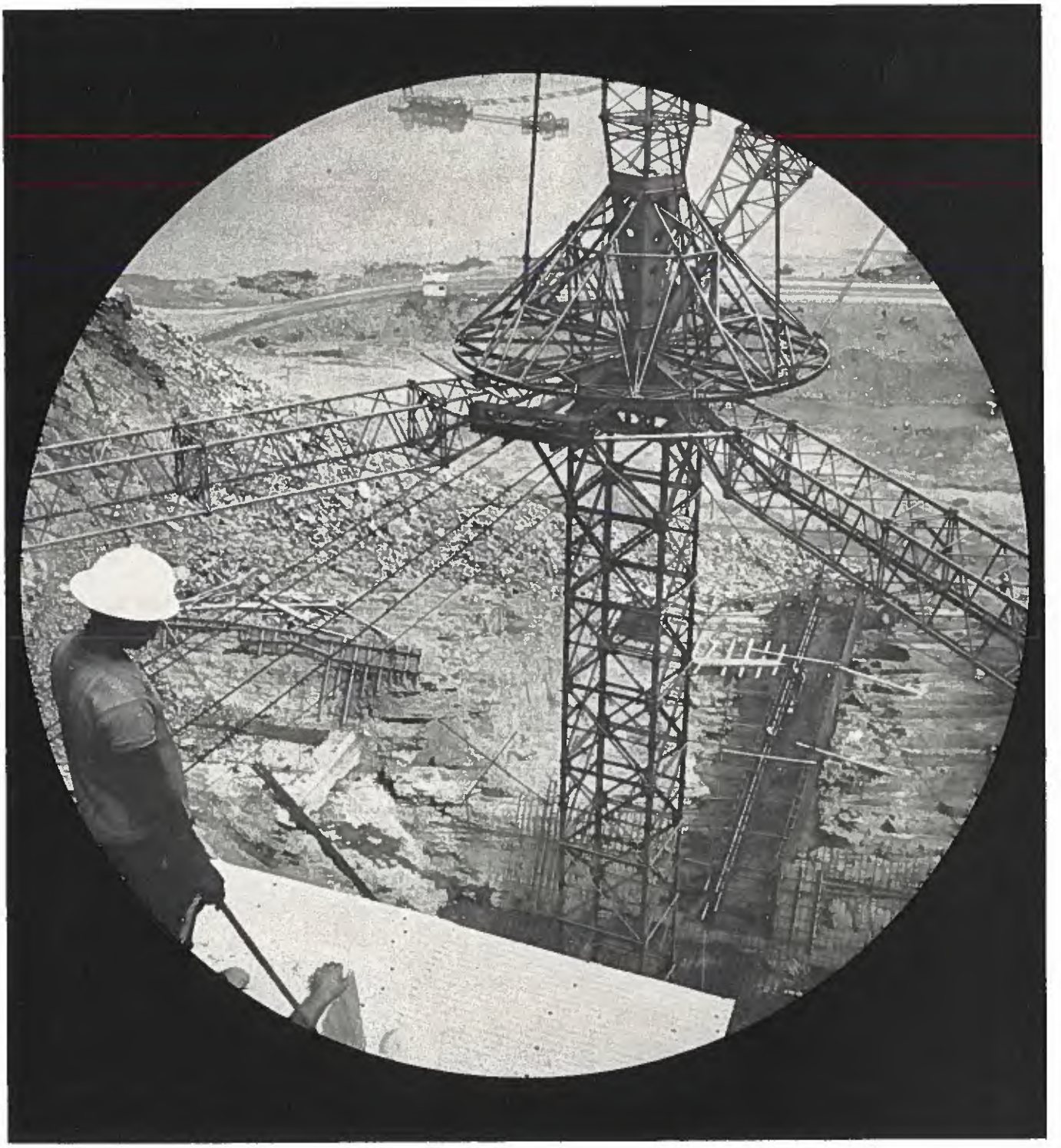
foreign trade

Department of Industry, Trade and Commerce, Canada

Obtaining Business through International Financing Organizations

January 31/70



In This Issue

"Foreign Trade" has made a practice of publishing from time to time an issue devoted to the international financing organizations. The purpose is to point up the opportunities for doing business abroad that they open up, particularly in the developing countries, for both consulting engineers and equipment suppliers.

Planning for this issue began several months ago. The Information Section of the World Bank set to work to prepare an article on the $207.4 million that has been spent in Canada since the Bank's inception. The tables that accompany the article break down this spending, particularly since 1960, by type of projects and by principal suppliers of equipment or services worth over $50,000. Other tables cover spending by the IDA and the IFC.

Additional articles and tables deal with the UN Development Program and—a newcomer to these issues—with the UN Children's Fund which buys materials and equipment for its work. The third grouping is the regional development banks. There is a newcomer here too, the Caribbean Development Bank, which is holding the first meeting of its Board of Governors in the Bahamas on January 31.

