, which will leave SEBI the ability to adjust to the changing legal requirements through its regulations. Another important aspect of legislation will be to promote equal regulation and enforcement standards for all securities market participants regardless of their institutional structure.

SEBI needs to establish a disclosure department and be given the legal authority to regulate ongoing corporate disclosure. SEBI needs the ability to take

I would like to thank you for sending me the documents that you did. I am sure I will find them very helpful.

ANZ Grindlays Bank

ARVIND SETHI
FIMMDA ORGANIZING COMMITTEE
ANZ GRINDLAYS BANK

enforcement action through the administrative process, including imposing fines, sanctions and penalties to those who fail to comply with industry standards. In order to implement these changes, SEBI will require technical consultancy. Technical consultancy should also develop SEBI's ability to oversee market operations, especially in monitoring for compliance and reviewing filings for false and misleading reports.

Debt Market

The Ministry of Finance should provide regulatory authority to SEBI for all PSU corporate debt. The FIRE Project believes that SEBI should regulate the issuance of all PSU bonds, corporate bonds, and other non government fixed income securities. Currently in the market, there is confusion amongst industry participants as to which instruments are monitored by which regulator, to whom they should report, and to which standards they should comply. Action from the Ministry of Finance can clear this confusion. The Ministry of Finance needs to provide strong leadership and provide a forum in which regulatory authorities, the exchanges, market intermediaries and market participants can have effective communication. Granting SEBI centralized authority to oversee the equity markets has been successful. SEBI is now sufficiently capable and experienced to take on this additional responsibility.

The FIRE Project also recommends that The Ministry of Finance establish a coordinating committee to develop a debt market. This committee should comprise of a senior representative from the Ministry of Finance, the Governor of the Reserve Bank of India (RBI), the Chairman of SEBI, a senior representative from NSDL, a representative on behalf of stock exchanges and representatives from key industry associations. The RBI and SEBI also need to recognize and work with industry groups such as the Fixed Income Money Market and Derivatives Association (FIMMDA) and Fixed Income Broker Association (FIBA) to develop active secondary trading in the debt market. Steps should be taken to facilitate bank financing to broker dealers, while demanding of them more stringent net worth requirements. This would facilitate secondary trading, while ensuring that broker dealers are not over extended. In addition, the activity of all unregistered debt intermediaries should be prohibited. As in the equity market, training and staff development at RBI and SEBI should continue. This training should provide an exposure to other markets.

The bond market requires significant technical improvement. The RBI should establish a fully automated clearing and settlement system for all issued and outstanding Government Securities. The FIRE Project recommends the creation of a single debt clearing corporation with mechanisms similar to those of the NSDL. All primary dealers need to quote realistic two-way quotes on all Government Securities and actively trade.

Investor Protection

During the FIRE Project, the initial framework for financial intermediaries was created to improve investor confidence and facilitate a larger flow of investments. Though the positive effects of this process have been recognized, more needs to be done. The FIRE Project recommends that SEBI develop and publish rules on Books and Records to provide more clarity and specificity. SEBI should adopt and enforce a uniform liquid assets rule to determine capital

SUSTAINABILITY AND RECOMMENDATIONS (CONTD)

adequacy standards at financial institutions. In addition, SEBI should play a leading role in developing greater transparency through improved accounting standards and more stringent programs for inspections of brokers and other market participants.

The FIRE Project held several investor education and awareness campaigns. These played an important role in strengthening investor confidence and highlighting key issues for industry participants. The FIRE Project was influential in establishing a climate of learning and continued education among industry participants through these programs. Technical consultancy in these areas should be continued. Assistance should continue to be provided to the stock exchanges to promote investor awareness programs, and to industry associations to promote investor education initiatives. The FIRE Project also recommends that assistance be provided in undertaking a comprehensive review of current investor protection programs. This review would include determining the availability of information and the routes available for disseminating information on a continuous basis, creating an Investor Protection Fund, and establishing a central database for filing corporate information.

Systems Infrastructure Improvements

Great strides have been made in bringing post trade clearing and settlement procedures closer to the Group of 30 Standards. Before the FIRE Project began, problems in clearing and settlement—such as duplicate share certificates, share transfer delays, inefficient clearing corporations, and trade guarantee risks—were significant inhibiting factors to foreign investment in India. The National Stock Exchange took the lead in systems improvement by setting up a nationwide screen-based trading system. This has compelled other exchanges to make similar upgrades. The FIRE Project was influential in supporting this process.

Technical consultancy should be continued in order to maintain the industry's commitment to technological improvement, and support issues relating to technology implementation as they arise. The development of a depository has provided the Indian market with immense opportunity. But support for this process needs to be continued. Consultancy needs to be provided to ensure that the goal of all settlements occurring in the depository is maintained. Similarly, efforts between the NSDL and the proposed depository in the BSE need to be coordinated. Assistance should also be provided to evaluate the clearing and settlement systems for the bond market, and to ensure that the systems in place are able to support active secondary trading in the bond market.

However, Since the FIRE Project is coming to an end by August 14, 1998, I understand that it would be difficult for you to complete the entire evaluation.



R. H. MEWAWALA
VICE PRESIDENT
SHCIL

CONCLUSION

In terms of contract deliverables, consultant man-hours, and US and India based training programs, the FIRE Project achieved 100% of its objectives by the scheduled project completion date of August 14, 1998. An Index of Capital Market Development undertaken by USAID (Appendix IV, Table 3) provides insight into the accomplishments of the FIRE Project. The Table also emphasizes the extent of work that remains to be done. India's reform objectives are diverse, and the process faces many hurdles. One of the most important of the many lessons learned during the project's four years in India is that sustained technical assistance will be important to the successful reform of India's financial sector.

The Future of Fund Management in India 1998 AN INVEST INDIA CONFERENCE



Launch of the future of Indian Stock Markets (L) Mr. Grubb - FIRE Project, (M) Mr. Pratip Kar Executive Director - SEBI, (R) Ms. Preeta Mishra MD Invest India

I'm sorry to learn that the US might close your project, and I very much hope that good sense will prevail between now and then

SBC Warburg

A DIVISION OF SWISS BANK CORPORATION
EJUAN MACDONALD
CHAIRMAN INDIA
SBC WARBURG
A DIVISION OF SWISS BANK CORPORATION

Though much progress was made, further financial sector reform will be necessary for the FIRE Project's accomplishments to be sustained. The Project developed a learning environment in local institutions so that training processes will be continued, and the path toward reform will be maintained. Similarly, the FIRE Project developed an improved regulatory framework and completed necessary training for personnel in regulatory and market intermediaries. Much remains to be done, and technical consultancy will remain an important component of this.

For the Indian capital market to function effectively, both the equity and bond markets need to have greater liquidity, and be linked together by a common regulatory framework. This has not yet happened. The FIRE Project provided considerable training and technical consultancy to the equity market in India. Noteworthy success was achieved in terms of market regulations and surveillance. Similarly, though liquidity levels remain weak in comparison with other markets, progress was made in this area as investor confidence improved. Though the debt market remains in a more rudimentary stage of development, the FIRE Project began laying the groundwork for further development. The FIRE Project provided evidence of the benefits that industry experts can bring to the Indian capital market through training and technical consultancy. As a result of FIRE Project assistance, Indian investors directly benefited. As India's market continues to develop, international technical consultancy should continue to partner its progress.

