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Canada's Export Development Plan for **MEXICO**

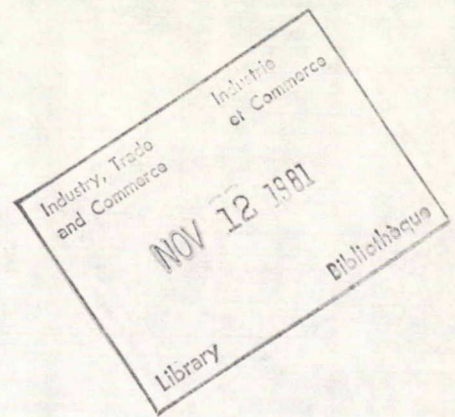


Government
of Canada

Gouvernement
du Canada

Industry, Trade
and Commerce

Industrie
et Commerce



**CANADA'S
EXPORT DEVELOPMENT PLAN
FOR MEXICO**

Government of Canada,
Department of Industry, Trade & Commerce)

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EXPORT DEVELOPMENT PLAN - MEXICO

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EXPORT DEVELOPMENT PLAN

I. EXECUTIVE SUMMARY

1. Purpose

The major theme of a Canadian Export Strategy for the 1980's as approved by the Cabinet Committee on Economic Development is the selectivity of market concentration coupled with a greater focus and coordination of Canada's export marketing efforts. This paper, the first of several to be produced, sets out an export development plan for Mexico including a detailed plan of federal government action. In so doing the government recognizes the critical role of the private sector and invites their participation and that of the Provinces in pursuing those activities which will contribute to the objective of expanding Canada's share of the Mexican market.

2. Introduction

Mexico's emergence in the late 1970's as a major oil and gas producer has offered that country a unique opportunity to achieve industrialized country status and in so doing has greatly improved the prospects for enhanced Canada-Mexico bilateral relationships particularly trade. The dynamic developments on the Mexican economic scene have claimed considerable attention in Canada and have served to stimulate a new business interest and level of activity. From an average annual growth of less than 2 percent for each of the last five years, the growth of Canadian exports to Mexico during the first ten months of 1980 indicates that by year end, Canada's exports to Mexico will have more than doubled over the 1979 level to approximately \$450 million. It seems clear that the initiative to strengthen and expand trade relations with Mexico since 1977 is proving to be worthwhile. The challenge now facing Canada is to capitalize on the momentum generated during the last few years and to ensure that this momentum continues into the new administration of the successor to President Lopez Portillo in 1982. Canada will not be alone in responding to this challenge - petro dollars have brought the world's leading industrial nations to Mexico's doorstep and the competition will thus be stiff. To be successful the Canadian marketing effort will need to be concentrated, focussed and coordinated. To that end this paper reviews and analyses the past Canadian export market development performance, identifies the opportunities and constraints that the future export effort must address and sets out an export development plan taking these factors into account. As such this document and the action program that flows from it are intended:

- i) to guide the action and resource allocation of the federal government in providing an effective program of assistance to exporters and in fostering an environment conducive to Canadian export development in Mexico;
- ii) to set out a marketing plan designed to take advantage of the market potential and to overcome the constraints facing Canadian exports to Mexico;
- iii) to identify opportunities for export concentration and to stimulate and assist the private sector in pursuing them; and,
- iv) to provide a focal point for coordinating the marketing efforts of the federal and provincial governments and the private sector.

3. Characteristics of the Mexican Market and Canadian Trade Opportunities

Mexico's oil wealth and strong balance of payments position have inspired it to tackle its problems on an unprecedented scale. Mexican development plans from 1980 to 1982 call for the investment of \$46 billion to remedy basic infrastructure shortcomings (railroads, ports, communications, etc.), to eliminate serious food shortages, to create new jobs, to lower illiteracy levels and raise the technical competence of its work force and to reduce the considerable economic disparity between the various regions of the country. This more systematic approach to national planning ushered in by the Lopez Portillo administration has improved the likelihood of success and by identifying national priorities has created exciting trade prospects in sectors of Canadian competence. The most promising prospects occur in the following sectors:

- Nuclear Reactors and allied equipment
- Transportation Equipment and Services
- Telecommunications Equipment and Services
- Agriculture
- Equipment and Services for the Oil and Gas Industry
- Mining Equipment and Services

Notwithstanding the priority emphasis being proposed for these sectors, the government will continue to give support through its regular programs to activities in any sector which will contribute to the prescribed objectives.

Canadians wanting to increase their exports to Mexico will have to come to grips with a number of distinctive features of the Mexican market. Some of the more important ones include: the determination of the Mexican government to use its oil

wealth to create jobs for its own people and to effect a transfer of technology to its own industry; the importance that Mexico gives to government purchases and government-to-government relations in doing business in Mexico; Mexico's highly bureaucratized decision-making structures; the complexity of regulations governing foreign investment and technology transfer; the barriers to imports created by Mexico's import licensing system and fluctuating but generally high tariffs; and the competitive nature of the import market characterized by American predominance. Marketing plans flowing from an analysis of the opportunities in each of the sectors and the impediments and competition described above are to be found in Section F of the paper and the highlights are set out as an action plan expressed in terms of Categories of Instruments and including responsibility centres and proposed scheduling in an Annex to this summary.

4. Canada-Mexico Trade and the Canadian Trade Development Effort

Following Mexico's discovery of oil in 1977 and the renewed Canadian emphasis on doing business with Mexico, exporting efforts have been characterized by an increase in the use of Canada's traditional export development instruments. Trade Fairs and missions and PEMD usage have more than doubled. Independent private sector initiatives are also clearly on the rise as attested to by the more than two-fold increase in the number of business visitors requiring assistance from the Canadian Embassy in Mexico City. Canadian banks (five of whom now have offices in Mexico) and mining companies continue to invest heavily in Mexico, while a small number of Canadian manufacturers are establishing Mexican manufacturing facilities or technology transfer agreements with Mexican partners. The staff of the Commercial Section of the Embassy has been enlarged and EDC lending (emphasizing \$545 million in new lines of credit signed in 1980) has dramatically increased. In addition CIDA's Industrial Cooperation Program has funded a number of studies potentially leading to the establishment of Canadian manufacturing activity in Mexico. The Young Technicians Program of the Department of External Affairs has seen 91 young Mexican technicians come to Canada to spend training periods of several months with Canadian companies and public institutions.

Mexico's selection of Canada as one of five countries with which special efforts would be made to increase cooperation culminated in the signings of the Industrial Cooperation Agreement during the visit to Canada of President Lopez Portillo in May 1980. This Agreement and the large number of ministerial and other high level visits that both preceded and followed it have created a tremendous reservoir of political goodwill that augurs well for expanded Canadian

exports to Mexico. The framework for economic cooperation that the Agreement provides has led or is leading to the formation of a number of sector specific cooperation agreements or committees (on urban transportation, space communication and agriculture) whose activities in concert with the Canadian private sector can be structured to foster the growth of Canadian exports. Likewise close cooperation between ITC and the Canada-Mexico Businessmen's Committee of CALA holds similar promise. In embarking upon this strategy, it is recognized that a mutually beneficial trade relationship stems from the ability of both partners to take into account one another's aspirations.

5. The Overall Strategy

The market development plan for Mexico consists of an inventory of new and existing instruments which will be used by the Federal government to assist Canadian exporters in increasing their penetration of the Mexican import market. The inventory results from the assessment of needs in export development which are intended to capitalize on opportunities and overcome constraints deemed to exist in that market from the Canadian perspective. A complete Action Plan for Mexico follows this Executive Summary.

Continued heavy use of the fairs and missions program is planned with emphasis being placed on the six priority sectors identified above. Considerable importance will be attached to maintaining the appropriate frequency of ministerial and other high level government to government visits. The PEMD program will be promoted more intensively. This applies particularly to Section F which can help a company sustain the on-going analysis and market development activities necessary to succeed in the Mexican market. Emphasis will also be placed on maintaining and/or creating active bilateral cooperation committees such as the one that exists for urban transportation.

With respect to financing, existing EDC lines of credit notably the \$500 million credit with NAFINSA will be publicized while opportunities to establish new ones, such as the successful mining equipment line with IMMSA, will be investigated. An analysis will be done on why the PEMEX lines of credit did not move and why at the same time PEMEX appears interested in new EDC credits. On-going and successful EDC lending programs will be continued. At the same time, should competitor activity so justify, recourse will be made to Canada's new credit mixte facility. Every effort will be made to expand the use of the INC program of CIDA and the Young Technicians program of External Affairs and to have these programs become more responsive to Canada's export market development activities in Mexico.

To fully capitalize on existing opportunities and to overcome constraints to trade new instruments must be developed within the context of the Mexican market. Because Mexico is often an unknown market to Canadian exporters, especially small businesses, a Market Awareness Program (MAP) will be developed to make potential exporters aware of opportunities in Mexico. Steps will also be taken to make Mexican buyers more aware of Canadian expertise and products by the use of seminars, speeches by Ministers, publicity and press releases, pamphlets, and other promotional materials. To meet information needs new studies will be undertaken, for example, of Canada's competitive position in the Mexican market; Mexico's industrial capabilities in some priority sectors; and impediments in Mexican law or Canadian government policy to technological transfer or industrial cooperation.

While the primary agents of facilitation of the plan will be the International Bureau of IT&C and the Post, and in sector-specific areas, selected Industry Sector Branches of IT&C, the degree of success in meeting the objectives of the plan is reliant on the coordination and cooperation of all federal departments and provincial governments and active involvement by business and industry. Consultation in the formulation of the strategy with the provinces, and with other federal government departments has therefore taken place. On-going consultations by IT&C officials with businessmen will ensure that private sector views are incorporated into the plan. A formal review by the Export Trade Development Board will also be sought. Given this concentration of effort and dedication of purpose there is every reason to expect that Canada's share of the Mexican market can be significantly expanded.

ACTION PLAN FOR MEXICO

<u>Categories of Instruments</u>		<u>List of Activities/Events</u>	<u>Prime Responsibility Centre*</u>	<u>Timing</u>	
I. Missions	A.	<u>High-Level Visits</u>	1. Prime Ministerial/Ministerial visits to Mexico	EA/Bureau/Post	As appropriate
			2. Visit of leading Mexican political figures to Canada	EA/Bureau/Post	As appropriate
			3. Prime Ministerial/Governor General visit to new President's inauguration	EA/Bureau/Post	Early 1983
			4. Ministers/senior officials delegations to follow-up inaugural visit	EA/Bureau/Post	1983
			5. Editors and journalists visit to Canada	EA/Bureau/Post	Annually
	B.	<u>Trade Missions</u>	6. Metro/lrv missions-incoming and/or outgoing	TPI/Bureau/Post	To coincide with the timing of projects
			7. Space Telecommunications Companies Mission to Mexico	ELE/Bureau/Post	To reflect Mexican decision on consultancy contracts for SATMEX
			8. Agricultural Equipment Mission to Mexico	MCH/Bureau/Post	March 1981
			9. Rapeseed and crushers buyers from Mexico	GMO/Bureau/Post	July 1981
			10. Meat Producers Mission to Mexico and reciprocal buyers mission	FPB/Bureau/Post	November 1981
			11. Malting Barley Mission to Mexico	GMO/Bureau/Post	1982
			12. Printing and Packaging Equipment to Mexico	MCH/Bureau/Post	September 1981

* Glossary of Abbreviations - Page 13

<u>Categories of Instruments</u>	<u>List of Activities/Events</u>	<u>Prime Responsibility Centre</u>	<u>Timing</u>
	13. High level industrialist mission to Mexico	Bureau/Post	March 1982
	14. Telecommunications companies incoming mission	ELE/Bureau/Post	Early 1982
	15. Market Identification Missions	Bureau/ISBs	As required
II. <u>Fairs/Exhibitions</u>	16. "Expo Mexico" Trade Show	MCH/Bureau/Post	July 1981
	17. Acapulco Mining Show	MCH/Bureau/Post	October 1981
	18. Technology for the People	CIDA/Bureau/Post	November 1981
	19. Promotion of the use of the facilities in Mexico City Chancery as a "Mini-Trade Centre"	Post/Bureau	Beginning 1981
III. <u>Technical Seminars</u>	20. Oil and Gas Seminar (to follow "Expo Mexico" trade show)	MCH/Bureau/Post	Early 1982
	21. Railway Seminar	TPI/Post	1982
	22. Briefings/Seminars-How To Do Business In Mexico	Post/Bureau/IFS	To coincide with Special Events
	23. CMA Export Forum Seminar	CMA/Bureau/Post	April 22, 1981
	24. Province/CALA Seminars	Bureau/Post	As appropriate
IV. <u>Meetings/Exchanges</u>	25. Joint Ministerial Committee	EA/Bureau	January 1983
	26. Industrial and Energy Cooperation Agreement	Bureau/ISB	Annually
	- Industrial Cooperation Committee	EMR/Bureau	
	- Energy Cooperation Committee pursuant to Industrial and Energy Cooperation Agreement		

<u>Categories of Instruments</u>	<u>List of Activities/Events</u>	<u>Prime Responsibility Centre</u>	<u>Timing</u>
	27. Urban Transportation Committee	Bureau/TPI/DOC	Annually
	28. Space Communications Committee	Bureau/ELE/DOC	To be established in 1981
	29. First Meeting of Joint Trade Committee	Bureau	June 1981
	30. Agricultural Cooperation Committee	AGR/Bureau/FPB	Annually
	31. PanAmerican Railway Congress Association Meeting	TPI/Bureau/EA	Oct./Nov. 1981
	32. Training programs, including Young Technicians Program	EA/Private Sector/ ITC/CIDA/EIC	
	33. Mexican public servant exchanges to Canadian Federal Government	EA/PSC/Bureau	
V. Studies	34. PEMEX investment program and implications	Post/MCH	1981
	35. Inventory of current Canadian sales to PEMEX	Post/Bureau	1981
	36. Oil and gas sector - Capability of Mexican Industry and Canadian Opportunities	Post/MCH/Bureau	1981
	37. Public Transit and Canadian Opportunities re: Mexican industry capability	TPI/Bureau/Post	1981
	38. Analysis of Mexican Freight Car Parts Imports	Post/TPI	1982
	39. Transportation Services		
	- Mexican Port Development Program	Post	1981
	- Canadian Distribution/Transportation	OSI	1982

<u>Categories of Instruments</u>	<u>List of Activities/Events</u>	<u>Prime Responsibility Centre</u>	<u>Timing</u>
	40. Meat products - study of Canadian competitive position	FPB/Bureau/Post	1981
	41. Technical information on handling & storage and uses of oilseeds	GMO	1982
	42. Review of swine and cattle marketing systems	FPB/Post	1982
	43. Mexico's Investment Plans in Mining	Post/MCH	1981
	44. Mexico Mining - Supply Prospects for Canadian Manufacturers Under World Bank Loan	MCH/Post	1981
	45. Competition in Mexico, with special emphasis on export promotion techniques	Post	1981
	46. Mexican Taxation, Investment Control and Patent Protection Legislation	Post/Bureau	1981
VI. <u>Market Guides/Aids to Business</u>	47. "How To Do Business in Mexico"	Post/IFS	1981
	48. Layman's Guide to "Investment and Joint Ventures in Mexico"	Post/IFS	1981
	49. Duty Free Zones - as a means of increasing exports through Mexicanization	Post	1982
	50. Mexican Capital Equipment Leasing	Post	1981
VII. <u>Promotion/Publicity</u>	51. Publicity of Canadian/Mexican Successes re Mexicanization	Post/Bureau	1981
	52. Official Opening of New Embassy	Post/Bureau	1981
	53. Audio Visual Presentations of Development Plan & Canadian Capability	Post/Bureau/IFS	1981

<u>Categories of Instruments</u>	<u>List of Activities/Events</u>	<u>Prime Responsibility Centre</u>	<u>Timing</u>
VII. <u>Promotion/Publicity</u>	54. Distribution of CIDA Studies of Joint Venture Opportunities	CIDA/Bureau	1981
	55. Selective publicity in Mexican trade journals e.g.: -oil and gas -telecommunications -agriculture -mining	Post/Bureau/ISBs IFS/CIDA INC	1981
	56. Ambassador & Trade Commissioner Tours of Canada to promote Mexican trade	Post/TCS/Bureau	Annually
	57. Press releases on Canadian success stories in Mexico	Bureau/IFS	as available
	58. Publicity to exporters; PEMD F opportunities/INC program EDC lines of credit/financing	Bureau/ISBs/PEMD/IFS/CIDA	May 1981
	59. Promote utilization of toll-free access to ITC	Bureau/CDE	1981
VIII. <u>Representations to the Mexican Government</u>	60. Ministerial speeches to business on Mexican opportunities	Government Wide	as suitable
	61. Bilateral taxation treaty (re: services withholding taxes)	FIN/Bureau/Post	1981
	62. PETROCAN Canadian Sourcing Agreement with PEMEX	MCH/Post	1981
	63. Collaboration with URAMEX on Mexican uranium development	Post/MCH/EMR/AECL/Eldorado Mining	ongoing
	64. Agricultural Commodity supply arrangements	Bureau/Post/AGR/FPB	Fall 1981
IX. <u>Encouragement/Interaction with Business Community</u>	65. Encourage adoption of Canadian B.L.U.P. system for dairy sire evaluation	FPB/Post/AGR	ongoing
	66. Formation of ties between Mexican and Canadian industry associations in priority sectors	Bureau/ISBs/Post	1981

<u>Categories of Instruments</u>	<u>List of Activities/Events</u>	<u>Prime Responsibility Centre</u>	<u>Timing</u>
IX. <u>Encouragement/Interaction with Business Community</u>	67. Technological transfer of live-stock and swine production and breeding systems	FPB/Bureau/Post/AGR	
	68. Support for Canada/Mexico Businessmen's Committee	Bureau/ISBs/Post	ongoing
	69. Development of Canada/Mexico Chamber of Commerce	Bureau/Post	
	70. Assistance to Canadian firms in Mexicanizing their products	CIDA/ISBs/Bureau/Post	ongoing
	71. Export Trade Development Board review and support for Mexican strategy	IMPG/Bureau	First meeting of ETDB April/May
X. <u>Financing</u>	72. Examine renewal of PEMEX line of credit	EDC/Post/ISBs	mid-1981
	73. Examine new lines of credit for priority sectors	EDC/Post/ISBs/Bureau	mid-1981
	74. Expand existing credit arrangement	EDC/IMPG/Post/Bureau	ongoing
	75. Application of a Credit Mixte Facility	EDC/IMPG/Bureau	responsive as needed
XI. <u>Interaction with the Provinces</u>	76. Federal/Provincial Committee on Export Development	IMPG/Bureau	quarterly

<u>Categories of Instruments</u>	<u>List of Activities/Events</u>	<u>Prime Responsibility Centre</u>	<u>Timing</u>
XI. <u>Interaction with the Provinces</u>	77. Promotion of joint advertising, fairs and mission cooperation, and participation in export seminars	Bureau/IFS/Provinces	ongoing
	78. Ensure orderly marketing of livestock	FPB	1982
	79. Improvements in market intelligence dissemination	Bureau/RO/Provinces/IMPG	ongoing
XII. <u>Internal Federal Government Review</u>	80. Joint review of export financing needs	EDC/CIDA/ITC/EA	1981
	81. Oil and Gas and Agriculture specialists with trade promotion responsibilities in Embassy Staff in Mexico	Post/TCS	1981
	82. Consideration of Canadian trade office in Houston for oil and gas promotion	TCS/Bureau	1981
	83. AECL to establish permanent representation in Mexico	AECL	1981
	84. Consideration of additional personnel and related budgets for Post and International Bureau to assist with implementation of strategy	IMPG/POST/TCS	1981

GLOSSARY OF ABBREVIATIONS

AECL	-	Atomic Energy of Canada Limited
AGR	-	Department of Agriculture
Bureau	-	International Bureau, Department of Industry, Trade & Commerce
CDE	-	Business Centre, Department of Industry, Trade & Commerce
CIDA	-	Canadian International Development Agency
CMA	-	Canadian Manufacturers' Association
DOC	-	Department of Communications
EA	-	Department of External Affairs
EDC	-	Export Development Corporation
EIC	-	Employment & Immigration Canada
ELE	-	Electrical & Electronics Branch, Department of Industry, Trade & Commerce
EMR	-	Department of Energy, Mines & Resources
FIN	-	Department of Finance
FPB	-	Agriculture, Fisheries and Food Products Branch
GMO	-	Grains Marketing Office, Department of Industry, Trade & Commerce
IFS	-	Public Information Directorate, Department of Industry, Trade & Commerce
IMPG	-	International Marketing Policy Group, Department of Industry, Trade & Commerce
ISB	-	Industry Sector Branches, Department of Industry, Trade & Commerce
ITC	-	Department of Industry, Trade & Commerce
MCH	-	Machinery Branch, Department of Industry, Trade & Commerce
OSI	-	Office of Service Industries, Department of Industry, Trade & Commerce
PEMD	-	Program for Export Market Development, Department of Industry, Trade & Commerce
PSC	-	Public Service Commission
RO	-	Regional Offices, Department of Industry, Trade & Commerce
TCS	-	Trade Commissioner Service, Department of Industry, Trade & Commerce
TPI	-	Transportation Industries Branch, Department of Industry, Trade & Commerce

EXPORT DEVELOPMENT PLAN

II. A. PURPOSE

The introduction of greater focus and coordination to Canada's marketing efforts is the major theme of a "Canadian Export Strategy for the 1980's" approved by the Cabinet Committee on Economic Development. The elaboration of 2-3 year marketing plans for Canada's priority markets is a central element of the Strategy. This paper sets out an export development plan for Mexico through:

- i) creating a strategy framework to guide the actions and resources of the federal government in providing an effective program of assistance to and an environment for Canadian export development in Mexico;
- ii) elaborating a marketing plan to take advantage of the opportunities and to overcome the constraints facing Canadian exports to Mexico;
- iii) providing a working document to use as the basis for discussions aimed at coordinating the marketing efforts of the federal government in cooperation with provincial governments and the private sector.

The following plan for Mexico includes:

- i) an identification of the opportunities and constraints for Canadian export market development in Mexico;
- ii) a review of past efforts of the Federal government to promote Canadian exports to Mexico and the bilateral framework in which these exports occur;
- iii) an identification of the marketing segments where the Canadian share of Mexican imports may be improved or expanded;
- iv) marketing plans for key priority sectors of the Mexican market based on an analysis of the specific opportunities and constraints in these sectors;
- v) an overall market development plan for Mexico outlining methods of capitalizing on opportunities and overcoming constraints found to affect Canadian exports, to that market, and recommending appropriate changes to present promotional techniques and possible new techniques to facilitate export growth.

B. THE CANADA/MEXICO ENVIRONMENT

Dynamic developments on the Mexican economic scene have claimed considerable attention in Canada and have served to stimulate a new business interest and activity. Discoveries of major reserves of oil and gas, the sixth largest in the world, have made Mexico one of the most attractive markets in the world. With the actual and potential revenue from oil and gas exports, the Mexican Government is setting in train ambitious development programs designed to solve various economic and social problems and to stimulate economic growth. Oil production and exports are strictly controlled to maximize industrial development and to avoid the possible negative impact on the economy of unmanageable inflows of foreign exchange.

Recognizing the importance of these developments to Canada's trade and economic interest with Mexico, efforts were begun at the third meeting of the Canada-Mexico Joint Ministerial Committee in November 1977 to strengthen the bilateral relationship. The Mexican government responded to Canadian initiatives a few months later by selecting Canada as one of five countries with which special efforts would be made to strengthen ties. As part of this initiative, project identification missions were exchanged in 1978 and the Mexican government suggested an Industrial Cooperation Agreement as a central element of the new relationship. Such an agreement, expanded to include bilateral energy interests, was signed during the visit of President Lopez Portillo to Canada in May 1980. This visit was immediately followed by a Canadian mission to Mexico led by the Minister of State for Trade. A return Mexican mission led by the Secretary of Natural Resources and Industrial Development visited Canada October 20-24, 1980.

In January 1981 the fourth meeting of the Joint Ministerial Committee was held in Mexico City at which time the first meetings of the proposed Industrial and Energy Cooperation Committee took place. A series of missions under the Agreement will be exchanged during the next 18 months.

The political aspect of the bilateral relationship between Canada and Mexico is vital to doing business in that country. The Mexican Presidency is the central institution in terms of major policy decisions which could affect projects of interest to Canada. President Lopez Portillo is mid-way through his term of office which ends in December 1982 and his successor will be chosen from six months to a year earlier from the ranks of the current administration. Traditionally, outgoing

Presidents do not make binding policy decisions after their successors have been named. Critical decisions such as the selection of a nuclear partner are likely, therefore, to be made during the next twelve months but the very size of these programs will also see new and equally important decisions made by the next administration. Transition to Lopez Portillo's successor thus will be extremely important to the success of long term Canadian interests in the Mexican market.

The challenge now facing Canada in its relationship with Mexico is to capitalize on the momentum generated during the last few years and to ensure that this momentum continues into the new administration of Lopez Portillo's successor.

C. CHARACTERISTICS OF THE MEXICAN MARKET

1. Demographic and Environmental

Mexico, as the second most populous country in Latin America and the largest Spanish speaking nation in the world, represents a substantial market for the exports of industrialized trading nations. Of a total population of 67 million, 13 million live in or around Mexico City, making it the world's third largest metropolitan area. The rapid urbanization of Mexico, evidenced by the high growth rate of Mexico City and other industrializing centres in the northern section of the country, is partly a result of actual population increases (at approximately 3-4 percent per year) but also caused by an in-migration of the unemployed from the rural southern states. In fact the unemployment issue, stimulated by the fact that more than 50 percent of the population is less than fifteen years old, has become the focus of national development planning by the Mexican government. Part of this programming is directed toward actual job creation improvements nationwide, aimed at meeting the unemployment "crunches" of the 1980's and 1990's (which will augment historically chronic employment problems). Another element, however, is an attempt to promote regional development, especially in the southern section of Mexico, to diversify the economic base and lower the social costs of regional disparity.

To manage a nation where population stresses and under development of resources have created increasing drags on the economy, growth in that economy becomes the key lever to improved well-being. Mexico, therefore, needs economic expansion not just to sustain itself but also, more importantly, to survive future demographic crises (Table 1).

2. Socio-Economic

In 1977, Mexico's per capita GNP was \$1,160 or 48th in the world ranking of individual well-being. Gradual improvements have occurred since that time, but the country is still considered a less developed country (LDC), albeit a middle-income one (MIC). Because of the historically rapid population growth, the agricultural sector has been unable to satisfy the needs of the internal market. In addition to major shortfalls in food-stuffs, Mexico has, in the past, suffered from financial and technological dependence, a lack of international competitiveness in the industrial sector, over-bureaucratization, insufficient public savings, uneven distribution of personal, sectoral and regional income, low levels of literacy and technical competence, and various other economic and social maladies.

These restraints to economic development, however, were partially reduced by the 1977 devaluation of the Mexican peso, and have been further alleviated by opportunities created by the advent of oil income and the establishment of national planning mechanisms. The developments have, in turn, stimulated GNP growth (from 2.1 percent in 1976 to 8.0 percent in 1979); employment growth (4 percent) which, for the first time, exceeded population growth; strengthened public savings (18.3 percent in 1978 compared to an annual average of 1.7 percent from 1971-77); lower public debt (7.7 percent of GDP in 1978 versus 10 percent in 1976); and increased investment levels (15.8 percent in 1978 and 18.0 percent in 1979). (Table 2). The improvements in the economic performance of Mexico have also stimulated social returns. While the population growth rate declined to 2.9 percent in 1979, the educational, health and other social services have increased, indicating for the first time in many years, a trend toward enhanced well-being.

3. Macroeconomic Trends and National Planning Mechanisms

The national plans of Mexico (Industrial Development Plan of 1979-1982, and the Global Development Plan of 1980-1982), while recognizing the essential social objectives of economic development, place their primary focus on altering the structural weaknesses of the Mexican economy. The removal or minimization of these constraints is seen as the fundamental means to realize the social ends of employment growth, income improvements, and other human concerns (Tables 3 & 4).

Weaknesses addressed by the national plans include an excessive reliance on the domestic market, production oriented to import substitution rather than international trade, small plant size with low productivity, the inability to achieve cost competitiveness, control of much of private industry by MNE's and large oligopolistic enterprises (especially in high growth sectors), the lack of vertical integration in industrial production, and an excessive reliance on raw material exports rather than trade in further processed goods. The differential rates of economic development within Mexico add to these structural problems by creating a regional concentration of domestic demand, producing industrial congestion at high social cost. Therefore, the plans attempt to foster the basic reshaping of the industrial structure by encouraging export development, regional decentralization, growth in small industry, and the greater manufacture of intermediate and capital goods.

At the same time, a focussed increase in the production of selective consumer goods was intended to more adequately satisfy urgent social needs in demand and the constraints

imposed by price inflation in supply. Inflation, as reflected in the consumer price index for the domestic market, has been a very serious problem in recent years and appears to be continuing and even increasing in severity. It is expected that the inflation rate will exceed 25 percent in comparison to 20 percent in 1979, with the most pronounced increases in such basic items as rent, milk, bread, newspapers and shoes. Nevertheless, the goal of the national plan is not primarily centred on meeting the economic challenges of inflation. On the contrary, the Global Plan states that the control of inflation "is merely a means and an instrument rather than an objective in itself". The real objectives, instead, are to ensure that distribution of income is unaffected by inflationary pressures, that real growth is maintained, and that social necessities or responsibilities are met; all with the caveat that the "internal" inflation rate is maintained at a level not higher than four to five points more than the "external" inflation rate (presumably that of the U.S.A., Mexico's major trading partner). Thus the Mexican government appears willing to cope with substantial inflation in the next few years in order to focus on other economic and social goals.

