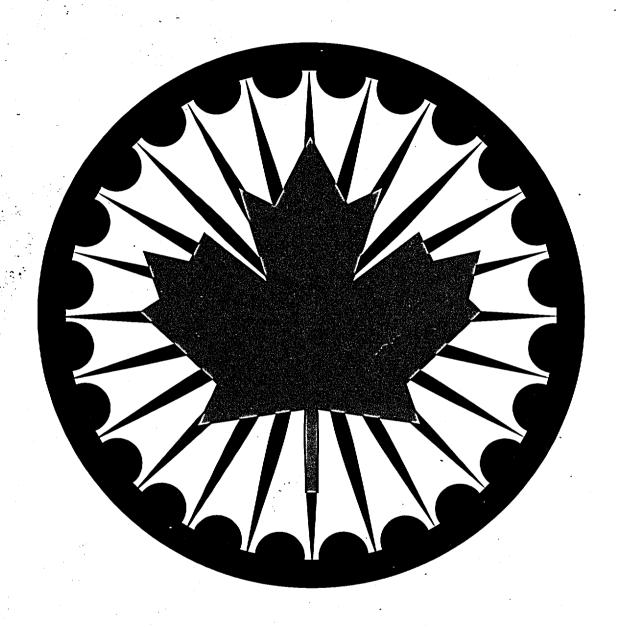
CA1 EA439 95B71 ENG c.1 DOCS

# Focus India



Building a Canada-India Trade and Economic Strategy

# FOCUS: INDIA

Building A Canada-India

Trade and Economic Strategy

May 1995

APR 8 1996

# **FOCUS: INDIA**

# **TABLE OF CONTENTS**

	<u>Section</u> <u>P</u>	<u>age</u>	
Ex	ecutive Summary		1
Α.	Strategic Overview		
	Terms of Reference	• • •	4 4 4 5
В.	The Canada-India Environment		
	Introduction The New India Market Potential Economic Reforms The Canada-India Trade Relationship Canadian Programs and Players Indian Programs and Players Financial Environment		7 8 9 10 11
C.	Analysis of Market Opportunities		
D.	Opportunities for Canadian Success		19
	Introduction		26 26
	Market Awareness  Complexity of the Indian Business Environment  Market Accessibility  Financing  Political and Economic Risk	• • •	26 27 29 31 32

	<u>Section</u>	<u>Page</u>
E.	Capturing the Opportunities	
	Introduction	35 36 37 41
F.	First Steps	
	Introduction	44 44
G.	Appendix 1 - Glossary of Acronyms	
н.	Appendix 2 - Sectoral Analyses	
I. ·	Appendix 3 - Government Programs Cross Reference Table and List of Contacts	

# **EXECUTIVE SUMMARY**

Focus India is the launching point of a Canadian economic and trade development strategy for India. Based on extensive consultation among the federal government, the provinces and the private sector, this paper identifies the key challenges and opportunities for Canadian business in India. In particular, it emphasizes the need for a co-ordinated approach to business development in India so that Canadian companies can successfully penetrate and take full advantage of the opportunities that this emerging market presents.

More specifically, Focus India provides an analysis of the Canada-India business environment influencing Canada's business development strategy. It assesses market potential with emphasis on those sectors where Canadian capabilities and opportunities in the Indian market complement each other. Focus India also evaluates economic and trade issues affecting Canadian business development in India and those tools, mechanisms and initiatives that can help Canadian business achieve a leading edge.

The analysis of the Canada-India environment reveals that India will become an increasingly important market for Canadian business. There are no untapped markets to rival India's size; and, since 1991, India has undertaken significant economic reforms to liberalize both trade and investment. These economic reforms and the privatization of state entities have created opportunities in areas of Canadian sectoral expertise. Other factors facilitate doing business in India and make it an attractive market. English is the language of business. India is a democracy with well-established judicial, banking and distribution systems. And, India has a highly skilled workforce. Although there are some indications that Canadian business—including small and medium-sized enterprises (SMEs)—is taking a fresh look at the Indian market, Canada and India have not realized the full potential of their commercial relationship.

A number of issues are having an impact on Canadian economic and trade development in India. There is a lack of awareness both in Canada and India of one another. In Canada, India's business potential is not fully appreciated. While there are some distinct market characteristics that may seem overwhelmingly difficult at first, Canadian business must look beyond its first impressions. Equally, if not more important, there is also a lack of awareness in India of Canadian competitive strengths. Canada is not recognized as a major economic partner or a supplier of quality goods, services and technology. As a result, there is a risk that many of Canada's competitors which have placed a higher priority on India both politically and commercially will have greater success in this market.

The complexity of the Indian business environment also affects potential Canadian success in India. Bureaucratic bottlenecks, conflicting or vague policies and guidelines, infrastructure problems, the importance of connections and cultural differences make India a difficult market to penetrate. While economic reforms have reduced tariffs and made investment approval easier, a number of barriers still exist which hinder access to this market. Import policies remain complex, government

Focus: India

procurement practices could be more transparent and intellectual property protection needs improvement to comply with the results of the Uruguay Round of world trade talks. Foreign investment policies concerning repatriation of capital also need to be clarified and the process streamlined.

The analysis of market potential shows that Canada and Canadian business must position themselves now in the Indian market, or risk being left out. India's economic reforms and growing consumer class have revived international political and business interest in this market. Focus India encourages Canadian business to consider collaborative arrangements with Indian industry like joint ventures and technology transfers as well as direct investment. Furthermore, it stresses that opportunities exist not only for direct exports to India but to use the Indian market as a base for exports to third countries in the region or for re-export to Canada.

To add sharper focus to Canada's strategy for India, business development efforts will target three sectors: energy, including oil, gas and power; telecommunications; and environmental products and services. These three sectors were selected based on high, immediate or near-term demand and favourable market conditions in India, and they match Canadian capabilities and competitiveness. They were not selected at the exclusion of other Canadian sectoral strengths. However, concentrating limited resources in high potential areas is the most effective means of succeeding in India.

To help Canadian business overcome the challenges and to capitalize on the potential of this market, Focus India is designed to focus the efforts of the various players. It suggests that an increase in high-level visits, public relations and an extended diplomatic presence be undertaken to improve Canada's political relationship with India. Tangible initiatives would include market awareness programs such as ministerial visits, both to and from India, increased media exposure, and twinning programs, seminars, workshops and (sector-specific) trade missions. Enhanced bilateral consultations and formal mechanisms will help build commercial linkages between the two countries and gain more secure access for Canadian exports and investment.

Canadian Trade Commissioners will continue to be a vital link between Canadian business and the Indian market by providing timely market intelligence and advice to exporters. The Department of Foreign Affairs and International Trade will also extend its presence in India by the appointment of two Honourary Consuls with commercial officers. Furthermore, Focus India emphasizes the importance of promoting greater co-operation between Canadian and Indian business organizations and fostering institutional linkages. It also recommends increased coordination and availability of financing instruments and services to Canadian business.

Ultimately, Canada's success will depend on our ability to gain greater access to the Indian market and the commitment of all players, including the private-sector. The Focus India strategy and subsequent updates encourage the pooling of resources, identify opportunities and help promote Canadian interests in India. This strategy will enable the Canadian private sector to Capitalize on the opportunities in the Indian market while contributing to its economic prosperity and sustainable development.

### A. STRATEGIC OVERVIEW

India represents one of the most exciting emerging economies with the potential to evolve into an economic 'Tiger' in the next century.

India is now at a crucial juncture in its development. It is imperative that Canada be well positioned to capitalize on opportunities in this dynamic environment.

It is the government of Canada's policy to increase our bilateral economic relations with India. The vehicle to accomplish this is Focus India.

#### I. Terms of Reference

Focus India is an initiative to develop a Canadian economic and trade development strategy for India which integrates the efforts of federal and provincial governments, and incorporates the ideas and interests of the Canadian private sector. The realization of this strategy will allow Canada to:

- capitalize on the burgeoning business opportunities in the 'new' India;
- realize the market potential of the region with India as a strategic partner;
   and
- contribute to the economic prosperity and sustainable development of India.

This document is the launching point for the development of Canada's trade and economic strategy for India. The aim is to coordinate government programs and activities in order to be a catalyst for increased private sector involvement in India's economic development.

This strategy paper reflects extensive consultations among key federal government agencies supporting economic and trade development in the Indian Market. They include the Department of Foreign Affairs and International Trade (DFAIT), the Canadian International Development Agency (CIDA), Industry Canada (IC), the Export Development Corporation (EDC), the Canadian Commercial Corporation (CCC), the Canadian Office for Technology Exchange in the Environment (COTE) and Environment Canada. Provincial ministries responsible for trade and Canadian industry have also provided input.

The Focus India strategy will clearly identify Canada's trade priorities for the Indian market and determine the policies, actions and programs which all participants can pursue in concert to fulfil Canada's trade objectives in India.

As a first step, Focus India has analyzed the Canada - India environment (i.e. those factors which influence the success of Canadian business in the Indian market), identifying key opportunities and challenges. Subsequently, it compiled an

inventory of those tools, mechanisms and initiatives within Canada's influence which can help Canadian business to meet the challenges and take full advantage of the opportunities.

#### II. Format

This document has five components:

• A. Strategic Overview: An outline of the structure and framework of the Focus India document defining the context and objectives of the strategy.

- B. Introduction to the Canada India Environment: A summary of the market conditions in Canada and India that will influence Canada's strategy.
- C. Analysis of Market Opportunities: An examination of the market opportunities in India and an identification of where Canada's best opportunities lie.
- D. Economic Development and Trade Issues: The description and analysis of major issues or challenges confronting Canadian economic and trade development in India.
- E. Capturing the Opportunities: A Focus India Action Plan: The tools, mechanisms and initiatives within Canada's influence that can help Canadian business meet the challenges of the Indian market and take full advantage of the opportunities.

#### III. Context

A Canadian trade and investment development strategy for India cannot be developed in isolation from Canada's broader bilateral, regional and multilateral relations with India, involving such issues as regional and global security, trade policy, the environment, human rights issues, and cultural relations. It must also be consistent with and complementary to Canadian activities in international fora like the United Nations, the Commonwealth of Nations, and the World Trade Organization. These relationships must support the economic and trade development strategy if the efforts of Canadian business are to be successful. This document supplements Canada's International Trade Business Plan (ITBP) which will become increasingly relevant as the potential of the Indian market is realized.

# IV. Market Opportunities

India's program of economic, trade, and industrial reforms introduced in 1991 has moved India from an inward-looking, planned economy, to a more open, globally-

Page 4 Focus: India

oriented economy ripe with opportunity.

The reform process in India has begun to bear fruit. Exports have increased by 20 percent in the 1993-94 fiscal year (the highest growth rate in Asia); capital inflows have increased from US\$150 million in 1991 to US\$5 billion in 1994. India's rapidly expanding middle class, numbering some 250 million, represents the largest emerging consumer market in the world and is a source of highly educated, affordable, skilled labour. With this pent up demand, Canadian companies can no longer ignore the tremendous opportunities in India. India is the next large emerging market, and Canadian business must position itself in the indian market or risk being left behind. And, there is plenty of room to grow. In 1993, Canada was the source of a mere 0.8% of India's US\$ 21.88 billion in imports, while India ranked 25th in terms of Canada's largest export markets. Furthermore, there are opportunities not only for exporting to the large Indian domestic market, but to use India as a base for exports to third countries in the region, or for that matter, the global marketplace.

The greatest potential for Canadian success exists now, when the sheer number of opportunities and the possibilities for forming partnerships in India are probably at their zenith.

# V. Strategic Issues

Two-way trade and investment between Canada and India does not reflect the capabilities and potential of these trading partners. The following issues are limiting Canada's economic development and trade interests in India:

- Awareness India's business potential is not fully appreciated in Canada.
   Similarly, there is a lack of awareness in India of Canadian competitive strengths.
   As a result, there is a risk that many of Canada's competitors which have placed a higher priority on India both politically and commercially will have greater success in this burgeoning market.
- Complexity of the Indian Business Environment The Indian market has some distinct market characteristics (i.e. business practices and infrastructure) that may seem overwhelming to Canadian businesses at first. India is not for the timid or uncommitted. Generally, Canadian businesses have not looked beyond their first impression of India.
- Market Accessibility Despite extensive economic reforms, a number of barriers remain which hinder access to the Indian market. Relatively high tariff rates, intellectual property protection problems, and local licensing requirements can impede market access.
- Financing Limitations in financing mechanisms for Canadian companies seeking to do business in India are restricting market access. Financing concerns range

from small and medium-sized enterprises' (SMEs') requirements for accounts receivable credit to the risks faced by multi-national corporations (MNCs) making billion dollar commitments.

• Political/Economic Risk - India's political and economic environment has certain inherent risks. These include the stability of the government, regional tensions, communal strife, the pace of economic reforms, and India's fiscal situation. While the situation has improved dramatically over the past three years on almost all these fronts, the continuing political/economic risk is reflected in the fact that the major international credit agencies still have not granted India an investment grade rating for their long term debt. However, Moody's recently upgraded their short term debt to Investment grade.

# VI. Capturing the Opportunities

The Focus India Strategy aims to enhance Canada's economic and trade prospects with India by having a positive impact on the aforementioned strategic issues. There are a number of tools, mechanisms and initiatives within the scope of the strategy which can help Canadian governments and business to address these issues through:

- Political Relations
- Economic/Trade Relations
- Business Development Initiatives
- Canadian and Indian Business Organizations
- Financing

This document outlines options available to Canadian governments and business and suggests how these devices can be used to address the relevant issues and promote Canadian interests.

Page 6 Focus: India

# **B. THE CANADA - INDIA ENVIRONMENT**

# I. Introduction

This section summarizes the Canada-India environmental considerations which will have an impact on the Canadian economic and trade development strategy. It examines the changes and opportunities in India: how the 'new' India has evolved, what general market potential exists and what economic reforms have taken place. It also describes Canada's trade links with India, both the government and private business development programs of Canadian and Indian organizations, and the financial situation in India.

#### II. The New India

When the minority Congress (I) government of Prime Minister Narashimha Rao took office in June 1991, few expected the Prime Minister to survive politically for more than six months, or the government to last its full five year term. Almost four years later, Prime Minister Rao has defied his critics. He remains at the helm of a government, commanding a slim majority in Parliament. Although his party has faced setbacks in recent state elections which have created problems within the party, he is expected to contest the national election in 1996.

A program of economic, trade and industrial reforms was introduced in July 1991 out of compulsion as India teetered on the brink of bankruptcy for the first time in its post-independence history. As the program stood the test of time, however, further reforms have come out of conviction. India has made a dramatic turnaround in its economic philosophy from an inward-looking planned economy based on import substitution to one based on a free market, more globally-oriented economy.

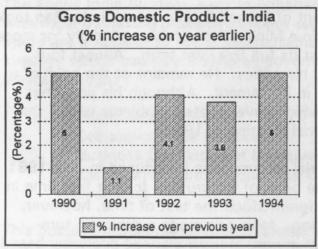
India has all but abolished its famous 'licence Raj' which frustrated exporters and potential investors alike; the Indian rupee is now fully convertible on both the trade and current accounts; and, more importantly, there is now a changing mind set that India can truly achieve global status. The pace and structure of reform can be attributed largely to Dr. Manmohan Singh, the Finance Minister, who steadfastly pursued his objective in the face of domestic opposition (including from within the Congress (I) party). His budgets reflected the need to find a balance between stimulating growth and responding to social pressures.

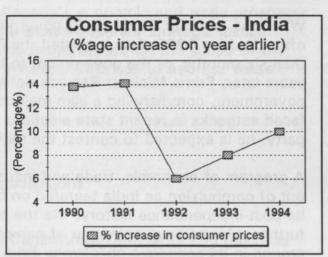
Although the Government's economic reform has been challenged, Prime Minister Rao has said there is no back tracking on the reforms introduced to date, and more reforms will follow. Given that both major parties are committed to the reform program, most analysts consider them irreversible. The increasingly positive foreign press on India's reform program and this country's sheer economic growth potential are attracting the attention of international business. As India realizes the

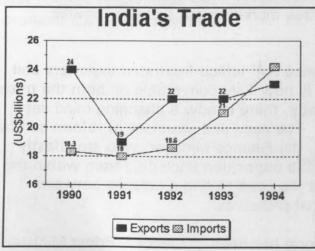
benefits of foreign technology and capital, business and government will accept that innovation and risk are needed if India is to match the growth of its neighbours in the Association of South East Asian Nations.