In order to promote equal regulation and enforcement standards for securities market participants, the FIRE Project recommended that a single government agency, SEBI, oversee both the equity and debt markets. For the equity market, this has been accomplished. Though the effects of the previous administration still exist, as can be seen for example, in the fragmented jurisdiction between SEBI and the DCA, the emergence of SEBI as a respected regulatory authority is a significant step forward. Broadening SEBI's authority will continue to be an issue with the RBI, DCA and other government agencies. Therefore, technical consultancy to SEBI in the areas of enforcement policy, regulation and market surveillance will remain an important part of continued reforms. In spite of the difficulties, SEBI has been a prime mover in capital market reform, and has gained the respect and confidence of both investors and market intermediaries. A unified regulatory environment will be a significant step forward for the Indian market. In pursuit of this goal, the FIRE Project sought for SEBI to be given jurisdiction over the debt as well as the equity market, and recommends that future assistance promote this goal.

CONCLUSION (CONTD)

I would like to thank you, Mr Walter Pugh and the rest of the team members for presenting an excellent report. The report was also presented to our Board which was accepted in principle and we intend to implement the same shortly

 **AJEET PRASAD**
MANAGING DIRECTOR
OTC
EXCHANGE OF INDIA

The Committee of the Calcutta Stock Exchange expresses its deep gratitude to you personally as well as all the members of your Organization for your contribution towards the development of Indian Capital Markets all these years

 **VIVEK MAHAJAN**
VICE PRESIDENT
THE CALCUTTA STOCK EXCHANGE
ASSOCIATION LTD

In India, inadequate controls and financial responsibility still weaken the functioning of the capital market. These issues have been discussed at length with SEBI. The FIRE Project prepared and delivered a report on financial responsibility for SEBI that outlines the FIRE Project's suggested requirements for all market intermediaries. Detailed recommendations on capital adequacy standards, liquid assets, book keeping margin requirements, reporting and investor protection were also presented in this report. The maintenance of market integrity is essential to investor confidence. Accounting standards in India do not currently offer investors adequate financial information on a continuous basis. The FIRE Project identified many of the issues involved with this problem. The two most important are the lack of uniform accounting rules and commonly accepted disclosure practices. Progress in this area is essential to continued market reform and growth.

The FIRE Project identified the information needed by both SEBI and the stock exchanges to ensure a well regulated marketplace. Recommendations regarding the frequency of reporting obligations were offered. FIRE recommended an information management system for SEBI and proposed a methodology for making information available to investors. In spite of these, disclosure remains weak, and neither SEBI nor the stock exchanges have been able to adequately enforce disclosure requirements. Continued assistance in this area will be critical.

Investor confidence will continue to grow as the enforcement of regulations improves. Accordingly, the FIRE Project prepared a draft comprehensive Indian Securities Law for the Dhanuka Committee. The Dhanuka Committee was set up to study securities laws and overlapping jurisdictions of various institutions. In addition, the FIRE Project undertook a review of SEBI's enforcement plan, a detailed study of SEBI's enforcement activities, and provided recommendations to SEBI on market surveillance and how to prosecute insider trading cases. All of these activities have created an awareness of the issues and a framework in which policy and law can be formulated. However, without the proper surveillance systems, the enforcement will continue to be ineffective.

A new law is also required to regulate UTI as part of the mutual fund industry. UTI is currently treated as a separate entity with respect to market regulation and investor protection. The UTI scheme has implications to the entire market. The fund has been extremely successful over the past 40 years. It has been a major contributor to the mutual fund industry and to the equity market, and has brought share ownership to the common man in India. All of these are important factors in economic development.

The FIRE Project efforts in the debt market area are also noteworthy. A strategy for the development of the Indian debt market was prepared. In addition, FIRE established two associations, FIMMDA and FIBA that will work toward regulatory reforms and the development of the Indian bond market. These two associations will serve as a catalysts for reform in the debt market area. However, a regulatory framework has not been established, and the secondary market is inactive. Significant technical consultancy and training will be required in this area. Accounting and market practice standards have not been established. In addition, industry participants need to be licensed and

registered, enforcement standards established, and an investor awareness program created. The RBI established six primary dealers and is considering a satellite dealer network. FIMMDA and FIBA will enhance the lobbying for reform in the debt market and will improve the market making network. Further, aided by the FIRE Project, additional measures to implement a bond market are being considered.

The National Stock Exchange of India Ltd has emerged as the premier exchange in the country, and over the past three years this position has strengthened even further



ASHISHKUMAR CHAUHAN
VICE PRESIDENT
NATIONAL STOCK EXCHANGE OF
INDIA LIMITED

Thank you very much indeed for all the efforts PW has put into this plan over the past three months under the PW/FIRE project



NASSER MUNJEE
EXECUTIVE DIRECTOR
HDFC

The earlier reference to the Index of capital market development prepared by USAID gives a quantitative frame of reference for the accomplishments of the FIRE Project. The Mission in New Delhi developed a set of objectives based on the project's six key objectives, and identified a mean target of 5.17 (based on criteria laid out in the index) for project accomplishments. This was contrasted against the data provided by a volunteer board of scorers, who developed an average score of 5.72. This figure not only provides quantitative evidence of the project's accomplishments, but also the extent of work which remains to be done. The Index can be found in Table 3 of Appendix Four.

At the completion of the FIRE Project, the key institutions that will continue the reform process were in place. FIRE developed the capacity to continue identifying training needs, and design and evaluate appropriate programs on a local level. The training objectives laid out by USAID were met, and had considerable impact. Now is a critical time for India's capital markets. India has made considerable steps to integrate itself with the global economy. Though much progress has been made, an on going commitment to reform cannot be taken for granted. Infrastructure needs are great, and these rely on the continued advancement of these reforms. Ongoing technical consultancy in India's financial sector will play a lead role in achieving these objectives.

Appendix I: Fire Project Reports

Deliverable Number	Consultant	Title of the Deliverable	Date
01	Mr Howard Schuman	Training Needs Assessment Report	June 20, 1995
02	Mr John Ruckrich	NCDS Request for Information - Stock Holding Corporation of India Ltd	July 7 1995
03	Mr Walter Pugh	Review of NSE data Security and Business Continuity Planning - NSE T O # 003	October 18, 1995
04	Mr Ranjit Advani	Back Office Systems Review - NSE T O # 003	November 15, 1995
05	Mr Cliff Kennedy	Review of the Enforcement Plan of the Securities Exchange Board of India - SEBI T O # 004	November 28, 1995
06	Mr Frank Wilson	Review of rules and regulations of National Stock Exchange and its status as a self regulatory organization - NSE T O # 003	October 30, 1995
07	Mr Terrance O'Malley	Enforcement Program Assistance SEBI T O # 004	January 15, 1996
08	Mr Stephen Brown	A review of the Operational Impediments of the Debt Market in India - NSE T O # 003	January 15, 1996
09	Mr Thomas Keyes	Design and Implementation of Licensing, Certification and Testing Program for persons joining capital market intermediaries	January 15 1996
10	Mr Thomas Keyes	Design and Implementation of Licensing, Certification and Testing Program for persons joining capital market intermediaries	February 15, 1996
11	Dr William Barclay	Feasibility Study of a Derivatives Exchange in India - NSE T O # 003	March 18 1996
12	Mr Walter Pugh	OTCEI Information Systems Risk Review	April 1996
13	Mr Thomas Keyes	Certification and Testing of Market Intermediaries	May 16, 1996
14	Mr David Tsoi	Automated Depository System Technical Evaluation Report	May 25, 1996
15	Mr Rajat Saxena	Research paper on Retail Debt Marketing in India	May 31, 1996
16	PW/FIRE	SEBI Regulation for Depository and Participants	July 5, 1996
17	Ms Susan Hertal	Organizational Structure Plan for NSDL	July 20, 1996
18	Mr Walter Pugh	Data Centre Operations Manual for NSE	August 1996
19	Mr Walter Pugh	Business Continuing Plan Draft Report Stage I	September 6 1996
20	Mr Walter Pugh	Review of Data Security and Business continuity planning for SHCIL	September 12, 1996
21	Mr Lewis J Mendelson	A Comprehensive Strategic Plan for AMFI	September 20 1996
22	Ms Susan Hertal	Work flows and Job Description under the Organizational Plan for NSDL	September 30, 1996