To emphasize that Canadians can and do participate in internationally financed projects, we wrote up a number of case histories following interviews with firms in Montreal, Toronto and Vancouver. These case histories range geographically from Brazil to Togo, from Pakistan to Cyprus, and from Iceland to Mauritania, and represent a variety of services provided, including management consulting.

We also organized a search for good pictures. Some were taken by Canadian engineers working abroad and make up in interest what they may lack in professional quality. Others, including the cover, we obtained from the World Bank. We chose this picture of a power development going forward in West Africa because power generation is one of the fields in which international organizations have played a vital part and one in which Canadian firms have outstanding expertise and experience. The UNDP sent us an excellent collection of pictures and UNICEF provided the appealing ones on pages 20 and 21. A further source was the IADB in Washington.

In a similar issue on December 7, 1968, the Trade Commissioner posts in the developing countries sent in reports on engineering opportunities in each. This time we decided to plan an issue devoted exclusively to these opportunities, probably late in 1970 or early in 1971.

Are you planning to visit Expo 70 in Osaka and perhaps to investigate business openings in Japan during your trip? You will want to read carefully the leading article in our issue of February 14. It will set out what the Commercial Division of our Embassy in Tokyo (which is expecting a flood of visitors) can and cannot do for you. The article also includes helpful hints for travellers to Expo—the kind that you don't often find in travel guides.

foreign trade

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The Hon. Jean-Luc Pepin, Minister

The Hon. Otto Lang,
Minister without Portfolio

J. H. Warren, Deputy Minister

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O. Mary Hill, Editor

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International Financing Organizations

Case Histories

Departments

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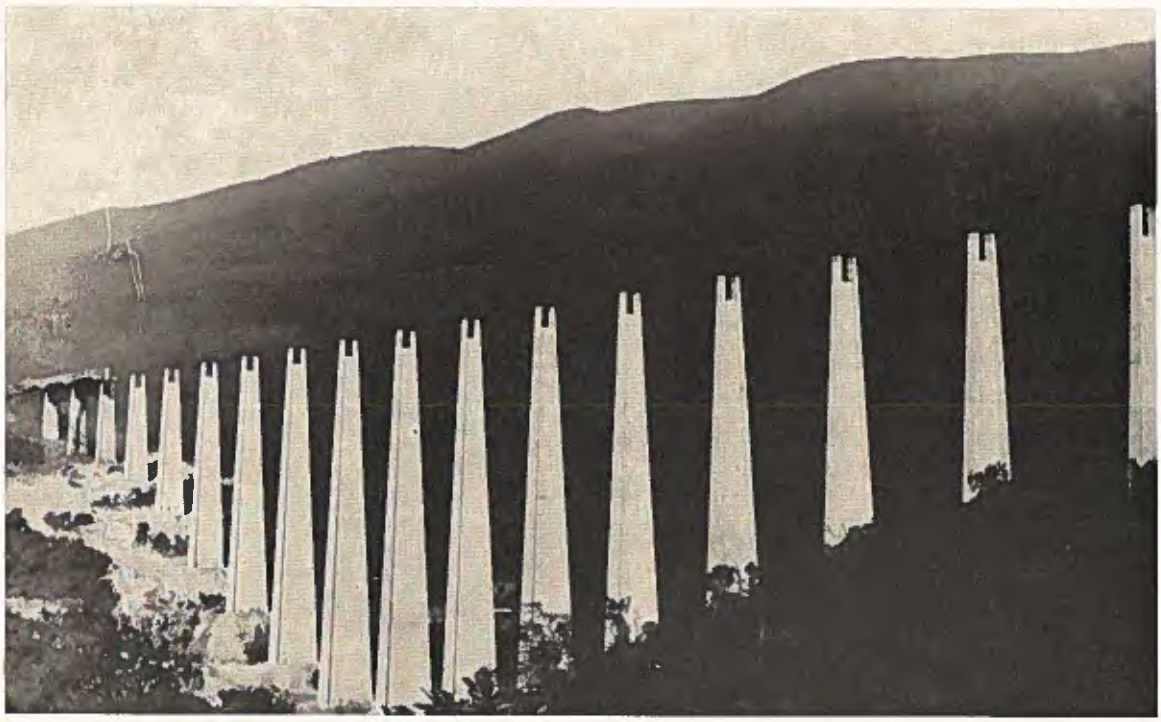
International financing is an important tool for many firms wishing to export goods and services to developing countries, and presents both a challenge and an opportunity to Canadian exporters. To help businessmen achieve a better understanding of how international financing can be used to enhance export opportunities, "Foreign Trade" has prepared this special issue. It covers the World Bank group, the United Nations Development Program, the UN Children's Fund, and the regional development banks—the main multilateral agencies providing aid to developing countries under which Canadian firms are eligible to—and do—obtain business.



The Cascata railway bridge is part of a big project for the Companhia Vale do Rio Doce in Brazil, supervised and managed by Foundation Engineering of Canada, and partially financed by an IADB loan. One aspect of the work was extending the railroad to an iron ore mining site; this required nine bridges and eleven tunnels.