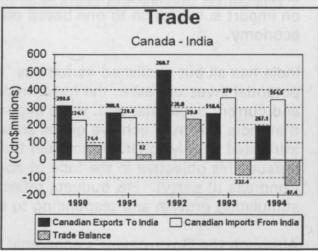
# III. Market Potential

There is enormous scope for Indo-Canadian commercial co-operation in the Indian market if we consider that there are virtually no untapped markets to rival India's size. At US\$250 billion, India is the 10th largest economy in the world in terms of GDP, 6th largest using the IMF's purchasing power parity measures. The country has a burgeoning middle class of between 150 and 250 million people that is becoming increasingly affluent and discerning. India has a wealth of agricultural and mineral resources, the potential of which has not even been half realized.









Furthermore, there are enormous infrastructure requirements. Like many of its neighbours, it has the potential to be the next 'Asian Tiger'.

Page 8

The market potential is increasingly being reflected in strong economic indicators: India no longer needs a second IMF loan, and it is paying off the 1991 loan ahead of schedule. GDP growth reached 4.2 percent in 1992, was 3.8 percent in 1993, and attained 5 percent in 1994. Inflation has been reduced from close to 17 percent to under 10 percent (9.96 percent in January 1995). Since July 1991, over 2,300 new foreign collaboration proposals, valued at US\$2.5 billion, have been approved.

In addition to the enormous market potential and positive economic signals, a number of historical factors facilitate doing business in India and make India an attractive market. India has a proven commitment to freedom and democratic principles with a functioning free press. There is a sophisticated, independent judicial system based on British common law that can and does overrule government decisions. English is widely spoken and is the common language of business and commerce. A well-developed banking system exists with private sector origins that date back 125 years. The century old financial and capital-market institutions include 22 stock exchanges. A complex distribution system can take a product from the factory gate to the remotest village. There is a well-qualified service sector, including lawyers, accountants, computer specialists and engineers. India also has a massive pool of inexpensive but highly skilled labour.

# IV. Economic Reforms

The Indian Government has introduced a radical and dramatic re-orientation of its fiscal, trade and industrial policies that seek to speed economic growth and increase international competitiveness. The major reforms can be summarized as:

Foreign Exchange Reform - The rupee was devalued by 24 percent in 1991 and, since then, the restrictive clauses of the Foreign Exchange Regulation Act have been abolished. The rupee is now fully convertible on the trade and current accounts.

Import Reform - The maximum tariff rate has been reduced from a peak of 350 percent to 50 percent, with the weighted average being in fact considerably less. Import duties should be down to 25 percent by 1998. Furthermore, except for three categories of prohibited goods and 12 categories of restricted goods, import licenses - a notorious source of red tape - have largely been abolished.

Investment Reform - Foreign companies are granted automatic approval for up to 51 percent equity investment in 36 priority sectors and many 100 percent foreign equity investments have been approved.

Privatization - The government has embarked on a program of partial disinvestment of its public sector units. It has opened power generation, telecommunications, and toll roads and bridges to the private sector.

Tax Reform - The final objective is a tax system that is simple, broad-based, well-administered, and set at a moderate rate. To date, corporate and personal tax rates have been drastically reduced. For example, the capital-gains tax has been cut from 40 percent to 20 percent and corporate taxes from 50 percent to 40 percent.

World Trade Organization (WTO) - In 1994, India ratified the final Uruguay Round of global trade talks embodied in the new World Trade Organization. As a result, far greater protection exists for intellectual property. For example, the Indian Patents Act has been amended to recognize 20-year product patents and include food, pharmaceutical and chemical sectors. India has agreed to bind over 60 percent of its industrial tariff schedules and to reduce these tariffs from about 65 percent to 32 percent. Export performance obligations for foreign investors have been abolished. The services sector has also been liberalized as they were included for the first time in a multilateral agreement. The opening of the service sector and improved protection of intellectual property rights will provide Canadians better access to the Indian market and should produce greater confidence to enter the market.

Environmental Reform - India has also undertaken environmental policy reform since 1991. The government's new pollution control strategy includes: integration of environmental and economic aspects in development planning; emphasis on pollution prevention through application of the 'polluter pays principle'; and incentives for the use of clean technologies to foster technological innovation.

The government has substantially enhanced internal competition and foreign access to this market. However, it may take several more years before all reform measures are fully implemented. There is a change of mind set taking place in India though it will not happen overnight. The fundamental forward momentum of the economic liberalization program witnessed to date is unlikely to change. This will continue to create exciting commercial opportunities for Canada.

# V. The Canada-India Trade Relationship

Canada and India are not major trading partners. Our respective exports only account for about one percent of each country's total exports. In the 1970s, Canada was India's third largest trading partner with wheat leading Canadian export sales. Newsprint, potash and sulphur were other major commodity exports. However, with India's Green Revolution and with a conscious effort by India to seek other, lower-cost sources of commodity supply Canada's exports decreased dramatically. In 1991, at the height of India's import compression due to foreign exchange difficulties, our exports had fallen to \$290 million, nearly half of what they were in 1985.

Unlike Canada's bilateral trade with other emerging economies in Asia, our exports to India were characterized by a lack of value-added products, although CIDA and

Page 10 Focus: India

EDC's financial assistance for major power and coal projects did lead to a significant upsurge in equipment and machinery exports to India in the late 1980s.

In contrast, Indian exports to Canada have increased steadily, making India inter alia a major supplier of textiles and garments. This has had a down side, as Canada was forced to negotiate several textile restraint agreements with India, to avoid injury to Canadian industry.

With economic liberalization and a major wheat sale to India in 1992 - the first in nearly a decade - Canada's exports to India increased by 75 percent to a record \$510 million and propelled India on to the list of Canada's top 20 export destinations. In the same year, India's exports to Canada grew by 16 percent to a record \$278 million, for total bilateral trade of close to \$800 million. In the last two years, however, with no major commodity sales, our exports to India dropped dramatically.

With an increasing number of Canadian business success stories, there are strong indications that the Canadian corporate community is starting to take a look at the newly liberalized Indian economy. Canada's small to medium sized firms (SMEs) are also taking a fresh look at India with new and active joint venture agreements. Canadian service companies are winning an increasing number of contracts in the consulting sector and are making long term commitments through an expanded local presence. There are now close to 120 Indo-Canadian industrial collaborations in areas as diverse as poultry breeding, aircraft maintenance, educational services, costume jewellery, telecommunications, power-generating equipment, automotive parts, geographic information systems, and edible oil processing. The number of Canadian corporate offices in New Delhi alone increased from only seven a year ago to 23 today. This is a remarkable achievement that bodes well for the future.

# VI. Canadian Programs and Players

This section reviews all trade related programs and briefly outlines the current activities of the major Canadian players in India. Several federal departments, all provincial governments and many private sector organizations are involved to varying degrees in the promotion of business development links between Canada and India. One aim of Focus India is to reduce the overlap and increase the effectiveness of these programs. (Please refer to Appendix 3 for a cross-reference table and a list of contacts)

Department of Foreign Affairs and International Trade (DFAIT) - Within the federal government, DFAIT has the mandate for international trade development. DFAIT's South Asia Division (PSA) is the principal point of contact for information and intelligence on trade and investment leads in India. The division manages and coordinates a trade and investment promotion program delivered through the missions in New Delhi and Bombay. International Business Development Divisions, within DFAIT, offer sectoral expertise, administer the overall trade promotion

funding, including the Program for Export Market Development (PEMD). The International Trade Centres (ITCs) are the points of contact in each province for information on programs and services. In addition, DFAIT deploys a total of twelve officers, including the High Commissioner, in New Delhi and the Consulate in Bombay. These officers deliver Canada's trade and investment program in India and provide market information and intelligence to Canadian industry.

Canadian International Development Agency (CIDA) - CIDA's mandate is to support sustainable development to reduce poverty and contribute to a more secure, equitable and prosperous world. The Industrial Cooperation Division (CIDA INC) and the Bilateral Program of the Asia Branch each fund activities which address this objective. The Canadian private sector is involved in the delivery of these programs through joint ventures and the direct procurement of goods and services from Canada. CIDA INC encourages Canadian companies to develop long-term links with India and to enhance the developmental impact of commercially-viable projects with Indian partners or clients. CIDA's Country Development Policy Framework for India focuses on development programs in three areas: the environment, economic and social policy reform, and Indian private sector development. The Bilateral Program promotes the exchange of mutually beneficial, environmentally sound technology in water and resource management. It also addresses the role that government and institutions can play in the creation of a policy environment conducive to private sector development, industrial cooperation and sustainable and equitable economic growth.

Export Development Corporation (EDC) - EDC has played an active role in supporting Canadian exports to India. In 1993 it upgraded its position in India and is now prepared to consider new business in the country. [Refer to VIII. Financial Environment in this section for further details.]

Environment Canada (EnvCan) - EnvCan's expertise in a number of environmental areas has assisted various federal departments and agencies in advancing sustainable development on a global basis. Its direct activities with India have been limited to information exchanges. However, India has recently received greater attention, within the context of climate change, due to its high level of green house gas emissions. EnvCan and the Indian Environment Agency have had discussions on environmental and sustainable development matters at various levels in the recent past. These discussions include information exchanges and training. They are also in the process of developing workshops addressing ozone depletion.

Industry Canada (IC) - IC's mandate is to foster Canadian business development and international competitiveness. Through its sector expertise and close contact with Canadian industry, IC plays a role in developing sectoral strategies for Canada's international business development initiatives. For example, IC has helped Canadian oil and gas equipment manufacturers establish a significant export market in India. Also, in the electrical sector, Industry Canada established a Memorandum of Understanding (MOU) between the Electrical and Electronic

Page 12 Focus: India

Equipment Manufacturer's Association of Canada (EEMAC) and its Indian counterpart. IC provides direct assistance to Canadian firms in their international business activities.

Natural Resources Canada (NRCan) - Natural Resources' three sectors: GSC, CANMET and Mining Sector are co-operating with the Government of Indian and the Indian mineral industry in the development of a bilateral policy addressing scientific and technical relations. This initiative will provide support for the promotion of mining and mineral-related services, technology and equipment from Canada.

Canadian Office for Technology Exchange in the Environment (COTE) - COTE was created in May 1992 in recognition of the global priority accorded to the exchange of environmental technologies. COTE's main function is to assist foreign organizations and companies to learn about Canadian technologies with applications to environmental issues and to develop their own technological capacity. To achieve this goal, COTE initiates projects that match international needs with Canadian expertise and works closely with United Nations' organizations and International Financial Institutions (IFIs) active in technology exchange programs.

Canadian Commercial Corporation (CCC) - CCC, a crown corporation reporting to the Minister of Public Works and Government Services was established to assist in the development of trade between Canada and other nations. Its role is to facilitate international trade and it is the prime contractor in the sale of Canadian goods and services to foreign governments and international agencies. CCC provides its buyers a guarantee of performance, on behalf of the Canadian government, that the contract will be executed in accordance with its terms and conditions.

Alberta Government - The Alberta government established an office in New Delhi in 1993. The Alberta representative's role focuses on providing support to the activities of Alberta companies in India.

British Columbia Government - The British Columbia Trade Development Corporation is increasingly interested in the Indian market and considers it an emerging market of importance. For the time being, they have decided to concentrate their efforts on three sectors: energy, telecommunications and the environment.

Ontario Government - While the Delhi office of the Ontario government wound up their operations in 1993, Ontario has retained the services of one of their former commercial officers. This officer acts as liaison between the Ontario and Indian transportation sectors, subsequent to a memorandum of understanding between the Ontario Ministry of Transportation and the India Ministry of Surface Transport. The Ontario government has also tried to promote a linkage between the respective automotive parts manufacturers associations of both countries.

Canada-India Business Council (CIBC) - The CIBC is an association of Canadian companies interested in doing business in India. It receives support from CIDA INC. The role of the Council is to foster Canadian business involvement in India through a program of information dissemination and individual counselling for firms wishing to enter the Indian market. CIBC is the Canadian counterpart of the Federation of Indian Chambers of Commerce and Industry (FICCI) and the Association of Indian Chambers of Commerce (ASSOCHAM) for the Canada-India Joint Business Council.

Canadian Manufacturers' Association (CMA) - The CMA is a business network with offices across Canada. It receives support from CIDA INC to support its membership in pursuing business opportunities in India. The CMA works through its contacts in India to introduce Canadian companies to the Indian marketplace and to identify potential joint venture partners. It has a memorandum of understanding with the Confederation of Indian Industries (CII).

Asia Pacific Foundation of Canada (APFC) - The APFC is a non-profit organization whose goal is to build awareness of Asia in Canada and vice versa. One of the APFC's aims is to increase Canadians' perception of the wealth of business opportunities in India through cross-Canada speaking engagements and seminars.

Business Council on National Issues (BCNI) - Each year, the BCNI organizes two visits by senior Canadian business executives to target countries. BCNI has selected India as its current market of choice.

Conference Board of Canada (CBoC) - The CIDA-funded CBoC Economic and Business Policy Linkage Program focuses on applied research projects in economic areas. Its purpose is to strengthen the capacity of Indian and Canadian applied research institutes to contribute to public policies on issues of mutual interest. There are a number of Canadian and Indian institutions working together on a wide range of applied research projects. A series of seminars and workshops have been held in Canada and publications are available from the Conference Board.

Canadian Environmental Industry Association (CEIA) - The CEIA is a key player in promoting commercial opportunities in India for Canadian environmental firms.

# VII. Programs and Players in India

India possesses a well developed network of institutions for supporting the country's business community. Detailed below are the Indian institutions that have Canadian programs.

There are three apex business organizations in India which provide information, advisory, consultative and representative services to industry and government: the Confederation of Indian Industry (CII), the Federation of Indian Chambers of Commerce and Industry (FICCI), and the Associated Chambers of Commerce and Industry of India (ASSOCHAM).

Page 14 Focus: India

The Confederation of Indian Industry (CII) - The CII is considered to be a reputable and professionally run industry organization. It has over 2,600 member companies: small, medium and large from both the public and private sectors, representing a total capital investment of over US\$21 billion and employing over two million people. CII is the principal counterpart of the Canadian Manufacturers' Association in India. The organizations have a loose collaboration to promote the mutual business interests of their memberships. In addition, the CII is developing a program with CIDA bilateral technical assistance to establish an environmental management division to promote more sustainable industrial development in India. The CII also has a close working relationship with the Conference Board of Canada on policy matters affecting the private sector.

The Associated Chambers of Commerce and Industry of India (ASSOCHAM) - ASSOCHAM is the oldest apex organization in India. Although its key role is to represent the views of its constituents to the government and to the public, it also acts in conjunction with the Federation of Indian Chambers of Commerce and Industry as a forum for interface between Indian and overseas business communities. For example, the two associations act as the Indian host agency for the Canada-India Joint Business Council.

The Federation of Indian Chambers of Commerce and Industry (FICCI) - FICCI is virtually a mirror image of ASSOCHAM and in fact draws its membership from the same basic sub-structure of regional chambers of commerce, industrial associations, professional institutions and corporate entities. As the respective national umbrella organizations for the International Chamber of Commerce, there is an institutional linkage between FICCI and the Canadian Chamber of Commerce.

Indo-Canadian Business Club (ICBC) - Formed in November 1991 to bring the Indo-Canadian business community into a common and closer focus, the ICBC was recently incorporated. There are now over 400 members, with chapters in New Delhi and Bombay. The High Commission prepares a bi-monthly 'ICBC Newsletter'.

Indian Association of Management Schools (IAMS) - Canadian and Indian business schools are linked by a program of mutual co-operation between the Consortium of Canadian Management Schools (CCMS) and the IAMS. The CCMS and the IAMS are currently working on a new collaborative arrangement specifically aimed at facilitating connections between Indian management institutions and local companies and, by extension, with Canadian private sector firms.

Export-Import Bank of India (EXIM) - The EXIM offers financial support to Indian companies to promote foreign collaborations, particularly joint ventures. The Bank has stated that it would be willing to help Canadian companies find partners in India, and it is discussing greater collaboration with the CIDA INC program.

#### VIII. Financial Environment

With the Indian Government's implementation of measures to reform the business and the financial sectors, the Indian financial environment is in a period of transformation. The removal of many import and investment related restrictions, the reduction of tariffs, and investment incentives all affect investment and export financing. Furthermore, the government has privatized many of its agencies to joint stock companies or made them limited corporations. Sovereign guarantees from the central government are expected to decline. The effects of the Helsinki Five agreement and the improved commercial viability of projects in India are expected to decrease the need for concessional financing.