Deliverable Number	Consultant	Title of the Deliverable	Date
23	Mr Thomas Keyes & Mr Paul Litteau	An Orientation Programme on the US Model for Regulation And Registration of Retail Capital Market Intermediaries for SEBI	September 1996
24	Mr Walter Pugh	Business Continuity Plan Final Report Stage I	October 9, 1996
25	Mr Thomas Keyes	Registration and Regulation of Retail Capital Market Intermediaries, the Sub brokers for SEBI	October 15, 1996
26	Mr Frank Wolf	Depository cost study - Final Report The Stock Exchange, Mumbai	October 21, 1996
27	Mr Thomas Keyes & Mr Paul Litteau	An orientation Program on International Capital Markets for participants from the Ministry of Finance, SEBI & The Stock Exchange, Mumbai	November 30, 1996
28	Ms Susan Hertel	Follow up on the organizational structure plan for NSDL	November 1996
29	Mr Frank Wolf	Depository and Clearing Corporation Cost Study The Delhi Stock Exchange Association Ltd	December 2, 1996
30	Mr Walter Pugh	Business Continuity Plan Draft report stage Two	December 1996
31	Mr Bill Gorman	Inter Connected Market System Feasibility Report	January 21, 1997
32	Mr Lewis Mendelson	Assistance to Mutual Funds - Review of comprehensive Strategic Plan and Investor Awareness campaign	February 24, 1997
33	Mr Joseph Schenk	World Securities Market Clearing/ Settlement Proposal for Stock Exchange, Mumbai	February 1997
34	Mr Walter Pugh	Business Continuity plan Final report on Stage One (Telecom)	February 1997
35	Mr Paul Litteau	Review of the establishment of Derivatives Exchange in India	March 14 1997
36	Ms Susan Hertel	Review of Organizational Development of NSDL	March 1997
37	Mr Lewis Mendelson	Assistance to Mutual Funds	April 7, 1997
38	Mr Paul Litteau	Review of Regulations for Derivatives Exchange in India	April 7, 1997
39	Mr Thomas Keyes	Registration and Regulation of Retail capital market Intermediaries for Securities and Exchange Board of India April 1997	April 15, 1997
40	Mr Theodore Burns & Mr Richard J Kemmer	Draft Business Plan for Infrastructure Development Finance Company Limited	April 25, 1997
41	Ms Susan Hertel	Work plan for continued assistance to NSDL	April 1997
42	Mr Harry Melamade	Assistance to Securities and Exchange Board of India - Report on Financial Responsibility Framework	April 1997
43	Mr David Silver	Assistance to Mutual Funds Improving Products and Services, Strengthening the Regulatory Framework and AMFI	April 1997

Appendix I: Fire Project Reports (contd)

Deliverable Number	Consultant	Title of the Deliverable	Date
44	Dr Tessie San Martin	Training under the FIRE Project	May 6, 1997
45	Mr Thomas Keyes	Registration and Regulation of Retail capital market Intermediaries for Securities and Exchange Board of India - May 1997	May 20, 1997
46	Mr Thomas Keyes	Certification and Testing of Capital Market Intermediaries for Securities and Exchange Board of India May 1997	May 1997
47	Mr Walter Pugh	Pilot study of control procedures for NSDL	June 1997
48	Ms Susan Hertel	Management & Staff training through development of procedural manuals for NSDL	June 10, 1997
49	Mr Khush Choksy & Mr Ajith Devasurendra	Proposal for the establishment of a Debt Dealers Association in India	July 18, 1997
50	Mr Lewis Mendelson	Assistance to Mutual Funds Review of comprehensive strategic plan & Investor Awareness campaign	July 22, 1997
51	Mr William Barclay	Index Derivatives Trading and the Indian Equity Market Impact, Regulation and Control Design	July 31, 1997
52	Mr Walter Pugh	Business Continuity Plan - Over The Counter Exchange of India Report on Stage Two	August 5, 1997
53	Mr Walter Pugh	Management Information Systems (MIS) for Data Processing Operations OTCEI Report on Phase 1	August 5, 1997
54	Mr Cliff Kennedy	Investigation Module for market manipulation - NSE	August 13, 1997
55	Mr Cliff Kennedy	Investigation Module for market manipulation BSE	August 13, 1997
56	Mr Cliff Kennedy	Investigation Module for market manipulation OTCEI	August 13, 1997
57	Ms Sandhya Bhate	Association of Mutual Funds in India (AMFI) Model Compliance Manual	August 14, 1997
58	Mr Bill Gorman	Over The Counter Exchange of India (OTCEI) Testing the ASSETS 8.0 Trading System - Test Results and recommendations	August 18, 1997
59	Ms Zoanne Nelson	Report on the Market Surveillance Workshop	August 20, 1997
60	Ms Susan Hertel	Development of operating procedures, manuals for National Securities Depository Limited (NSDL) Departments of Participant Interface, Issuer Interface, Registrar Operations and Business Partner Inspection	August 30, 1997
61	Ms Susan Hertel	Review of the Cash Settlement Process and proposed securities depository for the Stock Exchange, Mumbai (BSE)	September 1, 1997
62	Mr Joseph Schenk	Review of Clearing and settlement Procedures at the Delhi Stock Exchange	September 29, 1997

Deliverable Number	Consultant	Title of the Deliverable	Date
63	Mr Peter Grennough	Strategy for Development of the Secondary Debt Market in India	October 6, 1997
64	Mr Michael Sommer	Issuer & Regulatory controls on Securities Transactions by Insider	October 6, 1997
65	Mr David Strandberg	Draft outline for Workshop & Primer - How to investigate & prove an Insider Trading case	October 21, 1997
66	Ms Kate Hathaway	International approaches to Derivatives Market Regulations Common Global Regulatory Objectives	October 23, 1997
67	Mr Bill Gorman	Comments on the Preliminary Project report for the Inter Connected Stock Exchange of India Limited	October 23, 1997
68	Ms Susan Hertel	Development of Operating Procedures Manuals for NSDL Departments of Clearing Corporation Interface, Corporate Communications-Marketing & Corporate Planning and Risk Management	October 30, 1997
69	Mr Cliff Kennedy	India Securities Law Strategy	November 17, 1997
70	Ms Susan Hertel	Establishment of a Continuing Training Program within the Human Resources Department of National Securities Depository Limited	November 20, 1997
71	Ms Susan Hertel	Assistance to Securities Settlement and Clearance to The Stock Exchange, Mumbai	November 25, 1997
72	Ms Kate Hathaway	A review of the SEBI Derivatives Committee Report A Regulator Framework For Derivatives Trading	November 26, 1997
73	Ms Zoanne Nelson	Workshop Implementing a Market Surveillance System, November 11 - 13, 1997	November 28, 1997
74	Ms Sandhya Bhate	Workshop AMFI Mutual Fund Compliance Workshop Meeting our Professional Responsibilities	December 4-5, 1997
75	Ms Susan Hertel	Development of Operating Procedures Manuals for National Securities Depository Limited (NSDL) Departments of Surveillance, Compliance and Finance/Accounts	December 21, 1997
76	Ms Kate Hathaway	A Framework of Derivatives Market Regulations for the Exchange Self Regulator in India Draft Futures Market Regulations for the National Stock Exchange of India Ltd	December 21, 1997
77	Ms Anjali Kamat	SEBI Mutual Fund Inspection Workshop Quality Control and Consistency in Mutual Fund Inspections Insights from the US SEC Inspection Process	December 23, 1997
78	Ms Kate Hathaway	Approaches to Derivatives Market Regulation for Financial Safety and Fairness by Various Jurisdictions	December 23, 1997