You Too Can Get Business

Canadian companies can and do obtain contracts for services and supplies for internationally financed projects. Here is advice on how your firm can enter this world-wide market.

LAWRENCE H. BROWN
International Financing Branch, Office of General Relations.

Success goes to the most competitive trade promoter in obtaining business through international financing organizations, as it does in ordinary commercial sales. In fact, Canadians must often do an extra selling job with the former because business tends to follow established trade channels which for historic reasons may be non-Canadian.

The Hon. Lester Pearson, chairman of the World Bank Commission on International Development, speaks about its report at a luncheon meeting in New York. On Mr. Pearson's left are U Thant, UN Secretary-General, Paul Hoffman, UNDP Administrator, and Aga Shahi, Chairman of the UN's First Committee and Pakistan's Permanent Representative to the United Nations in New York.

Less developed countries offer a large and growing market for goods and services. Most need more imports to assist their economic development than they can pay for out of their own foreign exchange resources. International agencies with money contributed by Canadian and other donor countries help bridge this gap with untied aid funds. By so doing, they open what are essentially commercial market opportunities that would not otherwise exist.

In most developing countries these funds are used to finance surveys, engineering studies, and capital projects, but in India the World Bank Group has also provided program aid for the past few years to finance maintenance imports of equipment, industrial spare parts and industrial raw materials. The World Bank Group and the regional development banks also provide lines of credit to various national development banks. Together, these open up opportunities to a wide range of exporters.

International agencies are currently making available over $2 billion each year in untied funds. Under the impetus of growing needs, the preference in less developed countries for untied aid, and the recommendations of the Pearson and Jackson Commission reports, these amounts can be expected to rise considerably over the next few years.

Canada itself is a substantial and growing supporter of international aid agencies. Total Canadian multilateral aid contributions have risen sharply from $18.5 million in fiscal year 1963-64 to $68.4 million, in the form of appropriations or authorizations, in fiscal year 1969-70. The general trend of business obtained by Canadians has also been upwards, but there is still a considerable margin between the size of Canada's multilateral contributions and the volume of contracts won.

Internationally-financed contract awards fall into two main categories: those where the award is mainly decided in the recipient country and those where it is decided mainly at the headquarters of the international agency itself. Except for project and sector studies financed from their technical assistance funds, the contracts financed by the World Bank and the regional development banks fall into the former category. Consulting and equipment contracts financed by the UNDP fall into the latter, although even here promotion in the recipient country is useful. The principal international agencies from which Canadians are eligible to obtain business are outlined in the following pages.

The methods by which Canadian firms obtain business vary with the size and nature of the firm itself and depend on whether it is a consulting firm or a large or small supplier. Generally consulting firms have been proportionately more successful than suppliers in winning internationally-financed contracts, although the latter have also obtained a substantial amount of business, sometimes without being aware that international financing was involved.

A study made by the Deparment of Industry, Trade and Commerce revealed that a number of factors have an important bearing on the success of suppliers of goods and equipment in obtaining internationally-financed business. Not surprisingly, these were usually the same factors that influence normal commercial sales of goods and equipment. Some of these are:

1. Previous sales contacts—These are very useful but not essential, though many internationally-financed orders have

been obtained in areas where firms had already won a number of commercial sales or contracts.

2. Canadian engineering—This is also useful but not necessary, although some of the projects which provided Canadians with a substantial amount of business employed Canadian consulting engineers.

3. **Competitive pricing**—This is important. As one successful Canadian firm told us, "The reason we got the business was that we had the lowest price on the tender; also [a bit later] we lost business on price."

4. Early knowledge of a project or need for supplies is often one of the most important factors in success.

Aside from consulting contracts, in the past internationally-financed business has been obtained by successful exporters in a number of ways. On occasion, it walked in off the street. "The inquiry," one firm told us, "was sent to us by an agent in Peru who picked out our name from the records of the Canadian Embassy in Lima, Peru. With the aid of this agent we developed a quotation ... on which we were successful. The agent has represented us in respect to the servicing of the order which is now complete and he is in addition attempting to secure other business of a like nature in Peru."

On other occasions, the business was initiated by the Canadian Trade Commissioner Service. "Your Trade Commissioner in Guatemala," said one successful exporter under World Bank financing, "notified our company of a forthcoming tender ... We bid, but were not awarded the contract. Meanwhile, we appointed an exclusive representative ... which is a legal requirement. Our representative then brought to our attention the two tenders [in question] ... and we were awarded the bulk of the first one ... and a partial award on the subsequent tender ..."

Other firms obtained business through the international organization of their parent company. "We would advise that this business was obtained through an effort exerted by our parent company." Or as another exporter put it (the particular project was a plant expansion), "One of the owners of this plant ... and his chief engineer had had previous negotiations with our international organization and on his arrival in [our parent company's head office] we were invited to take part in the negotiations. This we did and it soon became evident that we would be able to supply their needs more easily because of port and shipping facilities and could do it more economically. ... We then moved the negotiations to [Canada]."