In order to finance the ambitious investment priorities, especially in the light of the inflationary pressures of supply and growing levels of domestic demand for both goods and services, the development and exploitation of Mexico's oil reserves is critical. There is a firm distinction made in the Global Plan between "a development policy which utilizes oil", and "an oil development policy", and it is the former that is used as the basis for policy planning.

In March of 1980, the nation's production levels for oil were set at 2.5 million barrels per day with a ten percent flexibility allowed to guarantee supply and exports (up to 2.7 million barrels per day). This production platform is expected to contribute 931.6 billion pesos (or about C \$46.6 billion) in government revenues in 1980-82: 22 percent of total GNP. Plans call for revenues from oil sources to be divided in the following manner: 32 percent (C \$14.9 billion) to PEMEX investment programs, 17 percent (C \$7.9 billion) for agriculture and rural development, 16 percent (C \$7.5 billion) in social sector spending (including education), 14 percent (C \$6.5 billion) for transportation, 11 percent (C \$5.2 billion) designed for the industrial sector (including PEMEX), and 10 percent (C 4.6 billion) to investment programs for state and municipal governments. Therefore, while energy will be the key to economic development, with the major share of income reinvested in exploration efforts in hydrocarbons and alternative resources as well as in upgrading the energy base through industrialization and modernization, the priorities in

development assisted by oil funding are clearly agricultural and rural development, the social sector (including education and health), and transportation and communications. It is in those sectors where the opportunities for import penetration of government controlled markets are most evident.

The influence of the state on industrial development in Mexico is, in fact, extremely strong. Government owned firms will provide approximately 67 percent of Mexican total new investment in industry during the 1979-1982 period, and represent more than 50 percent of the domestic market for machinery and equipment (Table 5). Sectors basically reserved for the State include petroleum and other hydrocarbons, basic petrochemicals, radioactive materials and nuclear energy, electricity, certain mining areas, railroads, and telegraph and wireless communication. In some cases, major state owned companies exert monopoly control (e.g. PEMEX); in others, the Mexican government has entered into joint ventures with private firms: both domestic or foreign (e.g. Polysar Ltd. of Canada) in their base.

To promote mexicanization, Mexico's national development bank, NAFINSA, has maintained a special fund (FOMIN) for acquiring equity shares in ventures that need or want capital assistance. In addition, GRUPO SOMEX, a banking and industrial conglomerate majority owned by the state, has developed an international division to promote its activity in joint ventures (at present numbering twelve). The Mexican government itself has, in turn, assumed the responsibility for direct and massive investment in infrastructure development to support industrial and export activity, especially in decentralized areas (Table 6).

The Industrial Plan, however, does not limit investment decisions to the public sector. By initiating a package of stimuli intended to shape investment decisions in the private sector, the Plan encourages the consistency of the activities of that sector with the goals of the national policy. Market segments such as automotive products, the "in-bond" industry, and mining have been accorded continuing priority. Attention is centred on industrial ports and export terminals (Figure 1) as well as rail and other land transportation, both to meet regional decentralization goals and to alleviate serious bottlenecks in the distribution network, which impede economic growth itself, and represent the weak link in the product-marketing chain.

Newly identified priorities in industry include agroindustry, capital goods, iron and steel and cement: all of which are granted highest priority; and petrochemicals, mining/metallurgy, transportation, pharmaceuticals, textiles,

footwear, and construction products: each of which receives continuing priority. The incremental investment from the industrial planning and priorities established is expected to increase from \$1.9 billion in 1981 to almost \$13 billion in 1990, with differential effects on the range of priority sectors (Tables 7 and 8).

The Global Plan, an integration of several previous development plans (including industrial development, urban development, tourism, fisheries development, employment, and science and technology), reinforces these priorities and establishes growth projections for major industrial sectors. It forecasts annual improvements in growth for socially-necessary goods, capital goods, chemicals, mining and construction (Table 9) and supports the growth targets with incentives, policy tools, regulations and direct investment guidelines.

It therefore becomes very clear that the emphasis of the remaining two years of President Portillo's term will be focussed on the economic means to reach social goals, using oil wealth as the fulcrum, and industrial development as the lever. Within such a framework lie Canadian export prospects which must not only capitalize on opportunities identified by the National Plans but also reflect consistency with the stated Mexican goals.

The framework, in some respects however, is only a short term (2 year) phenomenon. In the past, a change in the presidency has heralded a corresponding adjustment in both the Mexican bureaucracy and in policy direction. Although there is reason to believe that such a shift is less likely to occur in the succession from President Lopez Portillo's administration to a new head of state, the possibility of policy adjustments must be kept in mind in longer range planning and also in forecasting the nature of bilateral relationships between Mexico and its trading partners.

4. Trade Policy

Because the Mexican government has such a strong influence on the domestic economy (accounting for approximately 40 percent of all imports), its trade policy has added importance to Mexico's major trading partners. Unlike most industrialized markets, success in dealing with government agencies is often a more important key to export growth than private sector opportunities.

Conversely, Mexico has surpassed the level of a typical less developed country (LDC), with per capita income levels and economic growth sufficient to place the country in the middle income country (MIC) grouping. For that reason, the traditional methods of import penetration into LDC markets, using International Financial Institutions (I.F.I.) and trade-aid mechanisms, are less essential than is the case with countries having lower levels of individual wealth.

In view of the Mexican Government's economic strategy for creating jobs, the best approach to secure a foothold in this flourishing market could be a local operation in partnership with a Mexican firm. A number of Canadian government programs (of both CIDA and ITC) designed to assist Canadian firms establish a commercial and/or manufacturing presence in Mexico appear to be particularly well suited to meeting the increasing requirements for exporters to include Mexican content into their product. In that respect, a greater Canadian knowledge of Mexico's industrial capabilities and capacity for technology absorption is required.

In the past, Mexico's commercial policy has been aimed at protecting a weak industrial structure from import competition. This protectionism has contributed greatly to the concentration of income, industrial inefficiency, high prices and an unbalanced industrial structure which failed to capitalize on Mexico's comparative advantages in various sectors.

To correct the historical trend, the present government has implemented a policy of encouraging the rationalization of Mexico's import regime while promoting and diversifying exports to avoid an over-dependence on oil exports. The Global Plan establishes quantitative targets for this goal, seeking imports at 11.4 percent of GDP and exports at 10.9 percent of GDP by 1982. While the policy of "energetics", bolstered by tourism revenues and border transactions (which currently represent approximately 40 percent of Mexico's "exports" of goods and services), should create the necessary impetus to reach export goals, import guidelines are less clearly understood.

In order to shelter domestic industry, the tariff has been designated in the Global Plan as the principal protective instrument which will gradually be adjusted as industrial rationalization develops. Import substitution is encouraged by tariff rates in the capital and intermediate (rather than consumer) goods sector. Similarly the use of tariff structures to assist small and medium businesses and to provide special treatment to the agricultural sector is promoted in the Global Plan.

As of February 28, 1979 the tariff listed 7,455 items. Ad valorem duty rates range from 0 to 100 percent, becoming progressively higher as they move from raw materials to luxury products (Table 10). If a product can be completely or partially substituted by local industry, the official "rule of thumb" is that tariffs are set at 30-40 percent, with higher rates levied on dumped products or on those benefitting from other unfair pricing practices. Further processed goods generally receive higher tariffs, especially in the case of consumer products whose rates vary from 50 percent for basic goods to 100 percent for those in the luxury class.

Most items in the tariff are subject to a 2 percent surtax with the exception of some 360 items. Imports are also assessed a tax of 3 percent of the amount of the duty. A number of private sector luxury imports are subject to compensated interchange surcharge ranging from 1.5 percent to 17 percent, while on public sector imports it is 1 percent. Most imports are also subject to a value-added tax (VAT) of 10 percent based on customs value and tariff with the exception of a few products such as basic foods, agricultural machinery and equipment, fertilizers, and books and periodicals.

Traditionally, Mexico has operated a system of official prices to determine a uniform dutiable base, a system which constituted a significant restriction to trade. However, to complement the import permit liberalization measures in the late 1970's, a customs valuation scheme was put in force on July 1, 1979 which determines, as a basic criterion for merchandise valuation, the normal value of goods on an F.O.B. basis. However, for products which could damage domestic industry or the national economy, official prices may be established as a minimum dutiable value to be used in determining duties. The change has resulted in higher import duties in some instances, especially with intra-company transfers, and has put an effective end to double invoicing. Official prices are maintained for approximately 800 items, representing 6 percent of the total value of imports, and act as anti-dumping safeguards.

Continued, gradual elimination of prior import license requirements in favour of tariff protection is forecasted except for products under government control, certain capital goods with national production projects of limited duration, products under import quotas, controls to prevent massive purchases, licenses for national defence or security considerations or for health/sanitary reasons, and products of industries extremely sensitive to import penetration. However, although the Mexican government has moved to increase the number of items not requiring import licences from 1,098

or 15 percent of the total in 1976, to 6,217 or 78 percent of the total in 1979 (Table 11), the remaining categories accounted for 60 to 65 percent of the total value of imports. Import licensing, therefore, continues to be a major barrier to trade in Mexico.

The government purchases domestic products wherever possible in accordance with its import substitution policy. Foreign purchases are effected only when the products are not made in Mexico or when large price differentials exist. All government purchases abroad must be approved by the Committee on Public Sector Imports. One of the prerequisites in selling to the Federal government or to decentralized government agencies is registration with a central registry authority. This agency must be supplied with a notarized copy of the company's charter and a specimen signature of the executive officer, legalized by a Mexican Consulate. Such documentation must be accompanied by a detailed product information with an original price list on company letterhead signed by the executive officer. The overwhelming thoroughness of registration is augmented by the additional requirements of equipment suppliers to provide balance sheets or financial statements for the previous year with supporting production statistics (number of factories, employees, etc.). Finally, companies must register with each of the specific buying agencies with which they intend to do business, creating, in concert with the other limitations and constraints, a procedure which is time consuming, expensive and requiring the disclosure of information not normally divulged by most Canadian companies. While cumbersome, the process can be greatly facilitated by the use of a Mexican agent to assist in the paperflow and documentation requirements.

Despite an abundance of registration restrictions and other import constraints, Mexico currently does not have any anti-dumping or countervail legislation and the custom value law, which attempted to provide a substitute mechanism by an "official price" system, has been modified to include only the "unfair competition" regulation. In fact, Mexico has gradually developed guidelines for trade relations which have similarities to those adhered to in the GATT. The country, however, recently rejected GATT accession with the justification that although its policies increasingly trend toward such a theoretical base, Mexico's "energetics" plan would conflict with GATT guidelines on equality of treatment (most favoured nation status) and suffer from movements of developed nations to establish strategic resource supply guarantees. It was felt by the government that such constraints would limit Mexico's ability to use oil and other resources as tools of trade negotiation in a bilateral context

(for example to attract industrial cooperation and foreign investment) and to foster independent national development (as espoused in the Industrial Development Plan).

Bilateral relationships are, in the final analysis, the key to Mexico's trade policy (and total foreign policy). While Mexico is a member of the Latin American Free Trade Association (LAFTA) and is strongly involved in ongoing North-South dialogue, its major thrust in trade relations is directed toward the industrialized and industrializing countries whose oil requirements offer leverage for technology exchanges and other methods of industrial cooperation. In this light, Mexico has selected five countries with which special efforts would be made to strengthen ties. Along with Canada, these priority countries are Brazil, Sweden, Japan and Spain. The latter three countries, with the addition of France, have, during the past eighteen months, entered into crude oil/industrial cooperation arrangements with Mexico. Canada, in turn, has signed a similar agreement with Mexico (1979) which was modified to include energy linkages during President Lopez Portillo's visit to Ottawa in May of 1980. Thus government to government relations and energy linked trade policy have emerged as the framework for export market development with Mexico for both the newly preferred and increasingly the traditional trading partners of the country.

Mexican efforts to link trade to domestic industrial development and technology transfer are such that importers of products likely to be the subject of mexicanization will need to fully explore the available options including the purchase of Mexican components, assembly of the final product by a Mexican associate, direct investment in Mexico, the licencing of a Mexican manufacturer to produce the good, or the establishment of an "in-bond" plant in Mexico. Such avenues can successfully combine the concept of Mexicanization with the goals of import penetration and improved market access. The freely convertible nature of the Mexican peso make such options more attractive than in many other developing countries.

Economic nationalism has nevertheless been a permanent fixture of Mexican politics for many years and numerous controls on foreign equity, technology transfers and foreign patents and trademarks have been introduced. Mexico's foreign investment and technology import regime (the best known feature of which is the 49 percent foreign ownership role) is complex, requiring in-depth investigation and analysis by prospective importers.

Total direct foreign investment is estimated to be \$5 to \$6 billion with those funds being concentrated in some of the most dynamic sectors of the Mexican economy. During the period between 1974 and 1979, Banco de Mexico figures show that annual foreign investment inflow has averaged \$326 million. On the technology licensing front, Mexico's National Registry of Technology Transfer (created in 1973 to register and approve foreign licensing agreements) had, by October 1979, processed approximately 9,300 contracts of which 6,993 were approved on first application and another 2,300 after re-submission.

While the ultimate responsibility for the promotion of foreign investment and business development in Mexico rests with that country itself, there is nevertheless room for Canadian efforts to foster a better appreciation in its exporting community of the Mexican foreign investment and technology import regime. Many Canadian companies are fully conversant with the regulations and operate successfully within those guidelines. Many others, however, could benefit from such information dissemination both for their own market planning development and also in the general interests of improved Canadian exports to Mexico.

5. Trade Characteristics and the Balance of Payments

Mexico has historically suffered from a balance of trade deficit with its major trading partners. The merchandise deficit of the country, in fact, reached an all-time high of U.S. \$3.2 billion in 1975, but gradually improved from 1976 to 1978 as a direct consequence of continually and rapidly increasing exports of agricultural commodities, extractive and chemical products, transportation equipment (especially automotive parts) and inbond or maquiladora industries. Conversely, imports, while declining in normal terms in 1976 and 1977 in response to a sluggish domestic economy, have more recently regained growth momentum, increasing by 38 percent in 1978 and approximately 44 percent in 1979. Although apparent in almost all import categories, this growth has been particularly marked in the case of capital goods, reflecting mounting confidence in Mexico's economic prospects and the need to expand capacity in the light of the booming domestic demand (Tables 12 and 13).

Approximately sixty percent of total imports are required by the private sector (growing to 66 percent in 1979) which showed the most buoyant import behaviour from 1975 to 1979. Public sector imports declined in 1976 and, following a small increase in 1977, rose sharply in 1978 and 1979 on the strength of the large requirements for machinery and equipment associated with the expansion programs of PEMEX and CFE, as

well as large food imports made by CANASUPO to supplement domestic supply (Table 14). Considering the substantial incremental investment forecasted in Mexico's national plans for public sector development, the growth in imports by that sector should continue to close the gap between private and institutional trade.

Although the trade deficit declined during the latter half of the 1970's, the most recent trends in foreign trade indicate a shift to increased deficits (up 47 percent in 1979 over 1978), surpassing the 1975 high of \$3.2 billion. The inclusion of petroleum income produces a deficit of U.S. \$3.5 billion, but by discounting oil exports, the trade balance is adjusted to U.S. \$7.3 billion, indicating how dependent on that resource the Mexican economy is.

The deficit, while moderated by oil income, is also created, in part, by the sector's requirements for massive imports of machinery and equipment. The capital goods sectors, in total, accounted for 38 percent of all imports, while semi-processed items were at 43 percent, for a combined total of 81 percent (U.S. \$9.7 billion) spent on production goods. In comparison, only 8 percent of imports were for consumer goods, including agricultural products (Tables 12 and 13).

Mexico's ability to service its debt, however, has improved as its oil income has expanded. Although the interest on its foreign debt has tripled since 1975 to close to U.S. \$3 billion in 1979 (equivalent to 2½ percent of GNP) increases in exports, together with correspondingly growing private capital inflows (including substantial inflows from Canadian banking institutions) have allowed Mexico to maintain net international reserves of U.S. \$2.9 billion or 2.5 months of imports and non factor services in 1979. This level is comparable with most industrialized countries' reserve ratios or their "ability-to-pay". For that reason, assisted by its great development potential, Mexico's international credit rating is deemed to be excellent.

Exports, in total, slipped to 71 percent of imports, down from 83 percent in 1978 but still up from only 53 percent in 1975, with agricultural products, extractive products, and transformation (semi-processed) industries continuing their historically rapid growth. In reality then, it was not so much the lack of export development as it was the incremental import growth that caused the shift in merchandise trade balances. Considering the continued emphasis to be placed on the expansion of Mexico's domestic industrial base in national planning, import growth will retain priority over trade

balance concerns. Despite mexicanization trends and other import access problems, therefore, Mexico will remain a growth market for export development.

Import growth is likely to have the most beneficial effect on Mexican-U.S.A. trade, given the strong interdependence between the two countries. Like Canada, Mexico's major supplier and customer is the United States, which holds an overwhelming 63 percent of all imports and receives almost 70 percent of all Mexican exports (although this latter figure is modified substantially by entrepot trade to Canada from Mexico). Japan has replaced Germany as the second largest exporter to the country, with 6.6 percent in 1979, only about one-tenth of U.S.A. levels, compared to 6.4 percent for the F.R.G. These two countries, in turn, have twice the exports to Mexico of the other major trading partners: France, Brazil, U.K., Italy, Spain and Canada (Table 15).

In response to the dominance of the United States on its economy, Mexico has emphasized improved bilateral trade with "designated priority" countries (Brazil, Sweden, Japan, Spain and Canada), each of which are among the top exporters to that nation. The attempt to diversify trade links, both in energy related Mexican exports and capital goods oriented imports, will present a substantial opportunity to the countries selected to improve their penetration of the Mexican market. Nevertheless, while not a priority trading partner in theory, in practice the U.S.A. will continue to be a formidable competitor in this country which "thinks American first". The United States is the major supplier of machinery and transportation equipment, agricultural products, crude materials (excluding fuels), chemicals, basic manufactures; in fact, all the primary S.I.T.C. trade classifications indicate the U.S.A. as the dominant trading partner. Any attempt at export market development by Canada, or any other priority or non-priority nation, must place its strategy within this highly developed, constraining framework.

D. CHARACTERISTICS OF CANADA/MEXICO TRADE

1. Trends in Canada/Mexico Trade

Having remained relatively stagnant for three or four years, two-way trade with Mexico increased dramatically during 1980. Our exports reached \$438 million, while our imports totalled \$345 million, an increase of 104% and 66% over the previous year's figures. While most of this increase is accounted for in products traditionally shipped to Mexico, even these demonstrate a response to Mexican investment programs, i.e. sheet and strip steel doubling to \$39 million over the previous year's figures and railway rails tripling to \$31.5 million (Tables 16, 17 and 18).

In 1980, the top three Canadian exports to Mexico were sheet and strip steel, railway rails and asbestos milled fibres, followed by Alberta winter wheat (excluding seed), evaporated milk and newsprint paper (Table 16). This export profile continues with milk powder and skim milk, locomotives, automotive parts and aircraft. Fully manufactured exports are surpassed by semi-processed or partially fabricated sales, with commodity purchases totalling 83 percent of all exports to Mexico in 1980. Of machinery and transportation equipment imports by Mexico, so prominent in the country's development plans, Canada's share in 1977 was 2 percent and has remained basically unchanged at that level, compared to 66 percent held by the U.S.A. in the same period. In no major sector is Canada Mexico's primary supplier. The forestry products sector is dominated by the United States, as is the crude fertilizer/minerals group and metal manufactures.

In summary, in 1980 Canada's exports to Mexico of \$438 million represented about 1 percent of total Canadian exports, making the Mexican market about as important in dollar terms as Poland, Cuba or Saudi Arabia. While Canada is Mexico's ninth largest trading partner both in terms of exports and imports (although in Statistics Canada data, the ranking improves to sixth in terms of imports and eighth in exports), Mexico ranks 20th as both an import and export market for Canada: third in Latin America (following Venezuela and Brazil).

2. Trade Policy Considerations

Despite the relatively small market share held by Canada in Mexico and the corresponding low ranking of Mexico in terms of Canadian trading partners, bilateral relations between the two countries have been strong and growing. From the beginning of relations and the establishment of diplomatic ties in 1944 and

a most-favoured-nation trade agreement in 1946, Canada-Mexico interactions have increased to the point where relations include cultural agreement (1976), annual exchanges of parliamentarians and officials, a Joint Ministerial Committee (1968), an Industrial and Energy Cooperation Agreement (1980) stemming from initiatives toward an Industrial Cooperation Agreement (1979) and an Energy Cooperation Agreement (1979) which were later linked together, an Agriculture Cooperative Committee (1980), and the Working Group on Trade (1981).

The well-developed bilateral ties, a proximity to each other on the North American continent, and a common reliance of the U.S.A. in trade and commerce have encouraged interest on the parts of both Canada and Mexico to use common objectives and relationships to further trade ties. To reach that end, Mexico has designated Canada as a priority country for energy-linked export development and has increased its penetration of the Canadian market as a result of its efforts. Canada, on the other hand, has only recently accelerated export development activities to Mexico in a concerted manner, in part because of increased awareness of that country through energy import linkages. Given the trend toward balanced trade or even a trade deficit with Mexico in the future as a response to oil import growth, Canada's efforts toward export marketing will become more necessary and desirable.

The strength of the bilateral relationship between Canada and Mexico represents an opportunity for trade development that could be capitalized upon. The presence of government national planning mechanisms, proportionately high import control by paraestatal enterprises, a preference for government-to-government negotiations and dealings, a large investment flow from 1980-1982 by governmental bodies, a general trend toward import liberalization while at the same time a preference for at least partial mexicanization, a growing M.I.C. economy, and most importantly a desirability for Canadian trade, therefore, makes Mexico a market for export development surpassing traditional rankings or import shares.

E. CANADIAN TRADE DEVELOPMENT ACTIVITIES AND INSTRUMENTS

1. General

Mexico's major oil discoveries, which have fuelled its subsequent leap into the rank of newly industrialized countries occurred in 1977, the same year in which President Lopez Portillo assumed office and ushered in a more coordinated and systematic approach to economic planning. Both events fostered a new Canadian interest in doing business with Mexico. For example, since FY 1976/77, Canadian business visitors turning to their Embassy in Mexico for assistance have more than doubled (575 in FY 1979/80), as have missions between Mexico and Canada (14 in 1979/80) and the Canadian presence at trade fairs in Mexico (5 in 1979/80). In addition from 1976 to 1979 the number of PEMD approvals in support of private sector marketing initiatives in Mexico increased from 8 to 34, a number higher than in any year since the formation of the PEMD program in 1971. The companies using PEMD funding concentrated their activities in the mining, forestry, oil and gas, agriculture, fisheries service machinery and electronics sectors of Mexico, reflecting a prior knowledge of the country's investment priorities. Tables 19 and 20 provide historical information of PEMD applications approved for Mexico as the primary target market.

Because of the recent growth of interest in, and exposure to, the Mexican market by Canadian exporters, a need exists to both familiarize potential Mexican customers with Canadian industrial capabilities and Canadian exporters with the "how to" aspects of doing business in Mexico. This requirement, together with the inclination of Mexico to "think American first", suggests that a selective publicity program in Mexico promoting Canadian capabilities could be usefully undertaken in conjunction with an active program of fairs and missions (Projected mission activity for 1981/82, with a heavy emphasis on incoming missions, is indicated in Table 21).

The recognition of Mexico's new oil-funded development potential has led to efforts during the 1977 meeting of the Canada-Mexico Joint Ministerial Committee in November 1977 to strengthen the bilateral relationship. Within that context, economic missions were exchanged in 1978 during which Mexican investment plans and projects were identified in specific sectors offering the best trade and industrial development opportunities to both sides. The potential Canadian export content associated with these activities could total several billion dollars, concentrated in such sectors as mining and processing, wood products and by-products, transportation equipment, agro-industry and food processing, equipment and services for petroleum and gas development petrochemicals,

telecommunications equipment, electrical power generation and transmission equipment and consulting services. All were determined to be areas in which Canada possesses the expertise, technology and capacity to increase exports to Mexico while also assisting in the development plans of the recipient country, and in that context were specified in the Energy and Industrial Cooperation Agreement signed during President Lopez Portillo's visit to Canada in May, 1980. Mexico clearly wishes to see the oil shipments (50,000 barrels per day) that accompanied the Agreement act as a catalyst in attracting Canadian investment and technology, as well as direct export sales.

The Agreement, and the number of ministerial and other high level visits that both preceded it and followed it, have created a tremendous reservoir of political goodwill that, given the considerable importance attached by Mexico to government dealings, can result in expanding Canadian exports to Mexico. The framework for economic cooperation that the Agreement provides had led or is leading to the formation of a number of sector specific cooperation agreements or committees (on urban transportation, space communications and agriculture) whose activities the Canadian side intends to structure to complement and enhance the Canadian private sector export effort. In parallel with such developments, the Mexican and Canadian chapters of the Canada-Mexico Businessmen's Committee (CALA) have increased their exchange of missions. One result of the process was evident in the Canadian side acting as the umbrella organization for a CANDU nuclear seminar to be held in Mexico in early 1981.

To augment the range of federal initiatives, Quebec and Manitoba have opened offices in Mexico City and, together with Alberta and Ontario, have organized provincial trade missions to Mexico. Furthermore, five Canadian chartered banks have established offices in Mexico and are major lenders to both the public and private sector of the country. All are willing to assist Canadian exports and can place their contact network at the disposal of exporters. In addition, the Bank of Montreal has established a joint development fund, called FOMECA, with NAFINSA which is intended to take equity positions in Mexico-Canada joint ventures. The positions it takes count as "Mexican" equity under Mexico's foreign investment laws.

2. Financing

Competitive export financing is an essential ingredient for the sale of capital goods to Mexico. The size of Mexico's development plans and its international creditworthiness,

backed by petrodollars, allow Mexico to obtain attractive financing packages. The French and Japanese have on several occasions offered heavily subsidized credit mixte financing.

Mexico has been and continues to be one of EDC's most active markets in terms of numbers of loan agreements signed and dollar volume of signing. Since 1961, EDC has signed 49 loans in Mexico, totalling \$399.2 million, the majority of which have been with Nacional Financiera, S.A. (NAFINSA).

During 1980, EDC's activities in Mexico have increased significantly with the signing of lines of credit with NAFINSA, Mexico's state development bank (\$500 million), CFE, the state owned entity responsible for power generation (\$25 million), and Industrial Minera Mexico, S.A. (IMMSA), a private group of Mexican mining companies (\$20 million). Ten allocations were made under these lines of credit valued in excess of \$63 million and, in addition, two loan agreements of \$6.11 million have been signed.

EDC currently has a pipeline of projects under consideration at various stages of development, totalling more than \$350 million (exclusive of the potential AECL nuclear project). Recently concluded transactions and those under active consideration cover a wide range of products including nuclear reactors, steel rails, locomotives, flight simulators, pulp and paper machinery, marine industries and mining equipment, and electrical power generation and transmission machinery.

Mexico remains a market where EDC is prepared to actively support and encourage Canadian exporters. With the promotion of EDC's various facilities, particularly lines of credit, the hope is that Canadian exporters will be in a position to take advantage of the sales opportunities that exist in both Mexico's private and public sectors.

As a middle income country, Mexico looks to International Financial Institutions (I.F.I.'s), as well as to its trading partners and own financial system, to fund its ambitious national development plans. I.F.I financing in Mexico has been concentrated in sectors such as fisheries, agriculture and sewage, water supply and irrigation systems where Mexican firms have the capability to supply the needed expertise and are aided in winning the contracts by the preference margins given to suppliers from the recipient country. Therefore, I.F.I financed projects have not been a factor in the Canadian export development effort. (A statement of the World Bank's current projects in Mexico is to be found in Table 22).

3. The Young Technicians Program

While not of their own right a part of Canada's export development tool kit, two other government programs are making a valuable, albeit indirect, contribution to Canadian exports while simultaneously contributing to technological development in Mexico. They are the Young Technicians Program of External Affairs and CIDA's Industrial Cooperation Program.

Since 1973/74, 91 Mexican technicians have come to Canada at the expense of the Department of External Affairs to spend training periods of several months with Canadian companies and public institutions (see Table 23). They have come from a great number of Mexican sectors and industries including the food, engineering, telecommunications, forestry, electronics, power generation, mining, pulp and paper, metals processing, transportation and electrical sectors. Canadian companies receiving the technicians have included Hawker Siddley Canada, Bell Canada, Northern Telecom, a number of leading Canadian forest product companies, Sydney Steel, Stelco, Ontario Hydro, Canada Wire and Cable, National Sea Products, Mitel and many others. Companies contacted believe the program to be highly useful as a long term market development instrument that encourages promising Mexican technicians to "think Canadian" by exposing them to Canada's industrial capabilities and to individual companies and products. Such training, unrelated to any immediate project or commercial prospect, can thus be viewed as valuable "seeding" for future market development. To further enhance the effectiveness of the young Technicians Program, however, companies contacted felt that they could usefully make an input into the selection of candidates being brought to Canada.