Appendix I: Fire Project Reports (contd)

Deliverable Number	Consultant	Title of the Deliverable	Date
79	PW FIRE Project	Assistance to Registrars Apostrophe Association of India Manual of Standard Operating Procedures	January 9 1998
80	Mr Michael Gorham	Report on Stock Index Futures for the National Stock Exchange of India Limited	January 19, 1998
81	Ms Kate Hathaway	Paragraph Review of the December 1997 Gupta Derivatives Committee Report	January 23, 1998
82	PW FIRE Project	Assistance to Securities and Exchange Board of India of Certification, Licensing and Testing of Capital Market Intermediaries	January 31, 1998
83	Ms Susan Hertel	Expansion of the Training Program within the Human Resources Department of The Stock Exchange, Mumbai (BSE)	January 1998
84	PW FIRE Project	Study of Control Objectives and Related Procedures for the National Securities Depository Limited	March 3, 1998
85	Mr Lewis Mendelson	Assistance to Mutual Funds - Review of Comprehensive Strategic Plan & Investor Awareness Campaign	March 16, 1998
86	Ms Susan Hertel	Development of Operating Procedures Manuals for National Securities Depository Limited - Departments of Information Technology Systems and Networking	March 30, 1998
87	Mr Frank Wilson	Development of Self Regulation Concept in India	April 6, 1998
88	Mr Khush Choksy	Fixed Income Brokers Association Business Plan	April 22, 1998
89	Mr Thomas Keyes	Distribution of Financial Products Registration and Regulation of Retail Capital market Intermediaries	May 20, 1998
90	Mr Cliff Kennedy & Mr Frank Wilson	Market Surveillance Reference Manual for National Stock Exchange of India (NSE)	June 3, 1998
91	Mr Cliff Kennedy & Mr Frank Wilson	Market Surveillance Reference Manual for The Stock Exchange, Mumbai (BSE)	June 3, 1998
92	Mr Cliff Kennedy & Mr Frank Wilson	Market Surveillance Reference Manual for The Over The Counter Exchange of India (OTCEI)	June 3, 1998
93	Mr Cliff Kennedy & Mr Frank Wilson	Development of Surveillance Investigation and Enforcement Procedures manuals for the Securities and Exchange Board of India (SEBI)	June 3 1998
94	Ms Susan Hertel	HRD Internal Training Program Procedures for The Stock Exchange, Mumbai (BSE)	June 1998
95	Ms Susan Hertel	HRD Internal Training Program Procedures for the National Securities Depository Ltd (NSDL)	June 1998
96	Ms Sandhya Bhate	Survey of the Implementation of the Model Compliance manual by AMFI members	July 29 1998

Deliverable Number	Consultant	Title of the Deliverable	Date
97	Mr Paritosh Sharma & Mr Kavi Kapur	Survey of Retail Financial Intermediaries (RFIs)	August 1998
98	PW FIRE Project	Study of Guaranteed and Assured Return Schemes	August 1998
99	Ms Sandhya Bhate	AMFI Model Compliance Manual (revised as of July 1998)	August 7, 1998
100	PW FIRE Project	Survey on Corporate Disclosures Practices in India	August 1998
101	Dr Tessie San Martin & Mr John Harris	SEBI Conference Proceedings Creating a Vision for the 21st Century July 31-August 2, 1998, Mumbai	August 1998
102	PW FIRE Project	Integration and Price Discovery in the Indian Stock Markets	August 1998

Appendix II: India Based Training

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
25	SEBI, NSE intermediaries	2 days	10	May 1995	<i>Derivatives Program</i> PW FIRE Project
35	SEBI	3 days	21	August 1995	<i>Organizational Development for SEBI</i> Howard Schumann, et al
51	IMC Stock Market	1/2 day	5	December 1995	<i>Depository</i> Dennis Grubb
5	UTI Inst of Capital Markets	1 day	1	December 1995	<i>Licensing and Certification</i> Thomas Keyes
8	SEBI Licensing Committee	1 day	2	December 1995	<i>Licensing and Certification</i> Thomas Keyes
184	AMF Fin Services Convention	1/2 day	18	January 1996	<i>Depository Development</i> Dennis Grubb
76	Rotary	1/2 day	7	January 1996	<i>The Share Market Bank</i> Dennis Grubb
8	SEBI	1/2 day	1	January 1996	<i>Enforcement Procedures</i> Terrance O'Malley
11	USAID, ADB,	1/2 day	1	January 1996	<i>Financial Futures and Options Delhi Stock Exchange</i> Dr William Barclay
70	NSE, SEBI, Banks, Brokers	1 day	14	February 1996	<i>Financial Futures and Options</i> Dr William Barclay
25	Custodians	1/2 day	2	February 1996	<i>Depository</i> William Dentzer
12	ICICI	1/2 day	1	February 1996	<i>Depository</i> William Dentzer
18	Brokers and Custodians (Jardine, DSP, BSE)	1/2 day	2	February 1996	<i>Depository</i> William Dentzer
50	Conference Board	1/2 day	5	February 1996	<i>Depository</i> William Dentzer
16	OTCEI	1/2 day	2	February 1996	<i>Data Security</i> Walter Pugh
10	SHCIL	1/2 day	1	February 1996	<i>Data Security</i> Walter Pugh
31	SEBI, Regional Exchanges	1 day	6	March 1996	<i>Securities Enforcement Market Surveillance and Self Regulation</i> Cliff Kennedy
10	SEBI Regional Offices Madras	1 day	2	April 1996	<i>Securities Enforcement, Market Surveillance and Self Regulation</i> Cliff Kennedy

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
5	SEBI	1 day	1	April 1996	<i>Self Regulatory Organizations Rules and Regulations</i> Frank Wilson
148	NSE Members	1 day / each	30	April 1996	<i>Self Regulatory Organizations Rules and Regulations</i> Frank Wilson
5	OTCEI	1 day	1	April 1996	<i>Self Regulatory Organizations Rules and Regulations</i> Frank Wilson
41	NSE, OTC	1 day	8	April 1996	<i>Information Security Awareness Training</i> Walter Pugh & Citibank
26	NSE, OTC	1 day	5	April 1996	<i>Data Security Training</i> Walter Pugh & Citibank
75	Madras Sub-Brokers	1 day	15	April 1996	<i>Sub Broker Workshop</i> Thomas Keyes
70	Individual Madras Investors	1 day	14	April 1996	<i>Investor Education Workshop</i> Thomas Keyes
50	Madras Exchange/Brokers	1 day	10	April 1996	<i>Investor Education and Structural Changes</i> Thomas Keyes
5	OTC	1 day	1	April 1996	<i>Depository Workshop</i> Walter Pugh
4	SEBI	1 day	1	April 1996	<i>Self Regulation in the Securities Industry</i> Cliff Kennedy
14	SEBI Regional Office, Delhi	1 day	3	May 1996	<i>Securities Enforcement and Self Regulation</i> Cliff Kennedy
18	SEBI, Delhi	1/2 day	2	May 1996	<i>SRO/Enforcement & Market Surveillance</i> Cliff Kennedy
10	NSE Participants	1/2 day	1	May 1996	<i>Rules and Regulations for Depository</i> John Ruckrich and Jan Slinn
85	Invest India Stock Exchanges	1/2 day	8	May 1996	<i>Global Markets and India Summit Participants</i> Dennis Grubb
90	Invest India Stock Exchanges	1/2 day	9	May 1996	<i>Expectations of Depositories Summit Participants</i> Dennis Grubb

Appendix II: India Based Training (contd)