At least one firm obtained business by seeing a notice in an international trade publication. Others obtained it through a broker. "The inquiry reached us through brokers and it was through one of the brokers with good connections in [the country receiving the loan] that we followed up the matter," said one. "The order we obtained," said a second, "was done through the assistance of a Canadian agent working through a co-brokerage arrangement with an agent in [the recipient country]."

Some business was obtained by a referal through a good customer of the successful exporter in Canada, and other orders from a prime contractor. "We learned of the existence of this by prior contact with [the main contractor] and when the specifications ... arrived we were duly asked to submit a bid." Still others obtained orders through contact with a project's consultant. "I believe our first notification of the requirements of the ... project in Nigeria came from the Department, following which we contacted the consultants for this project with regard to prequalification and consequently were invited as bidders." "In this particular case in Peru," wrote another, "our representative there advised us of the possibility of a requirement ... We obtained a copy of the specification from the consultant in London (England) and, having had experience in the use of [our product for that type of requirement] ... we were able to offer a suitable [item] ... for the job at a competitive price."

But the most important factor in international financing business that successful exporters stress is the trade promotion activities of export managers and the companies' own agents abroad. As one successful company told us:

"Our participation ... arose from a bid based on specifications obtained by our sales manager from Latin America during a visit ... It was clinched by a second visit at the time the bids were opened, with an assist from a local agent. Since then we have entered new bids on the [next phase of the] program."

Or as a second firm put it, "in reply to your inquiry ... we received the contract ... through our resident agent ... This agent is an independent commission agent who also buys for his own account and who does not represent us exclusively. As a matter of general interest to you, we have a large number of contacts in many different countries as well as in major purchasing centres such as New York. There are not very many projects of any value about which we do not hear, usually from more than one source, including quite often our Trade Commissioner Service and also the Department of Trade and Commerce in Ottawa."

As part of its trade promotion function, the Department of Industry, Trade and Commerce follows up international activities to locate business and to provide guidance to businessmen on international financing matters. There are a number of ways an exporter can go about getting internationally-financed business, just as there are a number of ways to win commercial export orders and each firm's approach may vary with its interests, product line, and size. The Department of Industry, Trade and Commerce in Ottawa, with its Regional Offices in Canada and Trade Commissioners abroad, is available to advise you on the best way to tailor your firm's approach to internationally-financed business. With the growing volume of international financing, to which your tax dollars are contributing, some of the untied business will likely come your way if you wait long enough and if you are competitive. Most of it, however, will go to your competitors in Canada or in other countries who go out and pursue it. With our help, you can tell your export manager, agent, or international export department that you know the business is there and that you want it for your company.

Canada and the World Bank Group

IBRD Information and Public Affairs Department

The World Bank Group (the International Bank for Reconstruction and Development, the International Development Association, and the International Finance Corporation) lends well over a billion dollars a year. It ranks first among the multilateral aid-giving institutions and in recent years has accounted for 11 per cent of capital flows and aid to developing countries from all multilateral and Western bilateral aid agencies combined. All World Bank group contracts are awarded under international competition and Canadian firms are eligible to compete for any Bank-financed business.

The IBRD, IDA and IFC each have their own assets.

The IBRD has three primary sources of funds: the paid-in capital of member governments, borrowings (primarily on private capital markets), and accumulated net income from its operations or reserves. Its world-wide disbursements in the Bank fiscal year ended June 30, 1969, were $545 million; 1 per cent or $5.9 million was disbursed in Canada.

The IDA lending resources have been derived principally from budgetary allocations by its member governments, although in addition, the IBRD has made certain transfers from its own income. Its fiscal-year disbursements totalled $223.3 million, with $1.03 million spent in Canada.

The IFC's resources are derived from capital subscribed by governments and from loans made to the IFC by the World Bank. Its fiscal-year disbursements totalled nearly $35 million.

Canada became a member of the World Bank when it was founded more than 22 years ago. It has since played an important role both as a source of capital for the Bank's development lending and as a supplier of equipment and services for Bank-financed projects in member countries. It was, in fact, one of the first member countries to permit the use of part of its paid-in capital for lending. **Canada is the sixth largest subscriber to the capital stock of the IBRD, contributing $792 million,** or 3.4 per cent of total subscriptions, of which 10 per cent is paid-in and 90 per cent is callable to back the borrowing on world capital markets that is the main source of the Bank's resources.

To the IDA, established in 1960, Canada has contributed or pledged $154.5 million, 5.17 per cent of total contributions, which makes it the fifth largest contributor. Canada's capital subscription to the IFC, set up in 1956, amounts to $3.6 million out of a total of $101 million and it thus ranks as the seventh largest contributor.

Canada has also been a member of the Consortia for Aid to India and to Pakistan since their establishment in 1958 and 1960, respectively. It has also been associated with almost all the Consultative Groups organized by the Bank to co-ordinate development assistance to Colombia, East Africa, Korea, Malaysia, Morocco, Nigeria, Peru, Thailand and Tunisia. In addition, Canada is a member of a special group of donor countries concerned with aid to Ceylon.