4. The CIDA Industrial Cooperation Program

As a middle income country, Mexico is eligible for assistance from the industrial cooperation program administered by CIDA. The tool offers several opportunities to combine the development interests of Mexico with the expertise of Canadian business through the process of:

- a) supporting the work of Canadian consultants in identifying joint venture linkages between Canadian and Mexican firms. Five studies in fisheries, forestry, agribusiness, transportation and housing have been undertaken;
- b) funding "starter" or pre-feasibility studies (6 studies in progress) and technical viability studies (3 studies funded) for the establishment of Canadian manufacturing plants in Mexico. This program has resulted in Glenayre Electronics going ahead with an assembly plant;

- c) distributing Canadian technical and professional journals to Mexican organizations which might benefit from technological development (30 publications were supplied to 100 addressees in 1980);
- d) contributing to programs of training and managerial assistance offered by CESO (consulting by retired executives overseas) and the FBDB (specialized training to individuals involved in industrial development and promotion).

Considerable scope exists to make better use of this program to meet Mexico's needs for technology and training while, at the same time, capitalizing on the export opportunities presented by such cooperation methods: both in direct funding for market development (a and b above) and in the techniques of market awareness (c and d).

F. PRIORITY SECTOR IDENTIFICATION AND SECTOR MARKETING PLANS

The analysis of the Mexican market and Canadian trade patterns in that market has identified a number of sectors to which the Mexican government accords priority in national planning and policy-making. Similarly, bilateral interaction between the two countries has produced a consensus about where Canadian expertise could be matched with Mexican development requirements. Such a "matching" process has also occurred in the selection of Mexico as a priority country, where sectors were ranked in terms of their potential for export growth. Finally, the U.S.A., Mexico's major trading partner, has identified sectors in which improved import penetration is possible, which, because of the commonalities in the industrial bases of Canada and the United States, would have special relevance to both Canada's perceptions of opportunities and also its awareness of its competitor's plans. Together, these inputs allow for the determination of a group of sectors for which the trade prospects are highest and the payoff to Canada the best.

Six product groupings: nuclear reactors, transportation: railway systems and urban transportation, telecommunications, agriculture, oil and gas and mining will be the focal points of specific marketing planning in the following sections of the export strategy for Mexico. Major projects, also high in the priority listing, cross many sectoral boundaries and are, to a large degree, dealt with in addressing the opportunities in the mining, oil and gas, urban transportation and telecommunications sectors.

The above priority sectors, by no means, represent the only areas of opportunity for Canadian exports to Mexico. As in the past, many of Canada's more traditional exports will continue to grow without the need for government assistance. On the strength, solely, of private sector initiatives, inroads will undoubtedly be made in non-traditional areas as well. Some sectors of promise for which promotional or exploratory initiatives by government are contemplated include automotive parts, agricultural machinery and thermal and metallurgical coal. With respect to resource trade generally, the market for metals and minerals is not considered as a high priority since Mexico produces most of the commodities that Canada does, and indeed, in non-ferrous metals is a net exporter and competitor in world markets. A small market for nickel and magnesium may exist but is of little real significance. Iron ore, steel and coal remain in demand in Mexico, but further sales may be limited by Mexico's rapidly developing, domestic facilities. Similarly, Canadian exports of asbestos are not expected to maintain present levels, in this instance because of associated environmental problems. However, Canadian companies are actively seeking business in exploration, mine development and mining equipment sales.

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The volume of wood pulp exports has been relatively small due to strong competition from Mexican mills and large producers in the southern U.S.A. The market for manufactured paper products is completely dominated by United States firms, many of which have subsidiaries in Mexico. On the other hand, Canadian newsprint exporters have historically been more successful (either as individual companies or through the export consortium, Canover Inc.), despite import licensing, a 15% tariff and restrictive policies pursued by the Mexican government purchasing agency, PIPSA. Mexico has been attempting to reduce dependence on imported newsprint by encouraging local companies to set up newsprint plants using bagasse or other agricultural wastes as raw stock. This has been a slow process over the years, but if and when the process becomes successful, Canada will undoubtedly lose its market share.

At the present time, Mexico is not a significant market for Canadian lumber, plywood or other primary wood products. Because of a substantial forest resource base, the domestic production of lumber and plywood has increased in recent years. This supply factor, as well as the presence of both high tariff levels and import licensing requirements, limit the ability of Canadian companies to increase their exports to Mexico.

1. Nuclear Reactors

Leadership responsibility for reactor export marketing rests with Atomic Energy Canada Ltd. (AECL). This paper therefore attempts to depict the Mexican market environment and the current Canadian marketing effort in recognition of the overriding impact that a reactor sale will have on our commercial and trade relations with Mexico.

a) The Mexican Nuclear Program

Mexico currently has two 650 MW boiling water reactors (BWR's) supplied by G.E. of the U.S. under construction at Laguna Verde. Construction is several years behind schedule.

In November 1980, President Portillo confirmed Mexico's intention to embark on a further nuclear program that would see 2500 MW of nuclear power in place by 1990 and fully 20,000 MW operational by 2000. In making that announcement President Portillo held up the possibility that Mexico would opt for a combination of technologies (i.e. light and heavy water reactors) as a means of maintaining a "broader margin of operational flexibility and technological self-determination".

Current expectations envisage that in the spring of 1981 Mexico will put out bids for anywhere from two to four reactors with a combined capacity of 2000-2400 MW. The Canadian content of this initial phase of the Mexican program could be as much as \$1 billion per unit. It is expected that bids will be due by mid-1981.

The size of the Mexican nuclear program, even allowing for possible reduction and a stretched out timetable, is such that orders would be placed throughout the 1980's. At the same time there is little doubt that the successful bidder on the initial units to be awarded in 1981 will be in a predominant position to obtain the lions share of any remaining business.

As announced, Mexico's nuclear program is slated to be larger than the present Canadian program and is to be completed in 20 years whereas the Canadian program will have been achieved in 30 years. That notwithstanding, Mexico is clearly intent upon ensuring that the program maximizes the manufacturing and technology transfer opportunities for Mexican industry and the employment prospects of its burgeoning population.

b) The Canadian Industry

Canada was one of the first countries in the world to embark on a program of nuclear power generation. The product of over 30 years of research, the CANDU system has proven its worth with 11 commercial power reactors in operation (nine in Ontario, one in India and one in Pakistan) providing 6000 MW of installed capacity. The CANDU's record of reliability is outstanding. In 1979 four Canadian reactors ranked in the world's top ten in terms of capacity availability. Insofar as lifetime performance of the world's reactors is concerned, six CANDU's placed in the top ten, with the Pickering #2 unit ranked number one. Studies done by Ontario Hydro have demonstrated that the CANDU, in terms of unit energy cost, is competitive with the pressurized light water reactors (PWR's) which dominate the world market. The CANDU's on-power fueling system and its use of heavy water moderator and natural uranium fuel offer unique advantages in terms of high reliability, low fuel costs and flexibility in fuel sourcing. The system's safety record is excellent and compares favourably with that of other reactor types. Canada's large uranium reserves, our established expertise in the exploration, development and processing of uranium, and the relative simplicity of CANDU fuel fabrication are such that, in selling reactors, Canada is in a more advantageous position than its principal competitors to offer CANDU buyers security of fuel supply and/or self-sufficiency in the entire fuel cycle. Doing so requires a coordinated effort from AECL and a combination of uranium mining companies and private sector fuel fabricators.

Some part of the manufacturing and construction cycle is currently underway for fourteen Canadian reactors and three export reactors (one in Korea, one in Argentina and one in Romania) with a combined capacity of over 11,000 MW. By 1983, work will be completed on all but eight of the Canadian reactors.

With the exception of the now undersized Indian and Pakistani reactors, all CANDU export orders have been for the 600 MW product. Economies of scale are such that Canada's principal competitors are increasingly exporting and/or building reactors of 900 MW and 1200 MW. That notwithstanding, the smaller 600 MW unit does offer greater flexibility. It is more readily married into the moderate size power grids of many countries and when outages occur their relative impact on power generation systems of limited capacity is less severe than for the

900 MW unit. Mexico has stated that it is capable of absorbing reactors that are of current "world scale" size, i.e. 1200 MW.

Atomic Energy Canada Limited (AECL) has spearheaded Canada's research and design effort in nuclear power. The size and importance of Ontario Hydro's nuclear program (which sees roughly one third of its power generated from CANDU reactors) has resulted in that organization also developing its own design for reactors capable of generating 750 MW or 850 MW. Four 750 MW units are in operation (the Bruce A units) and have been performing very well. A further four 750 MW units (Bruce B) and four 850 MW units (Darlington) are under construction - all in Ontario. Hydro's design for the 750 MW and 850 MW reactors is based on their being built in clusters of four units (also true for the smaller 540 MW Pickering units) with the four units sharing common facilities (vacuum building, fuel handling and storage systems, turbine building, intake and outlet structures for cooling water, control centre). This feature and the phased but uninterrupted construction of four units at a time have resulted in economies of scale benefits.

Ontario Hydro (which until 1981 will remain Canada's only operator of CANDU's) has done all its own project management which has meant that AECL and Canadian industry has had to play a sub-contracting role and to rely on export orders and other domestic business (from Hydro Quebec and New Brunswick Power) to build up their project management capabilities for CANDU reactors. A substantial and stepped up CANDU export program will require the effective utilization of all the expertise available from AECL, provincial utilities and the private sector. The smooth progress of construction at the Wolsung CANDU site in Korea is demonstrating that a cooperative Canadian effort works.

The design of the CANDU system permits maximum participation of the Canadian capital goods industry as it does not require the total range of capabilities that only a large fully integrated producer of power generation equipment can offer. This feature of the CANDU design has minimized capital investment requirements and greatly facilitated domestic manufacture (Canadian equipment content of CANDU is roughly 80 percent), a situation which is attractive to foreign customers interested in technology transfer. It has also perpetuated a fragmentation of the Canadian nuclear manufacturing industry. Together with the dispersion of Canada's nuclear reactor design and project management capability,

this poses unique problems and challenges in terms of risk assumption and project management in pursuing export business. Efforts to confront the challenge include the creation of the Organization of CANDU Industries or OCI (representing the private sector) in June 1979 and the formation of a joint export marketing committee consisting of representatives from AECL, OCI, public utilities and Industry, Trade and Commerce.

There are currently about 60 major Canadian suppliers of equipment to the CANDU system including one or two manufacturers of each of the major components of the system. The companies range in size from 15 to 3,000 employees with approximately two thirds of the firms being located in Ontario and most of the remainder in Quebec. Many are foreign owned but all are free, subject only to government export licenses, to export CANDU equipment. With very few exceptions, none of the companies rely exclusively on nuclear business as they are manufacturers and suppliers to a range of machinery user industries. The industry estimates that it is capable of producing the equivalent of 5 to 6 reactors per year. Its current capacity utilization is about thirty-three percent.

c) Canadian Marketing Activity to Date

The possibility of Canada entering into a program of nuclear cooperation with Mexico in return for the supply of Mexican oil to Canada was first broached by Canada during an April 1978 ministerial mission to Mexico. The concept was given further impetus by an exchange of letters later in the year between Prime Minister Trudeau and President Lopez Portillo. Subsequently in January 1979 the Minister of Energy, Mines and Resources (EM&R) led a mission of Petrocan, AECL and EM&R officials to Mexico at which time agreement in principle was reached on an Energy Cooperation Agreement later incorporated into the Industrial and Energy Cooperation Agreement signed in May 1980. The agreement did not commit either side to a program of nuclear cooperation but did engage both countries in a program of further study on the prospects.

In December 1979, AECL concluded an agreement with Mexico's state owned electricity monopoly (CFE) whereby AECL undertook to study how a CANDU program could be implemented in Mexico. The study looked at site location, CANDU design and economics, manpower requirements, the construction in Mexico of a heavy water plant, and Mexican participation in the production of CANDU reactors and fuel. Research and development in support of these activities and the possible installation of AECL research

reactors in Mexico were also discussed. The study (completed in June 1980) concluded that the CANDU system is eminently suitable for Mexican conditions and envisaged the construction in Mexico of a heavy water plant and the phased Mexican participation in the manufacture of CANDU fuel and CANDU components. The reference CANDU nuclear power station for the study was a 2 x 600 MW station. A technical description of a 4 x 850 MW unit CANDU station and a 2 x 950 MW station was also included.

Since completing its study AECL personnel have visited Mexico on numerous occasions. AECL has learned that CFE is very pleased with their detailed analysis of the mexicanization possibilities of a Mexican CANDU program. Mexico has stated that it is placing more emphasis on the "mexicanization" aspects of a nuclear purchase than on the different technical parameters of the available reactor systems - although the relative energy independence offered by the ability to use their indigenous uranium to directly fuel CANDU, as well as economies in operating costs may pre-dispose the Mexicans towards a heavy water reactor. Mexico's proven uranium reserves are not large but the potential appears significant and EM&R officials have visited Mexico on several occasions during the past year. Mexican uranium mining officials are aware of Canada's willingness to transfer uranium exploration, development and processing technology. A joint EM&R/Eldorado invitation to have exploration, mining and uranium processing experts from URAMEX (the State uranium monopoly) visit Canada is outstanding. The same applies to an AECL invitation to URAMEX fuel fabrication personnel.

During the visit to Canada of the Mexican Minister of Resources and Industrial Development in October 1980, Minister Oteyza met with Energy Minister Lalonde, the Minister of State for Trade, Mr. Lumley, Premier Davis of Ontario and the President of AECL all of whom renewed Canada's interest in embarking upon a program of nuclear cooperation with Mexico based on CANDU sales. That was also a major theme of the Joint Ministerial Commission meeting held in Mexico City in early January 1981 at which time AECL announced its intention to open an office in Mexico City. The Canadian delegation to that meeting was headed up by Ministers Lalonde, McGuigan and Lumley.

Minister Oteyza's visit in October 1980 (during which he was accompanied by senior officials from CFE and URAMEX who visited the Bruce generating station) also served as the occasion for:

- (1) OCI to restate its commitment to a substantial transfer of manufacturing know-how to Mexico by building up a broadly based nuclear industry on the Canadian model of a relatively large number of smaller manufacturers (as opposed to the French approach of transferring a monolithic essentially indivisible "nuclear factory").
- (2) The Mexican side to indicate a strong desire for Ontario Hydro involvement in a nuclear program with Canada because of their project management engineering and training experience. (Both Hydro and Canadian universities have stated their willingness to participate in training programs in Canada and Mexico while Hydro has further indicated its willingness to transfer its project management expertise. AECL is prepared to participate in engineering training).

As a follow-up to these activities AECL and the Canadian government supported the Canadian Association for Latin America (CALA) in its organization of a technical seminar on the CANDU system. Held in Mexico City in mid-February and jointly sponsored by the Mexican Academy of Engineers, the seminar was opened by Minister Lumley and included technical papers by AECL, OCI, Ontario Hydro, the Atomic Energy Control Board, Energy Mines and Resources, Eldorado Nuclear and others.

Attended by over 150 participants from Mexico's influential engineering community including the deputy minister of Energy and the directors general of CFE and Uramex, the three day seminar was considered a great success. In concert with and immediately preceding the seminar, the Organization of Candu Industries with ITC support, put together a 5-day mission to Canada of eight Mexican engineers and industrialists including a representative of Mexico's industrial development bank. The visit included tours of AECL's facilities, the Pickering power plant and a wide selection of Canada's nuclear component manufacturing facilities. Hydro Quebec and Ontario Hydro are also moving ahead in their discussions to establish technical cooperation agreements with CFE.

d) Further Considerations

In selecting its nuclear partner or partners, the Mexican government will inter alia take into consideration the following factors:

- the degree of industrial and technical cooperation that Mexico can expect to receive;
- the national reliability, capability and technical competence of the chosen supplier;
- Mexican comfort in its economic relationship with its chosen partner, i.e. the degree to which Mexico does not feel it would be overwhelmed by the economy of its partner;
- the competitiveness and technical advantage of the system chosen.

However, it is expected that price considerations for the first units will be paramount. In order that Canada can respond in time and in a comprehensive and coordinated fashion to the Mexican nuclear purchase timetable, a special bid preparation task force under AECL leadership and consisting of OCI and Ontario Hydro representatives has been established. Communication channels on financing have been opened with EDC and steps taken to initiate discussions on a nuclear safeguards agreement with Mexico.

In pulling together the Canadian bid, to be primed by AECL, the bid preparation task force will address the following issues:

- (1) The size of the CANDU to be offered in Mexico;
- (2) The division of contractual responsibilities between AECL, Ontario Hydro and Canadian industry;
- (3) The composition over time of the Canadian package in terms of such items as:
 - i) the supply of a heavy water and/or heavy water plants;
 - ii) the supply of uranium and/or fuel fabrication facilities;
 - iii) assistance in the development of a Mexican uranium exploration and development program;
 - iv) the timing and extent of technology transfer in the manufacture of CANDU components;

- v) training programs for a wide variety of personnel including the training by AECB of Mexican government officials on the regulatory process to licence the CANDU for safe operation;
- vi) ensuring that the CANDU offered to Mexico can be designed to meet Mexican seismic requirements;
- vii) assistance to Mexico in nuclear research and development programs.

2. Transportation Equipment and Services

2a) Urban Transportation

a) The Opportunity

Opportunities to supply urban transportation equipment and services to Mexico focus on expansions of the Mexico City Metro, totalling some 300 kilometers, a proposed light rail vehicle system in Tijuana and eventual new rapid transit systems in Monterrey and Guadalajara. These last two cities with populations of over 2 million each have virtually no publicly owned transportation systems. They are now studying the costs and benefits of expanding transit service and are comparing the relative merits of alternative modes such as street cars, trolleybuses and subways. The trolleybus system in Mexico City is being enlarged although continued expansion has run into opposition and could be influenced by past cost overruns. A decision to proceed may nevertheless offer supply opportunities for up to 2000 trolleybuses. A number of the above developments could be preceded or accompanied by a requirement for new computerized traffic control systems. An eventual billion dollar sub-urban "ring railroad" around Mexico City has been planned but is not likely to proceed in the near term.

The rubber wheeled Mexico City Metro, through two construction phases, now has 40 kilometers of line operational and 42 kilometers under construction (Phase II), with complete operational readiness expected by late 1982. Major decisions on Phase III of the Mexico Metro are to be announced this year. In mid 1980 it was expected that Phase III could involve as much as 30.3 kilometers of new lines and 14.7 kilometers of extensions to existing lines.

In early 1981 the Mexican authorities decided that Phase III would consist of one new line of 12 kilometers and about 12 kilometers of extensions, offering about \$200 million in Canadian equipment and service supply prospects.

In summary the Mexican market for urban transportation equipment and services offers hundreds of millions of dollars of business for Canadian companies. In Mexico, as elsewhere, the gestation period for urban transportation projects is lengthy. Only over a period of years will projects emerge from

the planning stages to offer concrete equipment and services supply prospects. When they do the system approach to metro and LRV programs is such that Canadian efforts in these areas will require leadership from Canadian consultants (i.e. systems packagers) such as BTM and the Urban Transportation Development Corporation (UTDC).

b) The Canadian Industry

By the late 1970's decades of Canadian urbanization (with 75 percent of the Canadian population now living in urban centres) had provided significant incentives to the development of a comprehensive Canadian urban transit industry. Growth rates through the decade were such that the industry today produces a wide range of products including buses, trolley coaches, streetcars, light rail vehicles (LRV's), several types of heavy rail vehicles (including new advanced intercity, high speed banking trains and bi-level commuter cars), intermediate capacity transit systems, automatic vehicle monitoring and control systems, computerized traffic control and power distribution systems.

The industry is fragmented with eight established vehicle manufacturers, twenty manufacturers of major vehicle control sub-systems, and some two hundred and forty suppliers of components. Of all these companies only three are entirely devoted to the production of urban transportation equipment. Vehicle production over the 1970's decade approximated \$800 million, while vehicle exports which had been negligible until 1975 exceeded \$350 million in the five year period ending in December 1980 (split roughly 65-35 between rail cars and buses). The U.S.A. remains the major export market.

The industry's research and product development efforts, with activity focused at North America's only fully operational Transit Development Centre in Kingston, are considerable. Two new LRV designs are in progress as are new articulated bus and trolley coach designs. New product developments are also underway in the area of automatic controls, communications, traction power and computerized control and information systems.

Canadian companies using a combination of foreign and domestic technology and manufacturing to demanding North American standards have achieved a level and

range of technological development that now allows Canada, not just to export vehicles and other systems components, but to seriously pursue the export of complete guided and electronic systems without foreign input. Together Canadian transit authorities and consultants have demonstrated their competence in the planning, design and commissioning of new transit facilities whether it be in metros, new light rail vehicle systems or the integration of urban transportation modes over large areas. The challenge will be to put this capability and the widely dispersed manufacturing abilities into exportable "system packages". The foreign source of technology may in some instances limit the ability of Canadian firms to engage in technology transfer programs offshore.

c) Canadian Activity to Date

1. Metros and Rail Systems

The Urban Transportation Development Corporation (UTDC) of Toronto has since 1976 been pursuing business in Guadalajara and has completed one preliminary study on that city's transportation requirements. A UTDC proposal of January, 1979 to proceed with a more comprehensive study on routing and optimal modes has not been taken up by the city. A joint Bombardier-Bureau de Transport Metropolitan (BTM) proposal for a light rail vehicle system for Tijuana which was recently before that city's government has been deferred. Canadian consultants have also demonstrated their interest in Mexico City's suburban train (ring railroad) while Hawker Siddeley Canada has organized and been prequalified to lead a Canadian equipment consortium for the project. For the time being the project does not appear to be high priority. For Phase II of the Mexico City Metro, Canadian firms notably BG Checo, Spaulding Fiber, Canadian Steel Wheel, Candian Steel Foundries and Sidbec managed to win a number of small orders totalling about U.S. \$10 million or 5 percent of the value of equipment imported in 1978 for Phase II. A larger Canadian effort to win more orders floundered in mid 1978 on the inability of the Canadian side to present a unified offer with a comprehensive financing proposal competitive with the highly concessional French package.

Canadian equipment prices were in many instances well below those of the French competition and a total package, if it had been put together, might have been on even terms. As it turned out, a Grupo Industrial Canadiense para el Metro was eventually formed, but too late in the day to challenge the French. The Canadian effort also suffered throughout from a lack of leadership; several potential Canadian suppliers in fact refused to have anything to do with one another and Grupo Industrial existed more in name than in fact.

When it became apparent that 1980 would see a go-no go decision on the proposed Phase III expansion, the Canadian marketing effort picked up and quickly became part of the high level effort to strengthen relations between Mexico and Canada. Transportation equipment was identified under the Energy and Industrial Cooperation agreement of May 27, 1980, as one of the priority sectors where there was potential for both Canadian exports and technology transfer. Minister Lumley's June 1980 mission to Mexico therefore led to the creation of the Canada-Mexico Joint Commission on the Mexico Metro. The Mexican side of the Commission is chaired by the deputy minister of the Secretariat of Patrimony and Industrial Development and includes representatives from the Sistema de Transporte Colectivo (the metro operator), COVITUR (the organization responsible for metro design, construction supervision and procurement), and Constructora Nacional (the government owned monopoly manufacturer of rolling stock). The Canadian side is chaired by Barry Steers, ADM, Trade Commissioner Service and International Marketing and includes two representatives from ITC as well as senior representatives from the Bureau de Transport Metropolitain and the Canadian Railway and Transit Manufacturer's Association. Together, the exports of BTM, Bombardier and B.G. Checo would account for an important share of any Canadian participation in Phase III expansion.

The commission first met in Mexico in July 1980. That meeting was instrumental in identifying the basic ingredients required of a successful Canadian bid for business under Phase III, namely

- i) a competitively priced and quality product package;
- ii) effective and substantial technology transfer to Mexico over the construction period of Phase III;
- iii) a competitive financing package.

It was also readily apparent that political considerations would weigh heavily in the selection of the winning country bid.

A list of COVITUR's equipment import requirements for Phase III was also obtained in early September. Based on that list BTM, working in close collaboration with ITC, put together a budgetary proposal for Phase III (not yet fully defined) that under the umbrella of the Joint Commission was presented to the Mexican side in early October 1980.

The proposal offered: a comprehensive BTM service proposal starting with overall planning, design and project management and going right through to the supervision of installation and the training of operations personnel; the Canadian supply industry offered short term delivery of critical equipment with varying degrees of technology transfer and mexicanization in other areas; and a joint EDC/Bank of Montreal "indication of interest" to the effect that "every effort will be made to provide long term financing" in support of the Canadian offer. The mexicanization aspects of the offer featured BTM (services), Bombardier (rolling stock), and B.C. Checo (fare collection systems, train control systems and electrical power sub-stations). As such it covers an important share of the total foreign component. Mexican self-sufficiency is held up as the target.

The Mexican side responded positively to the substance of the Canadian offer which was subsequently up-dated to coincide with the final project definition.

During his visit to Mexico in January 1981 as part of the Canadian delegation to the Joint Ministerial Commission and on his trip to Mexico in early February, Minister Lumley met with senior officials involved in the metro program in order to support participation of Canadian companies in the project. In so doing he stressed the Canadian government's confidence in the ability of Canadian firms to supply in collaboration with Mexican partners wherever appropriate the services and equipment for a quality subway system.

At the end of February strong proposals by a number of Canadian firms yielded positive results. B.G. Checo was awarded a contract to supply \$1 million in fare collection systems for subway extensions. BTM signed an agreement with COVITUR, the engineering arm of the Mexico City Metro, to provide that firm with engineering design and project management services (valued at \$1 million) for metro ventilation and for a unique system for placing subway track on a concrete base in subway tunnels. Most spectacularly Bombardier Inc. won a \$100 million contract to supply twenty subway trains of nine coaches each for new lines of the Mexico City Metro. The latter transaction, Canada's largest ever export order for urban transportation equipment, was announced when Mexico's Secretary of Commerce, Jorge de la Vega Dominquez arrived in Canada on February 26 at the head of a team of Mexican trade officials.

The establishment early in the year of a Canadian financing facility to match the credit mixte financing of some other industrialized countries contributed significantly to a stepped-up marketing effort by Canadian companies as they knew that Canada could, if necessary, match another concessional French financing package.

Parallel to these efforts, ITC encouraged BTM to apply for a \$25,000 CIDA grant to explore the requirements for subway car components for Constructora Nacional, as presented to the Mexico Canada Joint Commission. BTM engineers have discussed these with Constructora Nacional and have had discussions with component suppliers in Canada.

2. Trolley Coach Purchases and
Traffic Control Systems

In 1977 the Mayor of Mexico City, Professor Hank Gonzalez announced a plan to improve city traffic conditions by creating 34 "ejes viales" or cross-town streets (17 north-south and 17 east-west), each of which would have a reserved lane for trolleybuses. This plan has run into opposition from rate-payers' groups along the routes and also from private bus operators opposed to an expanded publicly owned trolleybus system. Work is still continuing on the widening of 15 designated streets. The first lot of 500 trolleybuses for this program were of traditional "Made in Mexico" design and built by a state owned bus manufacturer. These trolleybuses did however employ new electric traction motors supplied by Mitsubishi of Japan. In anticipation of an expanded program a private company, CASA has begun negotiating with foreign manufacturers prepared to enter into a joint venture for bus production. In line with the thinking of Mexico City authorities the preference is for an articulated unit with wide doors. CASA has looked at a number of designs from different countries, including Canada, but given the uncertainties of the trolleybus expansion program no decision has yet been taken. An Hungarian company, ICARUS, looks to be the front runner. Brown Boveri, Switzerland, in collaboration with Icarus, has offered to supply electrical systems of which part, the chopper controls, could be made in Mexico. Icarus has offered to supply fully made-up units at the beginning and then to hand over the manufacture of the complete bus to CASA by gradual stages, supplying only parts as necessary. Should the trolleybus program proceed approximately 1500 to 2000 units would be required.

d) Canadian Success Stories

The recent and major breakthroughs for Phase III have already been discussed above in some detail. With respect to the \$10 million of business that Canada obtained for Phase II the success of Spaulding Fibre in selling moulded fibre glassinsulators and of B.G. Checo in supplying fare collection systems are of particular note for several reasons. Both companies improved the product, the initial

technology for which was supplied by the French for the Montreal Metro. Both companies also engaged in technology transfer programs with Mexican firms and were aggressive and persistent in their marketing efforts. B.G. Checo's in-house training program on the use, maintenance and overhaul of its equipment has demonstrated their commitment to technology transfer and contributed to their winning in January 1981 a contract to supply over \$1 million of turnstiles for extensions to existing lines.

e) Market Impediments

Mexico's own industrial development priorities place considerable emphasis on the Mexican content of major capital projects including those in the urban transportation sector. Mexicanization considerations do not pose insurmountable barriers - they do however pose challenges to Canadian industry to ensure that their technology is adequately paid for and that any direct investment receives an economic return. Market size considerations have to be taken into account and a Mexican partner carefully chosen. Furthermore, the Canadian firm may have to balance similar technology transfer demands from other countries in the region. The local content question nevertheless has to be addressed.

The financial position of Mexico's cities is such that funding is critical to the launching of metro and LRV transit systems. In turn the timing of a Canadian marketing effort must simultaneously coincide with and contribute to the availability of funding. The funding question together with the highly competitive nature of the export market for urban transportation equipment creates an environment in which the use of subsidized financing is likely. This was most definitely the case for Phase II of the Mexioc City Metro (details below).

f) The Competition

France, Canada, Britain and Japan all bid on Phase II of the Mexico Metro. Mitsubishi on the strength of a good mexicanization package and playing on STC's desire to diversify away from the French (who also did Phase I) won \$50 million of business for the supply of chopper controls and traction motors. On the remainder of the project the French made a strong

technical and unified proposal tied together with a highly concessional financing package on which sources in the trade have provided the following details:

Equipment - 993 million francs (U.S. 215 million)

- 20% (U.S. \$43 million) at 3½% fixed interest, 4 years grace, 16 years to pay.