To take advantage of the recent changes, many foreign companies and multinationals have either expanded their operations in India or are in the process of entering the market. Many reputable investment banks from New York and London have opened operations in India. Large Indian businesses have gained the confidence of the international capital markets and the investment community and have raised millions of dollars in foreign capital through Global Depository Receipt (GDR) issues. These firms are expected to use these funds to pay down their high-interest foreign debts or to fund major expansions or modernizations which will offer export opportunities for Canadian firms. This will also enable these firms to support local costs with greater ease. The Japan Bond Rating Service has recently up-graded India's credit rating to BBB+ (two notches above the minimum investment grade rating) and Moody's has upgraded it to investment grade.

# 1. Export Development Corporation's (EDC) Program in India

The Export Development Corporation (EDC) has played an active role in supporting Canadian exports to India. Since 1960, EDC has provided insurance and financing support in excess of \$700 million for Canadian export transactions through its insurance and financing programs in India. Historically, these transactions have included the sale of goods and services to the Indian steel, gas, mining, transport, and power-generating industries. Much of the long-term financing support was related to large government infrastructure projects, while short-term support concentrated on commodity exports. It is important to note that no material repayment difficulties have been experienced in the process.

More recently, EDC has supported exports such as crude non-metallic minerals, lead and lead alloys, telecommunications equipment, and goods and services related to infrastructure projects. EDC's presence in this market has enabled many Canadian exporters to successfully compete and bid for business in India.

EDC's Current Position in India - In November 1993, EDC upgraded its position on India and is presently open to provide project and export financing support on a selective basis, for medium to long-term transactions, based on sovereign guarantees or guarantees from first class banks. It is also open for new business on all insurance risks in India. Periodically, EDC is approached to finance private

Page 16 Focus: India

sector 'build, operate and transfer' (BOT) projects. EDC is in the process of exploring the associated legal and other issues related to such projects to determine whether it can consider a limited amount of well-structured project risk in India.

EDC's Financing Priorities - In addition to regular demand for insurance related cover, demand for EDC's long-term financing involves transactions related to infrastructure improvements in areas such as power and communications. Priority is given to projects which offer strong benefits to Canada, are at an advanced commercial stage, and which do not require concessional funding.

# 2. Other Sources of Financing in India

Many bilateral, multilateral or supranational financial institutions provide financing for transactions and projects in India. Private sector financing may also be secured. At times, EDC can work with these organizations to provide joint financing for a certain project or transaction. Participation by these organizations in a project often enhances financing from other sources, particularly for large energy, power or communications projects. Some of these organizations are briefly discussed below:

The Asian Development Bank (AsDB) - AsDB has a large Indian portfolio. AsDB's involvement has been principally in infrastructure-related development projects. Currently, AsDB is evaluating its financing focus and may partially shift towards environment, health and education projects. AsDB maintains a regional office in New Delhi.

The International Bank for Reconstruction and Development (IBRD) - The IBRD provides various types of financing to India, including project financing. Information related to up-coming projects is available from the organization. It also circulates various publications regarding its financing activities in India.

The International Finance Corporation (IFC) - The IFC, better known as the 'private arm of the World Bank', actively finances projects in India. It is also recognized for its equity participation in such projects. The IFC provides important information related to local equity markets and maintains a regional office in New Delhi.

Multilateral Investment Guarantee Agency (MIGA) - MIGA is another related organization of the World Bank to which India became a signatory on April 13, 1992. MIGA's principal focus is providing guarantees for eligible investments against non-commercial risks.

Other International Agencies - Other international agencies provide funds for developmental projects. The International Development Agency (IDA) and the International Fund for Agricultural Development (IFAD) are the most notable. In addition, many organizations under the United Nations' umbrella provide financing for development projects. The Commonwealth Development Corporation based in

London has an office in New Delhi. A few Canadian companies have used this organization as a source for funding.

Other Regional Organizations - There are regional funds, especially in the Middle East, which provide financing for projects in India such as the Kuwait Fund for Arab Economic Development (KFAED). A few Japanese organizations such as the Japanese Overseas Economic Cooperation Fund also provide financing.

Export Credit Agencies - At times, export transactions require a truly international package or participation. For example, the electrical machinery for a power plant may come from a third country. In this regard, financing may be available from the concerned export credit agency (EDC's counterpart) to cover that component of the overall project.

Private Investment Funds - Several investment funds have been floated for India by reputable investment houses in the United States, the United Kingdom and in the far east. These funds primarily invest in well-established Indian firms, which may use the proceeds to pursue new projects.

Commercial Banks - Private commercial banks provide various types of financing for transactions in India. Prospects are bright for private commercial bank financing in various capacities. There are 51 private banks in India, including 24 foreign banks such as the Chase Manhattan and the Bank of Mauritius. This number is likely to grow as the Reserve Bank of India has started to grant licences to new private banks. One Canadian bank, the Bank of Nova Scotia, has opened two branches and a number of other Canadian banks are actively considering the market.

Indian Stock Markets - The 22 stock markets in India have been buoyant with the inflow of foreign funds over the past three years. There are more than 6500 companies listed, for a total market capitalization of US\$139 billion. The Regulatory authorities have been removing obstacles for the smooth functioning of the stock markets while promulgating new legislation to protect the integrity of the system. In other words, the system is in transition. However, the significant inflow of foreign funds into the Indian financial system has significantly improved the possibility of accessing local funding.

# C. ANALYSIS OF MARKET OPPORTUNITIES

Canada has a strong bilateral relationship with India based on our Commonwealth ties and our major aid program which started with the Colombo Plan in 1952. This forty year relationship has resulted in a broad range of contacts and friends within the Indian government and private sector.

# I. Opportunities for Canadian Success

India will become an increasingly important market for Canada both in terms of exports and investment. Multi-national companies recognize that India is attractive, not just for its large domestic market, but also as an ideal base for accessing the markets of third countries in the region or for re-export back to home markets. The world business community is focusing on India with renewed vigour which places Canada at risk of losing its share of the market unless it starts to position itself today when opportunities and the quality of potential partners are at their best.

Canada's corporate profile in India is growing. About 120 Canadian firms are now engaged in some form of strategic alliance with Indian partners. Canada was the eighth largest foreign investor in the first quarter of 1994 (\$50 million). Canadian companies have also successfully penetrated the Indian market through direct exports from Canada. The success of exports has depended on the uniqueness of the product, price, quality, and the size of the market. In general, Canadian companies should consider some sort of collaborative arrangement - be it an investment, joint venture, or transfer of technology.

### II. Sectors with Greatest Potential

The Canadian government is highly motivated to find cost effective ways to achieve our trade development objectives. With an emphasis on budgetary restraint, DFAIT and other government departments are prepared to co-ordinate resources to achieve better results. To furnish a sharper focus to our trade and investment support efforts in India, three sectors have been targeted: energy (including power, oil and gas); telecommunications; and environmental products and services.

These three sectors were selected based on high, immediate or near term demand and favourable market conditions in India. They match Canadian interest and superior Canadian capabilities and competitiveness. There are also a variety of programs available from the federal government departments and agencies to support business development efforts in these sectors.

The sectors were not selected to the exclusion of others. However, concentrating limited resources in high potential areas is the most effective means of succeeding in India. These highlighted sectors might also change over time because of market saturation, evolving Canadian industrial capabilities, changes in government policies, and domestic and world events. (Please refer to Appendix 2 for more detailed sectoral analyses)

Energy I - (Oil and Gas) - India is undergoing rapid change as the government recognizes that private sector investment is crucial to oil and gas development. Policies are quickly progressing toward increased domestic and foreign private sector participation. The annual market for oil and gas field equipment and services which is about US\$3.5 billion is expected to grow between 12-15 percent over the next five years. At present, almost 53 percent of total requirements are met through imports. As India begins to invite private sector participation in oil and gas contracts, the scope for Canadian exports and servicing in this sector widens. The Canadian oilfield manufacturing industry is well placed to fill the market requirements since Canada is a leading world supplier of niche advanced-petroleum equipment and technologies. Furthermore, Canadian companies have already established a sound reputation as reliable suppliers of quality products and equipment to India's oil and gas industry.

Energy II - (Power) - India is handicapped by inadequate power generation, transmission and distribution capacity. India has proposed to upgrade and expand its existing distribution system and to add approximately 30,000 megawatts of generating capacity by 1997. As a point of comparison, this addition would equal the total generating capacity of Ontario Hydro. With economic reform, enormous pent up demand caused by increased industrial capacity, a large emerging middle class, and changes to the policy governing private power-generation and transmission, the opportunities in this sector are greatest now. Canada is well placed to meet this challenge. We are the world's largest producer of hydroelectric power; the third largest producer of electricity from all sources; and we design, build and operate some of the largest and most complex electrical projects in the world.

Telecommunications - The Indian market is one of the world's largest in terms of business potential for Canada's exporters. To reach its target of 20 million telephones by 2000, India will need US\$500 billion worth of investment from domestic and international sources. Timing is significant in this sector: far-reaching policy changes by India's Department of Telecommunication are underway; India spent US\$19.93 billion in 1993-94 to install new telephone lines. Indian companies are scouting for foreign partners with proven technologies. Canada is a leader in this field and capable of being a major player in this very competitive industry.

Page 20 Focus: India

Environmental Products and Services - India's growing industrial base and its rapid population growth have created major environmental problems for the country. In response, the Indian government has launched a number of ambitious initiatives to improve environmental quality: environmental legislation has been introduced; most import controls have been removed; and stricter enforcement is being implemented. The market for environmental goods, services and technologies is estimated at approximately US\$500 million annually. The Indian environmental technology market is growing at an annual rate of 20-25 percent. Canada is a world leader in technological advancement within the environmental industry. As such, India offers a unique opportunity for Canadian companies to contribute to its economic success while protecting the global environment; the essence of sustainable economic development.

# III. Other Sectoral Opportunities

ន្ទស់សំណាក់ស ខ្មែរ៉ា មាន ១៦៩៩២ ខេត្ត ប្រែប្រ

India offers a wealth of opportunities in many sectors for Canadian manufacturers and service companies. Commercial initiatives, therefore, need not be restricted to those sectors highlighted above. While a concerted government effort will be made in these sectors, the Trade Commissioner Service of the Department of Foreign Affairs and International Trade will continue to actively support Canadian companies in the following sectors:

Aviation and Airports - With the repeal of the Air Corporations Act in March 1994, private airlines are now permitted to operate scheduled services which will create an increasing demand for regional aircraft, aviation equipment, and repair, maintenance and overhaul facilities. To handle a projected increase in passenger (12 percent growth) and cargo traffic, India plans to modernize and expand its current airports, build new ones, and improve its air navigation system. By early next century, new airports are to be built in Bombay, Bangalore and Cochin and another 12 regional airports are to be upgraded in the near term. The modernization and expansion of the airport system will provide opportunities for airport designers, builders and operators as well as equipment manufacturers.

Chemicals and Petrochemicals - This industry is one of the fastest growing segments of the Indian economy. Its share of the nation's gross domestic product rose from 8 percent in 1970-71 to about 40 percent in 1992. It comprises the petrochemical, dyestuff, pesticide, and the organic and inorganic chemicals sectors. The modernization of India's agricultural base has generated a sustained demand for fertilizers, plant protection chemicals and related products. The synthetic fibre industry has also recorded a dramatic growth which has given a boost to the associated industries of dyes and textile auxiliaries. In addition, the availability of hydrocarbons has opened up new horizons for the petrochemical industry.

Consulting Services - To support its program of economic reform and to significantly increase the country's export performance, India must undertake a major modernization and expansion of its infrastructure, especially in the areas of power generation and transmission, roads, ports, airports, and telecommunications. These infrastructure requirements offer significant opportunities for Canadian consulting engineers. Other opportunities fall into four categories: services to Indian companies or agencies; international financial institution-financed consulting projects; bilateral projects financed by EDC and/or CIDA; and projects in India and in third countries accessed through a collaboration with an Indian company. Regarding services to Indian companies or agencies, there is a broad range of opportunities although project sizes are relatively small. While projects cover various sectors, those relating to extraction and manufacturing technologies, efficiency, waste reduction, and quality management are the most prominent.

Drugs, Pharmaceutical and Health Care Products - The pharmaceutical industry remains subject to industrial licensing restrictions and drug prices that are controlled by the government. There are 20 000 companies engaged in manufacturing over 500 bulk drugs and 30 000 formulations. India's pharmaceutical market is ranked 9th internationally, with a 1.5 percent share of the total world market. The total production of drugs and formulations in 1992 was valued at US\$1.3 billion, of which 29 percent was exported. Nearly half of the trade is controlled by 25 multinationals. In 1991-92, the import of drugs and pharmaceutical was estimated at US\$320 million. Imports included antibiotics; penicillin; erythromycin; vitamins and provitamins; vaccines (polio, human and veterinary); preparations containing insulin, caustic and other hormones; and tetracyclines.

Electronics - Electronics is India's fastest growing industrial sector. It accounts for over 4 percent of the industrial sector output and represents 1.5 percent of India's gross domestic product. The consumer electronics area is contributing about one-third of total electronics production in India. By the turn of the century, total electronic production is expected to surpass Cdn\$22 billion. India offers excellent market potential for Canadian companies to enter into joint venture and technology transfer agreements in the electronics sector.

Food Processing Industries - Food processing is one of India's new growth sectors. The fruit juice and concentrate sector offers tremendous opportunities for expansion as an export-oriented industry. India is a major producer of tropical and temperate fruits with an annual production of about 27 million tonnes. Edible and processed fruit such as canned products, juices, flavours, and concentrates, offer excellent opportunities for Canadian companies for new investments, joint ventures and technology transfers. India has the largest emerging middle class in the world and as India's economy expands, there will be a growing market for fast-food and specialty products. There are also opportunities for the sale of processing and packaging machinery as Indian industry strives to upgrade the quality of its

production. Total imports of food processing equipment in 1991-92 (latest statistics) were US\$3.5 million.

Industrial and Electrical Machinery - This sector is characterized by a lack of technological sophistication and specialization. This offers opportunities for Canadian companies in terms of providing equipment and machinery to upgrade India's industrial capacity and through industrial collaborations in India. Domestic prices are often 40-100 percent higher than imported equipment. In 1992-93, imports into India area were estimated at US\$2.5 billion, about 20 percent of India's total imports. While imports in this sector have grown at an average rate of about 9 percent in past years, they are expected to increase by about 12 to 15 percent in the next few years. There are excellent opportunities in the following areas: filtering and purifying equipment for liquids and gases; sophisticated machine tools for working metals, carbides, cement, glass, stone and ceramics; industrial furnaces and ovens; plate and finned heat exchangers; mining extraction and processing equipment; measurement control instrumentation; and spares for pumps, and steam and electrical generating equipment.

Medical Equipment - Medical electronic equipment is one of the fastest growing sectors in India with an annual growth rate of about 20 percent. The market is estimated at US\$130 million and India imports as much as 85 percent of its requirements. India must upgrade and expand the level and quality of its medical services. Subsequently, there is a requirement for diagnostic, therapy, rehabilitation and patient monitoring equipment. The demand for this type of equipment could exceed US\$300 million per annum by 1997. There are excellent opportunities in the following areas: ultrasound based echo cardiogram units; dopplers of various types; heart diagnosis and treatment equipment; equipment for dental treatment; ultrasound scanners for abdominal applications and gynaecology; diagnostic equipment for cancer treatment; solid state lasers for ophthalmology, urology angiology, cardiology, surgery; and therapy lasers and semi-conductors for rheumatology and dermatology.

Mining, Metals and Minerals - India is among the world's top producers of minerals such as coal, iron ore and chromate, with production in 1991 valued at US\$5.5 billion. The annual growth rate of this sector, which was around 17 percent in the 1980's, has slowed down to about 4 percent in 1990-91. India already manufactures a wide range of mining equipment. However, there are increasing opportunities in specialized high technology equipment such as DTH drilling machines; walking draglines; electric and hydraulic shovels; and load haul dumpers which are needed to improve the productivity in the mining sector. As part of its economic reforms, India has recently amended regulations allowing foreign companies to hold a controlling interest in mining operations. It is also lowering the level of protection given to the domestic industry and amending its environmental protection regulations. Consequently, the industry will have to become more competitive and environmentally conscious.

Peas and Pulses - Pulses are an important source of protein in the Indian diet. Even though India is the largest producer of peas and pulses, its production has not kept pace with its population growth. The Indian government continues to permit the private sector to import pulses without any licensing restrictions. Pulse imports were around 792,000 tonnes in 1990-91 valued at \$206 million, but declined to an estimated 400,000 tonnes in 1991-92 due to foreign exchange restrictions. In 1992-93, a record bumper crop left imports at the previous year's level. The main varieties of pulses imported include: peas; kidney beans; chick peas; lentils; green beans; Tyson chick peas; black matpe; and pigeon peas.