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
50	Calcutta	1 day	10	May 1996	<i>Sub Broker Workshop</i> Dennis Grubb/Paritosh Sharma
70	Calcutta	1 day	14	May 1996	<i>Individual Investor</i> Dennis Grubb/Paritosh Sharma
125	NSE	1 day	25	May 1996	<i>Data Security Training</i> Citibank
10	Delhi Stock Exchange	1 day	2	May 1996	<i>Regional Exchange Operations</i> Cliff Kennedy and Dennis Grubb
15	NSDL	1 day	3	June 1996	<i>Organizational Development & Human Resources Planning for NSDL Staff</i> Susan Hertel
12	NSDL	1 day	2 4	July 1996	<i>Organizational Structure Program</i>
110	NSDL	1 day	22	July 1996	<i>Depository Awareness Program for Market Participant Custodian and Market Players</i>
483	NSE	1 days each	87 6	July 1996	<i>Futures and Options Awareness Program for Market Participants Bombay & Delhi</i>
20	SEBI	2 days	4	July 1996	<i>Auditors General Officials on Development Surveillance and Enforcement in the Capital Markets</i>
39 at 2 centers	AMFI Bombay	1/2 day each	3 9	Aug 1996	<i>AMFI Education Seminar</i> Lew Mendelson
500	NSE	1 day	100	Aug 1996	<i>Derivatives orientation Programme for Market Participants Madras, Calcutta Ahmedabad, & Bombay</i>
414 at 6 centers	NSDL	1 day each	82 8	August 1996	<i>NSDL Depository Workshop (awareness program)</i>
6	SHCIL	1 day	1 2	August 1996	<i>Information System/Back Office & BCP</i> Walter Pugh
2	NSDL	1 day	0 4	August 1996	<i>Communication and Workflow for NSDL Staff</i>
25	SEBI	1 day	5	August 1996	<i>Enforcement and Regulatory Workshop</i>
29	SEBI	1 day	5 8	August 1996	<i>Induction Program for New Recruits on Enforcement and Regulation</i>

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
200	Lala Institute for	1/3 day	13 3	September 1996	<i>Developments in the Capital Markets Management Studies</i> Dennis Grubb
705 at 4 centers	SEBI/ Broker Certification	1/2 day each	70 5	September 1996	<i>Sub broker Workshop Bombay & Delhi</i> Thomas Keyes
100	NSDL	1 day	10	September 1996	<i>Law Relating to Depositories</i> Jan Aalbrechtse Slinn
7	OTCEI	1 day	1 4	September 1996	<i>Information System/Pack Office & BCP</i> Walter Pugh
70	SEBI	2 days each	28	September 1996	<i>Enforcement and Regulatory Workshop</i>
35 each	Investment Bankers	2 days	28	October 1996	<i>Derivatives Trading</i>
25	Investment Bankers	1 day	5	October 1996	<i>SEBI Officials</i>
25	Management students	1/2 day	2 5	October 1996	<i>Emerging capital market Scenario</i>
125	Individual Investors	1/2 day	12 5	October 1996	<i>Recent Developments in the Capital Market</i>
35	UTI training participants	1/2 day	3 5	October 1996	<i>Futures and Options Trading</i>
250	ASAF/ICFAI	0 5	25	December 3, 1996	<i>Infrastructure Development</i> Dennis Grubb
200	Institute of International Consultants	0 5	20	December 7, 1996	<i>International Consulting Capital Market</i> Dennis Grubb
1330	Regional Tour	1 day	266	January 2 20, 1997	<i>Future of the Sub Broker</i> Thomas Keyes/Paritosh Sharma
300	Mumbai Investors	0 5	30	January 15, 1997	<i>Individual Investor Awareness</i> Susan Hertel/Kim Shaak
248	MoF & Market Participants	1 day & 1/2 day	40 8	January 16 21, 1997	<i>Role of Mutual Funds</i> David Silver/Lewis Mendelson
30	Fed of Stock Exchanges	1/2 day each	3	January 21, 1997	<i>Interconnectivity of Exchanges</i> Bill Gorman
25	SEBI, NSE, BSE, OTCEI	2 days	10	January 23 24, 1997	<i>Broker Dealer Financial Responsibility</i> Paul Litteau/Leo Melamed
250	ICFAI Conference	0 5	25	January 28, 1997	<i>Investor Education</i> Dennis Grubb
20	International Comm Management Conference	0 5	2	March 4, 1997	<i>Securing Financial Investment</i> Rosemary McFadden

Appendix II: India Based Training (contd ..)

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
41	OTCEI, BSE	1/2 day each	5 2	March 8 11 1997	<i>Market Surveillance</i> Ford/Kennedy
5	AMFI	0 5	0 5	March 13 June 4, 1997	<i>Mutual Fund Training</i> Dr Tessie San Martin/ R N K Prasad
6	NSDL	0 5	0 6	March 21, 1997	<i>Introduction to Comp Surveillance</i> Susan Hertel
20	Indian Institute of Management		0 5	2 March 28, 1997	<i>Depository System</i> Sankar Narayanan
20	SEBI	0 5	2	April, 1997	<i>Stock Watch</i> Frank Wilson
30	AMFI	1/2 day each	3	April, 1997	<i>Mutual Funds Industry</i> Lewis Mendelson/R N K Prasad
5	SCHIL	0 5	0 5	May 9, 1997	<i>Product Definition</i> Susan Hertel
5	NSDL	0 5	0 5	May 13, 1997	<i>Intro Writing Procedures</i> Susan Hertel
5	NSDL	0 5	0 5	May 20, 1997	<i>Function ID for Pro Writ</i> Susan Hertel
3	BSE	0 5	0 5	May 22, 1997	<i>Cash Settlement</i> Susan Hertel
25	BSE/ OTCEI	1/2 day each	1 8	May, 1997	<i>Clearing Corp Seminar</i> Susan Hertel/Joe Schenk
100	Stock Exchange Summit II	0 5	10	May 27, 1997	<i>Competition between Exchanges</i> Dennis Grubb/NYSE
125	CRISIL, Stock Exchange Summit	1/2 day each	12 5	May 27 28, 1997	<i>International Capital Raising</i> Dennis Grubb/NYSE
23	OTCEI	0 5	2 3	June 4, 1997	<i>HRD and Training</i> Dr Tessie San Martin & Sue Hertel
1	AMFI	0 5	0 25	June 4, 1997	<i>Mutual Funds training</i> Dr Tessie San Martin & Sue Hertel
8	NSDL	0 5	1 6	June 5, 1997	<i>HRD and Training</i> Dr Tessie San Martin & Sue Hertel
30	BSE	0 5	3	June 25, 1997	<i>Securities Markets</i> Thomas Keyes & Paritosh Sharma
200	NSDL	0 5	20	August 2, 1997	<i>Depository Awareness Seminar (Indore)</i> PW FIRE Project