From French Government

- 80% (U.S. \$172 million) at 7% fixed interest, 3½ years grace, 10 years to pay.

From commercial banks with COFACE guarantee.

In addition the French financing protocol stipulated that to access one dollar of local cost financing (also supplied by France) Mexico had to buy one dollar of French equipment.

There is evidence to suggest that the Mexican government is not happy with the degree of technology transfer under Phase II which on equipment Mexican sources favourable to France have nevertheless placed as high as 50 percent. While political considerations and technology transfer are playing an important role in the awarding of Phase III business, Mexico City's financial condition may make it hard for the administration to ignore a concessional package. France, of course, remains the principal competitor for Phase III.

In Guadalajara and Monterrey companies from Germany, Japan, Belgium and France have all been active.

g) The Action Plan

Competitive financing, technology transfer, timing the Canadian marketing effort to coincide with and contribute to the availability of funding for mass transit projects; going the systems route, making the most of the political dimension of the Mexico-Canada relationship, and further selling Canadian capability will be necessary ingredients of a successful Canadian marketing effort the principal elements of which are mapped out below:

1. ITC will continue to liaise with Bombardier, BTM, B.G. Checo and other Canadian suppliers of equipment identified by COVITUR as being needed for Phase III. They will be encouraged to establish early and close contact with EDC in order that all Canadian offers for Phase III would be covered in whatever Canadian financing package would prove necessary to meet the competition.
2. Canada has achieved a reasonably high profile in Mexico's urban transportation community. Success on future projects will require an on-going and strong Canadian presence in the Mexican market over the next 2 to 3 years. Within that context Canada's proposal made in the fall of 1980 to expand the mandate of the present Joint Commission on the Mexico Metro to cover other areas of public transportation has been accepted by Mexico. During the Joint Commissions deliberations emphasis will be given to obtaining readings on when sufficient Mexican financing to allow Mexico's various mass transit projects to proceed can realistically be expected. Given that the Mexican federal government would almost certainly be involved in funding such projects the commission should be a most suitable vehicle for this purpose.
3. Given the critical importance of financing to urban transportation projects EDC will, as appropriate, continue to be a participant on the commission. Canadian industrial participation can be changed in accordance with project opportunities while still giving priority to systems packagers. EDC will be urged to leave all its funding options open.
4. Metro and LRV Missions, either to or from Mexico, will be mounted to coincide with the timing of identified projects and joint venture initiatives. Care will be taken to ensure that the Mexican authorities have an appreciation of the full range of Canadian capabilities in the public mass transit sector including UTDC's light rail transit system. Priority will be given to ensuring that a newly created task force of Mexican officials and industry studying transit technology are invited to Canada.

5. Taking into consideration the importance of Mexicanization and the need to maintain momentum in the Canadian marketing effort into the next presidential administration it is proposed that the Department arrange for a detailed study on the ability of Mexican industry to locally manufacture public mass transit equipment. Recognizing that the transfer of Canadian technology and manufacturing know how to Mexico is likely to take place only as part of a larger Canadian participation in Mexican mass transit projects the study will further refine available information on the probable size and timing of Mexico's various urban transportation projects. CIDA financing for this study will be sought. Groundwork for the execution of the study will be worked out with the Mexican authorities through the Joint Commission. In addition to identifying potential manufacturing partners for Canadian firms the study should also seek to identify the actual levels of Mexican content and technology transfer carried out by the French for Phase II of the Mexico City Metro.

6. ITC will follow-up with BTM regarding disseminating their report on Constructora's requirements to components for subway cars to the urban transit industry. Consideration will also be given to organizing a mission of component suppliers to visit Constructora - perhaps in conjunction with suppliers of components for railway cars.

2b) Equipment and Services for the Mexican Railroads

Introduction

Canadian transportation consultants and the larger Canadian railroad equipment manufacturers have been successfully selling to Mexico for many years. They know the dynamics of doing business in Mexico (one of our most important markets for railroad equipment and services) and follow developments there closely. For these reasons the sector is not one requiring a substantial and sustained program of export market support by the Canadian government. Market maintenance considerations and ambitious expansion plans by the Mexican National Railroad are nevertheless such that a useful government role is envisaged in keeping the Mexican authorities aware of the fact that Canada's railway technology is "state of the art". Such an experience would also have a beneficial spillover into the urban transportation sector where a very active Canadian government role is envisaged and which involves a number of the same Canadian exporters.

a) The Opportunity

A large proportion of Mexico's forty thousand kilometers of rail lines were built in the late 19th and early 20th century by foreign concerns. The roadbeds and track have had only cursory maintenance attention since their original construction. In addition, because of Mexico's mountainous terrain, many lines were built with only a single right-of-way and are now insufficient to handle expanded traffic volume. Moreover the curves and slopes of the rail lines are not able to handle longer trains of greater weight.

Mexico's on-going economic boom is placing intolerable burdens on the whole system to the point that economic growth itself is being hampered. A major one billion dollar plus railway modernization program was launched in 1976 with the help of \$100 million of World Bank financing. The program, which was to have run from 1979 to 1982 is still far from complete. It calls for 660 kilometers of track renewal, the renovation of 400 kilometers of principal traffic lines, the reballasting and re-sleeping of worn out track, bridge strengthening, realignment and improvement of track, improvements to stations, terminals and marshalling yards, construction of workshops and depots, improvements of

signalling and telecommunications facilities and the purchase of 233 new diesel locomotives, 5,000 freight cars, 315 cabooses, 30 mail vans and 271 passenger coaches.

Identified import supply opportunities cover new diesel locomotives, repair parts for existing units, passenger cars, specialty freight cars and components, rail track maintenance equipment, signalling and telecommunications equipment, and a range of consulting services.

b) The Canadian Industry

The larger railway related companies most actively involved in the Mexican market are: Bombardier, Rail & Power Products Division (Montreal), whose principle products are locomotives and parts; Hawker Siddeley Canada, Trenton (Trenton, N.S.) and Canadian Car (Thunder Bay, Ontario) Divisions are leading Canadian suppliers of freight and passenger cars; Sydney Steel Corporation (Sydney, N.S., one of Canada's two rail producers; and Canadian Pacific Consulting Services and CANAC, respectively the consulting arms of Canadian Pacific and Canadian National Railways. These companies are all experienced exporters and have been active in the Mexican market for some time. Other than Hawker Siddeley which has its parent in the U.K., they are Canadian owned companies. All have developed their own technology know-how which is state of the art and which they are generally free to transfer to others as they see fit. In addition to these "major players" there are about a dozen smaller companies pursuing business in railway signalling, training equipment, track equipment, various railway equipment components and consulting. These companies are generally less experienced in the market, have limited resources, and therefore depend more heavily on government support.

c) Canadian Marketing Activity to Date

Canada has been a major supplier to the Mexican Railways for several decades and it is recognized locally as a leading manufacturer of locomotives, rolling-stock, rails and other equipment. Over the past 10 years, Mexico has purchased C\$80 million worth of Canadian built locomotives and parts (the vast majority of this sum being the most recent sale

of 72 locomotives by Bombardier-MLW), passenger and freight cars worth another C\$80 million, and rail and track equipment worth C\$75 million.

In addition to the above sale of locomotives by Bombardier- MLW, Hawker Siddeley Canada in 1978 completed delivery of an order of 200 cars for first class passenger service. Sydney Steel has traditionally won contracts to supply rail and has, within the last six months, sold C\$10 million worth of products. The sales of all three companies have enjoyed the financing support of the Export Development Corporation. In a similar vein Canada's two railroad consulting companies (CANAC and CP Consulting) have done business in Mexico and remain active in pursuing further business.

In September 1978, the Canadian Embassy in Mexico in collaboration with the Transportation's Industry Branch of Industry, Trade and Commerce, and the Mexican Secretaria de Comunicaciones y Transportes, organized a highly successful Canada-Mexico railway seminar to present the latest development in railway construction techniques, car design, quality testing, train location systems and administration. Papers were presented by representatives of ten Canadian companies. This event served to emphasize Canada's formidable advances in railway technology and occurred at a propitious moment as Mexico began a period of extensive railway modernization and equipment acquisition.

d) The Competition

Mexico's National Industrial Plan has identified locomotive manufacture as a priority area for industrial development and prescribed fiscal incentives to encourage investment. General Electric of the U.S. has recently entered into a controversial 10 year contract with Ferrocarriles Nacionales, Mexico's state owned railroad, to assemble 100 locomotives per year. That number is in excess of Mexico's annual requirements. It remains to be seen how quickly and with what degree of Mexicanization that agreement will proceed. Its ultimate significance may prove to be more as an American marketing tool than a Mexican industrial development instrument. The market will undoubtedly be reserved for, or at least give priority to, Mexican supply.

With respect to passenger cars the situation is not dissimilar. Constructora Nacional de Carros de Ferrocarril, the state owned manufacturer of freight, passenger and metro cars is very anxious to obtain designs and technical assistance for the building of first class passenger cars. A Japanese firm, KINKY has only just concluded such an agreement with Constructora which had several years ago attempted to negotiate a similar contract with a Canadian firm. There is little doubt that Constructora will have a monopoly on passenger car construction in the foreseeable future.

In spite of a domestic manufacturing capability, Mexico still imports specialized types of freight cars, and Canada has been a supplier at times. Constructora is well equipped for the building of standard box cars, flat cars, gondolas, tank cars, and cabooses. In fact, during 1978, it sold about 1500 box cars to the United States, half of U.S. imports that year. Constructora's freight manufacturing capacity is about 5000 units per year and imported parts make up roughly 50% of each car's value. Some more information on the nature of this parts business and any Canadian efforts to win some of it would be useful. Here again, although Constructora possesses the basic expertise necessary, there is some scope for developing a long term relationship based on the supply of designs and manufacturing know-how from Canada. In the late 1950's the Canadian industry did provide technical assistance to Constructora when it was first created and Canadian manufacturers continue to enjoy a high reputation.

With respect to rails, an expanding Mexican steel industry should soon be technically able to produce rails. The economics of doing so, given the need to look beyond Mexico's relatively small domestic market, may delay any such project. In the meantime Japanese and U.S. suppliers remain the principal competition. Recent U.S. dumping is also of some, but probably transitory, concern.

e) Market Impediments

As apparent from the above, rapid mexicanization of production remains the major challenge facing Canadian suppliers to Ferrocarriles Nacionales, particularly as the Mexican market will, whenever feasible, be reserved for Mexican production.

f) The Action Plan

The principal Canadian suppliers of big ticket items (Bombardier-MLW, Hawker Siddeley Canada, Sydney Steel) and consulting services (CANAC, CP Consulting) to the Mexican market have been doing business in Mexico for years, and are well aware of recent developments. Beyond encouraging them to look hard at their mexicanization options (lest they lose the entire market) the Government's ability to assist these experienced exporters is limited. Any Canadian marketing effort, be it to help smaller exporters or to support the larger suppliers, will have to convince the Mexican authorities that Canada's railway technology remains "state of the art". It is, therefore, proposed that a railway seminar, along the lines of that last held in 1978, be organized in Mexico for 1982. Such an event would be of direct benefit to small Canadian suppliers of rail car parts, signalling equipment, track laying and maintenance equipment, etc., who are not always as well introduced in the market as the major manufacturers. Large suppliers will be given an opportunity to present their latest technological developments enhancing their image as manufacturers of sophisticated products and as desirable trade and technological partners. Canadian firms are being encouraged to participate with the Department of Industry, Trade and Commerce in the Pan American Railway Congress Association meeting to be held in Mexico in October/November 1981. Consideration is being given to Canada hosting future Pan American Congresses.

It is also proposed that more details be obtained on Mexico's imports of freight car parts to see what, if any, opportunities exist in this area.

3. Telecommunications

a) The Opportunity

The worldwide telecommunications explosion has not passed Mexico by. Since 1972 Mexico's telecommunications network has grown at an impressive average annual rate of over 13 percent and should continue to grow at the same rate or even higher in the years ahead. Telephones in service increased from 1,900,000 to 3,638,726 in 1977. Current projections see that number rising to about 5.25 million by 1982. There is a 2-year plus waiting list for telex machines. Projected investments in communications' capital goods for the 1979 to 1982 period have been placed at \$3.1 billion. To lend some credence to that figure one need only recall that annual equipment investments (excluding labour costs) just in Mexico's telephone system averaged \$216.2 million annually from 1972 to 1977. Furthermore, a \$2 billion National Rural Telephone plan, which would see 13,548 communities added to the telephone network is in the final elaboration stages and should be completed in the near future. Requests for proposals for consultancy and technical support services on domestic communications satellite (SATMEX) program have only just been issued. The space portion of that program would be worth at least \$150 million. The number of earth stations allied to that program (which some sources have optimistically placed at 2000 by 1985) will open up hundreds of millions of dollars in equipment supply opportunities even if built in much smaller numbers.

Telecommunications equipment imports which were \$102.3 million in 1977 should be in the \$175 to \$230 million range by 1982. Telephone, telegraph, microwave and radio communications equipment will account for the bulk of the imports.

The Mexican telecommunications network is entirely controlled by the Mexican government or its agencies. Telmex has a de facto telephone monopoly. The telegraph and national microwave network is run by the Secretaria de Comunicaciones y Transportes. The government controlled monopolies PEMEX (oil and gas), CFE (power generation), and MNR (railroads) also operate their own radio and/or microwave networks.

Mexico's electronic's industry (1977) production of \$69 million in telecom equipment) is reasonably well developed and is said to meet about 40 percent of the nations requirements. The source of technology is foreign and the

emphasis is on assembly through Mexican foreign joint venture companies. The industry is only now beginning to go fully digital.

b) The Canadian Industry

Canada has achieved a worldwide reputation in advanced telecommunications and is now recognized as one of the countries at the leading edge of communications technology. The process has been a gradual one and the product of responding to the needs of establishing a modern economy in a vast and rugged country. In developing an advanced and independent national telecommunications network Canadian companies have achieved state of the art capability and have made Canada largely self-sufficient in telecommunications systems. The Canadian experience in eliminating isolation and overcoming the barriers of great distances through telecommunications is clearly relevant to Mexico as it embarks on a determined course of economic and industrial modernization.

There are three separate major microwave networks stretching across Canada interspersed with many interconnecting spur microwave links. This system in turn is linked to more than 100 satellite earth stations joining the many communities throughout the country. A new development in 1980 has also seen an 8 GHz digital radio system over-built on the existing Trans Canada Telephone System's 4 GHz analogue system between Toronto and Calgary.

With the launching of the ANIK A series of satellites in 1972, Canada established the world's first geostationary domestic satellite communications system. Three satellites of this version have provided communication services to 10 million square kilometres in Canada. Since ANIK A, a second, third and fourth series of satellites have either been built or are under development in collaboration with U.S. and European industry. Most of the world's commercial communication satellites carry some form of Canadian mechanical and electronic sub-systems. In cooperation with the U.S. National Aeronautics and Space Agency, Canada is developing and manufacturing the vital Remote Manipulation System (RMS) for the space shuttle transportation system.

Since 1874 when Alexander Graham Bell invented the telephone in Brantford, Ontario, Canada has not looked back in the development of its telephone system and equipment. With more than 14 million telephones in

service, or more than 60 per 100 of population, the density of Canada's telephone network is the fourth highest in the world. The network is also one of the most efficient anywhere. In the interests of even greater reliability and increased operating economies, that system is being rapidly converted to the digital mode.

Starting with manually operated switchboards in the 1880's, Canadian industry has consistently stayed abreast of the latest in telephone system technology. The step-by-step systems of the 1920's gave way to #5 crossbar systems in the 1950's. By the 1970's Canadian industry was leading the world in the design and development of digital switches. Canadian digital PABX equipment has already won wide acceptance in markets around the world. Canadian PABX products will soon be manufactured in Mexico. The increasing use of fibre optic systems by telephone companies across Canada from the subscribers premises to long-haul, high performance toll systems, will enable expansion of digital transmission at all levels.

Canada has had its own national digital data networks since 1973 when DATAROUTE was introduced into the Trans Canada Telephone System (TCTS). Introduction of the Infoswitch and Datapac packet followed in 1977. These in turn linked into U.S. systems and should in time, form part of an integrated network for voice, data and visual services across Canada and into the United States. Today, Canadian manufacturers and system companies are involved in the design and development of some of the most sophisticated information processing services.

Many high frequency (HF, VHF and UHF) mobile radio systems are manufactured in Canada and provide an ever increasing number of commercial and public services. These systems involve mobile stations, base stations and portables. There is a growing demand for mobile radio telephone systems that interface into telephone networks which provide access from coast to coast. In Alberta, Alberta Government Telephone (AGT) operates the world's largest integrated mobile radio telephone service consisting of 24,000 mobile units hooked up to some 400 base stations. The Alberta private sector also has over 30,000 mobile units in service. Canada has excellent manufacturing and system capabilities in this sector and Canadian companies are actively promoting their products and know-how in Mexico. One Canadian/Mexican joint venture company has already been set-up.

There are numerous fibre optic field trials and experimentations underway in Canada involving industry, governments and numerous carriers of which Bell, AGT, B.C. Telephone and Manitoba Telephone provide consulting services. Alberta Government Telephone for example, has already begun installing a fibre optic network that will carry some 30,000 voice circuits over 50 kilometres. When in operation, it will be one of the largest high capability fibre optic links in the world with a life expectancy of 30 years. A similar program being undertaken by Saskatchewan Telephone will provide about 32,000 kilometres of fibre optic communications.

In nearly all of the above technology sectors cooperative ties are being established between Canadian and Mexican companies and in some areas between the Canadian and Mexican governments.

c) Recent Canadian Marketing Activity and Successes

From \$1.5 million in 1977 Canadian sales of telecommunications equipment more than doubled to \$3.4 million in 1979. Spurred on by the availability of Mexican petro dollars and encouraged by an enhanced Canada-Mexico political and trade relationship, Canadian electronics exporters have in the last two to three years become increasingly active in the Mexican market. Their activities are producing encouraging results.

Already in 1980 two companies have announced plans to establish joint venture manufacturing facilities in Mexico. Glenayre Electronics will be making mobile radios in Mexico while Northern Telecon has entered into a joint venture to make PBX's with Mexico's Alpha group. Glenayre's feasibility studies leading up to the decision to manufacture in Mexico were CIDA financed. The formation of these joint ventures is expected to yield millions of dollars of new exports to Mexico over the next three years. Canadian firms are also actively seeking joint ventures in Mexico to make data terminals and PABX's. Also in 1979 AEL-Microtel through the parent marketing company (GTE International) was awarded a contract to supply PEMEX with \$5.5 million of microwave and multiplex equipment for its \$12 million east coast microwave system. The contract involves partial assembly and the transfer of some technology to the GTE plant in Mexico. Several Canadian companies active in the Mexican market include Plessey-Canada, Canadian Marconi, Mitel, International Systcoms and Farinon SR Systems.

Private sector initiatives have also been matched by growing government activities in satellite communications. During the visit of the President of Mexico, Mr. Lopez Portillo, to Canada in May 1980, the Mexican Minister of Communications and Transport, Mr. E. Mujica Montoya, met separately with the Minister of Communications, Mr. Francis Fox and with the Minister of State for Trade, Mr. Ed Lumley. Each were informed that Mexico was initiating a domestic satellite communications program, dubbed SATMEX.

In June 1980, Mr. Fox forwarded with Mr. Lumley an invitation to Mr. Mujica to send senior policy and technical officials from the Secretaria de Comunicaciones y Transportes (SCT) to Canada for a series of briefings and demonstrations on satellite communications. A group of five Mexican officials led by the head of the Directorate General of Telecommunications (DGT) of the SCT, Mr. Clemente Perez Correa visited Canada from August 28 to September 5, 1980. Through meetings with Telesat, DOC and Canadian industry the visit allowed the Mexican side to obtain an initial insight into Canada's satellite communications capability. It also laid the groundwork for future government-to-government cooperation between the SCT and the Department of Communications (DOC) beginning with such things as bilateral preparations for international conferences, the conduct of joint propagation experiments in the tropical regions of Mexico and observation by the DGT of Anik pilot projects and operations. An important purpose of the satellite cooperation program is to contribute to and support the efforts of Telesat and Canadian industry to win business on the SATMEX program by encouraging SCT to adopt the Canadian system.

The DGT/SCT has already issued an RFP for consultancy and technical support services for SATMEX. Proposals were due November 28, 1980 with a view to selecting a consultant early in 1981. Telesat has submitted the only Canadian proposal. The RFP document outlined three phases: study, implementation and technical support services. The study phase is in turn divided into two parts: system definition and selection of a contractor. System definition will take 12 months following which DGT/SCT will decide (within 90 days) whether to cancel or carry on with the project. Alternatively the Mexicans could consider the selection of a space segment based on a currently available satellite design optimized to their requirements. This would effectively shorten SCT's acquisition schedule. In other words a go no-go decision on SATMEX is expected to be made in about mid 1982 or

earlier depending on the approach adopted by SCT. Some slippage is quite possible due to the next presidential term starting in 1983.

A joint DOC/ITC space communications mission to Mexico took place in December. It's principal objective was to gain a clearer and more complete understanding of Mexican plans, projects and problems related to the proposed domestic satellite communications system. A subsidiary objective was to follow up on items already identified for cooperative activity

Canadian industry has been kept informed of these government to government developments which will soon see an exchange of letters between SCT and DOC on the direction that bilateral space communications cooperation will take.

Since 1973 nine technicians from the Mexican telecommunications sector have been brought to Canada under the Young Technicians Program to spend training periods of several months with Canadian firms such as Mitel, Bell Canada and Northern Telecom. Companies contacted believe the program to be highly useful as a soft sell, long term market development instrument that gets up and coming Mexican technicians "thinking Canadian" by exposing them to the excellence of our telecommunications network, the depth of our engineering capability and to individual companies and products. The companies contacted felt that they could usefully make an input into the selection of candidates to be brought to Canada.

Despite the high level of recent marketing activity it is safe to say that Mexican telecommunications equipment users are only just becoming familiar with Canadian expertise in this area. The recent origins of the SATMEX program are such that many of the potential Canadian exporters of equipment have limited knowledge of how to do business in Mexico.

d) Market Impediments

Mexico's import licensing system and government control of the telecommunications network effectively preclude the importation of telecommunications products which are already made in Mexico. Based largely on assembly Mexico's electronics industry is estimated to be capable of meeting about 40 percent of the country's electronic equipment needs. Mexico's growing requirements and rapidly evolving telecommunications technology should

nevertheless leave ample room for Canadian exports in the years ahead, especially if linked to a joint manufacturing agreement with a Mexican partner. Mexican laws on the repatriation of technology payments and corporate profits must be taken into account in structuring such agreements. In the telephone field the long established presence of ITT and LM Ericsson are important factors as is Mexico's adherence to ITU international versus North American standards.

e) The Competition

Mexico's telephone system was originally developed and owned by LM Ericsson of Sweden and ITT of the U.S.A. both of whom also established captive equipment manufacturing subsidiaries. While the telephone system was nationalized in 1947 both Ericsson and ITT, through their joint venture manufacturing companies in Mexico still supply Telmex with about 90 percent of its equipment. Thus it is that Sweden (58.7 percent) and Belgium (13.1 percent through ITT Belgium) plus the U.S.A. (9.4 percent) dominate the market for imported telephone and telegraphic equipment. By virtue of a Siemens plant in Mexico, Germany is the principal supplier of telegraphic equipment. In light of the above Northern Telecom's breakthrough in establishing a joint venture plant in Mexico is particularly significant.

Price, quality and proximity to the U.S. are the main reasons for the U.S.A. being Mexico's largest supplier (33 percent) of radio communications and microwave equipment. Competitive pricing, respected technology and attractive financing have made Japan the next largest supplier (27 percent) followed by Great Britain, Italy and France. The French have affected a growing trade penetration by virtue of an aggressive and continuing marketing campaign backed up by attractive financing terms.

Competition for the Mexican space communications program will likely be from the U.S., France, Japan, the U.K. and Germany.

In terms of trade shows the U.S.A. put on a major Communications Exhibition at its Mexico City Trade Centre in 1979 and is contemplating a repeat performance in 1982.

f) The Action Plan

Dominance of the telephony market by ITT and LM Ericsson, a Mexican knowledge of Canadian capabilities nurtured over only the last two to three years, or in the case of space

communications only over the last few months, and a growing emphasis on Mexicanization are the major challenges confronting the Canadian telecommunications industry in Mexico. With that in mind and recognizing the importance of private sector initiatives (such as the recent Northern Telecom-Alpha group joint venture which places Canada's largest equipment manufacturer in a position to effectively compete directly with ITT and LM Ericsson) it is proposed that:

1. The predisposition to "think Canadian" that follows from training programs in Canada will be encouraged by making every effort to expand the number of trainees from the electronics sector coming to Canada under the Young Technicians Program. The objectives of the program and the candidate selection process will be reviewed with External Affairs and Employment and Immigration to see what scope there is for making the program more responsive to the needs of exporters and to market opportunities in Mexico generally.
2. DOC/SCT cooperation (which helps satisfy the Mexican penchant for government-to-government dealings) in the satellite communications sphere will be formalized and structured in such a way as to support Canadian exporters of equipment and services. ITC will work with industry in order that they will become active participants in the bilateral cooperation program.
3. ITC will organize a joint industry-government mission of space telecommunications companies to Mexico aimed at the SATMEX program and/or the follow on earth station segment of this program. The focus of the mission will depend on the method Mexico will take in implementing their consultancy contract. The objective of the mission will be to further familiarize the Mexican authorities with Canadian capabilities and to sensitize the less experienced Canadian exporters to Mexican needs and the "how to" aspects of doing business in Mexico. Timing will depend on a later assessment of when hardware procurement will take place at which time appropriate Canadian ministerial representation and/or visits should be undertaken.
4. With an eye particularly but not exclusively to the SATMEX program and the implementation of the National Rural Telephone Plan a mission to Canada from the Mexican telecommunications sector will be put together. The mission is tentatively planned for early 1982 and will be designed to familiarize the

Mexican customer (and as appropriate potential Mexican joint venture manufacturing partners) with Canada's manufacturing capability.

5. Canada's ability and desire to become a space telecommunications partner with Mexico will be actively pursued during the meetings of the Canada-Mexico joint Ministerial Committee.
6. Canadian government programs (e.g. CIDA's industrial cooperation program, the PEMD "F" program for continuous marketing) and other vehicles (e.g. the FOMECA fund of the Bank of Montreal and NAFINSA) of use to Canadian companies wishing to fully explore their Mexicanization options will be drawn to their attention.

4. Agricultural & Food Products

a) The General Opportunity

Soaring urban incomes which are likely to continue to rise in keeping with the Government non-farm income targeted rate of 10%, have augmented demands for food that far outpace Mexican agricultural output. Thus, Mexican agricultural and food imports have increased 50% or more in value in each of the past three years and have increased about 100% in 1980 to almost \$2.5 billion. Canadian exports have risen dramatically from C\$36 million in 1978 to about C\$100 million in 1980 but are still dwarfed by U.S. agricultural exports which increased from U.S. \$938 million to U.S. \$2 billion in the same period. As well, if Mexican government targeted growth rates of 10% annually for non-farm output and 4% annually for agricultural and food output are reached the gap will further widen. Mexico has just recently become a middle-income country, and most consumers are likely to spend a high proportion of their increased income on food. Average annual per capita income in Mexico was barely above U.S. \$2000 in 1980. Meanwhile, the more affluent parts of the population are seeking new varieties of food -- more meats, including fancy meats, more wheat products, more seafoods, and exotic foods of many kinds. The boom in agricultural and food imports will almost certainly continue for several years.

Mexico has a unique agricultural system, with a communally owned "ejido" or peasant sector and a modern commercial sector existing side by side. The ejido system now accounts for about 40% of the land under cultivation and about 30% of annual farm production. Meanwhile, commercial farming operations account for about 70% of total farm output, for a somewhat higher proportion of the relatively more mechanized production of animal feed crops, and for almost all the production of export crops.

Mexico's major crops can be said to fall into three groups. The first are the basic staples for domestic human consumption -- corn, beans, wheat, and rice. These are subject to relatively tight price controls because the government wishes to maintain low food prices for domestic consumers. The second group are those crops used mainly for animal feed - sorghum, barley, soya, and safflower. Prices of these are less tightly controlled and market prices are usually permitted to rise above the official support prices. The third group are the major export crops -- coffee, cotton, sugarcane, tobacco, fruits and

vegetables. These are usually free of price controls. These differentiations have given rise to an increasing tendency on the part of commercial farmers to switch from consumer staples to animal feeds and export crops. This tendency, although it helps to earn foreign exchange and is therefore not discouraged by the government, has been one of the important factors in Mexico's present agricultural dilemma, insofar as it has increasingly left domestic- consumer-oriented production to the lower-productivity peasant sector.

Many problems beset Mexican agriculture. Although the authorities have for years offered extensive technical and financial assistance to farmers, many have preferred instead to continue cultivating their land in the traditional manner involving animal traction, non-improved seeds, non-chemical fertilizer, and so on. Investment in agriculture has been limited by the complexities of land redistribution and by lengthy and cumbersome legal conflicts over land tenure. Insufficient investment in agriculture and in relevant infra-structure such as transportation, storage, and distribution has also compounded the problem. As well shortages exist in technical know-how, managerial skill, equipment and joint-venture capital related to the agricultural and food processing industries. All this has resulted in serious short supply situations of every kind of food that Mexicans eat.