Railways - Indian Railways (IR) is the world's second largest system under single management. There are over 300 companies, mostly private, which manufacture a range of railway equipment and components. Indian Railways imports only certain components for its diesel and electric locomotives, sophisticated signalling and telecom equipment, and certain components either not manufactured or in short supply in India. The increased emphasis which Indian Railways has placed on gauge conversion will provide a good opportunity for future sales of Canadian rails. Canadian companies could also participate in Indian Railway's plans to upgrade domestic technologies, such as stronger track, advanced locomotives and rolling stock, modern communications systems, advanced-signalling and interlocking systems, the development of multimodal traffic with large scale containerization, and the development of associated rail, road and port infrastructures.

Road Transportation - India's highway network measures 33,689 km. There are opportunities for Canadian companies in the planning, construction, operation and maintenance of this network, in addition to industrial co-operation opportunities for road maintenance and ancillary equipment. Most projects have been financed by the World Bank and the Asian Development Bank. Given its pressing need to improve and expand its highways and concurrent budgetary restrictions, the Government of India has amended the National Highways Act to allow for privately operated toll roads. The Indian government is looking to the private sector to undertake the construction and operation of badly needed bridges and expressways.

Security Products - The market for electronic and other security products in India is relatively new and still small in size. The current import market is only about US\$3 million per annum which includes baggage X-ray equipment, bomb detectors, access and perimeters controls, burglar alarms, and metal detectors. Most of the buyers have been government agencies either through global tender or direct sourcing. However, this market is expected to grow significantly in the coming years, especially in the private sector. India already produces a wide range of security systems, yet they are not comparable in quality nor technological sophistication to what is available internationally. Opportunities exist in the following areas: access control systems; counter-espionage devices; devices for open space and interior protection; fire safety detection and prevention equipment;

Page 24 Focus: India

bomb detection and disposal equipment; perimeter protection devices; surveillance equipment; equipment for police use and for bank security; and equipment for forensic science laboratories. In addition, the National Airports Authority of India is planning to upgrade the security systems at all Indian airports.

# D. ECONOMIC DEVELOPMENT AND TRADE ISSUES

# I. Introduction

This section identifies and evaluates a number of issues which are impeding Canadian trade and investment development in India. Obstacles to Canadian companies achieving their full potential include a lack of market awareness, a failure to understand the complexity of the Indian business environment, current limits on market accessibility, restricted financing, and political and economic risks.

# II. Developmental Setting

The economic development strategy for India must take into consideration the 300 million people living below the poverty line. The Government of India has provided significant resources for food, health and basic education to the most disadvantaged. Hence, the late 1980s and early 1990s have seen a proportional decrease in the level of poverty. Through the Canadian International Development Agency, Canada has supported government and non-government organizations in their efforts by funding projects in agriculture, rural development, social and human infrastructure and the provision of goods and services to the energy and transport sectors.

India's development strategy has shifted in the past ten years. Through a series of economic policy reforms, the Indian economy has become increasingly outward looking which has encouraged the private sector to play a greater role in development. While a large portion of the CIDA program is directed at poverty reduction, the importance of Indian private sector economic growth has also been acknowledged. Thus, the CIDA program has become more involved in encouraging Indo-Canadian joint ventures. It is also working with key institutions and policymakers to improve the environment for private sector development in India. This is the CIDA component of the Focus India strategy.

#### III. Market Awareness

Canada's trade interests in India are being hindered primarily by a lack of market awareness on two fronts: in Canada, India's market potential is relatively unknown; and, in India, Canada is not seen as a major economic partner.

#### 1. Awareness of India in Canada

To date, India has not had a high political or economic profile in Canada. Canadians have been slow to recognize that India now offers tremendous business opportunities. Canadian companies, particularly small and medium-sized

Page 26 Focus: India

enterprises, lack experience in India and are therefore unfamiliar with it. The perception of India within the Canadian business community suffers from stereotypes of communal violence, poverty, and out-dated bureaucratic and inefficient business practices which are no longer a reality in modern India.

There is a risk that competing nations will achieve greater success in this growing market because of a better appreciation of India's potential and understanding of how to do business there. "The Indian train is moving on, those who fail to get on board now will only have themselves to blame for getting left behind!"

#### 2. Awareness of Canada in India

e alore of a fill a black to large out of

There is also a lack of awareness of Canadian competitive strengths in India. Competing nations who have recognized the potential of the Indian market and have a stronger presence there have achieved greater success. While Canada was the eighth largest foreign investor in India in the first quarter of 1994 with investments listed at \$50 million, it was not on the May 1994 list issued by the Indian Ministry of External Affairs that targeted 18 countries for fresh foreign investment into infrastructure areas as well as emerging industries like food processing.

Canada accounted for only 0.8 percent of Indian imports in 1993 down from 1.8 percent in 1992. Canadian industry is therefore losing market share at a crucial point in India's economic development. This could be interpreted in India as a lack of interest in the market. While there are high profile Canadian successes in India, the full diversity of our national industrial capabilities is not recognized and therefore not sought.

# IV. Complexity of the Indian Business Environment

While it is considerably easier to do business in India today, the complexity of the Indian business environment still presents challenges for Canadian business. The following market characteristics have an impact on doing business in India.

#### 1. Bureaucratic Bottlenecks

While investment approvals have been greatly facilitated and the restrictive 'import licence Raj' has been nearly abolished, bureaucratic bottlenecks still exist in implementing projects or in clearing shipments through customs. Reforms have not trickled down to the lower echelons of the bureaucracy, especially at the state level. There are still conflicting interpretations of new regulations that can only be ironed out over time as the transparency of the reform process improves.

# 2. Privatization Policy Guidelines

The Indian government has privatized services in many sectors such as power, roads, and telecommunications - all of which offer excellent opportunities for Canadian companies. However, there are still conflicting policies and often vague guidelines regarding government guarantees, rates of return, and the bidding process. Efforts are underway by the Indian government to address these issues and Canada, through high level contacts, continues to encourage India to address these shortcomings.

#### 3. Connections

India remains a country where connections play a pivotal role in success. It is not so much the information you possess, but more how you can use it and how you influence decision makers. This applies to the public sector and, to a lesser degree, the private sector.

#### 4. Cultural Differences

While India has a strong entrepreneurial class, there are business methods unique to this country. India provokes one's senses and first impressions may create internal conflicts that can influence business decisions. It is a land of contradictions that one must able to deal with. This has been exacerbated by the introduction of economic reform. While the private sector has been told to act like a free market economy, the mind set remains inward-looking and people rely on the government for guidance. While the situation is rapidly changing, it will require time and patience on the part of Indian business and its foreign partners.

### 5. Appearances

India is a market where appearances and first impressions can be very deceiving. Business is part of a complex socio-economic environment; it is important to develop a trusting relationship with partners and clients and verify the accuracy of information.

#### 6. Infrastructure

India's communications, power and transportation systems have not yet reached world class standards and can be frustrating at times when quick decisions have to be made. At the same time, this drawback is providing commercial opportunities for foreign companies. India will see radical improvements in this area in the coming decade.

Page 28 Focus: India

# V. Market Accessibility

Export to India is much easier today than it was before economic reform began in 1991. Peak tariffs were 350 percent. Most imports required licences. Importers could only import for resale against existing orders for merchandise. And, imports of spare parts were extremely difficult.

Today, government approvals for most investments are automatic. Peak tariffs have been reduced to 50 percent and Indian companies can buy foreign exchange for imports at market rates without central bank permission. Foreign exchange reserves have grown from less than US\$1 billion in 1990 to more than US\$20 billion as of the end of December 1994.

Despite economic reform a number of tariff and non-tariff barriers remain which hinder access to the Indian market. Lack of intellectual property protection, relatively high tariff rates, and local licensing requirements can impede market access. These and other concerns affect exporters' and investors' efforts to gain increased access to the Indian market.

# 1. Import Policies

Import Licensing - India's complex import licensing rules have eased significantly. While most products can be imported without licenses, import licensing has not been completely eliminated. Restrictions remain on the importation of many consumer goods and agricultural products, (e.g. breeding stock and processed food products). Although the Indian government has announced its intentions to eliminate all import licensing, this has not yet occurred.

Quantitative Restrictions - Despite continuing reform, imports of most consumer goods are still not permitted, except for a few products such as food grains imported by government agencies. Other sectors face quotas. The liberation of quantitative restrictions has usually been based on an absence of domestic production.

Antidumping - In response to complaints from domestic producers that import reform has led to foreign dumping, India has strengthened its antidumping policy. In the 1993/94 Budget, the Government promised domestic manufacturers "strict implementation" of antidumping laws.

#### 2. Government Procurement

Domestic Preference - Indian government procurement practices are not standardized or transparent and often favour local suppliers. Price is the most important factor even though better quality could lower overall costs over time. When foreign financing is involved, government procurement agencies tend to follow multilateral development bank requirements for international tenders.

Countertrade - India has an unofficial policy that encourages countertrade, though it has never been a critical factor in conducting business in India.

# 3. Intellectual Property Protection

In 1994, India ratified the Uruguay Round of multilateral trade negotiations which provides, for the first time in a trade agreement, comprehensive protection for intellectual property. As a result, exporters and investors have more secure access to and should have greater confidence to enter the Indian market. The major intellectual property issues facing companies operating in India are:

Copyrights - Indian copyright law offers strong protection, but the Constitution gives enforcement responsibility to the state governments. Piracy of copyrighted materials is a significant problem. India amended its Copyright Act in 1984 to provide stronger remedies against piracy and to protect computer software. While the government has made significant steps to improve copyright protection, there is a notable lack of resources devoted to its enforcement.

Patents - India is not a member of the International Union for the Protection of Intellectual Property. Protection of patents in India is governed by the India Patent Act. Product patents are granted for all inventions except where the invention is intended or capable of being used as a food, medicine, or drug, or is a substance prepared or produced by chemical processes. Process patents relating to food, drugs, pharmaceuticals and chemicals give the patent holder only the right to the process patented. Therefore Indian firms are able to manufacture various products without 'infringing' upon the patent law. Where available, product patents take four years to be granted and expire 14 years from the date of filing.

Compulsory Licensing - Patent law provides that a patented product must be produced in India within three years or the government may give the licence for the technology to an Indian producer for a fixed royalty to the government. Stringent compulsory licensing provisions have the potential to render patent protection virtually meaningless.

Royalty Payments - Indian policy guidelines normally limit royalty payments, including patent licensing payments, to 5 percent of the selling price for domestic sales and 8 percent for export sales. Under the Canada-India Double Taxation Agreement, royalties and lump sum payments are taxed at a rate of 20 percent of the gross sum.

Trademarks - With economic reform, international brand names are now permitted to be used in India. A bill to amend the Trade and Merchandise Marks Act has been introduced in Parliament that would protect foreign trademarks.

Page 30 Focus: India

# 4. Foreign Investment Barriers

Equity Restrictions - Automatic approval is now given by the Reserve Bank of India (RBI) for foreign direct investments of up to 51 percent equity in 36 priority industries. However, case-by-case approval is required for non-priority sectors and foreign equity investment above 51 percent. There remain six industries reserved to the public sector and another 15 which require industrial licensing.

Remittance of Funds - Once an investment or technology transfer has been approved, foreign exchange outflows (dividends, interest, etc.) can normally be freely-remitted. However, for consumer goods all remittances must be balanced by foreign exchange earnings.

Repatriation of Capital - Disinvestment of foreign equity must be approved by the RBI and is based on the stock exchange. For listed companies, the disinvestment price is based on the 2 year average share price as per stock exchange quotes. For shares not listed and traded on a stock exchange and closely held firms, the value is assessed by the RBI based on net asset value and earnings per share. Although there are few restrictions in theory, the repatriation process can prove to be long and arduous.

Foreign Funds Ceiling - In May 1994, the government imposed a ceiling of US\$2.5 billion on the amount Indian companies can raise from international markets as Global Depository Receipts (GDRs) every year. These monies can only be used for specified purposes such as importing capital equipment and repaying outstanding foreign currency loans. This ceiling could hamper the availability of foreign funds in India. Given that, there are 130 Indian firms expecting to raise over US\$9.0 billion in the next year. Since the government's failure to float their US\$1.2 billion VSNL issue in May 1994, up to US\$600 million has been raised by several firms. By mid 1994 twelve had been given permission to go to market.

# 5. Export Subsidies

The first reform Budget in 1991 phased out most direct export subsidies. However, indirect subsidies such as investment tax, credit access and foreign exchange retention incentives remain in place.

# VI. Financing

There are shortcomings in existing financing mechanisms for Canadian companies doing business in India. Financing concerns range from small and medium-sized enterprises' requirements for accounts receivable credit to the risks faced by multinational corporations making billion dollar commitments.

Export Working Capital - One of the primary requirements of small and mediumsized enterprise exporters is access to working capital to enable them to maximize their export potential in India.

Market Knowledge - The lack of knowledge about export and investment financing options is also a roadblock for Canadian business. Canadian firms are sometimes unaware that financing support or assistance is necessary for a government bid to be considered viable.

Credit Competition - Major Indian contracts are often won and lost on credit terms. Canadian firms do not have the access to concessional financing, unlike many of their competitors. Therefore, they are not on a level playing field with other nations.

Infrastructure Investment Requirements - India's infrastructure is in need of extensive modernizing. Many or these projects are self-financing and do not come with sovereign guarantees. Projects must therefore be assessed on their commercial viability. On their own, few Canadian firms can finance 20-year billion dollar infrastructure investments as required in many cases in India. The Canadian government is no longer in a position to assist in such mega-projects. The foreign competition, particularly from the EU, are utilizing consortia in India.

Perceived Investment Risk - Private sector involvement in Indian infrastructure projects has increased dramatically over the past few years, but many potential Canadian investors have concerns about political risk. They fear expropriation and adverse policy changes or are concerned about their long-term ability to repatriate profits. Public sector investment insurers worldwide have experienced a surge in applications from potential private investors in infrastructure projects eager to reduce some of the long-term political risks.

International Financial Institutions - Canada has a poor record in winning IFI projects in relation to our contributions to these organizations. Canadian industry is not properly equipped to successfully bid on many projects and is losing tenders despite technological superiority. Also, as IFI projects are usually awarded by the host country, irregularities in the Indian evaluation procedures are a concern. As India is still a major recipient of IFI funds, Canada could improve its access to the Indian market through IFI-sponsored projects.

# VII. Political and Economic Risk

India is a country in political and economic transition from an inward-looking society and economy based on import substitution, to a modern more open society with a free-market orientation. This transition involves uncertainties and imponderables. This inevitably results in apprehension about the market, especially regarding a country as large and diverse as India.

Page 32 Focus: India

# 1. Political Stability

Apprehension about India's political health relates in part to the central government's ability to hold the world's largest democracy together. When the minority Congress (I) government of Prime Minister Narasimha Rao took office in June 1991, few expected the Prime Minister to survive politically for more than six months or the party to last its full five-year term. Four years later, Prime Minister Rao remains at the helm of the government. His party now commands a slim majority in Parliament and is expected to contest the next national election anticipated in mid-1996. Recently, Congress (I) has fared poorly in state elections, and Prime Minister Rao has faced challenges to his leadership from within the party. However, he has forthrightly resisted these challenges.

# 2. Religious Tensions

The strength of India's democratic institutions is well established and should continue to buttress political stability. Concerns that India's fiercely-protected secular society would be undermined by fundamentalist entities, such as the Bharatiya Janata Party (BJP), have not become a reality. While India may have a more pluralistic political environment than in the past, voters have shown in recent state elections in the Hindu heartland that economic and social issues are more important than religious zealotry. The probability of further violent incidents such as the December 1992 attack on the Ayodyha mosque by Hindu fundamentalists has been significantly reduced. Law and order is being enforced.

#### 3. Regional Unrest

Political stability in India has always been a relative term. A strong central government has been able to bind this ethnically, religiously, and culturally diverse country together. However, there has been regional discontent and New Delhi has not been loathe to use extra-Parliamentary measures to enforce law and order or to rule under Presidential fiat. The central Government remains preoccupied with unrest and secessionist movements in Kashmir, the Punjab, the Northeast, and the deep south. The Kashmir situation is the bleakest, worsened by on-going insurgency from Pakistan. The Punjab has achieved a degree of stability but the harsh measures used to achieve this have left a residual resentment, especially within the Sikh community. The remote northeast considers itself a forgotten area with the tribal peoples of the region having no affinity for the leadership in New Delhi.