As a member of the Aid to India Consortium, Canada has extended and pledged approximately 3.1 per cent, or $173.5 million (Cdn.$187.4 million), of the total of $5,462 million (Cdn.$5,899 million) assured by members to assist the Third Five Year Plan, which ended in 1966. It is also providing assistance to India as indicated by Consortium

members for the three years ended March 1969. Canada has provided or pledged $157 million (Cdn.$169.6 million), or 5.4 per cent, of the aid pledges for Pakistan's development program.

An important Canadian contribution to the Bank has been the talent and energy of Canadian nationals on its staff, of whom there are now 103. Twenty-five are in professional positions.

The World Bank augments its capital by selling its own bonds in the world's capital markets; it also sells loans from its portfolio to other investors, as a means of promoting international investment and of recovering its own capital. By December 31, 1968, the Bank had outstanding borrowings of $3,803 million (Cdn.$4,107 million), mostly in the form of U.S. dollar bonds but also including issues denominated in Canadian dollars, Belgian francs, Deutsche marks, Italian lire, Kuwaiti dinars, Netherlands guilders, pounds sterling, Swedish kronor and Swiss francs.

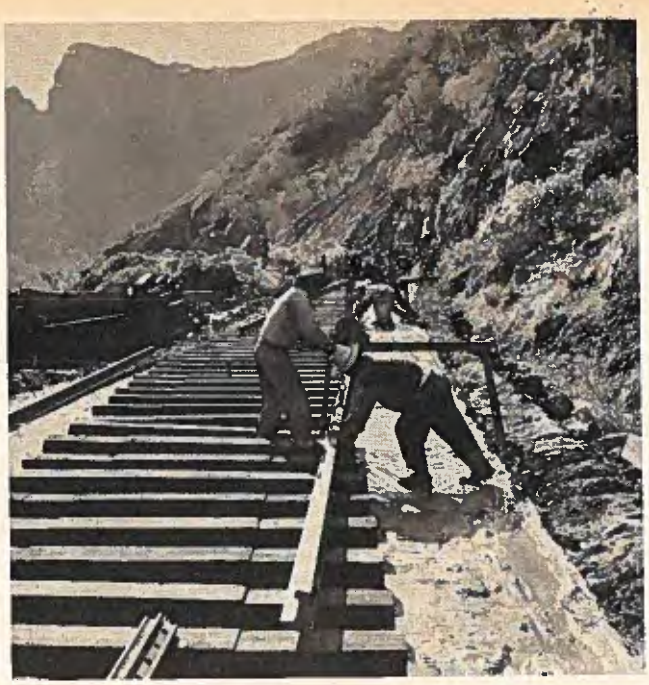
In all, the Bank has offered seven bond issues totalling $125 million (Cdn.$135 million) in the Canadian market through a large group of investment dealers and banks, headed by Wood Gundy Securities Limited, Dominion Securities Corporation Limited, and A.E. Ames & Co. Limited. After giving effect to retirement through maturities, sinking funds and purchase funds, approximately $89 million (Cdn.$96.1 million) is now outstanding. Maturities on these bonds range from five months to 25 years and the interest rate from 3½ to 7 per cent. To December 31, 1968, Canadian investors in World Bank bonds had received $25.2 million (Cdn.$27.2 million) in interest payments from the Bank.

Canadian investors have also purchased World Bank bonds sold in markets outside Canada. The amount of these purchases is not known, but of bonds sold in the United States, Canadian investors are believed to have held about $82 million (Cdn.$88.6 million) at December 31, 1968. In addition, several Canadian institutions have bought portions of loans from the Bank's portfolio or have participated

TABLE 1

RECORDED DISBURSEMENTS BY BANK BORROWERS FOR IMPORTS FROM CANADA

	U.S.$ million	Cdn.$ million
Cumulative total through June 30, 1961	138.0	149.0
Fiscal Years ending June 30		
1962	5.2	5.6
1963	4.2	4.5
1964	5.5	5.9
1965	4.7	5.0
1966	7.2	7.8
1967	11.9	12.9
1968	11.8	12.7
1969 (July 1, 1968, to December 31, 1968)	3.7	4.0
Cumulative total to December 31, 1968	192.2	207.4



One of the World Bank's areas of concentration is improved transportation, including railways, and a share of this business comes to Canada. Here Canadian-made rails are being put into place on the Chihuahua-Pacific line in northwest Mexico.

in Bank loans at the time they were made. Such purchases have aggregated $89.3 million (Cdn.$96.4 million), of which $80.3 million (Cdn.$86.7 million) has been repaid. The resulting net holdings amounted to $9.0 million (Cdn.$9.7 million) as of December 31, 1968. The holders of these investments had received an estimated $14.0 million (Cdn. $15.1 million) in interest to the end of December 1968.