But Mexico's great and growing need does not automatically translate into extensive sales and investment opportunities for Canadian suppliers. The world's developing awareness of Mexico's rapid growth has given rise to increasing competition among many would-be supplier countries. In particular, the United States, with its nearness, well-established connections and production capacity, is the strongest competition. Other constraints include the controlled and low prices for some commodities, the bureaucratic maze of the legal and commercial environment, and overburdened transportation, storage and distribution facilities.

On the positive side is Canada's long and increasingly close relationship with Mexico. Of the five priority countries designated by Mexico, Canada is the only one

with significant agricultural export potential to meet Mexico's needs. Also, Mexico has expressed a desire to diversify its sources of supply. The opportunity to increase Canada's share of this market is ripe.

b) Agricultural Trade Development

Trade oriented diplomatic activity between Canada and Mexico has been accelerated. The formation of an Agricultural Cooperative Committee in 1980 resulted in the Mexicans providing Canada with precise information on the commodities that they wanted to purchase from Canada and a supply and purchase arrangement was signed in February, 1981. Details of the arrangement are given below:

Mexico-Canada Arrangement (February 1981) for
The Supply and Purchase of Agricultural Commodities

<u>COMMODITY</u>	<u>1981</u>	<u>1982</u>
	(metric tons)	
Wheat	100,000 - 150,000	100,000 - 350,000
Skim milk powder (bulk) (1)	22,500 - 27,500	22,500 - 27,500
Evaporated milk (2)	1,800,000	1,500,000 - 2,100,000
Hydrolized milk (3)	up to 1,500	up to 3,000
Canola (4)	up to 60,000	up to 100,000
Corn (4)	up to 100,000	up to 100,000
Coloured beans (4)(5)	-	-

- (1) In addition, with respect to the proposal for a joint Mexican Canadian investment which may result in the construction of an evaporated milk plant in Mexico, the Canadian Dairy Commission has expressed its disposition and its firm interest in guaranteeing the total supply of skim milk powder for this project.
- (2) Figures in cases (rather than metric tons).
- (3) Subject to further supply.
- (4) Subject to public tender in Canada.
- (5) Consultations with respect to 1982 will be held in the autumn of 1981.

The arrangement covers only those commodities which are of interest to the Mexican commodities agency CONASUPO and represents a total target value of up to \$325 million for 1981 and 1982 taken together. Other commodities likely to

be exported from Canada to Mexico -- such as breeding livestock, other genetic material, meats, and so on -- will continue, as in the past, to be sold directly to private Mexican importers.

The commodities covered by the arrangement -- wheat, dairy products, canola, corn, and coloured beans -- will be purchased by CONASUPO through normal Canadian commercial channels and through direct transactions with Canadian government agencies. Shipments of canola, corn, and coloured beans will depend on the result of public tenders to be held in Canada. The Canadian government has supplied the Mexican government with a list of Canadian companies willing to tender on these items.

With respect to the minimum and maximum figures on wheat, it may be noted that these are based only on what seems available to accommodate Mexico's interest in No. 3 western red winter wheat. The Canadian Wheat Board has also supplied the Mexicans with samples of No. 3 western red spring wheat, and if this variety too is wanted by the Mexicans, the maximum figures indicated in the arrangement will become minimum figures -- that is, Canada will sell Mexico up to 150,000 tonnes of wheat in 1981 and up to 350,000 tonnes in 1982.

Under the terms of the overall Mexico-Canada arrangement, the Mexican government undertook to facilitate the purchase of the agreed-upon quantities of Canadian products, while the Canadian government undertook to ensure that sufficient quantities of the named commodities would be available. The parties to the arrangement are to hold consultations to review it in September 1981, and annually thereafter, and at any other time at the request of either party. The consultations will include consideration of prospective demand conditions in Mexico, prospective supply conditions in Canada, and the possible extension of the arrangement to additional years, quantities or commodities.

c) Identification of Priority Commodities

The preceding discussion has already identified most of the priority commodities in Canada's agricultural and food exports to Mexico. Some are listed in the Canada-Mexico supply arrangement and will be purchased by CONASUPO -- wheat, dairy products, canola, corn, and coloured beans. Others that have traditionally been, and will continue to be, sold directly to private Mexican importers include livestock, other genetic material and meats.

The emphasis of this agricultural strategy is on those commodities that are presently available in Canada in sufficient supply for export and are deemed to be those that will benefit most from new marketing thrusts. These include breeding livestock and other genetic material, meats of all kinds, oilseeds and some dairy products. Simultaneously, consideration will need be given separately to the question of Canadian supply capability in meeting Mexican demands. Other factors which have influenced the priority products involve economics and Canadian government marketing policies.

The priority products will be dealt with in individual commodity descriptions and other important products are discussed briefly below.

An opportunity for wheat sales in Mexico results from a rise in incomes and a shift of consumer preference on the part of the Mexican population. Mexico consumes approximately 3.5 million tonnes while it produces only 2.5 million, the shortfall being made up mainly by the U.S. with smaller amounts on occasion from Argentina and Australia. The Canadian Wheat Board signed an agreement with CONASUPO in January 1980 to supply 100,000 tonnes of red winter wheat during 1980. A second agreement signed in 1981 allows for the sale of 100,000 tonnes of red winter wheat in each of 1981 and 1982. This latest agreement also included an option to supply 50,000 tonnes of red spring wheat in 1981, increasing to 250,000 tonnes in 1982. However, Canadian sales to date have been modest due to supply considerations, logistical constraints and U.S. competition.

The potential for the export of beans which are a staple in the Mexican diet, is large. Even with U.S. bean exports to Mexico predicted to be 200,000 tonnes in 1981 there is still a need for an additional 200,000 tonnes annually. The types of beans that are in greatest demand are the pinto and black bean varieties which most closely resemble the Mexican product. Present Canadian bean production of 100,000 tonnes per year centered in Southern Ontario, Manitoba and Alberta, would need to be substantially increased in order to be able to supply the incremental Mexican demands. The prospects of a burgeoning bean market in Latin America should be an incentive for Canadian producers to make the investments necessary to meet this opportunity. If this were achieved government to government arrangements for supply contracts with CONASUPO would be pursued.

With expanding tourism and increasing disposable income, Mexico is expected to greatly increase its consumption of

beer. Even if Mexican production of malting barley increases at the expected rate of 3% annually, there will be a shortfall from the 12% average annual increase predicted. It is conservatively estimated that Mexico will be importing 70,000 - 140,000 tonnes of malting barley each year from 1981-85. Although barley production in Canada is second in grain production after wheat, with 11 million tonnes produced in 1980, only 750,000 - 900,000 tonnes a year have been selected for malting purposes. A mission to Mexico to familiarize the Mexicans with the Canadian product and to determine the requirements of the Mexican malt and brewing industry is under consideration. Favourable results from this mission coupled with an increase in the Canadian supply of malt would call for additional marketing efforts.

It should be noted that several other agricultural and food products have been exported from Canada to Mexico, including poultry and poultry meats, animal products such as hides, skins, lard and tallow, fresh and processed seafoods, fresh apples and other fruits and processed fruit and vegetable products and support will continue to be provided to these areas as appropriate on a case by case basis.

4a. Breeding Livestock, Semen and Embryos

a) The Opportunity

Animal genetic material is traded in several forms: live animals, frozen semen, and liquid or frozen embryos (ova).

During the decade of the 1970s Mexico imported an average of about 40,000 head of cattle a year, about 25,000-35,000 from the United States, about 2,000-10,000 from Canada, and small numbers occasionally from Europe. During the second half of the decade, Canadian cattle exports to Mexico, mostly of dairy cattle, increased sharply from about 2,000 a year in the mid-1970s to about 9,000 a year in 1978 and 1979, while U.S. cattle exports to Mexico, also mostly dairy cattle, declined from over 35,000 a year in the mid-1970s to about 25,000 a year in 1978 and 1979.

This divergence occurred even though Canadian cattle were higher in price and had a transportation cost disadvantage relative to U.S. sources. Canadian cattle are recognized by the Mexicans to be of superior quality.

In the past two years, the Mexican cattle industry suffered a serious setback, caused by a combination of drought and the government's policy of keeping prices low. Drought killed off many cattle and reduced feed grain production to well below normal levels. Farmers were discouraged by lack of profitability in cattle and milk production.

During the second half of 1980, however, the government permitted a significant increase in the price of milk, and imports of replacement dairy cattle turned up sharply. Canadian cattle exports to Mexico reached a record level of over 10,000 head in 1980, of which dairy cattle were over 95%. U.S. cattle exports to Mexico, meanwhile, appear to have been somewhat lower than in 1979.

Prospects appear very favourable for Canadian cattle sales to Mexico for as in all countries where the standard of living is rising, there is a trend to the consumption of more meat, as well as milk. Mexico's problems of raising the levels of livestock, meat, and milk production fast enough to meet soaring consumer demand appear too great to be solved without further, and probably substantial, increases in cattle imports. Canadian cattle have repeatedly made gains in the Mexican market because of their premium image and Canada clearly seems to have become the preferred source.

Also, because of the high cost of breeding stock the new approach of Mexico will involve more local production through semen imports and, someday, also embryo transfers. Canadian export of cattle semen increased very sharply to about \$250,000 in 1979 and 1980 and is approaching the U.S. level of cattle semen export to Mexico. In addition, substantial numbers of breeding stock will still have to be imported for artificial insemination stations, as well as for direct natural insemination.

Opportunities thus exist for collaboration between Canadians and Mexicans in areas such as artificial insemination, embryo transfer, genetic research, and animal health research. Mexicans are impressed by the work Canada has done in assisting Cuban production of dairy, swine, and poultry and would be interested in a similar arrangement. During Trade Minister Lumley's mission to Mexico in June, 1980, the Mexicans were told that Canada would examine its research plans and would identify the role we might play. The possibility of "twinning" research stations was discussed, and recently three research farms in Canada were designated as "twinned" to a Mexican research farm. Canada hopes that future technology transfers will be coupled with such mutually beneficial activities as joint ventures.

Swine imports by Mexico rose very rapidly in the late 1970s from insignificant levels in the early and mid-1970s. Canadian swine shipments to Mexico have exceeded 2,000 head annually in recent years. U.S. swine exports to Mexico increased to 3,500 head in 1979. However, Mexican imports of swine were down about 20% from both Canada and the United States in the first six months of 1980 and will probably be down for the full year. However, this is deemed to be a temporary situation and the long term potential is promising.

The reasons for the decline are not altogether clear. With reference to the Mexican hog cycle, the swine population showed an unusually large increase in 1979 of 700,000 head to 13.2 million, so that there may have been a temporary surplus and a reduced need for imports. Hog production in Mexico has not been under nearly as much pressure as cattle production to meet consumer demands and government objectives. Mexico is almost self-sufficient in pork production and is, in fact, exporting pork to Japan. The reason for reduced Mexican swine imports in 1980 may also be found in the unprecedented congestion of Mexican transportation and handling facilities, which have been clogged with all kinds of imported food.

Mexican officials indicate they will continue to need considerable numbers of swine breeding stock and a great deal of assistance in breeding and technology. The emphasis will be on establishing large swine units. One important objective is to produce more weaner pigs for contract feeders, and Canadians are very experienced in establishing and managing such operations. There appears to be a good deal of scope for Canadian participation.

b) The Canadian Industry

The Canadian livestock industry is spread across the country, but certain species are concentrated in certain areas. Dairy cattle are concentrated in Ontario and Quebec, beef cattle in the three prairie provinces. Most breeding stock is produced by fairly small family-owned and operated farms throughout the country. The average dairy cattle herd consists of 35-45 milking cows, the average beef cattle herd 70-100 cows, and the average swine herd 80-100 sows.

Most exports of live animals are handled by private firms that specialize in livestock exporting. These firms purchase animals from breeders, assemble the animals, prepare the necessary documentation, and make all the shipping arrangements. There are somewhat over a dozen major exporting firms. As well, there are a few large-scale breeders who also export animals, mostly their own, but the number exported in this manner is relatively small. Finally, there is some provincial government involvement in the actual exporting of livestock; for example, the Saskatchewan Agricultural Development Corporation (a provincial Crown corporation) and the Manitoba Department of Agriculture are thus involved. Most other provincial governments limit their export involvement to promotional activities.

Most of the semen that is exported from Canada is produced by farmer-owned cooperative artificial insemination (A.I.) centres located across the country. There are a few private A.I. centres, but the majority are cooperatives. Also, some breeders send their bulls to A.I. centres for custom collection and processing for a fee, then market that semen themselves. Most of the A.I. centres in Canada market their semen (for markets other than the United States) through a non-profit organization called Semex Canada. Any profits made on the sale of semen is returned to the member A.I. units to be used in their young sire proving programs.

Embryo transplanting is relatively new. Only two firms, one in Ontario and one in Alberta, have done much exporting. The transferring of embryos in a liquid medium is fairly commonplace, but the use of frozen embryos is not yet fully established as giving consistent results. Once the freezing-thawing technique is perfected the export potential will be greatly increased. Canada's technological expertise in this area ranks high.

Canadian capability for increasing the supply of breeding animals and other genetic material is very good. The Canadian industry seems in a position to meet any expected demand without problem, except possibly with respect to sheep and the minor dairy breeds such as Ayrshire, Jersey, and Guernsey. About 90% of Canada's dairy cattle exports are the Holstein-Friesian breed. It is estimated that up to 26% of the annual purebred registration could be exported per year without depleting the genetic base; since about 124,000 Holstein-Friesians are registered each year, it is evident the Canadian supply situation is sound. As for swine, the generation interval is sufficiently short that the industry could gear up production quickly enough for just about any new export opportunity. The supply of cattle and swine semen is no problem, as production could be altered to meet almost any demand.

Canada is recognized very widely as a source of high quality breeding animals and other genetic material. Dairy cattle have been exported since the mid-1940s and have gone to some 55 countries around the world; cattle semen has gone to some 70 countries. Swine exports are new relative to cattle, but in the past seven or eight years swine have been exported to some 23 countries around the world, including a well-known competitor, Denmark. Sheep exports are quite new, but already certain markets, including Mexico, have been suitably impressed with Canadian stock.

c) Recent Canadian Marketing Activity

Most sales to Mexico of Canadian breeding animals and other genetic material are generated by the Canadian exporter through direct contact with the Mexican buyer. Most Mexican buyers are private breeders, although some purchasing is done as well by the Mexican government, which makes purchases for government projects or for redistribution to individual breeders.

Contact with, and promotion in, the Mexican market has also been affected by federal and provincial governments. Provincial governments that have been actively promoting in Mexico are Ontario, Manitoba, Saskatchewan, and Alberta. In January 1981 the Ontario Minister of Agriculture and Food led a livestock mission to several Latin American countries including Mexico. Cattle and swine exporters and livestock specialists were members of the mission. Periodic visits to the market on behalf of the federal government have been made by Ministers, high ranking officials, and livestock officers.

Various breed associations have sponsored trips by their members to the area each year. Large livestock exhibitions in Canada, such as Agribition in Regina, have regularly hosted visits from potential Mexican buyers. The Department of Industry, Trade and Commerce has occasionally sponsored participation in the Mexican National Livestock Show.

The industry has made frequent use of PEMD financial assistance for further market identification, participation in regional shows, and bringing buyers to Canada. Financing of actual exports is generally not sought or needed from any government facility, because government financing is not being used by other countries for sales of livestock and genetic material to Mexico. The U.S. Commodity Credit Corporation has put in place a 3-10 year credit facility, but this has thus far not been used in Mexico; if it should be used, the Canadian industry would probably call upon the Export Development Corporation to provide competitive financing.

d) Market Impediments and Advantages

There are no Mexican tariffs on breeding animals and while there is supposed to be a tariff on non-purebred animals, the Mexicans usually do not enforce it.

Mexican government import permits are required, and there can be delays of several weeks in getting them. However, this is the same for all competing export countries and constitutes no special handicap. If the Mexican buyer or the exporter's Mexican agent does his job properly, the permits will come through eventually.

U.S. exporters have a transportation-cost advantage over Canadian, but this is more than offset by the superior quality of the Canadian product. A possibly greater advantage of U.S. proximity is that it enables Americans to maintain more frequent two way contact with Mexicans.

One major problem is the type of system used by Mexicans for dairy sire evaluation. Four separate methods are utilized in the Mexican system, all of which are based on the U.S. system, which places Canadian bulls at a disadvantage. Briefly, the Canadian method, called the Best Linear Unbiased Prediction (B.L.U.P.) method, is based on the performance of a bull's first lactation daughters, whereas the U.S. and Mexican system is based on a prediction of what the bull's daughters will produce when mature. The Mexican government wants to replace the four existing methods with a single one, and Canadians are making an effort to persuade the Mexicans to adopt the B.L.U.P. system as being superior.

e) The Action Plan

Although the United States will probably continue to dominate the Mexican market for breeding animals, the fact is that Canadian exports have been catching up in recent years, increasing steadily while U.S. exports have been declining gradually. Moreover, in view of the size and rapid growth of the Mexican market and the Mexican government's intense effort to bring about substantial increases in milk and meat production, there would appear to be ample room for further increases in Canadian exports.

The ingredients necessary for a successful Canadian marketing effort would include increased Mexican awareness of Canadian capabilities, increased personal relationships between Mexicans and Canadians, more technology transfer from Canada to Mexico, coupled with related commercial benefits, and a much wider Canadian awareness of the market opportunities in Mexico. These are being provided for through promotional projects, seminars and missions.

Sales of dairy cattle and semen could be greatly enhanced if the Mexicans could be persuaded to adopt the Canadian system of evaluating sires -- a system which Canadian experts on the subject believe to be superior to the system now used by the Mexicans. Every effort should be made to educate government officials and other Mexicans involved in the trade, as to the superior accuracy and benefits of the Canadian B.L.U.P. system. Much of this transfer of technology and education could be undertaken within the parameters of the existing Memorandum of Understanding.

Technical cooperation and technology transfer could also be used to promote embryo transfer and the use of frozen swine semen, both relatively new areas of expertise in

which Canadians rank high. The Department will encourage and assist companies to establish training programs in these areas for Mexicans. The Department has already been approached by an embryo-transfer company for EDP and PEMD assistance towards establishment of a training program.

Because there are several provinces and many organizations with an interest in the trade with Mexico in cattle and swine livestock and genetic materials, there is considerable competition between provinces and among organizations. The Department will undertake before the end of 1981 a thorough review of the cattle and swine marketing systems to determine the extent to which this competition may be a healthy expression of the spirit of enterprise and the extent to which it may be, on the whole, detrimental to overall trade.

If it proves to be the latter, seminars will be held in Canada in early 1982 to alert those involved as to the apparent detrimental effects, to encourage greater cooperation and greater support for improvement of the national export performance, and to provide information, ideas, and initiatives for the increase in total exports. If the competitive aspects prove not to be detrimental to the national export performance, the Department will encourage them unequivocally and, at the same time, take a greater leadership role.

4b. Beef and Pork Meats

a) The Opportunity

Although Mexico has a cattle population of about 30 million head, annual slaughter is only a little over 3.5 million head, and carcass meat production is only about 600,000 tonnes. In Canada, by comparison, with only a slightly larger cattle population, production of carcass meat is almost double the Mexican figure. In even greater contrast, with a hog population almost double that in Canada, hog meat production is only about two-thirds that in Canada. In addition, Mexico is in need to slaughtering and meat-packing facilities and in technical and managerial know-how for operating them. Canada has such expertise and opportunities in this area are extensive.

The drought in 1979 and 1980 reduced Mexico's production of livestock and meat and compounded the already growing problem of domestic need outpacing domestic production. Besides soaring urban incomes, expanding population, and a shift of preference toward meat products among people who can afford them, there is the government's concern to improve the nutrition of the considerable proportion of the population that is under-nourished. The average Mexican daily diet contains little more than 20 grams of animal protein, compared with about 65 in Canada. While Mexico aims at self-sufficiency in meat production, there seems little doubt that for the next few years the country will have to depend on greatly increased imports of meat.

Beef and pork meat exports from the United States to Mexico increased, in real terms, one-third in 1979 and almost one-half in 1980 to almost 150,000 tonnes. Canada's meat exports to Mexico, after being almost non-existent for a couple of years, jumped to about 550 tonnes in 1979 and to 1,400 tonnes worth \$1.4 million in 1980. In 1979 almost all of these exports were fancy meats, both beef and pork. In 1980, in addition, exports of pork bellies increased. In view of the large market share of foreign exports to this growing market, there would seem to be a very large market opportunity for Canada.

b) The Canadian Industry

Meat processing is the largest food-processing industry in Canada, accounting for about a fourth of all food and beverage industry shipments. Over 400 establishments are registered under the federal Meat Inspection Act, and they

employ about 35,000 people. The industry is distributed nation wide, with the greater concentration in Ontario and Quebec. Establishments vary greatly in size from a few employees to over 1,000 employees.

The industry participates strongly in export trade. A considerable number of export markets are served, chief among them the United States, Japan, the EEC, the Caribbean, and parts of Central and South America. While the volume of exports has grown steadily in recent years, the growth of export volume is always dependent on, and sometimes limited by, the domestic supply of livestock.

Technology in the industry is high. Canadian firms are recognized in international industry circles for their introduction of new technology, as well as for the quality of products produced. The international diffusion of new technology is quite rapid in this industry. The general thrust of technological development is towards cost reduction, improved and new products, increased automation, and the full possible utilization of all animal materials.

c) Recent Canadian Marketing Activity

Until two or three years ago, the Mexican market and potential market for imported meats and other animal products seemed rather small. For this reasons, there was little Canadian effort to enter or develop that market. Even those few Canadian firms that did occasionally make small shipments to Mexico were generally unaware of how to do business in Mexico and did most of their business through U.S. brokerage agencies.

The Mexican market potential and the outside world's perception of it have been dramatically transformed in the past two years. Four or five Canadian firms have entered the Mexican market directly, and several more have started making contacts. Favourable developments at the government-to-government political and official levels have helped pave the way. Much of the meat imported into Mexico is handled by CONASUPO, which can also be a helpful medium for facilitating contacts with private Mexican buyers of meat and other animal products.

d) Market Impediments and Advantages

Mexican tariffs on most meat products are 10% ad valorem. This is not considered a serious impediment to Canadian exports given the proven competitive performance of the

Canadian industry. Other impediments are the transport-cost disadvantage relative to U.S. producers; the fact the Canadian firms generally are new to the Mexican market; and the complications in obtaining import licences from CONASUPO. Advantages to Canadian firms are the technological and economic strengths and the fact that Mexico wants diversified product sources.

The predominant competitor is the United States, whose meat producers have been extremely active in trade fairs and exchange visits, making special efforts to sell to the hotel, restaurant, and institutional trades.

e) The Action Plan

Canadian livestock producers are being encouraged to produce sufficient livestock to satisfy both Canadian and augmented foreign markets. The action plan outlined below is dependent on their success and ability to supply.

A series of outgoing and incoming missions will be planned, to ensure that Canadian producers are able to assess the market potential at first hand and to develop contacts in both the private and public sectors. Also, the missions will give Mexican importers increased exposure to the capabilities of Canadian suppliers. A mission is being planned for November 1981 and will be followed by PEMD-supported visits by exporters at three-month intervals.

A study will be undertaken by the Department of ITC to develop more information in Mexico, on prospective prices in that market, and on factors that affect the ability of the Canadian industry to sell competitively. Findings of the study will be disseminated to the Canadian meat and livestock industries and to appropriate federal departments and provincial governments.

Endeavours will be made to develop through government-to-government contacts, technical cooperation and transfer arrangements by which Canada would assist Mexico to improve its livestock production and breeding systems in anticipation of consideration as a key source of supply for any increase in Mexican meat imports.

Transportation arrangements will be examined by DITC to determine whether improvements are possible in the speed and cost of moving meat products from Canadian sources to Mexican markets. For example, utilizing Mexico-to-Canada fruit and vegetable transport for return shipments of meat products to Mexico may be possible.

4c. Dairy Products

a) The Opportunity

Mexico has had for many years a large annual deficit of milk, now approaching four billion litres. To cope with this difficulty, the country annually imports 70,000-100,000 tonnes of skim milk powder, about 40,000 tonnes of evaporated milk, and other milk products such as hydrolyzed milk and instantized milk powder.

Mexico's annual milk production has not been getting any closer to meeting consumer demand. In fact, in 1980, milk production fell to its lowest ebb in several years following a drought in 1979 which killed off several thousand head of dairy cattle. Moreover, Mexican farmers are said to be discouraged by the low profitability of milk production.

Mexico imports milk powders and evaporated milk mainly from Canada and the United States, but also to some extent from the European Community, New Zealand and Australia. Over the years, annual exports from Canada to Mexico have been up to 50,000 tonnes of skim milk powder and up to 35,000 tonnes of evaporated milk. In addition, Canada supplies Mexico annually with 3,000 tonnes of whey powder and 3,000 tonnes of dairy-based infant foods.

Canadian exports of skim milk powder to Mexico have been declining in recent years, from 40,000 tonnes in 1978 to 32,000 tonnes in 1979 and 25,000 tonnes in 1980. The decline was more or less offset by increased shipments to Mexico of evaporated milk, which reached a record level of 35,000 tonnes in 1980. For economic reasons, the Canadian Dairy Commission has been promoting exports of evaporated milk as replacement for some of the exports of skim milk powder.

b) The Canadian Industry

Dairy plants in Canada are of two principal types:

- i) Fluid milk plants produce milk for use by consumers. The consumer product is little changed from the raw milk received from producers. It has been pasteurized and homogenized, and the fat content of the various kinds of milk has been brought into conformity with government standards. Marketing and pricing are under the jurisdiction of the provinces and are controlled by provincial milk agencies.

- ii) Industrial milk plants manufacture products such as butter, cheese, milk powder and evaporated milk. Prices these plants pay for industrial milk is controlled by the federal government under the National Dairy Support Program. The government, through the Canadian Dairy Commission, establishes a target support price for industrial milk and, as well, indirectly controls the price of manufactured dairy products through their offer-to-purchase program for butter and skim milk powder. The support program has been a major stimulus to the rationalization of the industrial milk sector, which has in recent years constructed large central plants characterized by advanced technology and optimum scale.

Dairy plants of both types are located in every province, with the highest volume of production taking place in Quebec and Ontario. Total value of shipments was about \$4 billion in 1979. Small plants employing less than 20 people account for 6% of industry shipments, medium-sized plants employing 20-100 people account for 37%, and large multi-purpose plants with sometimes over 1,000 employees account for 57% of industry shipments.

c) Recent Canadian Marketing Activity

All Mexican purchases of dairy products are handled by CONASUPO, and all Canadian sales are effected by the Canadian Dairy Commission. The Canadian Dairy Commission worked many years to establish and increase milk product exports to Mexico, to the point that Canadian exports once accounted for 70% of Mexican skim milk powder imports and now account for 85% of evaporated milk imports.

However, as noted, the Canadian Dairy Commission has recently been promoting sales of evaporated milk as replacement for some of the skim milk powder exports. This thrust results from several considerations. The Canadian industry has found more and more uses for skim milk and skim milk powder, so that the amount available for export has declined. Evaporated milk production involves more value added and processing, and is economically more beneficial to Canada, than skim milk powder production. It should be made clear that the total milk equivalent in Canadian shipments of both powdered and evaporated milk to Mexico is not declining - it is slowly rising.

Infant foods and whey powder require no subsidies, and Canada is in a position to supply increasing amounts of these to Mexico. The leading Canadian producer-exporter of whey powder and infant foods, Ault Foods Ltd. of Winchester, in collaboration with the Canadian Dairy Commission, has been making major inroads into the Mexican market. Again, sales have been developed mainly through frequent visits to CONASUPO. The product must be competitively priced, of high quality, and offer the flexibility of small, frequent shipments. Ault Foods has been able to provide all these features and to increase its exports to Mexico by about 15% annually in real terms.

d) Market Impediments and Advantages

Dealing on a government-to-government basis and with a single purchasing agency has disadvantages as well as advantages. The Mexican government desires to provide its population with the best possible nutrition in the least expensive manner. Despite the stringency of these conditions, there is considerable international competition to meet them. Export subsidization to promote sales of surplus domestic stocks is internationally prevalent. Prices have been set primarily by the EEC export price.

Canada has an excellent reputation for high quality dairy products and is usually able to be price-competitive with no greater, and sometimes smaller, subsidies than other countries. Canada and the United States, compared with overseas countries, have an advantage in being able to ship by rail to Mexico. Rail shipments can be more frequent and in smaller units compared with ocean freight shipments, and this reduces CONASUPO's financing and storage costs. Nevertheless, for economic reasons, Canada is not always able or willing to supply as much of some products as Mexico wants.

e) The Competition

The main competition for skim milk powder comes from the United States, the EEC, and New Zealand; for evaporated milk, from the United States and the EEC; and for whey powder and infant feeding products, from the EEC, New Zealand and Australia. Canada used to be Mexico's largest supplier of skim milk powder, while the United States used to be the largest supplier of evaporated milk. These positions reversed themselves in 1980. The two countries will probably be, for the next few years, roughly equal suppliers to Mexico of the two milk products. As a

supplier of whey powder and infant foods, Canada should hold its own, and more probably make gains, against the competition from the EEC, New Zealand and Australia.

f) The Action Plan

In view of the fact that Mexico wants to buy more skim milk powder and evaporated milk than Canada is able to sell, there is no need for any great effort to promote sales, though there may be opportunities for trade-offs in other commodities. Ongoing good relationship between the Canadian Dairy Commission and CONASUPO and between the two countries' governments at the political and official levels is required to maintain this level of exports, and the DITC will make every effort to develop these ties.