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
36	SEBI & Reg Exchanges	2	14 4	August 13-14, 1997	<i>Stock Watch System</i> Zoanne Nelson, Frank Wilson, David Strandberg
12	SEBI	1/2 day	1 2	September 23, 1997	<i>Human Resources Development and Training</i> Dr Tessie San Martin/Sue Hertel/Lew Mendelson
400	NSDL	0 5	40	September 30, 1997	<i>Depository Awareness Seminar (Delhi)</i> PW FIRE Project
2	SHCIL	1/2 day	0 2	October 10, 1997	<i>Concept Paper Development</i> Sue Hertel
6	NSDL	1/2 day	0 6	October 14, 1997	<i>Procedure Function Identification</i> Susan Hertel
4	NSDL	1/2 day	0 4	October 14, 1997	<i>Procedure Documentation</i> Susan Hertel
70	NSE	1/2 day	7	October 15, 1997	<i>International Perspective on Stock Index Futures</i> Michael Gorham
14	NSE	1/2 day	1 4	October 17, 1997	<i>Choosing Appropriate Index for Futures</i> Michael Gorham
14	NSE	1/2 day	1 4	October 20, 1997	<i>Energy Futures</i> Michael Gorham
13	NSE	1/2 day	1 3	October 21, 1997	<i>Manipulation Risk for Cash Settled Futures</i> Michael Gorham
40	NSE	1/2 day	4	October 22, 1997	<i>Interest Rate Futures</i> Michael Gorham
15	Indira Gandhi Institute of Development Research	1/2 day	1 5	October 27, 1997	<i>International Perspective on Stock Index Futures</i> Michael Gorham
44	SEBI & Exchanges	3 days	26 4	November 11-13, 1997	<i>Implementing a Market Surveillance System</i> Steve Simmes/Anne Marie Simmes
36	AMFI	2 days	14 4	November 12-13, 1997	<i>Overview of Mutual Fund Accounting & Valuation</i> Rajesh Dadoo
60	SEBI	1/2 day	6	November 13, 1997	<i>SEBI Awareness Creation</i> Dennis Grubb

Appendix II: India Based Training (contd)

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
30	AMFI	2 days	12	November 14 15, 1997	<i>Overview of Mutual Fund Accounting & Valuation</i> Rajesh Dadoo
200	UTI Institute of Capital Markets	1/2 day	20	November 15, 1997	<i>Indian Capital Markets Opportunities and Challenges</i> Dennis Grubb
34	AMFI	2 days	13 6	November 18 19, 1997	<i>Overview of Mutual Fund Accounting & Valuation</i> Rajesh Dadoo
15	SEBI & AMFI	1 day	3	November 21, 1997	<i>Overview of Mutual Fund Accounting & Valuation</i> Rajesh Dadoo
30	OTCEI Member/ Dealers (Mumbai)	1 day	6	December 2, 1997	<i>Workshop on Market Making</i> John Christensen/John Ruckrich
30	OTCEI Member/ Dealers (Delhi)	1 5 day	9	December 4, 1997	<i>Workshop on Market Making</i> John Christensen/John Ruckrich
49	AMFI	2 days	19 6	December 4-5,	<i>Workshop on Mutual Fund Compliance</i> Anjali Kamat, Lew Mendelson, R N K Prasad, Sandhya Bhate
30	OTCEI Member/Dealers (Calcutta)	1 5 days	9	December 5 & 6, 1997	<i>Workshop on Market Making</i> John Christensen/John Ruckrich
30	OTCEI Member/Dealers (Chennai)	1 day	6	December 8, 1997	<i>Workshop on Market Making</i> John Christensen/John Ruckrich
34	SEBI & Auditors	1 day	6 8	December 15, 1997	<i>Workshop on Inspection of Mutual Funds</i> Anjali Kamat, Lew Mendelson, R N K Prasad, Sandhya Bhate
200	NSDL	0 5	20	December 23, 1997	<i>Depository Awareness Seminar (Baroda)</i> PW FIRE Project
400	NSDL	0 5	40	January 10 1998	<i>Depository Awareness Seminar (Bangalore)</i> PW FIRE Project
15	SEBI	1/2 day each	3	January 21 22, 1998	<i>Enforcement Investigations Workshop</i> Cliff Kennedy, David Strandberg
125	The All India Association	1/2 day	12 5	January 21, 1998	<i>Depository Services of Industries</i> Dennis Grubb

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
450	NSDL	0 5	45	January 31, 1998	<i>Depository Awareness Seminar (Mumbai)</i> PW FIRE Project
4	SEBI	1/2 day	0 4	February 2, 1998	<i>Procedure Documentation</i> Susan Hertel
300	NSDL	0 5	30	February 21, 1998	<i>Depository Awareness Seminar (Pune)</i> PW FIRE Project
275	NSDL	0 5	27 5	March 7, 1998	<i>Depository Awareness Seminar (Calcutta)</i> PW FIRE
250	NSDL	0 5	25	March 14, 1998	<i>Depository Awareness Seminar (Indore)</i> PW FIRE Project
250	NSDL	0 5	25	March 18, 1998	<i>Depository Awareness Seminar (Surat)</i> PW FIRE Project
25	NSDL	0 5	32 5	March 27, 1998	<i>Depository Awareness Seminar (Ernakulam)</i> PW FIRE Project
375	NSDL	0 5	37 5	April 4, 1998	<i>Depository Awareness Seminar (New Delhi)</i> PW FIRE Project
170	AMFI	2	68	April 16-17, 1998	<i>The Future of Fund Management in India 1998</i> PW FIRE Project
250	NSDL	0 5	25	April 17, 1998	<i>Depository Awareness Seminar (Chennai)</i> PW FIRE
200	NSDL	0 5	20	April 24, 1998	<i>Depository Awareness Seminar (Ahmedabad)</i> PW FIRE Project
220	NSDL	0 5	22	May 2, 1998	<i>Depository Awareness Seminar (Jaipur)</i> PW FIRE Project
35	NSDL	0 5	3 5	May 7, 1998	<i>Depository Awareness Seminar (Mumbai)</i> PW FIRE Project
450	NSDL	0 5	45	May 9, 1998	<i>Depository Awareness Seminar (Anand)</i> PW FIRE Project

Appendix II: India Based Training (contd...)

No. of Persons	Home Organization	Program Length	Person Weeks	Timing	Workshop / Seminar / Instructor
225	NSDL	0.5	22.5	May 16, 1998	<i>Depository Awareness Seminar (Hyderabad)</i> PW FIRE Project
100	NSDL	0.5	10	May 17, 1998	<i>Depository Awareness Seminar (Kohlapur)</i> PW FIRE Project
20	The National War College	0.5	2	May 18, 1998	<i>Capital Market Seminar</i> Dennis Grubb
14	NSDL	0.5	1.4	May 18, 1998	<i>Train the Trainer Workshop</i> Dr. Tessie San Martin, Sue Hertel
16	BSE	0.5	1.6	May 19, 1998	<i>Train the Trainer Workshop</i> Dr. Tessie San Martin, Sue Hertel, John Harris
16	BSE	0.5	1.6	May 20, 1998	<i>Train the Trainer Workshop</i> Dr. Tessie San Martin, Sue Hertel, John Harris
100	NSDL	0.5	10	May 23, 1998	<i>Depository Awareness Seminar (Panjim)</i> PW FIRE Project
50	NSDL	0.5	5	May 24, 1998	<i>Depository Awareness Seminar (Margaon)</i> PW FIRE
190	SEBI & Stock Exchanges	2	76	May 27-28, 1998	<i>The Securities Industry Summit, 1998</i> PW FIRE Project
400	NSDL	0.5	40	June 6, 1998	<i>Depository Awareness Seminar (Mumbai)</i> PW FIRE Project
150	FICCI & BSE	0.5	15	June 12, 1998	<i>Seminar on "Revitalization of the Capital Markets"</i> Dennis Grubb
30	Federation of Indian Indian Stock Exchanges	1.0	6	August 8, 1998	<i>Development of Self Regulatory Organizations</i> Dennis Grubb
60	SEBI	2	24	July - August 1998	<i>SEBI Conference - Creating a Vision for the 21st Century'</i> Dr. Tessie San Martin, John Harris
14,746	Total		2,164.55		