#### 4. Social Issues

The Indian government faces challenges in addressing the political and economic concerns of its far-flung regions and the social issues affecting its millions of poor people. The government has progressively taken steps to improve the situation. India's economic reform program is part of this effort to deal with the current

socio-economic situation in India. Nevertheless, the government has slowed down the process in recent months given its comfortable foreign exchange reserves, the need to deal with social issues and the impact of double-digit inflation. Reform in India must be a measured process. Otherwise, social discord can easily erupt and regional differences become exacerbated.

## 5. Human Rights Record

India has received criticism for abuses of human rights, most recently in Kashmir. While these abuses are real, India is now addressing them in a more transparent manner. The international community has chosen not to pursue a punitive approach to India, but to use suasion to improve the situation. Broader bilateral and commercial relations with India should encourage further improvements with respect to the protection of human rights.

## 6. Regional Security

India's unstable relations with its neighbours, especially Pakistan, is a concern given the nuclear-weapons capability of the two countries. Although the India-Pakistan relationship is characterized by harsh rhetoric and much posturing, the two countries appear to be engaged in 'conflict avoidance'. Moreover, the regional security situation in South Asia receives close international monitoring and most Western countries have avoided strategic military exports to India and Pakistan.

#### 7. Risk Evaluation

The program of economic reforms has brought India from the brink of bankruptcy to economic resurgence. To become an economic 'Tiger' in Asia, India needs to maintain its reform program and ensure its full and transparent implementation, including at the state level. It must address crucial - and politically sensitive - reforms of the banking sector, the taxation structure, and the industrial and labour adjustment programs. India has the capacity to deal with these issues, with the appeal of global status driving it onwards. The increasing international business interest in Indian attests to the appeal of this market. Its economic risk is considered more than acceptable.

Page 34 Focus: India

# E. CAPTURING THE OPPORTUNITIES

#### I. Introduction

The objective of Focus India is to develop programs and initiatives to position Canadian industry to take advantage of the commercial opportunities emerging in a market that many analysts are calling Asia's next 'Tiger'.

Canada's trade objectives in India are: to capitalize on the flourishing business opportunities in the 'new' India; to realize the market potential of the region with India as a strategic partner; and to contribute to the sustainable economic development of India. Canada's success will depend on its ability to achieve greater access to the Indian market and to educate the Canadian business community of the reality that is the new India.

This section presents an inventory of those activities, mechanisms and initiatives which can help Canadian business meet the challenges in India and take full advantage of the opportunities. It also sets the framework for a detailed annual action plan which will coordinate the delivery of government programs and act as a catalyst for greater Canadian business participation in the Indian market. The following are the areas where specific activities and initiatives have been identified:

- Political Relations
- Economic and Trade Relations
- Business Development Initiatives
- Canadian and Indian Business Organizations
- Financing

#### II. Political Relations

Canada's relations with India have been characterized by a tradition of constructive co-operation and discussion both multilaterally and bilaterally. While the past several years have witnessed notable improvements, India has not been a focus of concerted Canadian foreign policy interest, particularly in the economic area.

Canada has taken a decision to foster a closer economic relationship with India. In order to achieve this, we have initiated efforts to enhance our political relations. This does not mean that Canada should cease to discuss issues such as non-proliferation and human rights with India. These issues, however, should be approached in the context of the broader relationship. In general, a vibrant and mature political relationship creates the appropriate atmosphere for conducting a progressive economic relationship.

In strategic terms, the following aspects of Canada's political relationship with India warrant continued attention to support Canada's economic interests:

Visits: High-level visits such as the successful visit by the Minister for International Trade last October and the Secretary of State (Asia-Pacific) in March send strong signals to India that Canada is interested in pursuing closer relations. Follow-up visits by the Prime Minister, the Minister for International Trade, and other ministers with responsibility for the environment, energy, and industry would raise the profile of Canada's relations with India and help focus attention on areas of particular interest to Canada. Visits by Indian ministers to Canada would also help achieve these goals. Similarly, visits by provincial trade ministers and accompanying trade missions should be encouraged.

Consultations: Regular, annual political-economic consultations at the senior-officials level would also enrich Canada's bilateral relations with India. These consultations provide an opportunity to discuss particular problems such as market access issues, or initiatives regarding our commercial interests. As Canada-India commercial relations expand, separate political and economic consultations could be held.

Public Affairs: Promoting Canada in India through the arts and the media is important to Canada's bilateral relations. Indian perceptions of Canada, and viceversa, are affected by such efforts. The Shastri Indo-Canadian Institute has been working for over 25 years in cultural and academic areas. It is seeking to enhance its mandate and establish relations with the business sector.

Diplomatic Presence: The High Commission in New Delhi and the Consulate in Bombay are very important aspects of Canada's strategy because of their on-going contact with the Indian government and private sector. This is the sharp end of Canada's relations with Indian decision-makers. The addition of one new Trade Commissioner position at each mission in 1994 was a positive step. An expanded presence, through two Honourary Consuls with attached commercial officers in Bangalore and Madras, will serve to raise Canada's profile in other regions of India.

#### III. Economic/Trade Relations

Canada has a number of economic co-operation arrangements with India, including an agreement for the avoidance of double taxation, an air services agreement, and a general agreement on development co-operation. To strengthen Canada's economic relations with India, bilateral consultations and formal mechanisms are needed to build trade and investment linkages. The primary objective would be to gain more secure access for Canadian exports and investment. The following co-operation agreements merit high consideration.

Foreign Investment Protection Agreement (FIPA): India is on Canada's priority list for the negotiation of a FIPA. The first round of negotiations was held in Delhi in early February 1995. Although there have been relatively few major Canadian investments in India to date, the significant emerging investment opportunities will not be ignored. In fact, there is increasing interest from investors in many sectors.

Page 36 Focus: India

The Indian Government is intent on attracting foreign investment as a matter of policy. A FIPA will ensure that Canada is well-placed in this regard.

Economic Co-operation Agreements: The negotiation of a general economic co-operation agreement would consummate sectoral interests and provide for the exchange of economic information. It would also provide a mechanism for addressing difficult areas, such as textiles and clothing, or sensitive issues like the protection of intellectual property rights. A more transparent economic relationship and mature discussions of economic issues can only enhance general economic relations. An economic co-operation agreement would build on existing agreements such as the Coal Working Group and a proposed memorandum of understanding in Fisheries Cooperation.

Non-Government Cooperation: There is scope for non-government economic cooperation arrangements with India, involving business and industry organizations, universities, or individuals. CIDA-funded linkages with the Association of Canadian Community Colleges, the Conference Board of Canada, the Canadian Manufacturers Association and the Canada-India Business Council are examples on which to build.

# IV. Business Development Initiatives

Business development initiatives provide Canadian industry with the tools it needs to succeed. They help ensure that Canadian industry is well placed to take full advantage of the new opportunities in India. Market awareness and business support programs and industrial cooperation mechanisms can help Canadian business overcome some of the challenges they face in a dynamic but complex and unfamiliar market.

# 1. Market Awareness Programs

Developing market awareness has two objectives:

- to raise the profile of Canada in India as a reliable source of goods and services, technology, and investment; and
- to spread the message in Canada that India is now open for business and apprise Canadian firms of India's true market potential.

The alternatives described below represent both near-term and on-going initiatives that can raise awareness in India and Canada. Momentum and repetition are key to building awareness. Therefore, the timing and co-ordination of these initiatives into a cohesive campaign is essential. Activities must complement each other and be harmonious to maximize their potential impact.

Two-Way Ministerial Visits: The highly successful visits to India by the Minister for International Trade last October and the Secretary of State (Asia-Pacific) in March accompanied by senior industry representatives, provided a strong signal that Canada is interested in doing business with India. Future business missions led by senior government officials would contribute to the awareness campaign focussed on India. In addition, invitations to senior Indian ministers will be extended to begin an on-going two-way flow of visits. Ministerial visits generate significant press coverage in Canada and India, building awareness here and highlighting Canadian capabilities there. The Department of Foreign Affairs and International Trade will organize an ongoing program of high-level visits between industry leaders and senior government representatives.

Indian Media Exposure: Exposure for Canada in prestigious Indian newspapers, magazines and industry publications promotes Canadian capabilities and business successes in India. DFAIT will encourage and facilitate the publication of supplements on Canada in Indian journals and newspapers.

Canadian Media Exposure: The Canadian media has been slow to tell the 'new India' story, while international publications such as *The Economist* are increasingly reporting on India. A greater awareness of India's economic reforms would enhance its image in Canada. This awareness could be developed through print, radio and television media. A public relations campaign to generate more media coverage of the Indian market would ideally be a co-operative effort with the Indian government.

Journalists: Visits by business journalists from both countries to the other could help increase public awareness. DFAIT will encourage and facilitate these visits. They will ideally be timed to coincide with high-level visits and trade missions.

Outreach Programs: Focus India will be the basis of an outreach program across Canada to promote the importance of India to Canada and what the government can do to assist exporters.

Twinning Programs: The twinning of Canadian and Indian cities, states and provinces in cultural and industrial agreements builds awareness and links between both countries. The twinning of Pune and Winnipeg has, for example, resulted in a significant increase in commercial activity between the two cities. In addition, the twinning of Mangalore and Hamilton as well as Jaipur and Calgary will assist in raising awareness.

Seminars and Workshops: Sector specific seminars and workshops across Canada will inform targeted export-ready companies of the opportunities, regulations, and business practices in India.

Industry Association Presentations: Presentations during annual meetings of key industry associations would outline the potential of the Indian market and feature successful Canadian exporters who can relate their direct experiences.

Page 38 Focus: India

Newsletter: Market information and opportunities can be disseminated through regularly published newsletters produced by trade offices or associations for distribution through International Trade Centres or DFAIT's InfoCentre Faxback and electronic bulletin board.

Information Packages: Information packages are a good tool for building interest and awareness in the Indian market. The distribution of DFAIT's India sector studies with fact sheets and exporting guides can help develop a basic level of market knowledge.

Targeted Trade Missions: An on-going Canadian presence in India is necessary to illustrate market commitment. The profile of competing nations can be countered with strategically targeted trade missions. The missions will be held in conjunction with other awareness building exercises such as technical seminars and high-level visits to maximize their impact. In-coming missions, again highly targeted, will expose Canada's superior capabilities to decision-makers first hand.

# 2. Business Support Programs

Canadian exporters must receive the best on-the-ground guidance to optimize their participation in India. Canada will need to develop greater business support programs to prepare Canadian companies to deal with many of the complexities of the Indian market. Small and medium-sized firms need access to tools and information to become export-ready and compete in India. The following programs will play an essential role in Canada's future success.

Trade Commissioners: Trade Commissioners play a vital role in an often unfamiliar market like India. Ottawa-based staff and Trade Commissioners at all International Trade Centres provide export and investment advice to prepare companies for their first forays into India or help them expand their international business to include India. India-based staff provide advice and market intelligence, such as information relating to sales opportunities. Improved access to the latest market intelligence is critical to succeeding in India and can give companies the edge over their competition. Trade Commissioners also initiate access to key decision makers. At present, there are five Trade Commissioners and six Commercial Officers assigned to Canada's missions in India.

Market Information: Market information includes data on marketing conditions unique to India, as well as the tools and strategies necessary to successfully penetrate the Indian market. One vehicle for market information is the quarterly Canada-India Business Council Review. The High Commission also publishes one-page, sector specific fax bulletins with commercially oriented and timely information for Canadian industry.

Industrial Cooperation: CIDA offers a financial assistance program to encourage Canadian companies to enter into long-term business linkages with Indian partners. This program recognizes there are valuable skills and technology in the private

sector which can promote development through commercial activity. In addition to assisting Canadian companies directly, the Industrial Cooperation Division of CIDA works with Canadian business organizations to promote doing business in India, foster joint ventures, and strengthen their relationships with counterpart organizations in India.

Honourary Consuls: DFAIT will expand its presence in India by the appointment of two Honourary Consuls in Bangalore and Madras. These Honourary Consuls will work in concert with two Commercial Officers to provide more information and assistance to Canadian firms doing business in these regions.

Counselling: One-on-one counselling is available to help Canadian export-ready companies develop a marketing plan for India, obtain information on government programs, and utilize the services of trade offices. Counselling is available through the regional International Trade Centres, provincial ministries responsible for international trade and DFAIT Trade Commissioners in Ottawa.

# 3. Government-Business Industrial Cooperation Mechanism

Indo-Canadian economic and trade development will rely on a greater partnership between and within the public and private sectors. Consultations between governments and a wide variety of industry groups ensure that business development strategies are better co-ordinated, planned and reflect private sector interests. The following two mechanisms can help achieve these goals:

Intergovernmental Consultations: Canadians are highly motivated to find more cost effective ways to achieve our trade development objectives. Focus India is the inception of a coordinated government approach to India. To add sharper focus to trade and investment development in India, it is important to target sectors in which to concentrate Canada's strategic efforts. Sectors have been selected based on high, immediate or near-term demand and favourable market conditions in India, matched with high Canadian interest and superior Canadian capabilities and competitiveness. They have not been selected to the exclusion of others. However, the concentration of limited government resources in high potential areas is the most effective means of succeeding in India. Within the scope of Focus India, sector-specific strategic plans will be developed.

Business-Government: Canada is well served by industry organizations and associations such as the Canadian Export Association, the Canadian Manufacturer's Association, the Canada-India Business Council, the Asia Pacific Foundation of Canada, etc. Canada must continue to promote co-operation mechanisms linking these organizations and their members with the federal and provincial governments to help ensure that business development efforts in India reflect private-sector interests.

Page 40 Focus: India

# V. Canadian and Indian Business Organizations

There is a clear need for enhanced co-operation between Canadian and Indian business organizations. Institutional linkages play a key role in bridging information gaps and in matching Indian market requirements with Canadian capabilities. This is important for Canada in the case of India where both players are still relatively unknown to each other. A significant number of linkages have been established over the past few years but they must be nurtured if they are to provide the desired effect. A wider audience must be informed of their existence. Business organizations need to be mobilized to do business in India as private sector alliances foster strategic opportunities and access to dynamic, well-placed partners.

Chamber of Commerce Memorandum of Understandings: The MOU between the Mahratta Chamber of Commerce and Industry (MCCI) in Pune and the Winnipeg chamber is an excellent example of industry to industry co-operation. This initiative led to the twinning of Pune and Winnipeg, numerous missions in both directions as well as a multitude of new industrial collaboration activities. There is also a twinning arrangement between Calgary and Jaipur as well as Hamilton and Mangalore. The next possible partnership may be between the Coimbatore Chamber of Commerce and Industry in Tamil Nadu and the Rosetown Economic Development Authority in Saskatchewan. As part of the Focus India strategy, twinning of cites and chambers will be encouraged.

Indo-Canadian Joint Business Council (JBC): The Canada-India Business Council's counterparts in India, the Federation of Indian Chambers of Commerce and Industry and the Association of Chambers of Commerce organize an annual Joint Business Council meeting, held alternatively in India and Canada.

Indo-Canadian Business Club (ICBC): The ICBC was recently incorporated and an interim committee made up of Indian business people are administering the Club until a Board of Directors is elected. These new developments and the upcoming elections will make the ICBC into an effective bilateral chamber providing services that government is unable to undertake and complementing the activities of the trade missions in India.

Business Networks: Becoming active participants in emerging business networks enables small and medium-sized enterprises to be more competitive; they gain the resource advantages of larger firms without the burden of excessive overhead.

# VI. Financing

Easy access to adequate financing is essential to foster business growth and to export successfully. To enable Canadian business to penetrate the Indian market, there is a need to better co-ordinate existing services, simplify procedures, improve information access and possibly create new mechanisms to fill gaps in existing services.

International Financial Institutions (IFI): Steps can be taken to improve Canada's record in winning IFI contracts in India. Canadian industry must be better equipped to manage all elements of the bidding process. And, Canada will work to ensure that companies have access to a level playing field with fair and transparent project competitions, evaluations, and awards. Government IFI-related financial support programs must be coordinated to support company efforts at key points through the entire IFI project cycle.

Investment Insurance: Private investors in Indian infrastructure projects need to have a greater awareness of and access to investment insurers such as the World Bank's Multilateral Investment Guarantee Agency and the Export Development Corporation's investment insurance. This would allow them to transfer some of the long-term political risks in India for a fixed, known premium.

International Consortia: Canada's international competitors have effectively manoeuvred into large Indian infrastructure projects by using consortia. They enable access to greater investment funding, spread project risk, and provide a broader range of expertise. Canadian industry should consider these international partnerships.