Meanwhile, in its efforts to promote sales to Mexico of whey powder and infant foods, the private Canadian producers will continue to receive the fullest collaboration and support from the Canadian Dairy Commission and the Canadian government.

4d. Oilseeds

a) The Opportunity

Oilseeds are attracting increased attention in Mexico as sources of animal feeds as well as human foods. As a result import demands, which sky-rocketed in 1981 because of the shortfalls in Mexican oilseed crops, appear to have long term potential. Mexican officials have indicated a need to import a total of about 1.5 million tonnes of oilseeds annually. A new twist in the country's agricultural problems is that the government's intense drive and lavish incentives to expand areas for cultivation of consumer-oriented crops may lead to diversion away from areas devoted to livestock pasturing and feedgrain production. This implies a trend toward more intensive feeding of livestock in the form of grains and oilseeds.

Mexico produces several types of oilseed, most importantly soybean and sunflower seed. Mexican crops of each have ranged in recent years, between 500,000 and 700,000 tonnes annually. However, these crops were sharply down in 1980, about 50%, due to weather and irrigation problems.

Canadian canola (a superior form of rapeseed), flaxseed and sunflower seed have been exported to Mexico in only small quantities in 1980; 8,000 tonnes of canola, 7,000 tonnes of flaxseed, and 4,000 tonnes of sunflower seed.

The broad Canada-Mexico supply arrangement of February 1981 specified canola shipments of up to 60,000 tonnes in 1981 and up to 100,000 tonnes in 1982. At current market prices these sales would be valued at \$20 and \$34 million respectively. This is probably only a beginning. Mexico has a large indigenous crushing capacity that could utilize greatly increased amounts of Canadian canola and possibly other Canadian oilseeds such as sunflower seed. The Mexicans have indicated they could, within a few years' time, take from Canada up to 300,000 tonnes of canola and 200,000 tonnes of sunflower seed. They have indicated that oilseeds are one of the product groups that lend themselves to relatively "long"-term agreements - because Mexico's import needs are not expected to fluctuate greatly from year to year.

b) The Canadian Industry

Canada grows five varieties of oilseed, mainly in Western Canada. They are canola, flaxseed, soybeans, sunflower seed and mustard seed. Production in 1980 was 2.5 million tonnes of canola, 465,000 tonnes of flaxseed, 713,000 tonnes of soybeans, 166,000 tonnes of sunflower seed, and just under 100,000 tonnes of mustard seed.

Exports in the 1979/80 crop year amounted to 1.7 million tonnes of canola, 450,000 tonnes of flaxseed, 54,000 tonnes of soybeans, 125,000 tonnes of sunflower seed, and 65,000 tonnes of mustard seed. Export marketing of oilseeds is carried out by private companies, some of them multinationals. The Canadian Wheat Board involvement is limited to delivery quota administration.

Supplies of Canadian oilseeds are generally adequate to meet any likely increase in export demand.

c) Recent Canadian Marketing Activity

Mexican crushers and trade officials have visited Canada a number of times in recent years, and Canadians have held technical seminars in Mexico and have developed contacts with CONASUPO. Federal government ministers and officials have included promotion of oilseeds in their trade discussions and the western provinces have actively explored market opportunities.

d) Market Impediments and Advantages

In the Mexican climate, oilseeds and oilseed products will deteriorate in quality within weeks if not properly handled, stored, and processed. The Mexicans are making considerable effort to improve port, rail and storage facilities to remove these impediments to exporters.

Higher transportation costs from Canada than from the United States represent a moderate disadvantage, as well. Canadians are much less experienced than Americans in dealing with CANASUPO.

However, Canadian oilseeds, particularly canola, do have some superior qualities, and the Mexican desire to diversify their sourcing would seem to have advantages for Canadian suppliers.

e) The Competition

The United States is by far the major exporter of oilseeds, meals and oils to Mexico. U.S. exports of soybeans to Mexico rose to 850,000 tonnes in 1980, sunflower seed to 240,000 tonnes, and soybean meal to 150,000 tonnes. The United States has the advantages of proximity, transportation costs, production and price competitiveness, and marketing vigour. The U.S. government and industry, and associations such as the American Soybean Association, promote actively in Mexico.

f) The Action Plan

Sales of canola were provided for in the broader Canada-Mexico supply arrangement of February 1981. The parties to the arrangement are to review it in the Fall of 1981, annually thereafter, and at any other time at the request of either party. The reviews will include consideration of prospective demand conditions in Mexico, prospective supply conditions in Canada, and the possible extension of the arrangement to additional years, quantities, or commodities.

If and when greater export opportunities do seem to be opening up, ITC will initiate, in collaboration with the provinces and the industry, increased efforts to encourage Canadian exporters to respond to Conasupo and to inform the Mexicans concerning the availability and superior qualities of Canadian oilseeds, particularly canola, and their broad uses in animal and poultry nutrition and in consumer foods such as margarine, shortening and salad oils. Technical information and assistance will also be offered concerning the handling and storage of oilseeds and products.

An incoming trade-and-technical mission for canola, sponsored by the Department, is planned for the Summer of 1981. This timing will capitalize on the technical seminars Canadians have conducted in Mexico, the potential shipment of considerable quantities of canola to Mexico, and the signs that the Mexicans may want to increase their purchases further as time goes on.

While some Canadian oilseed exporters have agents in Mexico, oil and meal exporters do not as yet have agents, because in the past they have not perceived Mexico as a prime market. The desirability of agents should be put forward at future meetings of the Market Development Committee of the Canola Council of Canada, which includes representatives of oilseed, oil, and meal exporters.

5. Oil and Gas Equipment and Services

a) The Opportunity

Continued development of Mexico's oil and gas industry is at the heart of Mexico's industrial strategy. Foreign exchange earnings from this sector are vital to the financing of industrial activity elsewhere in the economy while tax revenues from oil and gas production would be central to any future wealth distribution programs of a new administration. Present daily production of about 2.3 million barrels per day (of which 850,000 barrels are exported) make Mexico a major producer and exporter. That production is slated to rise to 2.7 million barrels per day by the end of 1980. Gas production has also been rising (2190 million cubic feet per day at the end of 1977) as have proven reserves which most recently have been put at over 60 billion barrels.

Mexico's global development plan for 1980-82 specifies that thirty-two percent, or about C\$15 billion, of Mexico's oil income is to be re-invested by PEMEX, the state owned oil and gas monopoly. Investments will cover the full range of oil and gas activity from exploration to downstream petrochemical plants. Much of that investment will occur in the "up-stream" portion of the industry starting with exploration and ending with pipelines. While Canadian expertise is by no means confined to this sector, it is in the up-stream portion of the oil and gas industry, that our capabilities are most extensive. PEMEX' own plans, as detailed in the National Industrial Development Plan, call for the following foreign purchases:

Foreign Purchases 1979-1986
(In Millions of Constant 1977
U.S. Dollars)

Pipe	948
Drillpipe	1,110
Compressors	1,145
Drill Rigs	477
Heat Exchangers	278
Valves	193
Electric Motors	203
Pumps	360
Instruments (of all types)	188

The Canada-Mexico Industrial and Energy Cooperation Agreement confirmed the interest of both countries in stimulating and expanding the bilateral exchange of

industrial goods by encouraging the formation of joint enterprises including transfers of technology through technical cooperation, licensing arrangements and related transactions. Equipment and services related to petroleum and gas development was one of nine areas singled out for attention.

b) The Canadian Industry

Of the many Canadian companies serving the oil, gas and petrochemical industry in Canada, about 100 are either active or interested in exporting their equipment or services to Mexico. These companies would in turn fall into two categories. The first group of about 25 medium to large companies (over 400 employees) have sufficient resources and experience to sustain an independent marketing effort. Many are foreign owned, have already been exporting to Mexico and have agents/manufacturing associates in the country (frequently as a result of the parent company's own activities in Mexico). As a general rule, but allowing for some exceptions (e.g. the putting together of a large Canadian project oriented equipment package where their participation would probably be essential) these firms neither seek nor need government marketing assistance. This group would also include one or two trading houses capable of putting together equipment/service packages or otherwise introducing new firms to the Mexican market. The second group of about 75 companies have not been very active in export markets but are interested in so becoming. These companies are generally Canadian owned, have less than 100 employees and need export marketing assistance. A high proportion of these firms are located in Alberta. A conservative annual target for their worldwide export activity would be about \$50 million. Should Canada win a major project, such as a pipeline or gas processing plant, this figure would be eclipsed overnight.

Over the past five years this industry, drawing extensively on developments in the Canadian oil and gas industry, has made major technological and manufacturing advances. The end result has been very real progress in reducing Canadian dependence on imported equipment to the point that many companies can now begin to give export markets new attention.

c) Canadian Activity to Date

While some Canadian firms have signed export contracts with PEMEX (details provided below) the Canadian marketing effort to date has only met with moderate success and has

been characterized by independent private sector initiatives, by Embassy assistance to exporters (introduction to agents and the customer, supply of background information on registration procedures etc.) by ITC participation in the Mexico trade show, and by two Alberta Missions to Mexico in the last two years. A trade commissioner seconded to the Alberta government was involved in putting together these missions and an Alberta government energy expert has been seconded to the Embassy in Mexico. Coordination of the Canadian marketing efforts with Alberta will be important lest future marketing efforts be too dispersed or even counterproductive.

At the invitation of the Canadian government, representatives of Mexico's state owned development bank, NAFINSA, visited Canada for one week in May 1980 to investigate concrete opportunities of inducing technology transfer and investment to Mexico in strategic sectors. Meetings were held with 25 Canadian companies and different government agencies. A NAFINSA report on the mission indicates that 6 Canadian manufacturers of oil and gas equipment showed interest in transferring some technology to Mexico.

Despite the activity to date (including a just expired and unutilized EDC line of credit with PEMEX of \$250 million) there is evidence to suggest that Canadian industry would benefit from a greater knowledge of how to sell to PEMEX. The need for an agent, the importance of Spanish language capability, the significance of registration procedures, the necessity of knowing one's way around the huge PEMEX bureaucracy, and above all the importance of persistence and regular visits to the market (given among other things PEMEX' slowness to place orders) have not always been fully appreciated by the Canadian exporter. A post-mortem, to be conducted on the expired EDC line of credit, should shed some light on the need for and nature of future Canadian financing packages with PEMEX. A compendium of what Canada has already sold to PEMEX could also be usefully compiled. Any Canadian marketing strategy should draw on the lessons learned from the following successes.

d) Canadian Success Stories

- KREMCO Sale of Work-Over Rigs

In 1978 Kremco sold 6 work-over rigs to PEMEX. In addition to having a quality and competitively priced product, KREMCO's success can be attributed to persistence and their willingness to bring Mexican

content into their product through an assembly agreement with a Mexican firm. Five to six visits to Mexico per year were deemed essential to identifying and selling the different divisions and people within PEMEX that are responsible for the purchase and operation of equipment. This is understandable in light of the vastness of the PEMEX bureaucracy and the time required to make buying decisions. Getting a firm handle on the real capabilities of the Mexican partner/manufacturer was considered very important.

- Foster Wheeler Canada Sale of Boilers

Foster Wheeler Canada (FWC) has sold 26 boilers to Mexico over the last 12 to 13 years including a recent sale of 5 boilers to PEMEX. Beginning with a competitively priced and quality product FWC attribute their success to perseverance and a sales campaign aimed at satisfying both the technical and purchasing people at PEMEX. The services of a knowledgeable agent were deemed essential to success as was the willingness to have Mexican industry participate in parts supply and installation. In undertaking mexicanization the need and difficulty of achieving consistent quality was held to be important as was PEMEX' perception that Canadian firms enjoyed the support of their government.

e) Market Impediments

Some reports indicate that Mexico is capable of producing 60 percent of its needs in oil and gas equipment and services. Where indigenous capability exists non-Mexican suppliers are effectively excluded from the market. Intensified development of the country's oil and gas production, transport and processing suggest that Mexican industry may not be able to meet as much as 60 percent of PEMEX' requirements for goods and services. Furthermore, reports emanating from the industrial development agencies of rapidly industrializing nations frequently overstate the capabilities of domestic industry and are often at variance with the views of the buyers and users of equipment who are more concerned with the proper functioning of the equipment than with its Mexican content. That prospect notwithstanding the message is clear - Mexican industry is meeting a growing share of PEMEX' needs and Canadian companies who ignore the technology transfer parameter of the marketing equation may find success in the Mexican market either non-existent or short lived. As indicated by the Canadian success stories above, Mexico's local content plans and technology import regime need not be insurmountable obstacles.

With respect to Canada undertaking major projects, Mexico's 21 percent tax on the import of foreign services (only a part of which is deductible as a business expense for Canadian tax purposes) has worked against Canadian engineering companies actively pursuing large oil and gas projects. The foreign origins of much of our technology in this sector is probably a more significant factor however.

f) The Competition

PEMEX import purchasing data shows the principal competition to be as follows:

Imports and Import Market Shares (PEMEX Purchases)
(Millions of U.S. Dollars)

	<u>1976</u>	<u>1977</u>	<u>1978</u>
Total	446	467	492
U.S.	321 (79%)	327 (70%)	344 (70%)
Italy	36 (8%)	37 (8%)	39 (8%)
Japan	45 (10%)	47 (10%)	49 (10%)
Germany	22 (5%)	28 (6%)	34 (7%)
U.K.	22 (5%)	23 (5%)	25 (5%)

As is the case in the oil and gas industry worldwide, the U.S. dominates the market. The European and Japanese presence confirms that distance need not be a barrier to sales. The U.S. has also held Petroleum Shows in each of 1978, 1979 and 1980 which the U.S. Department of Commerce has considered to be "huge successes".

g) The Action Plan

Established Canadian expertise, the magnitude of PEMEX' 1980-82 investment program, Canadian successes of recent date, and clear signs of growing corporate interest in selling oil and gas equipment to Mexico point to the desirability of a sustained and focused Canadian marketing initiative in this area. A successful and focused initiative will require: more knowledge of what Canada is currently selling; a better understanding of how PEMEX' "up-stream" investment program is broken down between exploration, production (including feeder systems, secondary recovery, etc.) and pipelines; more knowledge of Mexico's own industrial capabilities and identification of potential Mexican manufacturing partners; greater PEMEX

familiarity with Canadian capabilities; enhanced appreciation by Canadian companies of how to do business in Mexico; marketing coordination with Alberta; and tying the Canadian initiative to the good will evidenced by the signing of the Energy and Industrial Cooperation Agreement.

In addition to the normal intelligence gathering and corporate assistance activities of the Canadian Embassy in Mexico it is therefore proposed that:

- (1) The Department, working as appropriate in close concert with the Mexican authorities either commission or undertake with its own resources, two studies, one detailing PEMEX' up-stream investment program (including the identification of projects and large equipment packages coinciding with Canadian areas of expertise) and another clearly identifying the extent of Mexico's equipment manufacturing capability for the oil and gas sector. The latter study would also seek to identify potential technical partners for Canadian exporters and through consultation with Mexican manufacturers, industrial development authorities and purchasers/users of equipment identify the common ground for reconciling the views of the proponents of high Mexican content and those most concerned with equipment reliability.
- (2) Once those studies are completed, for marketing and subsequent evaluation purposes, a Canadian market target share will be established and a comprehensive marketing program put in place.
- (3) The marketing program will include:
 - i) A Canadian information booth at the July 1981 Expo Mexico trade show including a half day program for Canadian exhibitors sponsored by the Alberta Government on how to do business in Mexico and with PEMEX; recognizing the need for persistence in the Mexican market that show, should in 1982 be followed by a technical seminar in Mexico on Canadian expertise and industrial capability in the oil and gas sector;
 - ii) Still on the theme of sustained export marketing and the need for Canadian exporters to fully address the basics of doing business in Mexico, it is proposed that a mailing campaign on the new PEMD F program be directed

at the Canadian oil and gas equipment industry. Among other things the PEMD F program could see the members of that industry, either individually or collectively open an office in Mexico;

- iii) Publicity in Mexican trade journals;
 - iv) Appropriate financing vehicles with PEMEX, extending as necessary over several years to allow for gradual mexicanization of certain procurement packages;
 - v) Reference whenever Ministers of the two countries meet to Canada's interest in becoming an important supplier of oil and gas equipment to the Mexican market.
- (4) The Department explore with Petrocan and subsequently the Canadian industry the possibility of that company concluding a technical service agreement with PEMEX for the procurement of Canadian equipment.
- (5) The Embassy in Mexico continue to maintain on its staff an officer with an appreciation of the Canadian petroleum industry and its suppliers and that he have a clear mandate to promote Canadian equipment/service sales to PEMEX. In accordance with the dictates of the market, he should be a catalyst in furthering joint venture contracting between Canadian and Mexican firms.
- (6) In line with the need for industrial training in other sectors of opportunity calling for mexicanization the Department thoroughly explore what avenues are open to it (the Young Technicians Program, PEMD, etc.) to assist Canadian exporters to undertake training programs related to concrete export-industrial cooperation prospects.
- (7) The department promote the formation of a trade/ industrial cooperation link between relevant Canadian industrial associations such as the Canadian Oil Field Equipment Manufacturers Association and their Mexican counterparts.
- (8) Recognizing that Houston is the world's most important technology and procurement centre for the oil and gas industry (as illustrated by the state oil companies of Saudi Arabia, Mexico, Venezuela and others maintaining buying offices there), it is

proposed that serious consideration be given to the establishment of a Canadian trade office in Houston dedicated to increasing exports of Canadian oil and gas equipment and services.

6. Mining Equipment and Services

a) The Opportunity

Mexico has a long standing mining tradition going back to and even pre-dating the conquistadores. The Industry has gone through the normal cyclical periods at times exacerbated by strongly nationalistic policies. As the decade opens the industry appears poised for a period of growth, regulatory stability and sustained technological development. In 1978 the country's mineral production, roughly 50 percent of which was exported, totalled \$1.1 billion. Mexico currently occupies first position in world production for silver, fluorspar (fluorite) and graphite. It is also among the world's top five producers of lead, zinc, mercury, sulfur, barite, bismuth, arsenic and antimony. With the exception of two large copper mines and mining for coal and iron ore Mexico is essentially a country of small and medium size mines with over 15,000 mines in operation. As of 1978 there were only 15 mining companies with individual sales of over \$6 million. The largest of Mexico's mining groups had sales of approximately \$333 million. The Mexican government accounts for about 35 percent of production a figure which will rise dramatically as some major silver, coal, copper and phosphate projects proceed. It is estimated that close to 100 percent of the industry is under Mexican majority shareholding as legally required for new mining ventures since the early 1960's.

An overhaul of Mexico's mining legislation and tax regime was undertaken in the late 1970's. Fiscal incentives for mineral exploration and exploitation were increased, cumbersome bureaucratic procedures reduced and government regulations covering concessions clarified and streamlined. A positive effect on the growth of the industry is anticipated. In December 1976 the private sector members of the Mexican mining community pledged to invest \$2.5 billion over the six year period of President José Lopez Portillo's administration (1976-1982). By the end of 1978 almost \$1 billion of that amount had been invested. Mexico's Industrial Development Plan (1979-1982) envisages mining investments by Mexico's para estatal enterprises of over \$3,000 million from 1979 to 1990. (By contrast anticipated expenditures in the Canadian mining industry for 1980, 1981 and 1982 are \$8.6 billion). Projected private and public sector investments are for both open pit and underground operations and cover the full range of Mexico's mineral base with some particularly large projects upcoming for the development of phosphate, copper, coal and silver/ lead/zinc ore bodies.

Comprehensive information on 35 investment projects being contemplated and/or undertaken by Mexico's mining companies is available in a report prepared by the Canadian Embassy in Mexico for the Canadian participants in the October 1979 Acapulco Mining Show.

In 1978 Mexico imported \$134.2 million of mining and construction equipment. The anticipated level of Mexican investment activity is such that domestic manufacturers are unable to keep pace with the demand from their Mexican customers who already buy 60 percent of their equipment from foreign sources. Projected annual growth rates in mining machinery imports of between 12 and 13 percent are such that by 1983 a \$250 million import market for mining and construction equipment should open up. A \$40 million World Bank loan, concluded in 1980 for equipment procurement by Mexico's small and medium-sized mining companies should contribute to the development of this market as should the decision by URAMEX, the government uranium monopoly, to embark on a major exploration and development program.

b) The Canadian Industry

The Canadian industry providing equipment for the exploration, extraction and processing of minerals (up to and including refining) consists of roughly 120 manufacturers, only about 15 percent of which could be considered to be medium to large in size i.e. with over 100 employees. The vast majority of firms, whose production is intended not just for the mining industry, but a wide variety of machinery user industries, are located in the large urban centres of Ontario, Quebec and British Columbia where markets, supplier inputs and skilled labour are concentrated.

The industry can now offer the full range of exploration equipment. In fact in geophysical exploration Canada is recognized as a world leader and has a 60 percent share (\$10 million) of the world market for geophysical equipment. On the extraction side Canadian manufacturers can supply about 50 percent of the equipment needed for an open pit mine and 70 percent for an underground mine regardless of the mineral being mined with the exception of underground coal mining for which there are no Canadian equipment manufacturers. Canadian content fluctuates within the same range depending on mine size and mining method. At the concentrator stage Canadian supply capability is in excess of eighty percent for any non-ferrous ore. For the concentration and treatment of iron ore (up to and including pelletizing) Canadian

capability is also strong with the exception only of concentration requiring the use of Humphrey's spirals and the treatment by sintering of iron carbonate ores (not common in Mexico). Steel making is not addressed in this market plan.

Canadian ability to supply equipment for non-ferrous metal smelters hinges on the selection of the smelting process. For certain metals (lead, zinc, nickel, copper) Canada's mining majors have developed their own process technologies which if selected for a given project improve Canadian supply prospects. The international market for process know-how is a very competitive one however and Canada has only really begun to market its process technology offshore. Canada's ability to supply equipment for non-ferrous metal refineries, particularly electrolytic zinc refineries, is very strong. Two electrolytic zinc refineries have been exported to Turkey and Peru.

Subsidiaries of foreign companies mostly American comprise roughly 65 percent of the Canadian mining equipment industry. The transfer of foreign capital and technology to Canada and access by some Canadian subsidiaries to the marketing networks of their parents have enabled a rapid development of the Canadian industry. Foreign control has also contributed to limited R&D, restrictions on market development (generally not applicable when Canadian government export financing is in place) and fragmentation of industrial activities. In recent years some product integration or rationalization agreements between U.S. parents and their subsidiaries have begun to offset some of these disadvantages.

By 1978 the industry, which has grown at an average annual rate of 9.3 percent since 1965, exported \$115.4 million or 60 percent of total shipments (up from 28 percent in 1965). The American market absorbed about two thirds of these export sales. Growing Canadian competitive ability, increased availability of EDC and CIDA financing, strong demand in developing countries and almost certainly increased intra-corporate trade all contributed to the growth in exports. At the same time however imports increased their share of the Canadian market from 52 percent in 1975 to 70 percent in 1970.

In the process of growing with the Canadian mining industry Canada's suppliers of technical and engineering services have established a reputation of technical excellence across the entire spectrum of mining consultancy including airborne surveys, groundbased

geological and geophysical exploration services, mine engineering, ore treatment and metal processing. Canadian consulting expertise covers the full range of minerals.

With some notable exceptions the consulting/service industry is almost entirely Canadian owned. It is made up of hundreds of consultants from highly specialized one man operations to large multi-disciplinary firms with several hundred employees. Indicative of this the Canadian Association of Aerial Surveyors lists 27 members while the Association of Consulting Engineers of Canada lists 43 firms with a geological engineering/geophysics specialty, 37 with specialties in mining engineering and ore dressing and 24 specialized in metallurgical engineering. Over three dozen of these companies would have export experience with about half responsible for the vast bulk of Canada's mining service exports. Conservatively estimated such exports would be in excess of \$20 million annually.

It is estimated that since 1974, and excluding cement plants and mini-steel mills, Canadian firms have undertaken about 15 offshore mining/mineral processing projects. With the exception of one or two projects headed up by major equipment producers, all of these projects were primed or otherwise led by roughly six of the large integrated engineering firms (all with over 125 employees) and one trading company, INTERIMCO. These successes notwithstanding Canadian firms have not yet achieved the international project status of such American giants as Bechtel, McKee, Lummus and Fluor Corp. Some Canadian consultants are now forming joint ventures with these firms.

c) Recent Canadian Marketing Activity

Prior to 1977 the Canadian export effort consisted of the individual marketing activities of a handful of Canadian manufacturers. In that year the Department sponsored Canada's first participation in Mexico's most important mining equipment exhibition - the biannual Acapulco Mining Show. Ten Canadian equipment suppliers participated in that show which was followed in 1978 by a mission to Canada of five representatives of Mexican mining companies and government mining bodies. Interest in the Mexican market was clearly on the rise and in 1979 seventeen Canadian companies formed the core of the Canadian contingent for Canada's second participation in the Acapulco Mining Show. In that year Canadian sales of mining equipment to Mexico reached \$5.3 million versus only \$1.3 million in 1978.

In February, 1980 EDC signed a \$20 million line of credit with Industrial Minera Mexicana SA (IMMSA) one of Mexico's largest mining groups. Under this non-project specific loan orders exceeding \$10 million for underground trucks, rock breakers, cathode handling systems, sulphuric acid coolers, and mine hoists have already been received. Following the signing of the Energy and Industrial Cooperation Agreement in May 1980 Mexico's industrial development bank (NAFINSA) also sent a mission to Canada whose purpose was to identify firms potentially interested in investing in Mexico. Several Canadian mining equipment manufacturers were included in their program. NAFINSA and the Bank of Montreal have established a joint development fund called FOMECA. FOMECA can take equity positions in Mexican-Canadian joint ventures with its share being considered Mexican under Mexico's foreign ownership legislation.

In the past year Canadian firms have also sold substantial quantities of geophysical exploration equipment to URAMEX. Also in 1980 exploration and processing specialists from Eldorado Nuclear and Energy Mines and Resources, in support of AECL's nuclear reactor marketing efforts and within the context of the Industrial and Energy Cooperation Agreement visited Mexico to sound out Mexican interest in an uranium mining technical exchange. While it is clear that URAMEX is bound by law to entirely control its own uranium plays, it is not yet known how much technical assistance they are interested in nor what the related sales prospects for equipment and services would be. Much will depend on the progress made towards implementing the expanded Mexican nuclear program which envisages 2500 MW of nuclear power by 1990 and 20,000 MW by 2000. A joint Eldorado/EM&R invitation to have URAMEX exploration and processing personnel visit Canada is outstanding.

Roughly 15 to 20 Canadian mining companies (including COMINCO, INCO, NORANDA, LACANA) have invested millions in mineral exploration and production in Mexico. The latest large scale Canadian project announced in November 1980 is the Real de Angeles silver/lead/ zinc project being jointly undertaken by Placer Development of Vancouver and Minera Frisco and the Comision de Fomento Minero of Mexico. The mine will be the third largest in Mexico, processing 10,000 tons of ore per day. Total project cost is estimated to be about \$150 million. Wright Engineers of Vancouver will do the engineering for this project working with a Mexican company. This is the first time that Canadian engineers have undertaken a major mine

development project in Mexico. The Canadian chartered banks, five of whom have offices in Mexico, also carry millions of debt financing in their Mexican mining portfolios.

d) Canadian Success Stories

Numerous Canadian companies have concluded sales in Mexico in the last few years. The experience of some can be useful to others.

Jarvis Clark is a relatively large (650 - 700 employees) manufacturer of underground trucks, drill jumbos, utility vehicles and load-haul-dump units whose 1980 exports accounted for 50 percent of production. As late as 1977 export sales were not a major factor in overall corporate activity. Given the considerable importance attached to after sales service (in terms of both maintenance and parts supply) care was taken not to spread the global marketing effort over too many countries. Beginning in 1977 the company identified Mexico as a priority market and a regular program of market visits was begun. Participation in the 1977 Acapulco Mining Show was decided upon (and repeated in 1979). A Mexican sales company, in which Jarvis Clark holds 49 percent of the shares and Mexican interests 51 percent, was formed almost immediately and a Mexican national hired as its manager. Given the high importance attached by Mexican customers to rapid supply of spares (which generally means parts inside the Mexican border) replacement parts were consigned to the new company and stored in Mexico. The number of warehousing locations has since been increased and direct purchase of spares by the joint venture company initiated. The most was made of every opportunity to have potential Mexican purchasers visit the company's plant in North Bay (four Mexican groups have been to North Bay in the last 15 months). Sales to IMMSA under the EDC line of credit have been concluded.

Another highly successful supplier of mining equipment to Mexico highlighted the importance of working closely with a Mexican agent and educating him in their product. To effectively extend the selling effort to both executive/purchasing personnel in head office and the technical personnel in the field, this company also hired a Mexican national and put him on their own sales force payroll. Bringing their product into Mexico for an "on-spec display" without advance assurance of a sale contributed significantly to early sales. Regular visits to the market and participation in the Acapulco Mining Show in both 1977 and 1979 have been important

contributors to success. The company also felt that the Canadian Embassy in Mexico was a great help in opening doors. Sales in Mexico have now reached a level such that continued growth demands that even closer attention be paid to the rapid supply of spares. The company is therefore forming a 51-49 joint venture company with a Mexican partner to handle sales, distribution, warehousing and service.