Appendix III: US Based Training

No. of Persons	Home Organization	US Internship Organization	Program Length	Total Training	Timing	Course/ Internship
2	NSE	NASD	5 wk	10 pw	Oct/Nov 1995	NYIF US Money and Capital Markets
4	SEBI/NSE	SEC	2 wk	8 pw	Nov 1995	SEC Enforcement Course SEC internships
2	NSE	NASD	2wk	4 pw	Dec 1995	NYIF Global Security Services, clearing corporation internships
1	NSE	CBOE/CME	2wk	2 pw	Dec 1995	NYIF Derivatives Strategies, Valuation and Trading
3	SEBI	SEC	3wk	9 pw	April/ May 1996	SEC internships
1	SEBI	NYSE	1 wk	1 pw	May 1996	New York Internship
1	SEBI	NYSE	1wk	1 pw	April/ May 1996	Chairman Study Tour of New York Stock Exchange
1	NSE	SIAC, NSCC,	2days	4 pw	April 1996	Meetings with SIAC, NSCC, DTC
1	NSE	SIAC, NSCC,	1wk	1 pw	April/ May 1996	Chicago Internship at CBOE, DTC, CME
3	NSE	SIAC, NSCC, Merrill Lynch	2wk	6 pw	May 1996	Baruch College Settlement and Clearing
2	NSE	Greenough & Co	3wk	6pw	July 1996	PW Information Systems Risk Management Course
1	OTCEI	SEC & Greenough & Co	3 wk	3 pw	July 1996	PW Information Systems Risk Management Course
4	SEBI	CBOE, CME	2 wk	8pw	October 17- Nov 1, 1996	CFTC Training Program on Futures and Options followed by a 2 day internship, NUIFs US Capital Markets Seminar
5	MOF, BSE, SEBI, DTC, NYSE, CBOE, London Stock Exchange	Morgan Stanley,	2 wk	10 pw	October 21- 31, 1996	Study Tour of New York, Chicago and London led by Mr Paritosh Sharma assisted by Greenough & Keyes
16	SEBI, BSE, CSE, Merrill Lynch	DTC, SIAC,	3 wk	48 pw	October 28 Nov 15, 1996	Baruch College Training Program on Capital Markets Greenough & Co
4	SEBI	DTC, SEC, NYSE	2 wk	8 pw	Nov 4 15, 1996	SEC Institute on Enforcement Greenough & Co , Internship

Appendix III: US Based Training (contd...)

No. of Persons	Home Organization	US Internship Organization	Program Length	Total Training	Timing	Course/ Internship
1	NSDL	DTC, ML, Citibank	3 days	6 pw	April 1997	DTC Internship
2	SEBI	SEC	2 wk	4 pw	April 14 May 2, 1997	SEC IV Institute
6	Mutual Funds NYSE, ML, Charles Schwab	ICI, NASD,	3 wk	18 pw	May 12-30 1997	ICI Conference Greenough & Co , Internship
19	SEBI, BSE, DSE, CSE, LSE	Baruch College	3 wk	57 pw	October 27- Nov 14, 1997	SEC - Securities Enforcement & Market Oversight
1	SEBI	SEC	1 wk		October 27-31, 1997	SEC Securities Enforcement & Market Oversight
2	NSDL	DTC	2 wk	4 pw	Nov 10-21,	DTC - US Clearance Settlement Procedure
12	OTCEI	Baruch College	12 days	28 8 pw	Dec 1-12 1997	Clearing Corporatrons/ Unlisted Securities/Market Making/Marketing of Exchange Products
7	SEBI, BSE, NSE	Chicago Board, Options Exchange		28pw	July 1998	Derivatives Regulations
101	Total			265 80		

Appendix IV:

Table - (i)
Performance of the FIRE Project

Particulars	Cumulative
Input of Visiting US Consultants in person weeks	663 69
In-country Training Programs-Nos	142
In-country Training Programs - No of participants	14,686
In-country Training Programs - in person weeks	2,140 55
US Based Participant Training Programs - Nos	24
US Based Participant Training Programs No of participants	101
US Based Participant Training Programs in person weeks	265 80

Sources and Notes

Quarterly Report for the period March - May 1998

Note numbers reflect data through May 1998

Table - (ii)
Research Topics

Institution	Research Topic
NSE/CMIE	Nifty 50 Stock Index
Institute of Financial Management and Research, Madras	Corporate disclosure
Indian Institute of Science, Bangalore	Trading Systems, Integration and Price Discovery in Indian Stock Markets
Business Schools	Retail debt marketing and retail distribution structure
IIM Calcutta	Development of case studies for SEBI and financial intermediaries
IIM Ahmedabad	on enforcement and investor education
FIRE Project, PW India, and Matrix	Survey of Retail Financial Intermediaries
FIRE Project and Local Researchers	Survey of the Implementation of the Model Compliance Manual by AMFI Members
FIRE Project and Credence	Study of Guaranteed and Assured Return Schemes
Inst of Chartered Financial Analysts	Survey of Corporate Disclosure Practices in India
FIRE Project and Local Researchers	AMFI Model Compliance Manual
Indira Gandhi Inst of Dev Research	Study of Stock Index Futures
Invest India Foundation	Future of Indian Stock Exchanges
Invest India Foundation	Future of Fund Management

Appendix IV (contd...) :**Table - (iii)**
USAID-FIRE Project Index of Capital Market Development

Objective	I	II	III	IV	V	VI	Mean
Scorer A	6	4	6	9	4	5	5.67
B	7	5	7	8	5	6	6.33
C	6	4	3	9	3	6	5.17
Mean	6.33	4.33	5.33	8.67	4.00	5.67	5.72
Target	6	5	4	6	5	5	5.17

Areas

- I Market Oversight and Enforcement
- II Debt Market
- III Information Infrastructure
- IV Trade, Clearance and Settlement Infrastructure
- V Self Regulation/Licensing and Certification
- VI Risk Management (Futures and Options)

Score Weighting

- 1) Minimal or no system in place (1-3)
- 2) Need for improved and efficient system recognized (4-6)
- 3) Policy and infrastructure issues being addressed (7-9)
- 4) State of the art system in place (10-12)

Appendix V: FIRE Project Consultants

Ms Christine Bates	Mr Thomas Keyes
Ms Sandhya Bhate	Ms Ferzana Khanna
Mr Dick Breen	Mr Paul J Litteau
Mr Ted Burns	Mr Harry Melamed
Mr Khush Choksy	Mr Lewis J Mendelson
Ms Indira Crum	Ms Zoanne L Nelson
Mr Ajith Devasurendra	Mr Terrence O'Malley
Mr Thomas Frode	Mr R N K Prasad
Mr Mike Gorham	Mr Walter Pugh
Mr Bill Gorman	Mr John Ruckrich
Mr Peter Greenough	Dr Tessie San Martin
Mr Dennis Grubb	Mr Joseph Schenk
Ms Kate Hathaway	Mr Howard Schumann
Mr John Harris	Ms Kim Shaak
Ms Susan Hertel	Ms Jan Aalbertse Slinn
Mr Augusto Iglesias	Mr Pantosh Sharma
Ms Monika L Jashani	Mr Michael Sommer
Ms Anjali Kamat	Mr David Strandberg
Mr Kavi Kapur	Mr David Tsoi
Mr Richard Kemmer	Mr Frank Wilson
Mr Cliff Kennedy	Mr Frank Wolf

Appendix VI: Key Liaisons and Clients

**Ministry of Finance Department
of Economic Affairs**

Mr Montek Singh Aluwalia
Finance Secretary

Dr U Sarat Chandran
Joint Secretary

Dr Mrs Jayalakshmi Jayaraman
Joint Secretary

USAID

Mr Brian Atwood
Administrator / USAID

Mr John J Hartley
Deputy Director
*(Office of India, Nepal, Sri Lanka,
Bhutan and Maldives Affairs)*