Foreign Investment Protection Agreement (FIPA): Canada and India are engaged in negotiations which will lead to a FIPA. The agreement will address all aspects of investment, including the transfer of funds and transparency, ownership and control, taxation, and dispute settlement mechanisms. When the negotiations are completed and a consensus is reached, the security of an investment agreement will mitigate investment risks. With the recent increase in Canadian investments in India, there are significant interests to protect.

Indian Liquidity: Indian firms plan to raise upwards of US\$9.0 billion in equity over the next year in international funds, to repay foreign debt or invest in capital expansion. This excess liquidity represents a financing opportunity for Canadian companies. Canada should target firms with excess foreign currency liquidity for industrial partnerships.

Education: A concerted effort will be made to improve Canadian industry's, especially small and medium-sized enterprises', knowledge of suitable export financing techniques and institutional support services. The counselling offered by the EDC in developing and structuring business plans on a consulting basis is such a device.

Financing Guide Book: While trade financing institutions provide helpful publications describing their services, a comprehensive guide to all financing services and instruments applicable to India would be more useful. As part of the Focus India strategy, DFAIT will encourage the drafting of such a guide.

#### VII. Conclusion

The 'new' India is in a state of rapid evolution. Though there have been many reforms, some of them extraordinary, India remains a challenge and is not a market for the timid or uninitiated. Nevertheless, Canadian companies wishing to establish a presence in this vast emerging market must act now, or risk being left behind. Focus India is an attempt to bring to the forefront the reality of India while exploring all avenues available to assist Canadian industry to gain a foothold in the market.

The objectives of this paper are threefold: to create a higher profile for India in Canada; to raise the awareness and interest of the Canadian private sector in this vast emerging market; and to coordinate government programs and activities in order to become a catalyst for increased private sector involvement in India.

We hope this strategy will act as the foundation of such a co-ordinated and integrated trade and investment strategy for India. This document will also be supplemented by annual business plans prepared by the South Asia Division of DFAIT, containing specific initiatives and activities organized for each fiscal year in the sectors outlined.

The Focus India strategy and subsequent business plans are specifically designed to target resources to effectively promote Canadian interests in India. This will enable the Canadian private sector to capitalize on the emerging business opportunities in the 'new' India and in turn, contribute to its economic prosperity and sustainable development. Focus India is intended to solidify and expand our commercial relations with India and make this emerging tiger a true economic partner.

It is in this spirit that Canadian industry and the provincial governments are invited to fully participate in the implementation of the Canada-India Strategy. Indeed, the success of Focus India highly depends on all the players' involvement in and their commitment to this strategy.

# F. FIRST STEPS

# I. Introduction

The Department of Foreign Affairs and International Trade in conjunction with other departments and organizations has planned a series of events designed to bring into practice the strategies discussed within this document. These represent the first of many such efforts devised to improve socio-economic relations between Canada and India.

# II. Visits

Canada to India: Recent high level visits to India leading trade delegations composed of executives from Canadian companies include the visit by the Minister of International Trade in October 1994, and the visit by the Secretary of State (Asia-Pacific) in March 1995. It is expected that further high-level visits to India will take place in 1996.

India to Canada: Invitations to visit Canada in 1995 have been issued to a number of Indian Ministers. These include the Indian Minister for Telecommunications, the Minister for Petroleum and Natural Gas, and the Minister for Finance. It is hoped that several ministers will come to Canada during 1995 leading delegations of senior-level executives from their respective sectors.

# III. Seminars and Business Development Initiatives

The Joint Business Council: The Canada-India Business Council hosted this year's meeting of the Joint Business Council in Toronto and Montreal in June.

CIDA: The CIDA Industrial Cooperation Division is organizing a joint venture seminar series on the environment with individual seminars scheduled throughout the year.

The Asia Pacific Foundation of Canada: The APFC proposes to hold a seminar series on power and the environment in conjunction with the cross-Canada tour by the Indian Minister of Power.

Industry Canada and the Conference Board of Canada: Both will work in conjunction with DFAIT to bring together Canadian business representatives and their Indian counterparts during the cross-Canada tour by the Indian ministers and their delegations in summer 1995.

Business Council on National Issues (BCNI): This year, the Business Council on National Issues is planning to bring to Canada chief executive officers (CEOs) from significant Indian companies with a reciprocal exchange of top Canadian CEOs to follow.

# IV. Canadian Presence in India

Diplomatic Presence: The addition of two new Trade Commissioners in India (one in New Delhi and another in the Consulate in Bombay) has strengthened our ability to facilitate trade with India. The soon to be opened Honourary Consuls with attached Commercial Officers in Bangalore and Madras will serve to increase awareness of Canada and Canadian capabilities in other regions of India.

# G. APPENDIX 1

# **GLOSSARY OF ACRONYMS**

APFC Asia Pacific Foundation of Canada

ASSOCHAM Association of Chambers of Commerce

CBoC Conference Board of Canada

CCC Canadian Commercial Corporation

CIBC Canada India Business Council

CIDA Canadian International Development Agency

CIDA INC CIDA Industrial Cooperation Division

CII Confederation of Indian Industry

CMA Canadian Manufacturer's Association

COTE Canadian Office for Training in the Environment

DFAIT Department of Foreign Affairs and International Trade

EDC Export Development Corporation

ENVCAN Environment Canada

FICCI Federation of Indian Chambers of Commerce & Industry

GATT General Agreement on Tariffs and Trade

GOI Government of India

IC Industry Canada

ITC International Trade Centre

NRI Non Resident Indian

UR Uruguay Round

# H. APPENDIX 2

# I. Power Sector Analysis

#### 1. Power Sector Definition

The power sector is comprised of diverse sub-sectors that produce a wide variety of products, including equipment for hydro, thermal and nuclear generating stations; power transmission and distribution equipment; electrical wire and cable products; power and distribution transformers; control and protection equipment; power conversion equipment; electric motors; alternate energy equipment for power from solar, wind, etc.; standard and advanced technology batteries, and fuel cells.

#### 2. Indian Power Market

#### Market Potential

With a rapidly growing requirement to expand and upgrade its power generation, transmission and distribution systems, India has been identified as a prime market prospect for Canada's electrical equipment manufacturers, consulting engineers, utilities and private power developers.

India has increased its installed power generation capacity from 1 300 megawatts in 1947 to over 72 000 megawatts in 1992. Despite this, India faces an acute energy shortage that will only worsen as demand increases at an average annual rate of 9 percent. The current shortage is 10 percent (20 percent at peak demand). During the 8th Five-Year Plan (1992-97) an additional 48 000 megawatts will be needed, yet it is expected only 30 538 megawatts will be installed (in fact, actual capacity addition could be as low as 20 000 megawatts). At this rate, by 1997, India will have a shortage of 14 percent (28 percent at peak demand).

To address this shortage, the Government of India (GOI) decided to privatize the power sector and in 1993 announced a wide range of incentives to attract investment from foreign and Indian companies. The Ministry of Power has identified a requirement for 146 power projects totalling almost 66 000 megawatts. By January 1994, the GOI had received 75 proposals from private companies for a total of 32 000 megawatts. However, to date, only seven of the private projects for a total of 5 128 megawatts have been cleared.

India's power generation infrastructure is a blend of hydroelectric, thermal and nuclear power. In recent years, capacity addition has been almost exclusively thermal, resulting in a current ratio of hydroelectric to thermal of 30:70. About 2 percent of total generation comes from nuclear plants. India is increasing its efforts to tap its vast potential for nonconventional energy generation (25 000 megawatts from wind, 20 000 megawatts from small and mini-hydro, 15 000

megawatts from biomass, 80 000 megawatts from oceans, and unlimited megawatts from solar). It now has 600 megawatts of wind energy on stream. Co-generation, principally in the sugar industry, also holds very good potential.

In addition to increasing its installed capacity, India needs to improve the efficiency of its energy generation, transmission and consumption. The national average plant load factor is 55.3 percent, which prime facie provides evidence of under utilization. The vast majority of the thermal capacity is over 12 years old, with a significant portion over 20 years old. The GOI has identified over 40 power plants for modernization and upgrading. India's power transmission system is subject to losses of 25-30 percent, of which about 15 percent is from illegal diversions. While the GOI has a massive program for High Voltage Direct Current (HVDC) transmission, the overall system is plagued by inadequate links. On the consumption side, lighting, motor drives, pumps, fans and compressors have been identified as the key areas in which India could improve its end-use energy efficiency.

India's power sector promises to be one of the fastest growing in the world and international equipment manufacturers have shown their keen interest in gaining a foothold. The Indian market for major electrical equipment such as large generators, turbines, switch gears, transformers, control gears, and transmission hardware is estimated at over US\$5.3 billion, and is expected to grow at over 17 percent annually for the next three to four years.

# Domestic Competition

The Indian heavy electrical industry is quite large with several major Indian companies (led by the electrical giant Bharat Heavy Electrical Limited) and foreign companies manufacturing a wide range of products required for the domestic market. Indian industry has developed adequate infrastructure for thermal, nuclear and hydro-electric plants and their associated systems. Generators, turbines, switch yards, coal and ash handling equipment, and electro-static precipitators are all made in India.

Indian manufacturers of transmission line towers and related hardware have developed adequate capabilities to execute turnkey contracts for the design and erection of entire transmission systems. Indian companies manufacture a wide range of transmission hardware, accessories, string insulators, AAAC/AAC/ACSR conductors, and lightening arrestors. India has acquired HVDC technology, and certain projects using this technology have already been completed.

Various types of transformers suitable for units up to 500 megawatts are made in India. The entire range of circuit breakers, LT switch gear and control gear, MCBs, switches, receivable and HRC fuses, control equipment and systems, and other associated equipment/accessories are manufactured locally. The Indian cable industry is well-developed and offers a wide range of high/medium/low voltage

Page 2 Focus: India

XLPE, PILC, OVC, VIR and rubber cables.

India has witnessed the growth of several organizations specializing in engineering consultancy which have developed considerable expertise in turnkey projects, from site selection and system design to erection, commissioning and training.

Although the Indian heavy electrical industry is reasonably strong and investments are being made to meet the rapid increase in demand, it is unlikely that indigenous production will be able to satisfy India's needs. Industry sources estimate that private sector utilities will have to import most of their critical equipment, especially turbines and generators. The import of these products will be enhanced by the determination of foreign operators to purchase the most modern technologies and the best equipment available: something which Indian industry cannot always provide. There are also some doubts as to the ability of Indian companies to adhere to strict delivery schedules.

# International Competition

The stiffest competition that Canadian companies will face on entering the Indian market will be from American, German, French, Australian and British companies.

ABB, GEC-Alsthom and Siemens are already very well established in India and have strongly positioned their products in the market. Several of the multinationals have entered into strategic alliances with reputable Indian companies for the manufacture of various products and have built large, influential networks. Canadian companies need to ensure that the products, equipment, and services they offer are internationally competitive.

# Regulatory Framework

Under the Indian constitution, both the central and state governments have powers to enact legislation affecting the power sector. While the central government has taken control of the planning, financing and implementation of power projects, the state governments have primary responsibility for the distribution of electricity. This division of authority has resulted in a dysfunctional regulatory environment which Indian industry and the World Bank have requested the GOI address.

The GOI has announced the following incentives for private power projects: guaranteed 16 percent return on investment; debt-equity ratio permitted up to 4:1; up to 40 percent of the total financing requirements can be arranged through Indian public sector financial institutions, and up to 20 percent through public issues; promoters' contribution should be at least 11 percent; licences are available for 30 years with subsequent renewals of 20 years; beginning from the year of generation, a five-year tax holiday for power plants; a two-part tariff is permitted; investments in backward states and in all union territories, except Delhi; depreciation on plant and machinery for environmental protection and pollution

control of 100 percent; concessional duty of 20 percent on machinery imports for power projects; lowered import duty on specified raw materials and items for non-conventional energy; concessional import duty of 25 percent for wind operated electricity generators.

While the reforms are positive from an investor's point of view, there are still concerns regarding the capability of State Electricity Boards (SEBs) to pay for the electricity purchased from private generators and the institutional and political constraints surrounding the issue of electricity tariff hikes. The central government has agreed to extend counter guarantees on a case-by-case basis for payments by SEBs. The GOI has also encouraged the SEBs to raise their tariff rates in order to enhance their capability to pay for the purchase of electricity (some state governments have already implemented the hike). The GOI has also looked at having the SEBs open an 'escrow account' in which private generators would have first charge and SEBs would make advance payments to the private companies for supplying power to the SEB grid.

The government's keen desire to attract foreign investment from the private sector has resulted in pressure on the bureaucracy to expedite approvals. Delays of several months for completion of formal approvals for foreign firms can be expected. It is likely that the situation will improve as the bureaucracy becomes more familiar with handling power sector proposals from foreign and Indian private investors.

## 3. Canadian Power Capabilities

Through its provincial utilities, consulting engineers and private operators, Canada has developed a wealth of knowledge and experience in building and operating a wide variety of power generation, transmission and distribution systems. Canada is the world's largest producer of hydro-electric power, and the third largest producer of electricity from all sources. Canadian companies design, build and operate some of the largest and most complex electrical projects in the world. In fact, in the past five years, Canadian manufacturers, consulting engineers, constructors, and utility operators have helped build electric power projects in over 70 countries around the world. Because of long transmission distances, Canada has also become a world leader in high-voltage direct current (HVDC) and other advanced transmission technologies.

The electrical equipment manufacturing industry in Canada employs approximately 80 000 people and ships about \$9 billion in products annually, \$2 billion of which are exports. While shipments have declined since the beginning of the Canadian recession, a slow recovery is underway with 1993 output showing a marginal increase over 1992. The industry's productivity and international competitiveness continue to increase substantially and export levels are increasing.

Page 4 Focus: India

Manufacturers can be divided into two categories: small, Canadian-owned firms producing specialized products for niche markets and larger foreign-owned multinational companies. The most successful exporting subsidiaries have world product mandates.

Canada has developed an international reputation and image as a reliable supplier of high quality products with the most advanced technologies. Canada is most competitive in custom made and specialty electrical products, especially larger generation and transmission equipment including:

- hydro generators and turbines;
- power plant ancillary equipment;
- custom specialty electrical products and systems;
- boilers:
- nuclear reactors and associated equipment for nuclear plants;
- Medium and large power transformers;
- shunt reactors;
- medium and high voltage capacitors;
- specialty wire and cable;
- protection equipment;
- control equipment;
- engineered substations;
- supervisory control and data acquisition equipment (SCADA).

Alternative energy sources (solar, wind, fuel cells, etc.) are also drawing renewed interest. Subsectors involved in energy savings and improved system efficiencies are growing rapidly.

# Canada's Competitive Advantages

As a result of improved energy efficiency and conservation in Canada, there is a reduced demand for utilities and private operators to add additional capacity. Therefore, Canadian companies are looking at marketing their expertise to countries such as India where there is a large demand for additional generating capacity and the installation and upgrading of transmission and distribution systems.

Canada and Canadian firms have a good reputation in India. Many of Canada's leading electric power companies have been actively involved in the Indian power sector over the past four decades through CIDA and EDC funded projects. In fact, Canadian companies have provided 10 percent of India's hydro-electric generating capacity. Indian officials have expressed interest in working with Canadian companies which utilize up-to-date technologies for thermal and hydro power generation.

With economic liberalization, a large power demand and changes to the policy governing private power generation and transmission, more and more Canadian

companies are exploring commercial opportunities in India. While India is capable of manufacturing most power generation equipment, it requires imports of advanced technology equipment for generation and transmission.

#### Market Potential for Canada

The most promising areas for Canadian companies are private power project construction (using conventional or alternative sources of energy), the upgrading of transmission and distribution systems, refurbishing and retrofitting old power stations, improving energy efficiency and selling power generation and transmission equipment.

The sale of power generation and transmission equipment to India's private sector power utilities are most likely to be for the following products:

- steam boilers/turbines;
- gas turbines;
- hydro turbines;
- generators and large generating sets (1 megawatt and above)
- transformers;
- switch gear above 230 kilovolt rating.

The import of these products will be enhanced by the determination of foreign operators to purchase the most modern technologies and the best equipment available; goods which Indian industry cannot provide at the present time.

Canadian companies with state-of-the-art SCADA and line monitoring technology can help Indian utilities to reduce power losses during transmission and distribution.

For equipment suppliers and developers, those with local operations, licensees and/or joint venture partners are the most likely to succeed in what will continue to be a very competitive marketplace. For most of the larger projects, there is a requirement for financing: Canadian companies that are able to put together a comprehensive package will be in a much better position to succeed.