Scintrex Ltd., a leading supplier/manufacturer of geophysical exploration equipment and services has been involved in the Mexican market for over 15 years. While the sale of their services was effectively stopped by Mexico's 21 percent withholding tax on foreign service imports (formerly 42 percent), instrument sales, which over the last 10 years sales have totalled several million dollars, are if anything, accelerating. The company makes frequent visits to the market place and has put on a number of technical seminars in Mexico. They believe the role of an agent to be important, less in selling the technical merits of the product than in building up confidence in the foreign supplier. Scintrex believes that in a Latin environment you sell trust as much as you do technical excellence. Bridging the cultural gap and understanding the Mexican mentality are prerequisites to success. The company found that Mexico's long established mining tradition has created a pool of trained geologists and geophysicists which facilitated selling.

To varying degrees all of the above companies have built up their markets on a strong domestic base.

In short there are no hidden secrets to selling to Mexico - attention to the basics is what counts. A commitment to the market, regular visits, a permanent on the spot sales presence through an agent or otherwise, assiduous attention to after sales service (with emphasis on stocking spares in Mexico) and gaining an appreciation of the cultural dimension of doing business in Mexico are ingredients to success. EDC's line of credit is a new, encouraging and clearly helpful instrument. The above three companies do not yet consider Mexican assembly to be necessary although in time they can see that this will be a factor.

e) Market Impediments and Advantages

The Mexican Government has as one of its economic objectives the encouragement of local manufacturing of all types of industrial equipment. Mining equipment definitely falls into this category and much basic

equipment is already made in Mexico, e.g. drill steel, many types of drill bits, skips, cages, small crushing and milling equipment. Some of the major measures used to encourage local manufacture are:

- (1) A system of import permits which requires most mining equipment imports to be vetted by a special committee of the Secretaria de Comercio (Minister of Commerce) to ensure that equipment imports are not injurious to local manufacturers.
- (2) Up to 40% duties on imported mining equipment.
- (3) A 33% subsidy on the purchase value of machinery and equipment which is made in Mexico or has Mexican content of 60% or more or is manufactured under manufacturing programs approved by the Ministry of Patrimony and Industrial Development. This subsidy is available to the equipment purchaser from the Ministry of Finance once he has satisfied the authorities of the degree of Mexican content.

In spite of this well-developed program to encourage local manufacture, it must be said that much large scale mining equipment is and will continue to be imported. The import licensing system is flexible, even though from the exporters point of view cumbersome in its administration. Furthermore it should be noted that the Ministry of Finance has included in its subsidies for the mining industry a reduction of up to 75% of the general import tax normally payable on all imported machinery, equipment and spare parts required for mining ventures if not manufactured in Mexico. Passenger vehicles are not included. This subsidy is not automatic and must be requested from the Finance Ministry. The question of local assembly must however be monitored closely. Indeed Mexico's minister of Patrimony and Industrial Development has suggested that Canada and Mexico compare mining equipment import lists to see if together our two markets are large enough to justify the establishment of new plants. Such lists are now being exchanged.

Other factors that hinder the Canadian selling effort include heavy foreign ownership of the Canadian industry (not a factor if EDC financing is involved but a definite obstacle if technology transfer; is required), Mexico's 21 percent withholding tax on service imports, shortcomings of the Mexican transportation system (best minimized by trucking) and considerable documentation and long delays

for border clearance. While a diminishing consideration, Mexican lack of familiarity with Canadian equipment nevertheless remains a factor.

Potentially offsetting some of these drawbacks are the investment by Canadian mining companies in Mexican mining projects, the strong lending activity of the Canadian banks and most importantly that of EDC.

f) The Competition

U.S. suppliers drawing on their proximity to the market, the long history of U.S. mining investments in Mexico, and generally aggressive marketing of quality and competitively priced products hold about 80 percent of the Mexican market for imported construction and mining equipment and services. A number of American consultants maintain offices in Mexico and generally work in conjunction with Mexican engineering partners. Several American mining equipment manufacturers including Longyear, Allis Chalmers, Mining Safety Appliances have plants in Mexico. Mexican buyers still think American first. Other countries are making inroads however. Brazil which enjoys a preferential LAFTA tariff holds 5 percent of the market. Japan by virtue of aggressive marketing and credit terms has a 4 percent market share while Germany trading on its long established reputation for quality has 2 percent. Britain holds a 3 percent market share.

Mexican manufacturers currently supply the country with about 40 percent of its construction and mining equipment. The expected rate of growth of the mining industry is such that larger scale mining equipment is and will continue to be imported. While the Mexican manufacturing industry's share of the market is not expected to change substantially Canadian equipment producers will nevertheless have to keep all their options open and monitor Mexican developments closely. A CIDA financed study is now being undertaken to identify what equipment areas related to Mexican mining prospects offer potential for joint Canadian - Mexican manufacturing endeavours.

g) The Action Plan

It is highly likely for the reasons stated above that the USA will continue to dominate the supply of mining equipment and services to Mexico. That notwithstanding the scope of the Mexican mining industry's investment plans offers ample room for further increases in Canadian

exports. The challenges confronting the Canadian industry in Mexico include: keeping abreast of and responding to Mexicanization developments; sustaining the marketing effort to emphasize basics (an in-Mexico sales presence, after sales service, frequent trips to the market, etc.); simultaneously overcoming the export constraints and making the most of foreign (mostly American) ownership of the Canadian mining equipment industry; drawing more attention to Canadian capabilities and if at all possible improving market access for Canadian service suppliers. The Canadian response will therefore consist of the following elements:

- (1) High priority will be given to the use of EDC financing instruments as a means of overcoming export freedom restrictions faced by many Canadian manufacturers.
- (2) The Canadian Embassy in Mexico will be asked to up-date their existing information on the investment plans of Mexico's larger mining groups with a view to identifying large scale equipment needs and/or mining projects which could be supplied from or undertaken by Canadian manufacturers or consultants.
- (3) Maximum use will be made of the knowledge of Canadian mining companies and chartered banks active in the Mexican market. Findings will then be reviewed with EDC to single out the best prospects with whom to negotiate lines of credit and/or project specific financing packages. An appropriate publicity campaign in Mexico on Canadian mining equipment capabilities will be orchestrated to coincide with the announcement of any new financing instruments. Through direct mailings Canadian industry will also be informed of new EDC credits.
- (4) Priority will be given to working with Canadian mining companies active in Mexico in order to take full advantage of the equipment/services export prospects offered by their activities. The purchase of Canadian engineering services by Canadian investors may prove to be a means of selling services to Mexico that are not subject to Mexican tax.
- (5) Representations to have Mexico lower its withholding tax on their service imports will be continued. Efforts to reduce the impact of taxes on exporters through the establishment of a double taxation agreement with Mexico are being pursued.

- (6) Canadian consultants and manufacturers will also be encouraged to take advantage of the new PEMD F program for "Sustained Export Market Development" to open offices in Mexico and/or form warehousing or other joint ventures.
- (7) Canadian supply prospects under the World Banks \$40 million loan for Mexico's small and medium-sized mining companies will be determined and Canadian firms alerted accordingly.
- (8) Existing collaboration with URAMEX will be maintained within the context of the Canadian nuclear marketing effort and Canadian industry informed of any potential equipment and service supply prospects.
- (9) For the third consecutive time the Department will in 1981 sponsor Canadian participation in the high profile Acapulco Mining Show. Thereafter it is anticipated that ITC financing support for the marketing activities of Canadian firms will be through the PEMD program.
- (10) Canadian machinery exporters will be encouraged to closely monitor Mexican industrial development efforts lest the market be closed to them. CIDA's starter and viability study program will be drawn to the attention of those most interested in exploring the mexicanization option as will the existence of the joint Bank of Montreal/NAFINSA development fund.

G. AN OVERALL STRATEGY FOR MEXICO

The major Canadian trade objectives in Mexico are:

- a) to ensure an environment which will encourage the strengthening of the Canadian presence in Mexico's growing economy;
- b) to increase the sale of Canadian goods and services at a rate sufficient to improve the market share; and,
- c) to pursue opportunities for investment, joint ventures and other forms of cooperation.

From the federal government's perspective, a strategy vis-à-vis Mexico requires efforts on three fronts:

- a) helping exporters to take advantage of a strong political relationship between Mexico and Canada. This is particularly important in light of the fact that the Mexican government is responsible for more than 40 percent of the total imports for the country and controls shares in many companies in the sectors identified as important to Canada;
- b) overcoming obstacles to expanded Canadian exports and investment in Mexico. The import regime offers maximum protection to domestic industries and government incentives encourage domestic industrial development thus restricting foreign export business activities; and,
- c) supporting marketing efforts of Canadian firms in pursuing opportunities, particularly in the priority sectors identified.

The following overall strategy is set out in charts as a framework to guide the actions and resource allocation of the federal government and as a basis for coordinating marketing efforts in Mexico in cooperation with provincial governments and the private sector. The three year framework for Mexico is designed to capitalize on opportunities and to overcome constraints affecting Canadian exports. As such it incorporates recommendations arising from the priority sector action plans, particularly where common instruments are proposed. Sector specific initiatives are dealt with in the preceding individual sector strategies. The strategy is outlined in four specific contexts:

- A. Trade Relations
- B. Market Identification
- C. Market Awareness
- D. Market Development

Each of the instruments is suggested as a response to an identified need and is to be evaluated during the 2-3 year period. Undoubtedly additions and/or deletions will be made resulting from on-going interdepartmental discussions and consultations with the provinces and the private sector.

Canada's Overall Export Marketing Strategy for Mexico

A. TRADE RELATIONS

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Mexico relies very strongly on political aspect of bilateral relations in government purchasing decisions (40% of total imports.)	- Head of State to Head of State contact as a "tone-setter" (protocol).	- Prime Ministerial/Ministerial visits.	- Examination of publicity in Mexico resulting from visit. - Mission Report. - Post Feedback. - Business Agreements signed.
- Possible change in national planning priorities (investment, policies, etc.) following appointment of new president which may affect: a) Business opportunities and market planning; b) Strong bilateral relationship.	- Need to ensure a) and b) continued in the new administration.	- Ensuring close contact with a wide spectrum of Mexican political leaders.	- Degree of smoothness of transition in terms of Canada's interests.
- Establish relations with the new President to enhance bilateral relations.	- Need for strong bilateral development once new President is in office.	- Prime Ministerial/Governor General visit to successor's inauguration followed-up with Senior Officials Delegation (within 6 months) led by Minister of State for Trade to set out future program.	- Mission Reports - Post Feedback. - Publicity.
- There will be some continuity which will exist beyond the appointment of a new President.	- Opportunity to develop relationships with senior officials who will provide this continuity.	- Joint Canada/Mexico Programs, e.g. Memo of Understanding on Agricultural Cooperation, AECL activities, Joint Committee on Metro.	- Presence/Absence.
- Since Mexico is not a signatory to the GATT, there is no forum for the resolution of trade access problems or a means of encouraging increased trade access to Mexico.	- To make full use of the provisions of the Trade Act of 1946 (plus creating a means of improving access to the Mexican market).	- Use of Industrial Energy Cooperation Committees, and the Joint Ministerial Committee as appropriate fora; and the Mexican proposed Bilateral Consulting Committee on Trade Relations.	- The satisfactory resolution of problems and actual improvements in access for Canadian goods.

A. TRADE RELATIONS (CON'D)

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Problems of double taxation particularly in the area of withholding taxes on services.	- To encourage the formation of a double taxation treaty	- Negotiations aimed at double taxation treaty	- Presence/Absence

B. MARKET IDENTIFICATION

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Post capability	- Additional information re Mexican markets.	- More efficient market reporting by the institution of a new Post Forecast System (already done). - Studies re sectors and competition by the Post, with guidance by Ottawa of information required.	- Meets needs. - Meets needs.
- Federal/Provincial/ Business efforts.	- Coordination of total Canadian efforts and liaison re market information.	- Encourage more regular contact between Federal/Provincial/Business sectors through the use of: a) Joint Committees b) Visits by Federal Gov't. c) Export Trade Development Board d) Federal/Provincial Trade Development Committee	- Effectiveness of contacts.
- Insufficient market share information & competition techniques.	- Identify and analyze competition in market.	- Study of Competition Canada faces in Mexico	- Amount of new information gained.
- Desired increased in technology in Mexican business and industry which has not been responded to by Canadians.	- To identify impediments in Mexican law and in Canadian government policy which impeded technological transfer.	- Study of Mexican taxation, investment, control and patent protection legislation.	- Presence of solutions.

C. MARKET AWARENESS

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Mexico is a growing market for Canadian exports and is not being fully developed.	- Make potential exporters aware of opportunities.	- Market Awareness Program in Canada, including; a) Publicity/Press Releases b) Speeches to Businessmen c) Seminars on Mexico	- Number of new exporters identified.
- Strong Government to Government Relations.	- Make Mexican Government Officials aware of Canadian capabilities.	- Public Relations including; a) High level missions b) Joint Committees c) Government exchanges	- Increased knowledge of Canada.
- Insufficient Canadian knowledge of Mexican Industrial capabilities in some priority sectors.	- Improve that knowledge.	- Study of Mexican industrial capabilities using IT&C resources or commissioning a private sector study financed by CIDA INC program - Encourage formation of ties between Mexican and Canadian industry associations in priority sectors.	- Feedback from industry using study to consider Mexican-ization.
- Insufficient Mexican knowledge of Canadian industrial capabilities and tendency to "Think American First".	- Improve that knowledge in priority market sectors for Canada.	- Selective publicity in Mexican trade journals, and inviting Mexican editors of technical/specialized journals to Canada. - Canadian technical seminars in Mexico. - Missions of Mexican officials and businessmen to Canada. - Encourage formation of ties between Mexican and Canadian industry associations in priority sectors.	- Enquiries to post provoked by publicity. - Seminar and mission reports.

C. MARKET AWARENESS (CON'D)

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Post expertise	- Make Canadian Exporters Aware of Mexico.	- Market Awareness Program in Canada. - Contact and Liaison of Trade Commissioner tours of Canada and through speeches.	- Number of potential exporters.
- Insufficient coordination of Federal and Provincial marketing efforts	- Improved coordination of efforts and liaison.	- Market Awareness Program in Mexico, including a) Joint Advertising. b) Simultaneous Advertising. c) Joint participation in exporting seminars. d) Cooperation in missions for market awareness. - Federal/Provincial Trade Development Committee	- Number of joint activities.
- Insufficient awareness of trade access information provided by the government to business.	- To make companies aware of trade access information.	- Promote increased utilization of existing toll free access to ITC (especially re trade access information for Mexico) - Market Awareness Program to reach companies not presently using ITC facilities re export development in Mexico.	- Increase in the number of inquiries.
- Insufficient Canadian corporate knowledge of the "how to" aspects of doing business in Mexico including mexicanization.	- Improve that knowledge.	- Mexican Market Awareness Program. - Preparation by the Post of guides to the exporter to Mexico including; a) An updated Market Information Booklet b) "How to Do Business in Mexico" Guide c) Layman's Guide to "Investment and Joint Ventures in Mexico".	- Number of companies reached.

C. MARKET AWARENESS (CON'D)

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Insufficient knowledge and/or skepticism of the Canadian export potential associated with mexicanization.	- Inform Canadian exporters of potential benefit.	d) Booklet on Duty Free Zones in Mexico. - Giving Canadian business missions to Mexico short seminars on how to do business in Mexico.	- Number of companies reached.
- Mexicanization policy offers opportunities for investment ventures as a means of import penetration.	- To make business aware of investment venture opportunities.	- Compile and distribute information document of successful and unsuccessful examples (Canadian or otherwise) of mexicanization as a means to increase exports. - Encourage formation of ties between Mexican and Canadian industry associations in priority sectors.	- Assessment of cooperative initiatives.
- Insufficient awareness of financing available to Canadian companies exporting to Mexico.	- To make companies aware of financing available by EDC and other government agencies (e.g. EDC lines of credit to Nafinsa).	- Cooperating with information exchanges between Mexico and Canada, e.g. Nafinsa/Bank of Montreal seminars. - Distribution of CIDA-INC studies of joint venture opportunities Market Awareness Program including; a) Speeches b) Advertising. c) Export seminars.	- Number of companies reached.

C. MARKET AWARENESS (CON'D)

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Benefits to be derived from sustained export market development in Mexico (regular visits to Mexico, opening offices and warehousing in Mexico).	- Encourage Canadian firms in selected sectors to mount sustained marketing efforts.	- Mailing campaign in Canada to advise Canadian firms of new PEMD F program and assistance available from CIDA Inc. program.	- Number of applications for assistance received under PEMD F and CIDA Inc. programs. - Canadian offices/warehousing facilities opened in Mexico.
- Desired increase in technology in Mexican business and industry which has not been responded to by Canadians.	- To make Canadian companies aware of the possible opportunities found in Mexico's need for technology.	- Identification of, and contact with, relevant Canadian companies. - Direct publicity.	- Number of new companies identified. - Number of enquiries. - Number of new companies involved in technology projects.
- Strong Canadian banking presence in Mexico.	- To capitalize on this presence to increase business.	- Market Awareness Program, which will include steps to encourage liaison between Banks/Canadian Exporters/Mexican clients by joint sponsorship of seminars between banks and Canadian government.	- Number of new companies using facilities available.
- Strong bilateral ties.	- To capitalize on these ties with specific reference to government sponsored importing profile.	- Government to Government missions (including Canadian industry) to increase Canadian exports by using government sponsorship. - Canadian Commercial Corp. - Integration of Canadian government and private sector export activity through joint preparation for and/or participation in meetings of bilateral cooperation committees arising from Energy and Industrial Cooperation Agreement	- Business generated.

D. MARKET DEVELOPMENT

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Canada has been selected as one of five priority countries with which Mexico wishes to strengthen ties.	- To capitalize on promotional value of this designation.	- Focus Canadian promotional activities to take advantage of designation (fairs, missions, PEMD, etc.)	- Business generated by each program.
- Mexican reliance on Canada as a major market for its exports.	- To improve Canadian share of Mexican market.	- Assist Canadian companies in a more pronounced market penetration through the use of PEMD A, B, EDC, CIDA, etc.	- Business generated by each program. - Increase in use of these tools.
- Limitation of post person years and budget	- To maximize post efforts re promotion.	- To match resources with potential by the development or allocation of: a) Additional man years. b) Increased funds for "in house" activities such as Mini Trade Centre	- Increase in contacts and resulting business.
- New facilities of the chancery in Mexico City.	- To make most advantageous use of the facility and to promote its use by Canadian exporters.	- "Use of the chancery facility as a Mini Trade Centre for export development, and publicizing its availability to potential and existing exporters to Mexico".	- Impact of use.
- Personal contact between businessmen as an important key to success in Mexico.	- Increased contact between Canadian and Mexican businessmen.	- Support and participation in programs which will increase contact between businessmen in the two countries, including a) Canada-Mexico Businessmen Committee b) Support for development by the private sector of Canada-Mexico Chamber of Commerce.	- Increase in contacts.

D. MARKET DEVELOPMENT (CON'D)

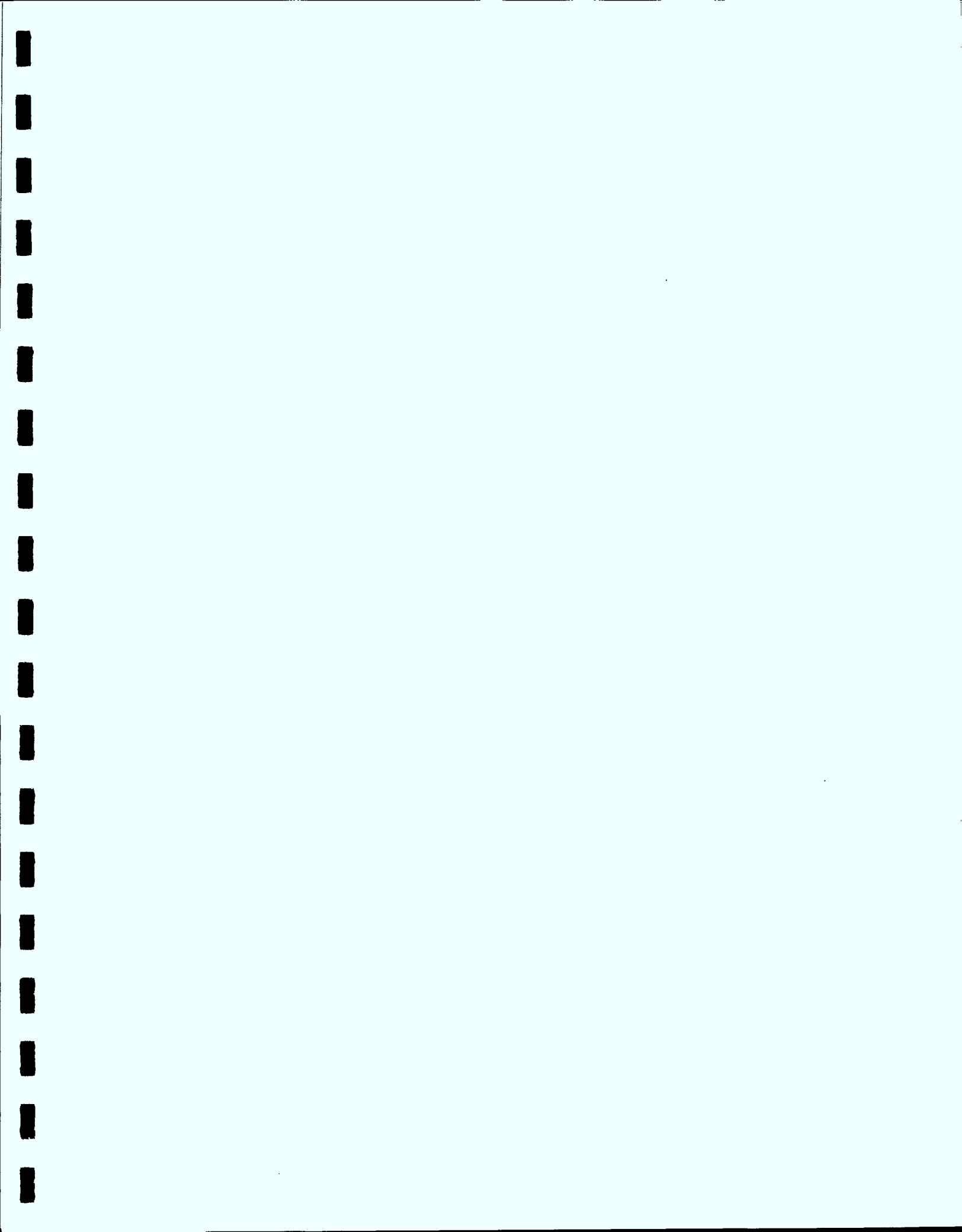
<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Canadian capacity shortfalls in meeting Mexican needs.	- Coordinate Export and Industrial Strategies with respect to supply.	- Examination by ITC of ways in which coordination might be made.	- Suggestions for coordination.
- Insufficient Canadian promotional experience in Mexican market.	- To investigate the successful promotional tools used by the competition in Mexico for possible adjustment to existing Canadian programs.	- Preparation of an inventory of promotional techniques, both sector specific and general in nature, to use as the basis for an evaluation of the suitability of Canadian promotional tools through the use of an ITC/TCS promotional review re Mexico in cooperation with the private sector and provinces.	- Suitability of existing promotional tools and recommendation of new programs where desirable.
- Present dispersion of effort in Canadian export marketing.	- Better coordination in total Canadian export promotion efforts in Mexico and consultation with the Provinces and the private sector.	- Committees and Advisory Groups, including: a) Federal-Provincial Trade Development Committee b) Export Trade Development Board	- Reduction in duplication of effort and increases in cooperative efforts.
- Federal/Provincial/Business efforts.	- Cooperation in efforts and liaison re export promotion programs.	- Encourage more joint and simultaneous programs, including a) Joint Federal/Provincial Missions b) Program Linkages c) Access to each others programs and facilities.	- Number of joint/simultaneous activities.
- Distribution/Transportation difficulties in getting Canadian products to the market.	- Provide better access to Canadian exporters to get to Mexico.	- Study of Transportation Services, including analysis of distribution services available to Canadian exporters and recommendations of solution.	- Improvements in Services.

D. MARKET DEVELOPMENT (CON'D)

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Desired increase in technology in Mexican business which has not been responded to by Canadians	- To encourage companies to take advantage of Mexico's desire for technology.	- Technology Missions - Publicity	- Increase in participation.
- Limited Mexican technical knowledge in priority sectors of interest to Canada.	- To increase Mexican technical knowledge in priority market sectors for Canada.	- Establish government training program for long term market "seeding", bringing Mexican public servants to Canada in exchange programs - Enlarged Young Technicians Program more responsive to Canadian export efforts.	- Increased business as a direct result of decisions made by people involved in exchanges.
- Canada has often no clear or unique product advantages over the major competition in Mexico.	- To determine export promotion techniques which can be used by the federal gov't to emphasize the image rather than product specific benefits of Canadian exports	- Analysis of promotional activities suitable to non product specific or image marketing through joint Ottawa/Post review.	- Forthcoming changes.
- Dominance of USA in Mexican market.	- Turn domination to Canadian trade advantage.	- Promoting need for Mexican market diversification through; a) lobbying of Mexican government rediversification needs. b) Investigating joint venture possibilities with USA in Mexico. - Encourage Mexican purchases of Canadian products compatible with or using American technology preferred by that country.	- Increased business in Canadian exports and joint ventures.

D. MARKET DEVELOPMENT (CON'D)

<u>OPPORTUNITY/CONSTRAINT</u>	<u>NEED</u>	<u>SUGGESTED INSTRUMENT</u>	<u>EVALUATION MECHANISM</u>
- Mexican content requirements: mexicanization	- To use mexicanization to Canada's best advantage.	- Studies on Mexican industrial capabilities and the encouragement of mexicanization related to Canadian opportunities	- Opportunities identified and/or capitalized.
- Export financing is not always competitive	- Assess where export financing is not competitive and determine ways to overcome this.	- Analysis of financing need of Canadian exports to Mexico through a joint EDC/CIDA/ITC review in cooperation with private sector and provinces	- Solutions determined
- Restriction on export development caused by language communication problems	- Increased ability of exporters to do business in Spanish with Mexican clients	- Promotion of and support for, the development of Spanish language capability in Canadian exporters to Mexico	- Increase in capability



APPENDIX:

TABLES 1 - 23, FIGURE 1

TABLE 1

Selective Demographic Indicators of Mexico

Population of Mexico (1980) 70,000,000 of which 35.1% Rural
64.9% Urban

Labour Structure of Economy 34 % Agriculture
25 % Industry
41 % Service

Major Urban Centers

	<u>Total</u>	<u>Mexico City</u>	<u>Guadalajara</u>	<u>Monterrey</u>
	(in thousands of persons)			
<u>January-March 1979</u>				
Total population	18,856	14,391	2,240	2,045
Population 12 years old and above	12,706	9,782	1,566	1,358
Labour force	6,342	4,928	803	611
Employment	5,957	4,627	754	576
Open unemployment	385	301	49	35

Source: Mexico's Ministry of Programming and Budget.

Scientific American, September 1980

TABLE 2

Origins and Ratios of GDP for the Mexican Economy

Origin of GDP (1978)	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>Est.</u> <u>1979</u>
	<u>(per cent)</u>				
Agriculture, livestock, and fishing	9.6	9.5	9.7	9.4	8.8
Petroleum	4.0	4.4	5.0	5.4	5.8
Manufacturing	23.1	23.4	23.5	23.9	24.1
Construction	5.2	5.0	4.7	5.0	5.1
Transport and Communications	3.9	4.0	4.1	4.2	4.2
Commerce	31.2	30.2	29.6	29.4	29.3
Other	23.0	23.5	23.4	22.7	22.7
<u>Ratios to GDP (1978)</u>					
Exports of goods, services, and transfers	8.2	9.3	11.3	11.6	12.4
Imports of goods, services and transfers	13.5	13.6	13.8	14.7	15.9
General government revenue	14.6	15.4	15.7	16.4	16.3
General government expenditure	16.7	19.2	17.3	17.9	18.4
Public sector savings	2.2	2.3	2.9	4.4	4.4
Public sector deficit	-8.6	-9.7	-6.7	-6.6	-6.6
External public debt (end of year)	18.5	24.7	30.9	28.4	24.4
Saving	18.9	19.9	20.2	22.2	23.4
Investment	24.2	24.2	22.7	25.3	26.9
Money and quasi-money (end of year)	36.8	33.9	32.3	34.4	34.8

Source: Mexico: Recent Economic Developments (I.M.F., 1980)

TABLE 3

OBJECTIVES AND PRIORITIES OF THE MEXICAN INDUSTRIAL PLAN

Basic objectives of the Industrial Plan are to:

- 1) Accelerate the rate of job creation;
- 2) Encourage production of basic consumer goods;
- 3) Develop highly productive industries capable of competing on international markets;
- 4) Utilize Mexico's natural resources, by maximizing upgrading in the country;
- 5) Integrate the industrial structure by developing the field of capital goods production;
- 6) Decentralize industry in terms of geographic regions;
- 7) Achieve more equilibrium between large and small enterprises;
- 8) Encourage technological independence in the industrial sector.