The principal material benefit that Canada derives from membership in the World Bank has been in payment for goods and services supplied by Canada to the Bank's borrowers under loan agreements requiring international competitive bidding. **Total identifiable expenditure in Canada by Bank borrowers to December 31, 1968, was $192 million*** (Cdn.$207.3 million)—well over twice the amount of Canada's paid-in subscriptions to the Bank. (See Table 1).

Under World Bank loans, Canadian companies have supplied goods and services for projects in 52 countries or territories. In other words, more than half the 85 countries in which the Bank had financed projects through December 1968 had entered the Canadian market to buy equipment or services financed by Bank loans.

Canadian companies have supplied a wide variety of goods and services under Bank loans, but they have competed most successfully in the field of electric power and railways. Table 2 lists Bank loans under which Canadian suppliers received orders worth more than U.S.$500,000 (Cdn. $540,000). Of 13 loans listed in the table, Canadian suppliers had received 10 per cent or more of all disbursements. Between January 1, 1960, and December 31, 1968, some $61.8 million (Cdn.$66.7 million) was disbursed to Canadian suppliers under Bank loans; the amount allocated to each is shown in Table 3.

*Unidentifiable disbursements in Canada are estimated to be over $41 million (Cdn.$44.3 million).

TABLE 2

BANK LOANS UNDER WHICH MORE THAN U.S.$500,000 WAS SPENT IN CANADA

Loan No.	Country, Purpose, Date	Disbursed* U.S.$ million	Canadian Share U.S.$ million	per cent
17	India, railways, 8/49	32.8	18.4	56.0
229	Brazil, power, 6/59	11.6	5.9	50.8
103	Mexico, railways, 8/54	61.0	28.5	46.7
438	New Zealand, railways, 12/65	29.8	10.2	34.2
11	Brazil, power and communications 1/49	90.0	29.7	33.0
439	New Zealand, power, 12/65	15.4	4.1	26.6
226	Honduras, power, 5/59	1.4	0.3	21.2
369	Colombia, power, 2/64	21.7	3.9	18.0
287	Chile, roads, 6/61	6.0	0.9	15.0
488	Pakistan, power, 3/67	10.1	1.4	13.8
464	Peru, power, 9/66	6.7	0.7	10.4
86	Panama, agriculture, 9/53	0.6	0.06	10.0
372	Nigeria, power, 3/64	29.7	2.9	9.8
66	Australia, equipment for development, 7/52	50.0	4.6	9.2
207	India, railways, 9/58	85.0	6.8	8.0
366	Chile, agriculture, 12/63	9.9	0.8	8.0
293	Trinidad and Tobago, power, 8/61	21.4	1.7	7.9
111	Australia, equipment for development, 3/55	54.5	4.3	7.8
156	Australia, equipment for development 12/56	50.0	3.4	6.8
187	Brazil, power, 1/58	13.4	0.9	6.7
12	Mexico, power, 1/49	24.1	1.6	6.6
454	Jamaica, power, 6/66	18.1	1.2	6.6
40	South Africa, transport, 1/51	20.0	1.3	6.5
23	India, power, 4/50	16.7	1.1	6.5
186	Mexico, power, 1/58	11.0	0.7	6.3
346	Costa Rica, power and communications, 7/63	22.0	1.2	5.5
25	Brazil, power, 5/50	15.0	0.8	5.3
340	India, industry (ICICI) 6/63	26.9	1.4	5.2
29	Australia, equipment for development, 8/50	100.0	4.9	4.9
247	Iran, multi-purpose, 2/60	41.9	1.9	4.5
95	Brazil, power, 2/54	18.8	0.8	4.2
96	Australia, equipment for development, 3/54	54.0	2.3	4.2
313	Colombia, power, 5/62	50.0	2.0	4.0
378	Algeria, gas liquefaction, 5/64	20.5	0.8	3.9
211	Brazil, power, 10/58	72.9	2.8	3.8
310	Ghana, power, 2/62	46.9	1.7	3.6
3	Denmark, reconstruction, 8/47	40.0	1.3	3.2
436	Mexico, power, 12/65	110.0	3.3	3.0
1	France, reconstruction, 5/47	250.0	8.9	3.0
56	Mexico, power, 1/52	29.7	0.9	3.0
61	Finland, power, industry and agriculture, 4/52	20.0	0.6	3.0
298	India, railways, 10/61	50.0	1.2	2.4
198	India, port, 6/58	29.0	0.7	2.4
233	India, railways, 7/59	50.0	1.0	2.0
316	Mexico, power, 6/62	130.0	2.5	1.9
297	Philippines, power, 10/61	33.5	0.5	1.5
2	Netherlands, reconstruction, 7/47	191.0	2.7	1.4

*Figures as of December 31, 1968.