Page 6 Focus: India

organia de la comparte de Marida de Cartera, lorgania de la final de Cartera de Cartera de Cartera de Cartera d La comparta de Cartera de Cartera de Cartera de Ca

# Telecommunications Sector Analysis

#### 1. Telecommunications Sector Definition

The telecommunications sector is comprised of:

- telecom switching equipment;
- telecom transmission equipment;
- satellite telecom systems:
- microwave telecom systems;
- radiopaging systems:
  - receive-end telephone systems;
  - cellular phone systems.

#### 2. Indian Telecommunications Market

#### Market Evolution and Trends

India has accorded top priority to the expansion of its telecommunications sector. Its earlier development was based on imported technologies and generally did not keep pace with the rest of the world. This was compounded by international suppliers offering old generation technology; inadequate investments in infrastructure; and India's lack of expertise in the effective implementation of new projects.

In 1981, the government introduced digital switching and transmission and in the early 1980's, India entered the optical fibre field. The Centre for Development of Telematics was established in 1984 to develop indigenous equipment for large digital main and rural digital automatic telephone exchanges. To promote the growth of this sector, the Department of Telecommunications (DoT) was established in 1986. Mobile telephones and paging services were started in 1987 and cellular telephones were introduced later in metropolitan cities on an experimental basis. To provide policy direction, the Telecom Commission was set up in May 1989.

Since 1991, under the program of economic reform, the Indian government has taken several new initiatives to expand and modernize the telecommunication network in India. For example, in a major policy change the government opened up the cellular telephone and paging sectors to private sector operators. Other reforms include automatic approval for up to 51 percent foreign equipment participation in new ventures.

The GOI announced its new National Telecom Policy in May 1994 replacing the century old Telegraph Act. The objective of the new telecommunications policy is to substantially improve urban and rural communications facilities by 1997 and to

raise the quality of services to international standards through increased domestic and foreign investment. Highlights of the new policy include: allowance for private investment in basic telecommunications services to bridge the resource gap for making telephones available on demand by 1997; and permission for registered companies to operate value-added services such as E-mail video mail, data services, audio and video text and video conferencing under licence on a non-exclusive basis.

The new policy represents a major departure from the previous telecom policy. The GOI has opened the door for private sector participation in basic telephone services in order to bring the telecom sector in line with the reform process and improve the infrastructure needed to increase India's competitiveness in the global market. The Government of India has recently announced it plans to use the Canadian model in developing their telecommunications regulatory system.

## Market Potential

The Indian market may be second only to China in terms of worldwide business potential for Canada's exporters. India will spend US\$1.93 billion in 1993-94 to install new telephone lines. During 1992-93, 1.7 million new lines were installed and 500 000 lines were replaced at a cost of US\$1.45 billion. India has a mammoth task before it to provide more extensive telephone coverage for its population of nearly 900 million people. The government plans to increase the number of telephone lines from seven to 20 million by the end of the decade.

At the end of the Seventh Plan in 1989-90 the telephone density in India was 0.52 per 100 people. During the Eighth Plan (1992-97), India aims to target six telephones per 100 people and make telephones available on demand by 2000. The government is planning to replace all the existing mechanical exchanges with electronic exchanges.

The public sector accounts for the bulk of the purchasing requirements for telecommunications, electronics, process control and instrumentation equipment. While core sectors - including defence, petroleum and petrochemicals, railways, civil aviation, energy and heavy engineering - still constitute 80 percent of the demand, a small but nevertheless very strong private sector is expected to expand substantially under the new National Telecom Policy.

#### Segment Identification and Opportunities

Business opportunities are available in the telecom services and equipment industries, rural telephone, cable television, SCADA, and human resources development activities. The opportunities range from the export of Canadian products and services to technology transfer, joint ventures, contract manufacturing, assembly of equipment and professional service contracts with government or other clients. Specific sector opportunities are discussed below.

Page 8 Focus: India

Telephone Service - started in India in the 1870's, but its rate of growth has been slow. India's phone density of 0.5 per 100 people is one of the lowest in the world. The government plans to increase this figure to 2 per 100 people. There are currently approximately 7 million telephone lines with plans to expand to 20 million by the year 2000. During the 8th Five Year Plan ('92-'97) an additional 7.5 million lines will be required. Opportunities exist for Canadian telecommunications firms in many sub-sectors, especially for telephone company operations. The most likely entrants to this area will be Canadian and American firms.

Long Distance Network - is moving from open wire lines and open wire multichannel carrier systems to digital technology. At present, the long distance network is a mixture of analogue and digital systems. Electronic switching technology exists in approximately 50 percent of the network and there is a mix of technologies (microwave, copper cable, fibre optics, satellite, and obsolete technologies). The long term aim is to have a completely digital national network with Direct Distance Dialling (DDD) and ISDN capability.

Datacom Service - is still very limited. Telexes are heavily used despite small packet switching and satellite-based message networks. There are plans to increase the number and capacity of these services significantly in the immediate future.

Value-Added Services - are not readily available in India. There is a large and immediate demand to expand voice messaging services, radio paging and mobile telephones, E-mail services, video conferencing and electronic data interchange. This sector is now open to private sector participation. The major issue for the government is establishing how to handle the licensing procedures.

Rural Telephones - are in scarce supply. Although 75 percent of the population live in rural areas, less than 10 percent of the telephone lines serve rural customers. The government has decided to provide at least one telephone to each village that has a village council. The potential market for rural telecommunications is large. A further government plan calls for at least one pay phone in 576 000 villages and approximately 800 000 pay phones by the year 2000. This will require the commissioning of approximately 1.5 million lines of local switching in rural areas including the replacement and automation of 415 000 lines. The government also plans to automate all rural manual exchanges, replace all step-by-step exchanges with electronic equipment, and make subscriber trunk dialling available on all exchanges.

Telecommunications Equipment - has previously been manufactured under extensive government controls and licenses. This segment of the economy has been opening up since 1984. In 1994, the government's policy was to discontinue providing telephone sets and to allow the private sector to provide them. Most leading multinational manufacturers of switching equipment have already entered the Indian market (Alcatel, Ericsson, Siemens, Fujitsu, and AT&T) but there is no

major Canadian presence to date.

Space Applications - are also of great interest to the Indian market. After a period under U.S. embargo which has now apparently been relaxed, the Indian Space Research Organization (ISRO) is interested in information on Canadian space technology: they have a requirement for microwave components, carbon fibre, resins, and robotics. India plans to launch three more INSAT satellites. The National Informatics Centre which is responsible for NICNET, a VSAT network with 600 earth stations, will establish 3400 more earth stations with data communications for government offices. They have expressed interest in Canada's Stationary High Altitude Relay Platform (SHARP).

Manufacturing - facilities for exchanges are being set up. It is expected that initial exchanges will involve assembling equipment with foreign technology. Complete manufacturing is planned for 1996. There are opportunities for foreign investment and collaborations in the manufacture of a wide range of products including: subscriber apparatus; key telephone systems; transmission equipment; fibre optic cable and applications; modern data communications equipment such as packet switching; paging technology; OPGW with enclosed optical fibre; PABX's; and fax communications enhancements.

Cable Television - has become very popular since Star TV started beaming into India. There are 23 million TV households and the market place is open for both equipment and services. A cable policy to regulate cable operators is not yet in place and the market tends to be disorganized. There is little capability in system design, operational expertise, or professional system installation organizations. Subscribers are increasing and the quality of transmission is deteriorating. The market experiences limited channel capacity, geographic isolation, fluctuating signals, poor equipment, co-channel interference, and terrestrial interference. The market is open for companies which can offer improved quality and reliable service. Projections have been made for 2 million cable TV networks of which 1.5 million would be terrestrial. In addition, 500 000 direct satellite receiving dish antennae are required. The list of CATV equipment is very long, and the market opportunities are extensive.

Supervisory Control and Data Acquisition (SCADA) - SCADA equipment and systems have a large market potential in India. The SCADA systems used by the electric utilities are manufactured locally, sometimes in collaboration with foreign companies. With the increase in activity and the privatization of some oil and gas activities, the opportunity and demand for SCADA systems will increase beyond the local market's ability to respond. Foreign investors will likely place a higher premium on systems manufactured with North American or European standards and technology.

Human Resource Development - With the fast growing demand for improved telecom service, there will be a parallel demand for customer education and

Page 10 Focus: India

training. Canadian telecom consulting firms or service companies which offer training will find many opportunities to establish themselves in India.

## Regulatory Environment

The Department of Telecommunications (DoT) was established in 1986 and in May 1989 the Telecom Commission was set up to provide policy direction. Telecommunications services are governed by the new National Telecom Policy (May 1994) which replaced the century old Telegraph Act. The Government of India has recently announced that it will use the Canadian model in establishing and operating these new regulatory bodies.

The telegraph network in India, owned and operated by DoT, is still underdeveloped.

The Department of Space implements all space communications and remote sensing programs to establish national networks using space technology for television, telecommunications, meteorology, and remote sensing for the survey, monitoring and management of India's natural resources and environment.

The Department of Electronics (DoE) has been entrusted with the development of electronics, control instrumentation, robotics and artificial intelligence. All imports in these sectors are regulated by the DoE. The operation of public telecommunications services is the responsibility of the DoT. Mahanagar Telephone Nigam Ltd. (MNTL) provides telecommunications services for Delhi and Bombay. Other major metropolitan centres will eventually by covered under MNTL. Attempts to partially privatize Videsh Sanchar Nigam Limited (VSNL), the overseas carrier, have been unsuccessful to date.

#### Competition

The new trade policy has created business opportunities for large multinationals to establish reliable and efficient communication networks. Several multinational corporations are in the race to manufacture telecom switching equipment while others will provide value-added telecom services such as paging, cellular mobile telephones and voice mail systems. Many foreign companies are already establishing strategic alliances that will make it more difficult for Canadian companies to enter this market unless they act quickly.

Major suppliers of telecommunication equipment are NEC, OKI, Fujitsu, Mitsubishi, CIT-Alcatel, STC, Farinon and Ericsson. DoT has issued letters of intent for joint ventures proposed by Fujitsu, Ericsson, and Siemens for each to set up one telephone exchange with 100 000 subscriber lines. Communication equipment suppliers have traditionally been GEC-Marconi, Motorola, NEC, Redifon, REPCO and Racal. Communication system equipment suppliers include GTE, SCF, Thompson, Olivetti, Nexdorf and Racal Milgo.

An increasing number of reliable Indian conglomerates are now diversifying into the telecommunications sector. For telephone instruments, the technologies of Siemens, Ericsson and Face have been standardized: several companies are making telephone instruments under licence, using the above technologies and production is adequate. For PBX, three technologies have been standardized: OKI, GTE and Jeumont Schneider. Indian Telephone Industries (ITI) manufactures cross-bar equipment and digital E-10B exchanges and various types of transmission and terminal equipment. Bharat Electronics Ltd. (BEL) and Electronic Corporation of India Ltd. (ECIL) manufacture microwave systems and telex equipment in collaboration with Siemens. In the last few years, some state governments have set up public sector companies to manufacture telecommunication and electronic equipment and components. The communications needs of the Indian Armed Forces are being met by indigenous sources, namely BEL, Hindustran Aeronautics Ltd. (HAL), ITI and ECIL.

## 3. Canadian Telecommunications Capabilities

The telecommunications sector is probably subject to the greatest evolution in technological change in the world today. In this respect, Canada is recognized as a world leader in this field. The diversity of Canadian manufacturers, consulting companies and operators, augurs well for Canada to take a leading role in the development of India's telecommunications sector.

In 1992, Canada's telecommunications sector employed more than 175 000 people and produced goods and services valued at \$23.8 billion. The telecommunications sector alone accounts for half of Canada's informatics technology research and development: over \$1 billion for each of the last five years.

Canada is a world leader in digital switching and asynchronous transfer mode technologies; leads the Group of Seven (G-7) countries in the deployment of optical fibre; is second in the use of digital networks and intelligent network systems; and worldwide, is second only to Japan in the reliability of its networks. With more than 30 years of satellite experience, Canada is among the leaders in both cellular and satellite communications. In addition to a significant number of world-renowned Canadian telecommunication companies, there are over 300 small and medium-sized enterprises increasingly active in all major export markets.

#### Market Potential for Canada

Although there is a good match between Canadian capabilities and Indian needs, Canadian companies are under-represented in the Indian telecom market. This is particularly significant given Canada's world class reputation in telecommunications technology.

Market potential exists for Canadian industry in the following areas: pack switching; cellular telephone services; paging systems; optical fibre; international

Page 12 Focus: India

links; V-SAT; digital microwave systems; RF Links; satellite terminals; and, facsimile switches, as well as in a wide range of value-added services that have recently been opened to the private sector.

India offers excellent market potential for Canadian companies to enter into joint venture and technology transfer arrangements with Indian firms in the telecommunications sector. Many Indian telecom firms would be interested in marketing partnerships with Canadian firms where they would market, install and service the Canadian equipment through their existing Indian sales networks. This arrangement would be followed up by a transfer of technology or a joint venture so that the benefits of lower cost, highly skilled manpower in India could be used to mutual advantage. Other Indian telecom firms are exploring the possibilities of contract manufacturing for established Canadian companies. Indian companies want access to good and proven technology.

Page 13

# **Environmental Sector Analysis**

#### 1. Environmental Sector Definition

The environmental goods, services and technologies sector is a promising Canadian industry offering new business opportunities, value-added exports and knowledge-intensive jobs while directly addressing environmental challenges. This industry is comprised of the products, services and technologies which:

- monitor and assess the nature and pathways of pollutants and waste streams;
- prevent pollution by minimizing or eliminating solid, liquid and gaseous wastes through process re-engineering;
- control pollution, usually in response to environmental laws and regulations and often through a single-medium approach with an end-of-pipe solution;
   and
- clean-up and restore the environment which has been degraded by neglect, by accident or by unsound waste storage and disposal practices, especially concerning toxic, hazardous and nuclear materials.

#### 2. Indian Environment Market

#### Market Evolution and Trends

The environmental goods, services and technologies market in India is presently US\$0.5 billion and is expected to grow at an annual rate of 20 percent to 25 percent to reach US\$2.0 to 4.0 billion by the year 2000.

At present, there is a low level of awareness of environmental problems in India. This is exacerbated by a number of other concerns, which include: a command and control regulatory system; a lack of municipal-environmental infrastructure; a substandard environmental service base; a lack of skilled and trained environmental labour; poor access to information on environmental technology (ie. prevention, control and remediation of pollution affecting air, water, land and ground water); inadequate environmental policy approaches and models; and poor environmental performance in industry.

Indian industry offers the greatest export opportunities for the Canadian environment industry, however, Canadian products and services have not been marketed very effectively. Few Canadian companies have included India in their global market plans.

# Segment Identification and Opportunities

Indian industry represents a high potential market for the goods, services and

Page 14 Focus: India

technologies of Canadian environmental firms. Specific environmental sectors are listed below with the identified opportunities for specific products and services:

#### Sector

**Environmental Consulting.** 

Recycling/re-use/safe transport/safe disposal of liquid and solid wastes inclusive of hazardous/toxic ones.

Pollution monitoring techniques and interpretation.

Pollution control technologies and resource management techniques.

 $SO_2$ ,  $NO_x$  and other toxic emission control equipment.

Absorption equipment for BOD, COD, toxic compounds, colour, odour for dyes, textile, paper, pharmaceutical, pesticides, fruit, canning, petrochemical, rubber, chemicals, manmade fibres industry.

Conventional rotating biological contactors (RBC).

Diffused aeration.

Ultra violet and ozonation.

### India's Foreign Requirements

In selected areas of resource management, air pollution control, water pollution control, hazardous wastes management, risk analysis, waste land management, mining and environmental mapping.

In selected areas like city garbage disposal, solid wastes of metallurgical industry, solid wastes of mines, hazardous/toxic wastes, fermentation wastes etc.

In selected areas like measurement of toxic organic emission effects on human health, ecology etc.

Requirements will continue in the field of air pollution control, water pollution control, bio-technologies, recycling, renewable energy resources, etc.

In selected areas of metallurgical chemical and petrochemical industries.

Foreign know-how as well as critical equipment are required.

Design know-how and hardware.

Design know-how and hardware.

Know-how and critical components for large water works.

Electrodialysis for controlling heavy metals pollution in metallurgical/ electroplating/caustic soda industries.

Know-how and critical components.

Ion exchange and reverse osmosis for controlling heavy metals, cyanides, fluorides, dissolved inorganics for number of industries like chloralkali, man made fibres, metal processing electronics, etc. Know-how and selective ion exchange resines, pumps and critical components.

Ultra filtration for controlling COD, dissolved polymers and colloids of dairy, oil refinery, wool, breweries, paper and paint industries.