TABLE 4

GLOBAL STRATEGY FOR MEXICO

1. Strengthening the State.
2. Modernization of the sectors of the economy and society.
3. Generation of employment in a dignified and just manner.
4. Consolidation of economic recovery.
5. Reorientation of the productive structure toward generation of basic goods and creation of a national capital goods industry.
6. Rationalization of consumption and stimulation of investment.
7. Development, in an accelerated form, of the agricultural sector, in order to elevate the standard of living of the "campesinos" and to satisfy the food requirements of the population.
8. Progress in the Mexican Foodstuffs System (SAM).
9. Promotion of priority spending and strengthening of public sector firms, eliminating excessive subsidies.
10. Utilization of oil as a lever for economic and social development, channeling profits obtained from oil into the priorities of development policy.
11. Stimulation of a policy of productivity and an adequate distribution of benefits between urban and rural workers and other elements of society.
12. Provision of more resources for basic social necessities, particularly for the urban and rural population on the margin of the economy.
13. Encouragement, with full respect for individual liberty, of a reduction in population growth and rationalization of its territorial distribution.
14. Achievement of an improvement in the standard of living of the population, through a substantial increase in consumption made possible by productive employment.
15. Improvement and broadening of basic education for children and adults.
16. Shaping of the educational system to take into account the requirements of the nation's productive system for skilled workers, technicians and professionals.
17. Promotion of training and social organization for the worker.
18. Decentralization of economic activity and human settlements, with emphasis on the coastal and border regions.
19. Control and reduction of the rate of inflation.
20. Development of a strategy for new vehicles for financing development.
21. Establishment of links abroad which will stimulate modernization and productive efficiency in Mexico.
22. Improvement of concerted action by the public, social and private sectors within the framework of the Alliance for Production.

TABLE 5

Major State Owned Companies in Mexico

<u>Company</u>	<u>Activity</u>
Petroleos Mexicanos (PEMEX)	Petroleum, petrochemicals
Sidermex*	Steel
Fertilizantes Mexicanos (Fermitex)**	Fertilizers
Mexicana de Coque Derivados	Coal
Maiz Industrializado	Food
Fabricas de Papel Tuxtepec	Paper
Combinado industrial Sahagun*	Buses, Trucks, Cars
Comision Federal de Eletricidad (CFE)	Electric Power
Ferrocarriles Nacionales de Mexico (Constructora)	Railroads
Compania Nacional de Subsistencias Populares (CONASUPO)	Basic Commodities
Nacional Financiera, S.A. (NAFINSA) URAMEX	Development Bank Uranium

*holding companies

** formally Guanso y Fertilizantes

TABLE 6

ANTICIPATED INVESTMENT BY PARAESTATAL ENTERPRISES IN MEXICO

(Million of Cdn.\$, December 1978 prices)

	<u>1979-82</u>	<u>1983-86</u>
T O T A L	41,725	75,520
Industrial Fields	35,555	62,950
Metallic Mines	425	1,135
Non-Metallic Mines	495	1,030
Oil and Petrochemicals	16,495	17,240
Meat and Milk Products	705	1,855
Flour and Tortilla-Flour	80	645
Other Foodstuffs	760	2,270
Textiles of Soft Fibre	820	1,565
Other Textiles	15	70
Wood and Cork	205	830
Paper	235	385
Printing	110	355
Basic Chemicals	225	335
Secondary Petrochemicals	260	1,165
Fertilizers	1,000	1,270
Pharmaceuticals	75	600
Other Chemicals	290	980
Cement and Glass	1,070	1,060
Basic Metals	1,500	5,725
Metallic Products	295	3,040
Metal-Mechanical	580	1,485
Electrical Machinery	645	1,730
Transport Equipment	480	1,530
Automotive	185	1,295
Electricity	8,595	15,305
Other Fields of Activity	6,170	15,570

Source: Mexico's Industrial Development Plan

TABLE 7

INCREMENTAL INVESTMENT SOUGHT BY THE MEXICAN
INDUSTRIAL DEVELOPMENT PLAN, 1979 - 1982

<u>FIELDS OF ACTIVITY</u>	<u>ADDITIONAL INVESTMENT PROPOSED FOR 1979-82 U.S. \$MILLION (1975 PRICES)</u>
Metallic Mines	200
Non-Metallic Mines	120
Meat and Milk Products	360
Flour and Tortilla-Flour	56
Other Foodstuffs	368
Textiles (Soft Fibre)	424
Wood and Cork	88
Printing	72
Secondary Petrochemicals	176
Pharmaceuticals	40
Other Chemicals	184
Cement and Glass	632
Basic Metals	248
Metallic Products	176
Metal-Mechanical	272
Electrical Machinery	320
Transport Equipment	64
Electricity	960
Transport	528
T O T A L	<u>5,288*</u>

*Excluding investment in agriculture (which is treated in terms of general government investment) and in construction of housing.

TABLE 8

PRIORITY SECTORS FOR MEXICAN INDUSTRIAL ACTIVITIES.

AS DECREED IN THE INDUSTRIAL PLAN OF 1979

- Category 1 - Highest Priority
1. Agroindustry
 - a. edible products for human consumption
 - b. products for agricultural sector
 - c. other agroindustry products
 2. Capital goods
 - a. machinery and equipment for the production of food
 - b. machinery and equipment for the petroleum and petrochemical industries
 - c. machinery and equipment for the electrical industry
 - d. machinery and equipment for the mining and metallurgical industry
 - e. construction machinery and equipment
 - f. transportation equipment
 - g. miscellaneous industrial machinery and equipment
 3. Strategic materials for the industrial sector
- Category 2 - High Priority
1. Non-durable consumer goods
 - a. textiles and footwear
 - b. other non-durable consumer products
 2. Durable consumer goods
 - a. household appliances and accessories
 - b. auxilliary transportation equipment
 - c. equipment and parts for the service industries
 3. Intermediate goods
 - a. petrochemical products
 - b. chemical products
 - c. mining and metallurgical products
 - d. construction materials
 - e. other intermediate products

TABLE 9

AVERAGE ANNUAL GROWTH RATES FOR INDUSTRIAL SECTORS IN MEXICO

AS FORECASTED IN THE GLOBAL PLAN 1980-82

<u>Sectors</u>	<u>Average Annual Growth Rates (%)</u>	
	<u>1970-78</u>	<u>1980-82</u>
Socially-necessary goods	4.4	8.0
Capital goods	7.1	13.5
Chemicals	7.0	9.7
Oil and Petrochemicals	19.5	14.0
Electrical	12.4	10.7
Mining	2.5	6.8
Construction	6.1	11.1

TABLE 10

Mexico's Structure of the General Import Tariff

as of February 28, 1979

<u>Category/Sector</u>	<u>Import Tariff (% Ad Valorem)</u>	
	<u>Goods Not Produced in the Country or Under Prior Permit Regime</u>	<u>Goods Produced in the Country or not Subject To Prior Permit</u>
Raw Materials for Food or Agricultural Production	0 - 15	-
Chemical Raw Materials	10 - 15	20 - 60
Intermediate Products	20 - 35	40 - 60
Machinery	10 - 25	10 - 60
Luxury Articles	50 - 100	60 - 100

Source: GATT - Accession of Mexico, Memorandum on Foreign Trade Regime L/4793/REV. 1,
May 11, 1979

TABLE 11

Mexico: Imports Subject to Prior Authorization

(In Millions of U.S. Dollars)

	<u>1976</u>		<u>1977</u>		<u>1978</u>		<u>1979</u>	
	<u>Number of Items</u>	<u>Value</u>	<u>Number of Items</u>	<u>Value</u>	<u>Number of Items</u>	<u>Value</u>	<u>Number of Items</u>	<u>Value</u>
<u>Total</u>	<u>7,315</u>	<u>6,030</u>	<u>7,340</u>	<u>5,890</u>	<u>7,453</u>	<u>8,140</u>	<u>7,946</u>	<u>...</u>
Subject to Permit	6,217	5,077	3,851	3,990	2,354	5,636	1,729	...
Not subject to Permit	1,098	953	3,489	1,900	5,099	2,504	6,217	...

Source: General Directorate of Tariffs,
Mexico's Ministry of Planning and Budget

TABLE 12

Mexico: Exports of Major Products

(In millions of U.S. dollars)

	1975	1976	1977	1978	Jan.-Sept.	
					1978	1979
<u>Total</u>	<u>3,464.0</u>	<u>4,011.8</u>	<u>5,126.0</u>	<u>6,764.8</u>	<u>4,706.5</u>	<u>6,895.4</u>
<u>Agriculture, cattle and fish</u>	<u>932.4</u>	<u>1,185.8</u>	<u>1,439.1</u>	<u>1,600.2</u>	<u>1,106.2</u>	<u>1,275.1</u>
Cotton	173.1	240.6	194.9	308.9	180.5	201.8
Coffee	185.0	356.8	458.4	386.7	285.2	433.0
Tomatoes	122.9	137.5	215.0	198.1	186.5	172.5
Shrimp	137.4	137.1	185.8	166.4	101.8	122.5
Cattle and meat	38.9	95.4	138.6	231.3	104.6	29.5
Fresh fruits and other	275.1					
<u>Extractive products</u>	<u>888.8</u>	<u>995.8</u>	<u>1,471.5</u>	<u>2,321.1</u>	<u>1,545.6</u>	<u>3,031.9</u>
Petroleum and derivatives	460.1	557.0	1,029.4	1,805.0	1,168.0	2,548.2
Silver	151.7	161.0	183.1	227.2	170.0	220.0
Other	277.7	277.8	259.0	288.9	207.6	263.7
<u>Manufactures</u>	<u>1,069.3</u>	<u>1,190.8</u>	<u>1,611.0</u>	<u>2,008.9</u>	<u>1,458.1</u>	<u>1,774.9</u>
Processed foods	81.2	104.0	145.9	146.5	117.9	145.9
Textiles	141.2	156.2	150.3	155.5	111.1	130.8
Chemicals	204.2	227.7	235.7	312.2	216.0	329.4
Transport equipment	269.8	250.1	446.7	593.5	432.0	545.9
Other	372.9	452.8	632.4	801.2	581.1	622.9
<u>Inbond industries</u>	<u>452.0</u>	<u>520.0</u>	<u>524.7</u>	<u>714.3</u>	<u>506.0</u>	<u>735.0</u>
<u>Unclassified</u>	<u>121.5</u>	<u>119.4</u>	<u>79.9</u>	<u>120.3</u>	<u>90.6</u>	<u>78.5</u>

Source: Bank of Mexico.

TABLE 13

Mexico: Composition of Merchandise Imports

(In millions of U.S. dollars)

	1975	1976	1977	1978	Jan.-Sept.	
					1978	1979
<u>Total</u>	<u>6,580.2</u>	<u>6,029.6</u>	<u>5,889.8</u>	<u>8,139.6</u>	<u>5,734.5</u>	<u>8,210.0</u>
<u>Consumer goods</u>	<u>599.9</u>	<u>310.7</u>	<u>417.0</u>	<u>506.1</u>	<u>306.0</u>	<u>458.9</u>
<u>Raw materials</u>	<u>2,903.1</u>	<u>2,705.7</u>	<u>2,537.0</u>	<u>3,915.9</u>	<u>2,830.6</u>	<u>3,702.8</u>
Petroleum and derivatives	291.1	291.5	126.5	157.2	125.	151.8
Chemicals	772.9	768.4	771.6	978.9	773.2	1,063.1
Parts for transport equipment	581.5	592.7	523.7	713.9	500.5	627.5
Iron and steel	536.0	392.9	326.8	949.4	683.4	843.9
Other	721.6	660.2	788.4	1,116.5	748.4	1,016.5
<u>Capital goods</u>	<u>2,390.8</u>	<u>2,509.9</u>	<u>2,087.2</u>	<u>2,802.7</u>	<u>1,988.4</u>	<u>3,134.9</u>
<u>Unclassified</u>	<u>686.4</u>	<u>503.3</u>	<u>848.6</u>	<u>914.9</u>	<u>609.5</u>	<u>913.4</u>

Source: Bank of Mexico.

TABLE 14

Merchandise Imports by Institutional Sector in Mexico

(\$US Million)

	1975	1976	1977	1978	JAN-SEPT	
					1978	1979
Total	6,580	6,030	5,890	8,140	5,735	8,210
Private Sector	4,082	3,875	3,659	5,081	3,582	5,421
Public Sector	2,498	2,155	2,231	3,059	2,153	2,789
- PEMEX	699	774	668	1,286	937	1,150
- CONASUPO	638	259	585	734	455	541
- CFE	206	283	205	266	196	310
- Steel Enterprises	383	222	71	76	58	73
- Other	572	617	702	697	507	715

TABLE 15

MEXICO'S MAJOR TRADING PARTNERS

(1979)

<u>EXPORTS</u>	Million \$US	%	<u>IMPORTS</u>	Million \$US	%
World Exports	8982	(100.0)	World Imports	11,992	(100.0)
Industrial Nations	7338	(81.7)	Industrial Nations	11,052	(92.2)
Developing Countries	1168	(13.0)	Developing Countries	881	(7.3)
Other	476	(5.3)	Other	59	(0.5)
<u>MAJOR IMPORTERS</u>			<u>MAJOR EXPORTERS</u>		
U.S.A.	5941	(69.3)	U.S.A	7502	(62.6)
Spain	463	(5.2)	Japan	790	(6.6)
Israel	287	(3.2)	F.R.G.	769	(6.4)
Japan	284	(3.2)	France	381	(3.2)
F.R.G.	217	(2.4)	Brazil	293	(2.4)
Brazil	149	(1.7)	U.K.	287	(2.4)
China	129	(1.4)	Italy	239	(2.0)
Venezuela	95	(1.1)	Spain	223	(1.9)
Canada	74	(0.8)*	Canada	198	(1.7)**
France	71	(0.8)	Switzerland	159	(1.3)
Belgium	69	(0.8)	Argentina	127	(1.1)
Italy	55	(0.6)	Sweden	122	(1.0)
U.K.	46	(0.5)	Belgium	119	(1.0)

* According to Statistics Canada Data, Canada is ranked 6th rather than 9th

** According to Statistics Canada Data, Canada maintains its ranking of 9th

Source: Direction of Trade, 1980

TABLE 16

PRINCIPAL CANADIAN EXPORTS TO MEXICO

(\$Cdn 1000)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Newsprint	49,162	16,078	9,531	23,745
Railway/street rolling stock & parts	34,049	12,328	963	2,592
Sheet and strip steel	21,940	21,136	16,512	39,093
Milk powder, skim milk	18,317	18,350	14,570	23,595
Asbestos milled fibres, all groups	14,235	23,144	31,621	25,783
Railway rails	4,535	9,741	10,250	31,497
Parts & accessories for motor vehicles, nes	3,262	5,141	9,335	17,443
Cattle, dairy, purebred & nes	1,491	6,776	8,928	5,403
Card punch sort tab, computer & parts	1,444	2,783	5,683	9,353
Coal	6,914	1,225	4,640	2,088
Power boilers equipment & parts	-	4,484	4,268	3,883
Woodpulp - all grades & types	4,602	1,470	7,200	18,357
Wheat	2,192	6,160	3,024	24,832
Polyethylene resins	744	934	3,915	4,373
Plastic and synthetic rubber not shaped	n/a	648	5,302	3,194
Milk, evaporated	-	-	4,277	24,723
Fire brick & similar shapes	-	-	2,609	413
Photographic equipment & supplies, nes	<u>941</u>	<u>1,105</u>	<u>2,602</u>	<u>5,118</u>
TOTAL OF ABOVE ITEMS:	163.8	131.5	145.2	265.5
TOTAL EXPORTS:	210.9	229.2	236.4	482.9

Source: Statistics Canada

TABLE 17

PRINCIPAL CANADIAN IMPORTS FROM MEXICO

(\$Cdn. 1000)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Coffee, fresh	41,326	18,253	29,007	19,774
Tomatoes, fresh	19,136	12,933	11,419	8,682
Parts & accessories for motor vehicles	13,572	10,107	15,895	6,430
Shrimp & prawns, fresh and frozen	7,961	6,442	6,533	7,512
Denims, cotton	5,879	1,848	2,160	295
Strawberries, frozen	5,226	5,468	6,943	5,091
Cotton, raw	5,002	5,341	5,813	7,251
Fluorspar	4,982	9,820	10,443	14,091
Electronic equipment, components, nes	2,147	2,540	3,236	4,954
Pants, slacks, women's & girl's, cotton	2,125	913	491	850
TV, radio & phonographic sets, chassis	3	10,434	11,493	10,287
Electronic computers & parts	11	-	2,612	1,904
Pants, men's and boy's, cotton	n/a	1,719	2,434	1,661
Toys & parts, nes		2,622	3,480	3,441
Baler twine	4,955	2,404	5,863	4,732
Crude petroleum	-	13,294	-	-
TOTAL OF ABOVE ITEMS:	112.4	104.0	117.8	97.0
TOTAL IMPORTS:	194.3	184.3	208.3	345.3

TABLE 18

CANADA-MEXICO TRADE(Million Cdn \$)ANNUAL

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Canadian Exports to Mexico	99.0	118.5	187.1	218.6	213.0	220.4	229.3	236.4	482.9
Canadian Imports from Mexico	<u>52.9</u>	<u>83.2</u>	<u>114.0</u>	<u>95.3</u>	<u>146.0</u>	<u>194.9</u>	<u>184.5</u>	<u>208.3</u>	<u>345.3</u>
Balance	46.1	35.3	73.1	121.3	67.0	21.9	44.8	28.1	137.6

Source: Statistics Canada

TABLE 19

PEMD Approvals by Section, 1971-1979

-MEXICO-

	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Section A - Approvals	5	6	14	4	7	4	15	10	7
- Successes	0	0	0	2	0	0	4	1	0
Section B - Approvals	0	15	10	5	10	3	9	15	20
- Successes	0	7	0	1	2	1	2	1	0
Section C - Approvals	0	2	3	1	1	0	4	6	2
- Successes	0	0	1	0	1	0	1	2	0
Section D - Approvals	0	0	0	0	1	1	2	1	4
- Successes	0	0	0	0	0	0	1	0	0
Section E - Approvals	0	0	0	0	0	0	0	0	0
- Successes	0	0	0	0	0	0	0	0	0
Section F*- Approvals	-	-	-	-	-	-	-	-	0
- Successes	-	-	-	-	-	-	-	-	0
Section R*- Approvals	-	-	-	-	-	-	-	-	1
- Successes	-	-	-	-	-	-	-	-	0

* These sections of PEMD were introduced in 1979.

Source: Department of Industry, Trade and Commerce

TABLE 20

PEMD APPROVALS BY SECTOR, 1971,79

a. Goods Versus Services

	<u>SECTIONS</u>				
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>R</u>
Goods	31	58	5	5	0
Services	41	29	14	3	1
TOTAL	72	87	19	9	1

b. By Major Focus

	<u>SECTIONS</u>				
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>R</u>
Chemicals	6	4	0	0	0
Agroindustry	3	18	12	1	1
Fishing/Fisheries	3	1	0	0	0
Energy/Environmental	17	11	3	1	0
Forestry	8	1	0	1	0
Mining/Resources	13	12	0	1	0
Transportation	10	12	0	0	0
Communications/Instr.	6	7	0	1	0
Industrial	7	9	3	2	0
Social Services*	4	12	1	2	0
TOTAL	72	87	19	9	1

* Including Housing, Education, Hospitals, etc.

Source: DITC

TABLE 21

FEDERAL TRADE FAIRS & MISSIONS WITH MEXICO

<u>Fiscal Year</u>	<u>Trade Fairs</u>	<u>Outgoing Missions</u>	<u>Incoming Missions</u>	<u>Ministerial Missions</u>
1978/79		1. Railway Seminar		
1979/80	1. Mining-Geological and Metallurgical 2. Techno Transfair			
1980/81	1. Oil and Gas	1. Nuclear Power 2. Auto Parts	1. Nafinsa Mission	1. Minister of Trade 2. Minister of Trade
1981/82P*	1. Expo Mexico-Oil and Gas 2. Acapulco Mining Show 3. Technology for the people	1. High Level Industrialist Mission 2. Oil and Gas Equipment Mission to Venezuela and Mexico 3. Automotive Aftermarket Parts and Service Equipment Mission	1. Rapeseed and Crushers Buyers from Mexico 2. Market and Investment Information Mission 3. Urban Government Officials Mission 4. Telecommunications Mission 5. Post Officials Buyers 6. Nuclear Decision Makers Mission 7. Steel Mission 8. Senior Railway Officials Mission 9. OEM/Aftermarket Parts Buyers	

* Projected Exposure
Trade Fairs have been approved. Outgoing and Incoming Missions are in Discussion

TABLE 22

World Bank
Mexican Projects
as of October 15, 1980

<u>Executing Agency</u>	<u>Amount (in U.S. Millions)</u>	<u>Project</u>	<u>Status</u>
Secretaria de Agricultura y Recursos Hidraulicos (SARH)	To be determined (Bank)	Forestry	Project preparation underway.
Colegio Nacional de Educacion Profesional Tecnica	Up to 50.0 (Bank)	Vocational Training	Identification missions in the field.
Nacional Financiera (NAFINSA)	Up to 35.0 (Bank)	Fisheries	Sector report being reviewed by Government.
Banco Nacional de Obras y Servicios Publicos	125.0 (Bank)	Medium Size Cities Water Supply and Sewerage II. Total project cost estimated at \$297 million of which \$125 million foreign exchange	Negotiations substantially completed.
Comision Federal de Electricidad	Up to 175.0 (Bank)	Power XII - Project elements to be defined	Government not pursuing its request to the Bank for assistance. Reporting will be discontinued.
Banco Nacional de Obras y Servicios Publicos	Up to 141.0 (Bank)	Urban and Regional Development - Sites and services, infra- structure works, municipal facilities and production credits in the Isthmic region. Total project cost estimated at \$413 million of which \$140 million in foreign exchange.	Negotiations scheduled for end-October. Procurement: Retroactive financing of up to \$2 million being requested for works and preparatory studies begun or carried out by Mexican institutions.

TABLE 22 (Cont'd.)

Secretaria de Comunicaciones y Transportes (SCT)	Up to 90.0 (Bank)	Rural Telephones	Government decision on project scope pending.
Nacional Financiera (NAFINSA)	Up to 100.0 (Bank)	Installation of foundry forge in Lazaro Cardenas.	Discussions with technical partners underway.
Nacional Financiera (NAFINSA)	Up to 100.0 (Bank)	Rural Development - PIDER III. Total project cost estimated at \$300 million of which \$100 million in foreign exchange.	Appraisal report being prepared.
Secretaria de Agricultura y Recursos Hidraulicos (SARH)	160.0 (Bank)	Apatzingan Irrigation - Rehabilitation and expansion of irrigation facilities, development of intensive agriculture on 110,000 ha in Rio Balsas Basin. Total project cost estimated at \$409 million of which \$160 million in foreign exchange.	Loan signed on September 29. <u>Procurement:</u> Retroactive financing of up to \$2.5 million approved for preparation of final design of Chilatan Dam, preparation of bid documents, construction of roads and work camps, and land leveling and clearing.
Secretaria de Agricultura y Recursos Hidraulicos (SARH)	Up to 280.0 (Bank)	Rainfed Agricultural Development - Program to increase agricultural production in rainfed areas. Total project cost estimated at \$800 million of which \$232 million in foreign exchange.	Appraisal report being prepared. <u>Procurement:</u> Retroactive financing of up to \$3 million may be recommended for design and preparation of bidding documents for field offices.
Nacional Financiera (NAFINSA) and Fertilizantes Mexicanos (FERTIMEX)	70.0 (Bank)	Fertilizer - 1,500 T.P.D. Urea Plant located at Pajaritos; nitrogen solution project including facilities to concentrate nitric acid also at Pajaritos; and phosphate based complex fertilizer project located at Lazaro Cardenas. Total project cost estimated at \$300 million of which over \$80 million in foreign exchange.	Government considering timing of and sources of financing for project.

TABLE 22 (Cont'd.)

Ferrocarriles Nacionales de Mexico (NdeM); Banco Nacional de Obras y Servicios Publicos (BANOBRAS)	150.0 (Bank)	Railway IV - Track rehabilitation and acquisition of new rolling stock equipment. Total project cost estimated at \$1,498 million of which \$525 million in foreign exchange.	Appraisal report being reviewed. Negotiations scheduled for mid-October.
Nacional Financiera (NAFINSA)	100.0 (Bank)	Credit for Small and Medium Industries. Total project cost estimated at \$185 million of which \$100 million in foreign exchange.	Loan signed on September 29.
Secretaria de Agricultura y Recursos Hidraulicos (SARH)	100.00 (Bank)	Pujal Coy - Irrigation and agricultural development in the Panuco Basin.	Project preparation underway.
Secretaria de Agricultura y Recursos Hidraulicos (SARH)	23.0 (Bank)	Ocoroni Irrigation Development. Total project cost estimated at \$54.6 million of which \$23 million in foreign exchange.	Board presentation on October 14. <u>Procurement:</u> Retroactive financing being proposed to facilitate project implementation.
Secretaria de Agricultura y Recursos Hidraulicos (SARH)	100.0 (Bank)	Agricultural Development - San Fernando Valley.	Feasibility report being prepared.
Nacional Financiera (NAFINSA)	100.0 (Bank)	Capital Goods Credit - Development of capital goods industry.	Preparation mission in the field.

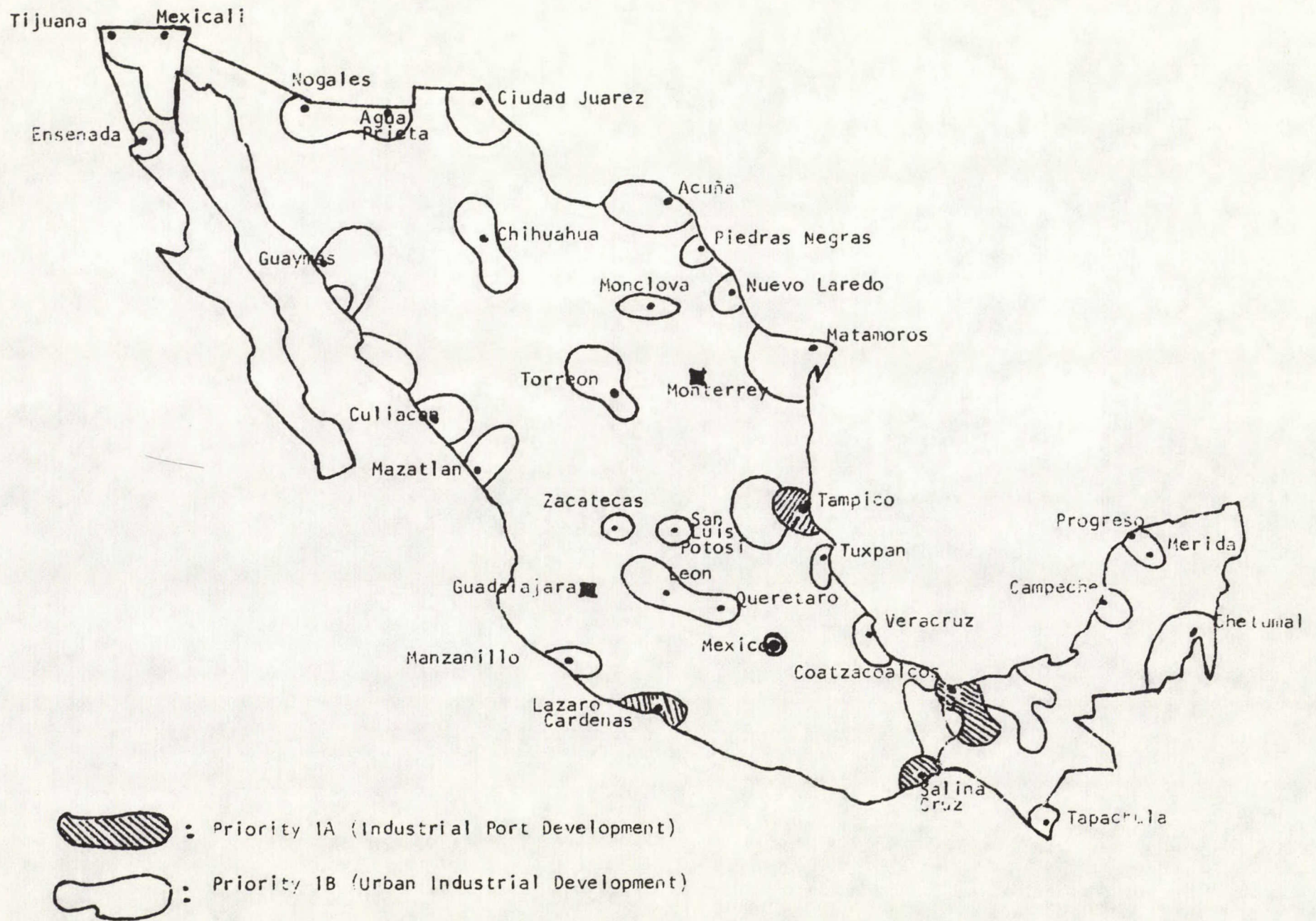
TABLE 23

Canada/Mexico Young Technicians Program

	<u>Number of Participants</u>	<u>Fields of Interest</u>
1973-74	15	Engineering(14)
1974-75	15	Electricity(2) Pollution(2) Forestry(2) Industrial Design(2)
1975-76	10	Paper(2) Engineering(2)
1976-77	21	Paper/Forestry(5) Industrial Design(3)
1977-78	14	Food Technology(3) Engineering(3)
1978-79	9	Food Technology(9)
1979-80	7	Telecommunications(3) Pollution Control(2)

FIGURE I

GEOGRAPHICAL PRIORITIES IN MEXICAN PLANNING





INDUSTRY CANADA/INDUSTRIE CANADA



51553

Canada

(aussi édité en français)