TABLE 3

IBRD DISBURSEMENTS IN CANADA, JANUARY 1, 1960, THROUGH DECEMBER 31, 1968

Type of Equipment	U.S.$'000 1960	1961	1962	1963	1964	1965	1966	1967	1968	Total 1960-68	Per cent 1960-68
Electric power and communications equipment	1,753	7,354	1,798	4,310	1,941	2,198	3,800	5,206	3,493	31,853	51.6
Engineers, consultants and contractors	—	—	—	—	1,174	1,577	907	770	286	4,714	7.6
Machinery and tools	115	5	62	867	934	572	2,870	1,206	847	7,478	12.1
Transport equipment	—	342	40	—	64	—	3,804	5,568	807	10,624	17.2
Metals and metal products	2	160	1,462	—	3	26	—	—	21	1,674	2.8
Miscellaneous	1,119	375	372	428	605	890	463	443	715	5,410	8.7
Total	2,989	8,236	3,734	5,605	4,721	5,263	11,844	13,193	6,169	61,754	100

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TABLE 4

IBRD DISBURSEMENTS IN CANADA, JANUARY 1, 1960, TO DECEMBER 31, 1968

Principal suppliers: disbursements of U.S.$50,000 or more over period

(a) Electric Power and Communications Equipment

Aluminum Co. of Canada*
Aluminium Ltd. (New York)*—goods originated from Canada
Brown Boveri (Switzerland)—goods originated from Canada
Canadian General Electric*
Canadian Marconi
Canadian Westinghouse*
Canada Wire & Cable
Canadian Ohio Brass Co.
Dominion Cutout Ltd.
Eastern Power Devices
English Export & Trading Corporation (New York)—goods originated from Canada
Federal Pacific Electric Co.
Ferranti-Packard Electric Co. Ltd.
Foster Wheeler, Ltd.*
General Telephone & Electronics Export Corp. (California)—goods originated from Canada
I-T-E Circuit Breaker Ltd.**
John Inglis Co.
James R. Kearney
Nichimen Co.
R. H. Nichols Co.**
Northern Electric Co.**
Powerlines Ltd. (Lagos)*—goods originated from Canada
Sangamo Co. Ltd.
N. Slater Co.
Velan Engineering Co.

(b) Engineers, Consultants and Contractors

Acres International Ltd.
L'Air Liquide**
McNamara Corporation Ltd.*

(c) Machinery and Tools

Allis Chalmers of Canada*
Babcock & Wilcox Co.*
Blackwood Hodge Equipment Co.
Boyles Bros. Drilling Co.
Byron Jackson**
Canadian Clark Ltd.*
International Harvester of Canada
Provincial Engineering Ltd.
Wright Engineers, Ltd.

(d) Transport Equipment

Brown & Sites (New York)—goods originated from Canada
General Motors Diesel Ltd.*
Pacific Truck & Trailer Ltd.**

(e) Metals and Metal Products

Dominion Steel and Coal Corporation**
Steel Company of Canada

(f) Miscellaneous

Anglo-Canadian Shipping Company*
Arnott-Smith Export Co. Ltd.
Canadian Industries Ltd.
Hays Farms Ltd.
Interior Beef Growers Ltd.
Ontario Seed Growers and Dealers Ltd.
Timber Preservers Ltd.
Domtar Chemicals Ltd.

*Companies receiving disbursements of $1,000,000 (Cdn. $1,080,000) or more over period.
**Companies receiving disbursements of $500,000 (Cdn. $540,000) or more over period.

Electric Power and Communications Equipment—In this category, the most important items appeared to be transformers, transmission lines, switchboards, generators, and switchgear. Table 4(a) lists 25 companies which received orders worth more than $50,000 (Cdn.$54,000) during the nine-year period. Six of these companies received more than $1 million (Cdn.$1,080,000) during the period under review.

Engineers, Consultants and Contractors—Canadian firms have been associated with the construction and equipment of a gas liquefaction plant in Algeria, civil works of a power project in Colombia, preparation of a plan for the expansion of port facilities in Madras, India, and carrying out technical studies for another power project in Colombia. Table 4(b) lists three firms which received more than $50,000 (Cdn.$54,000). Two of them received more than $500,000 (Cdn.$540,000) during the period.

Machinery and Tools—In this category, the most important items appeared to be machinery and equipment for a cement plant, tractors, mining machinery and power-house cranes. Table 4(c) lists nine companies which received more than $50,000 (Cdn.$54,000) over the period. Three of them received more than $1 million (Cdn.$1,080,000).

Transport Equipment—This category involved the supply of diesel locomotives and parts, locomotives and tractor trailers. Table 4(d) lists three companies which received more than $50,000 (Cdn.$54,000) over the period. One of these received approximately $10 million (Cdn.$10,800,000).

Metals and Metal Products—In this category, the main items supplied by Canadian firms were steel billets and plates, copper sheets and pipes and steel sheets. Table 4(e) lists two companies that received more than $50,000 (Cdn. $54,000) over the period; one received more than $500,000 (Cdn.$540,000).

Miscellaneous—This category included freight and the supply of radioisotopes, grass and clover seed, and cattle, Table 4(f) lists eight companies which received more than $50,000 (Cdn.$54,000) over the period. One received more than $500,000 (Cdn.$540,000).