Know-how and critical components, especially membranes.

BOD incubators, spectrophotometers, atomic absorption spectrophotometers, laboratory reagents, etc.

Manufacturing know-how and the supply of critical components such as AAS, Mass spectrometers, gas chromatographs, ideal gases.

Continuous recorder of wind patterns, inversion and ambient air quality.

Know-how for the manufacture and supply of critical components.

Continuous stack emission monitoring with process interfacing computers.

Know-how for the manufacture and the supply of critical components

Work environmental emissions monitoring kit (portable).

Know-how for the manufacture and supply of critical components.

Water pollution monitoring kits (portable) - digital display

Know-how for the manufacture and supply of critical components.

Noise level meters

Know-how for the manufacture and supply of critical components.

Solid wastes handling equipment

Equipment for collection and transportation, sludge handling pumps and valves, etc.

Page 16 Focus: India

Recent research indicates that the current demand for new technology in India is in the following areas: hazardous waste management (training to handle materials, treatment and disposal); technologies for ground water remediation, separation of solids, oil and grease in refineries, oil wells, vegetable oil industry; recovery of chemicals and water; sludge thickening; anaerobic systems, especially second and third stage treatment; fermentation towers; aerobic plant packages with specialized features; waste pretreatment and incineration plants; flue gas desulphurization; and hot gas filtration.

In essence, the above-noted sectors require the following combination of environmental management activities:

• Prevention: Waste minimization and clean production and processing

technologies.

• Control: End-of-pipe pollution control technologies and procedures and up-

to-date approaches for handling residues.

• Remediation: Technologies and expertise to clean up sites left unacceptably

polluted by earlier practices.

# Market Analysis

Addressing the environmental problems in Indian industry will depend on a number of factors, including:

- Awareness of the precise nature of pollution problems and options for prevention, control or remediation and the role that quality control and efficient use of energy, water and other basic inputs has in the profitability and environmental friendliness of operations;
- Access to know-how and technology in pollution prevention, control and remediation which Canadian equipment suppliers, engineering consultants and research and development institutions can provide through alliances with Indian firms;
- Access to clean production technologies, in that Indian industry is still equipped with obsolete, inefficient, highly-polluting manufacturing and processing technologies;
- Access to affordable financing required to install clean technologies as well as to upgrade existing facilities;
- Infrastructural support to firms, industry associations and industrial parks to design, install and manage relatively low-cost common effluent treatment facilities;
- Ongoing technology research and development required to generate new, more cost-effective solutions to environmental problems (particularly in industries such as tanning and pulp and paper);

- Enforcement of regulations by central and state PCB's in most areas of India;
- Appropriate economic policies including realistic water and energy pricing, and lower subsidies to industry, as well as the continued liberalization of the Indian economy to global markets;
- Pressure on exporters in many sectors for products produced through environmentally acceptable processes;
- Corporate citizenship and environmental stewardship promoting the desire by Indian industry management to be socially responsible; and
- Public pressure from environmental groups and concerned citizens.

#### Competition

German, American, Japanese, Scandinavian and Australian companies have targeted the Indian marketplace for export of products, services and technologies. These countries' environmental firms enjoy a high profile in India. Indian organizations have indicated that the greatest barrier to Indo-Canadian commercial interaction in the environmental sector is their low level of awareness of Canadian capabilities. Similarly, Canadian firms are not fully aware of the newly emerging market for environmental products and services in India.

Indian environmental equipment and service companies are slowly becoming more advanced in serving the needs of industry. There is already a good manufacturing base for producing mechanical equipment, such as clarifiers/thickeners/classifiers; floatation units; ion exchange units; membrane separation systems; softeners; deionizers; industrial effluent and sewage treatment plants; wet scrubbers of various types; bag filters; and electrostatic precipitators/cyclones.

# The Regulatory Framework

From a regulatory perspective, India's regime has historically caused problems for foreign firms attempting to access this market. This situation has changed considerably in recent times, even though disparities remain in a number of states. In terms of national policy, the Government of India released the National Conservation Strategy (NCS) in 1992 which addressed the environmental problems arising from the negative effects of industrial development and those resulting from conditions of poverty and under-development. A number of priority requirements are specified including: water conservation; recycling; pollution prevention and its control in the disposal of solid wastes, effluents and hazardous substances in land and water; water pollution control and abatement; use of energy; efficient and clean technologies for air and noise pollution; incentives for environmentally-benign substitutes; technologies; and energy conservation.

The NCS also calls for action in the following areas: encouraging research, development and adoption of environmentally compatible technologies; promoting the application of modern tools of science and technology for conservation; the creation of environmental consciousness through education and mass awareness

Page 18 Focus: India

programmes; and measures to recycle waste materials and natural resources, conserve energy, and conserve use of natural resources in industrial processes.

Finally, the 1992 Policy Statement for Abatement of Pollution focuses on the following areas: pollution prevention at source; encouragement, development, and application of best available practicable technical solutions; polluter pays for pollution and pollution control; and focus on heavy polluted areas and river stretches.

# 3. Canadian Environmental Capabilities

There are approximately 4 500 firms employing about 150 000 people in Canada and generating roughly \$11 billion in annual sales. The Canadian industry is overwhelmingly comprised of small and medium-sized enterprises, with about 15 to 20 percent of these companies being export-ready.

Canadian firms have established a good reputation for water and waste water treatment systems; for handling liquid and solid wastes; and for providing such items as incinerators, shredders, compactors and refuse recycling equipment. Our capacity extends from the construction of large pollution prevention and control systems down to such component parts as pumps, filters, valves and chemicals.

Canadian firms have world-class products, services and technologies in the following areas:

- industrial pollution prevention services;
- pollution control / waste management / site remediation;
- clean production technologies;
- liquid effluent and sludge treatment technologies;
- air pollution control technologies;
- waste management and site remediation of land and ground water.

Canadian environmental consulting, management and engineering firms as well as private laboratories and research establishments are providing engineering, economic, scientific, management and technical services to both the domestic and international markets.

# I. APPENDIX 3

PROGRAMS & PLAYERS			
CROSS	REFEF	RENCE	TABLE

CROSS REFERENCE TABLE			
Player	Programs and Activities		
DFAIT	High-level visits; high-level political dialogue; market intelligence and information; trade missions; PEMD; trade and investment support in India; trade promotion activities in Canada and in India; access to decision makers.		
CIDA INC	Joint ventures and strategic alliances.		
CIDA Bilateral	Short and long term technical assistance on policy bottlenecks; studies; technology transfers.		
EDC	Export insurance and financing.		
ENVCAN	Environmental and sustainable development activities through information exchange and training to support capacity building activities.		
COTE	Environmental workshops; training and technology transfers.		
IC	Development of sectoral strategies for international business development; bilateral relationships with counterpart in India.		
NR	Scientific and technical relations with Mining Sector and Government of India; promotion support for mining services, products and technology.		
CCC	Trade facilitator for Canadian firms selling to foreign governments; brokerage.		
Alberta Gvmnt	Trade support; oil and gas expertise.		
BC Gvmnt	Trade support; focused on energy, telecommunications and the environment.		
Ontario Gvmnt	Cooperation in transportation sector; linkages.		
CIBC	Bilateral Business Council; information dissemination; networking; counselling; joint venture program.		
СМА	Networking; identification of joint venture partners.		
APFC	Networking; awareness building; seminars.		
BCNI	Trade missions; awareness building.		
CBoC	Applied research projects.		

Focus: India

## LIST OF CONTACTS

#### Ask for the Focus India contact

#### In Canada

#### DFAIT

Department of Foreign Affairs and International Trade
125 Sussex Drive
Ottawa, Ontario
K1A 0G2

South Asia Division Tel: (613) 996-0917 Fax: (613) 996-5897

#### INFO Centre:

Foreign Policy and Trade Information, publications and general enquiries Tel: (613) 944-4000
Toll Free 1-800-267-8376

Bulletin Board Tel: (613) 944-1581 Toll Free 1-800-628-1581 Faxlink (613) 944-4500 Visual Ear (613) 996-9136

#### ITC

**International Trade Centres** 

Vancouver, B.C. Scotia Tower 900-650 West Georgia St. P.O. Box 11610 V6B 5H8 Tel: (604) 666-7633 Fax: (604) 666-8330

Edmonton, Alberta Canada Place, Suite 540 9700 Jasper Avenue, T5J 4C3

Tel: (403) 495-2944 Fax: (403) 495-4507 Calgary, Alberta

11th Floor, 510-5th Street S.W.

T2P 3S2

Tel: (403) 292-6660 Fax: (403) 292-4578

Saskatoon, Saskatchewan

Suite 401, 119-4th Avenue South

S7K 5X2

Tel: (306) 975-5318 Fax: (306) 975-5334

Winnipeg, Manitoba

8th Floor, 330 Portage Avenue

Newport Centre

R3C 2V2

Tel: (204) 983-2594 Fax: (204) 983-2187

Toronto, Ontario

4th Floor, Dominion Public Building

1 Front Street W.

M5J 1A4

Tel: (416) 973-6154 Fax: (416) 973-8161

Montreal, Quebec

5 Place Ville Marie

H3B 2G2

Tel: (514) 283-8792 Fax: (514) 283-8794

Moncton, New Brunswick

Assumption Place, 770 Main Street

P.O. Box 1210 E1C 8P9

Tel: (506) 851-6669 Fax: (506) 851-6429 Halifax, Nova Scotia

Central Guarantee Trust Building

1801 Hollis Street

P.O. Box 940, Station "M"

B3J 2V9

Tel: (902) 426-9475

Fax: (902) 426-2624

Charlottetown, P.E.I.

**Confederation Court Mall** 

134 Kent Street, Suite 400

P.O. Box 1115 C1A 7M8

Tel: (902) 566-7400

Fax: (902) 566-7450

St. John's, Newfoundland

215 Water Street

Suite 504, Atlantic Place

P.O. Box 8950 A1B 3R9

Tel: (709) 772-6600

Fax: (709) 772-2373

#### CIDA

India Program, Asia Branch

CIDA

Place du Centre

200 Promenade du Portage

Hull, Quebec K1A 0G4

Tel: (613) 997-3183

Fax: (613) 997-0945

#### CIDA INC

Industrial Cooperation, CIDA

Place du Centre, 5th Floor

200 Promenade du Portage

Hull, Quebec K1A 0G4

Tel: (613) 997-0563

Fax: (613) 953-5024

#### **EDC**

South Asia

**Export Development Corporation** 

15 O'Connor

Ottawa, Ontario K1A 1K3

Tel: (613) 598-2869

Fax: (613) 598-2503

#### COTE

Canadian Office for Technology

Exchange

235 Queen Street, 7th Floor

East Tower, Rm. 738B

Ottawa, Ontario K1A 0H5

Tel: (613) 954-5264

Fax: (613) 952-9564

#### **ENVCAN**

**Technology Transfer Office** 

**Environment Canada** 

Place Vincent Massey, 15th Floor

351 St. Joseph Blvd.

Hull, Quebec K1A 0H3

Tel: (819) 953-9399

Fax: (819) 953-7253

#### CCC

Canadian Commercial Corporation

50 O'Connor, 11th Floor

Ottawa, Ontario K1A 0S6

Tel: (613) 996-2138

Fax: (613) 995-2121

#### **NRCan**

Natural Resources Canada

Mining Sector

460 O'Connor

Ottawa, Ontario K1A 0E4

Tel: (613) 992-3084

Fax: (613) 992-5244

#### IC

Industry Canada

235 Queen Street, Rm. 776A

Ottawa, Ontario K1A 0H5

**Energy Technologies Directorate** 

Tel: (613) 954-3262

Fax: (613) 941-2463

**Environmental Industries** 

Tel: (613) 954-3080

Fax: (613) 954-3430

Focus: India

International Operations Directorate

Tel: (613) 957-2916 Fax: (613) 954-2682

Telecommunications Industries

Tel: (613) 990-0871 Fax: (613) 990-3858

#### CIBC

Canada-India Business Council 55 Metcalfe Street Ottawa, Ontario K1P 6N4

Tel: (613) 238-4000 Fax: (613) 238-7643

#### **CMA**

Canadian Manufacturers' Association 75 International Boulevard, 4th Floor Etobicoke, Ontario M9W 6L9

Tel: (416) 798-8000 Fax: (416) 798-8050

#### APFC

Asia Pacific Foundation of Canada 999 Canada Place, Suite 666 Vancouver, BC V6C 3E1

Tel: (604) 684-5986 Fax: (604) 681-1370

#### **BCNI**

Business Council on National Issues 90 Sparks, Suite 806 Ottawa, Ontario K1P 5B4

Tel: (613) 238-3727 Fax: (613) 236-8679

### **CBoC**

Conference Board of Canada 255 Smyth Road Ottawa, Ontario K1H 8M7

Tel: (613) 526-3280 Fax: (613) 526-4857

#### CCoC

Canadian Chamber of Commerce Suite 1160, 55 Metcalfe Street

Ottawa, Ontario

K1P 6N4

Tel: (613) 238-4000 Fax: (613) 238-7643

#### CEA

Canadian Exporters Association 99 Bank Street, Suite 250 Ottawa, Ontario K1P 6B9

Tel: (613) 238-8888 Fax: (613) 563-0214

World Bank
Greg Ebel
Advisor to Executive Director

Canadian Office World Bank Headquarters 1818 H Street N.W.

Washington, D.C. 20433

Tel: (202) 473-5681 Fax: (202) 477-4155

#### **Provinces**

Alberta

Department of Economic Development

and Tourism Sterling Place

9940 - 106th Street Edmonton, Alberta

T5K 2P6

Tel: (403) 427-3162 Fax: (403) 422-6338

**British Columbia** 

Ministry of Small Business, Tourism and Culture
712 Yates Street

Victoria, British Columbia

V8V 1X4

Tel: (604) 356-2034 Fax: (604) 387-5633

**BC** Trade

British Columbia Trade Development

Corporation

Suite 730, 999 Canada Place

V6C 3E1

Tel: (604) 844-1847 Fax: (604) 844-1926

Manitoba

Manitoba Industry, Trade and Tourism

410 - 144 Carlton Street

Winnipeg, Manitoba

R3C 3H8

Tel: (204) 945-2456 Fax: (204) 957-1793

**New Brunswick** 

Department of Economic Development

and Tourism P.O. Box 6000

Fredericton, New Brunswick

E3B 5H1

Tel: (506) 453-2875 Fax: (506) 453-3783 Newfoundland

Department of Industry, Trade

and Technology

Confederation Building

P.O. Box 8700

St. John's, Newfoundland

A1C 4J6

Tel: (709) 729-5600

Fax: (709) 729-5936

**Nova Scotia** 

Department of Economic Development

World Trade and Convention Center

1800 Argyle Street

Halifax, Nova Scotia B3J 2R7

Tel: (902) 424-8920

Fax: (902) 424-5739

**Northwest Territories** 

Department of Economic Development

and Tourism

P.O. Box 1320

Yellowknife, Northwest Territories

X1A 2L9

Tel: (403) 873-7115

Fax: (403) 920-2756

Ontario

Ministry of Economic Development

and Trade

Hearst Block, 900 Bay Street

Toronto, Ontario M7A 2E1

Tel: (416) 325-6666

Fax: (416) 325-6688

Prince Edward Island

Department of Economic Development

and Tourism

P.O. Box 2000

Charlottetown, Prince Edward Island

C1A 7N8

Tel: (902) 368-4240

Fax: (902) 368-4224

#### Québec

Ministère des Affaires internationales, de l'Immigration et des Communautés culturelles 380 rue Saint-Antoine Ouest 4 étage

Montréal, Québec H2Y 3X7

Tel: (514) 499-2192 Fax: (514) 499-2178

#### Saskatchewan

Department of Economic Development 1919 Saskatchewan Drive Regina, Saskatchewan S4P 3V7

Tel: (306) 787-9210 Fax: (306) 787-3989

#### Yukon

Department of Economic Development, Mines and Small Business Box 2703 Whitehorse, Yukon Y1A 2C6

Tel: (403) 667-3014 Fax: (403) 667-8601

#### In India

### \*New Delhi

Canadian High Commission Mailing Address: P.O. Box 5208 New Delhi, Republic of India Tel: (011-91-11) 687-6500 Fax: (011-91-11) 687-5387

# **Bombay**

Consulate of Canada 41/42 Maker Chambers VI Jamnalal Bajaj Marg, Nariman Point Bombay, 400 021 Republic of India

Tel: (011-91-22) 287-5479 Fax: (011-91-22) 287-5514



CA1 EA439 95B71 ENG c.1 DOCS Focus India 43275714