Mr Dirk W Dijkerman
*Director Strategic and
Economic Analysis*

Mr Frank D Martin
Economist

Mr Joseph M Lieberson
Economist

Mr George A Pickart
Senior Advisor

Mr Bruce Robert
Economist

Mr Christopher Sandrolini
India Desk Officer

Ms Martha Wofford
Senior Press Officer

Ms Linda Morse
Mission Chief

Mr Terry Myers
Deputy Mission Chief

Mr Peter Thormann
Office of Economic Growth
Mr John O'Rourke
Program Officer

Mr Mark Gellerson
Program Officer

Mr Dick Goldman
Director Office of Financial Program

USAID (*contd*)

Mr John May
Regional Contracting Officer

Mr Leonard Kata
Regional Contracting Officer

Mr Stanley R Nevin
*Foreign Assistance Contracts and
Grants Advisor*

Mr Cory Edwards
Executive Officer

Mr Thomas A Totino
Controller

Mr Earl Kessler
Director RUHDO

Mr Madhumitra Gupta
Senior Economist & Division Chief

Mr V K Manchanda
Deputy Executive Officer

Mr Kamran M Khan
*Housing & Urban
Development Officer*

Mr Ashok K Jha
*Financial Sector Development
Specialist*

Mr T D Nailwal
Chief Personnel & HRD

Mr Narinder N Wahi
Deputy Controller

Mr Sunil Nanda
*Chief Project Development &
Implementation Divisional Manager*

Mr Arun Mongia
Chief Accountant

Mr Vivek Chatterjee
Financial Analyst

Mr Ajay Wadia
Analyst Assistant

Mr Satish Kumal
Regional Contracting Assistant

Mr Kamran M Khan
*Housing & Urban
Development Officer*

Appendix VI: Key Liaisons and Clients (contd...)

Securities and Exchange Board of India	Mr D R Mehta <i>Chairman</i>
	Mr O P Gahrotra <i>Senior Executive Director</i>
	Mr L K Singhvi <i>Senior Executive Director</i>
	Mr Pratip Kar <i>Executive Director</i>
	Ms D N Raval <i>Executive Director</i>
	Mr Vijay Ranjan <i>Executive Director</i>
	Mr D H Patel <i>Executive Director</i>
	Mr A Kacker <i>Executive Director</i>
National Securities Depository Limited	Mr C B Bhawe <i>Managing Director</i>
	Mr T Koshy <i>Vice President</i>
	Mr S Gopalan <i>Assistant Vice President</i>
	Mr V R Narasimhan <i>Vice President</i>
	Mr Gangan Rai <i>Executive Director</i>
	Mr Jayesh Sule <i>Assistant Vice President</i>
	Mr V P Rajesh Doshi <i>Executive Director</i>
	Mr S Gopalan <i>Assistant Vice President</i>
	Mr Shashi Kant Shirahatti <i>Assistant VP</i>
Stock Holding Corporation of India	Mr B V Goud <i>Managing Director</i>
	Mr R Mehawalla <i>Vice President</i>

Stock Holding Corporation of India
(contd)

Mr J Vishwanathan
Deputy Managing Director

Bombay Stock Exchange

Mr M G Damani
Past President/Director

Mr Jaswantlal Parekh
President

Mr R C Mathur
Executive Director

Ms Kalpana Maniar
Executive Assistant

National Stock Exchange

Mr R H Patil
Managing Director

Mr Ravi Narain
Deputy Managing Director

Ms Chitra Ramakrishnan
*Vice President Wholesale Debt
Market Depository*

Mr Raghavan Puthran
*Vice President Clearing and
Settlement*

Mr Satish Naralkar
Vice President Systems, telecom

Mr Ashish Kumar Chauhan
*Asst Vice President -
Futures and Options*

Over The Counter Exchange of India

Mr Joseph Bosco
Managing Director

Mr Pushpangadan
Managing Director

Mr Ajeet Prasad
Managing Director

Mr P V Sreenath
General Manager

Delhi Stock Exchange Association Ltd

Mr S S Sodhi
Executive Director & CEO

Mr Arjun Kapur
Ex President

Appendix VI: Key Liaisons and Clients (contd...)

The Calcutta Stock Exchange Association Ltd	Mr Tapas Datta <i>Executive Director</i>
	Mr Vivek Mahajan <i>Director</i>
	Mr Subroto Das <i>General Manager Information Technology Division</i>
Madras Stock Exchange	Mr S Raamassubramaniam <i>President</i>
Association of Mutual Funds in India	Mr A P Kurian <i>Chairman</i>
	Mr S V Mokashi <i>Executive Administration</i>
Association of Merchant Bankers of India	Mr S A Dave <i>Chairman</i>
	Mr P Chandrasekhar <i>Vice Chairman</i>
	Mr S B Billimoria <i>Chief Executive</i>
Fixed Income Money Market & Derivatives Association	Mr Puvan Sukhdev <i>Deutsche Bank</i>
	Mr Arvind Sethi <i>Bank of America</i>
Fixed Income Brokers Association	Mr Asit Mehta <i>Nucleus Securities</i>
	Mr Dhiren Mehta <i>Sterling Securities</i>
Registrar's Association of India	Cdr A K Rastogi <i>Director</i>
	Mr Arun Agarwal <i>Chairman</i>
	Mr B Narasimhan <i>Chairman</i>

**The Credit Rating Information Services
of India Ltd**

Mr Ravi Mohan
Managing Director

Mr Subodh Shah
Executive Director

Mr Vivek Kulkarni, IAS
Head Advisory Business Services

Infrastructure Development Finance Co

D J Balaji Rao
Managing Director

Dr Urjit Patel
Executive Director

US Consulate, Mumbai

Mr Franklin Pierce Huddle, Jr
Consul General

Mr Bruce McKenzie
Consul Officer

Mr Andrew R Young
Consul Officer

US Embassy, New Delhi

Mr Douglas A Hartwick
Counselor of Embassy for Economic and Scientific Affairs

Mr Curtis A Stone
First Secretary (Economic)

World Bank

Mr Edwin R Lim
Director - WB India

Mr Jim Hanson
Chief Economic Unit

Mr Sanjay Kathuria
Economist

Appendix VII: Acronyms

AMFI	Association of Mutual Funds in India
BSE	Bombay Stock Exchange
CSE	Calcutta Stock Exchange
CRISL	Credit Rating Information Services of India Ltd
CBOE	Chicago Board Options Exchange
CME	Chicago Mercantile Exchange
CII	Confederation of Indian Industries
DSE	Delhi Stock Exchange
DCA	Department of Company Affairs
DTC	Depository Trust Corporation
FIBA	Fixed Income Brokers Association
FIRE	Financial Institutions Reform and Expansion Project
FIMMDA	Fixed Income Money Market and Derivatives Association
FISE	Federation of Indian Stock Exchanges
ICAI	Institute of Chartered Accountants of India
ICFAI	Institute of Chartered Financial Analysts of India
ICSE	Interconnected Stock Exchange of India Ltd (Proposed)
ICSI	Institute of Company Secretaries of India
IDFC	Infrastructure Development Finance Corporation
IFMR	Institute for Financial Management and Research
ICI	Investment Company Institute
IOSCO	International Organization of Securities Commission
MSE	Madras Stock Exchange
NASD	National Association of Securities Dealers
NSDL	National Securities Depository Ltd
NSCC	National Securities Clearing Corporation
NSE	National Stock Exchange
OTCEI	Over the Counter Exchange of India
RAIN	Registrars' Association of India
RBI	Reserve Bank of India
SEBI	Securities and Exchange Board of India
SEC	US Securities and Exchange Commission
SHCIL	Stock Holding Corporation of India Ltd
USAID	United States Agency for International Development
UTI	Unit Trust of India
UTI-ICM	Unit Trust of India Institute of Capital Markets