TABLE 5

UNDP PROJECTS—EXECUTING AGENCY IBRD

Country	Type of Study	Consultant	Nationality
Brazil	Survey of hydro-electric resources of Minas Gerais	Canambra (Montreal Engineering, G. E. Crippen and Associates and Gibbs & Hill)	Canada/U.S.
Brazil	Survey of power development for South Central Brazil	Canambra	Canada/U.S.
Brazil	Power development program for the Southern Region	Canambra	Canada/U.S.
Dahomey	Land transportation survey	GECO (N.D. Lea and Lamarre Valois Ltd.)	Canada
Guatemala	Power and irrigation study	Acres/NEDECO	Canada/ Netherlands
Pakistan	EPWAPDA—general consultants	Acres	Canada
Somalia	Highway feasibility study	Grimble	Canada
Surinam	Mineral survey	Aero Services	U.S./Canada

TABLE 6

IDA DISBURSEMENTS IN CANADA
(as of December 31, 1968)

Type of Equipment or Services	U.S.$	Cdn.$
Industrial imports	34,798,000	37,581,000
Engineering, consultants and contractors	1,804,000	1,948,000
Electric power equipment	2,212,000	2,389,000
Machinery and tools	421,000	455,000
All others	470,000	508,000
Total	**39,705,000**	**42,881,000**

IBRD acts as the executing agency for a number of pre-investment studies financed by the United Nations Development Program. Canadian firms have been engaged to carry out a number of these studies, as Table 5 shows. These studies represent a large expenditure, the Canadian share of which has been about $6.4 million (Cdn.$6.9 million). Canadian engineering firms have also been active on a number of Bank/IDA projects in Asia, Africa, and Latin America. In addition, there was a Bank-financed study of railway operations in India, for which Canadian National Railways were the consultants.

The cumulative total of IDA disbursements as of December 31, 1968, was $1,410.5 million (Cdn.$1,523.3 million). Of this amount, disbursements totalling $245.9 million (Cdn. $265.6 million) had gone to finance local expenditures or imports for broad development programs where the source of the items was not specified. The balance of $1,164.6 million (Cdn.$1,257.8 million) represented disbursements for imports from abroad by IDA borrowers. Canada's share in this total was $39.7 million (Cdn.$42.9 million) or 3.4 per cent. (See Table 6.)

By December 31, 1968, 10 out of 43 IDA borrowers had entered the Canadian market to buy equipment and services to carry out IDA-financed projects.

TABLE 7

IDA CREDITS UNDER WHICH MORE THAN U.S.$500,000 WAS SPENT IN CANADA

Credit No.	Country, Purpose, Date	Disbursed* U.S.$ million	Canadian Share U.S.$ million	Per cent
62	Bolivia, power, 7/64	5.00	2.05	41
97	India, industrial imports, 12/66	65.00	9.03	14
61	Bolivia, power, 7/64	9.10	0.96	11
36	India, railways, 3/63	67.50	7.40	11
22	Pakistan, irrigation, 6/62	11.63	0.75	6.5
57	Pakistan, railways, 6/64	24.31	1.57	6.5
92	India, industrial imports, 8/66	150.00	8.64	6
89	India, power and irrigation, 6/66	9.56	0.52	5
78	India, industrial imports, 8/65	100.0	4.02	4
98	Pakistan, industrial imports 12/66	25.00	0.64	3
67	India, railways, 10/64	62.00	1.55	3
52	India, industrial imports, 6/64	90.00	0.96	1

*Figures as of December 31, 1968.

Table 7 lists IDA credits under which Canadian suppliers had received orders worth more than $500,000 (Cdn. $540,000). In four of the credits listed, the Canadian share was more than 10 per cent of the disbursements.

Table 8 lists IDA disbursements in Canada by principal suppliers, and Table 9 Canadian consultants employed on World Bank Group projects. See page 10.

91535—3½

TABLE 8

IDA DISBURSEMENTS IN CANADA, JANUARY 1, 1963, TO DECEMBER 31, 1968

Principal Suppliers: disbursements of $50,000 (Cdn.$54,000) or more over period

(a) Metals and Metal Products

Alcan Asia*—goods originated from Canada
Associated Metals & Minerals Corp.
Atlas Steel
Canada Iron Foundries
Canada Wire & Cable Ltd.
Cominco Ltd.
Dominion Steel & Coal Corporation*
International Nickel Co. (London)—goods originated from Canada
Metal Distributors Ltd. (London)*—goods originated from Canada
Nesco Aluminum Ltd.*
Noranda Sales
Pirelli Cables Ltd.

(b) Engineers, Contractors and Consultants

Canadian Hoosier Engineering Co.
Montreal Engineering Company Ltd.**

(c) Electric Power Equipment

Aluminum Ltd. (New York)—goods originated from Canada
Aluminum Company of Canada**
I-T-E Circuit Breaker Ltd.
James R. Kearney
N. Slater

(d) Machinery and Tools

Blackwood Hodge Ltd.

(e) Chemicals

Brimstone Export Ltd.*

(f) Miscellaneous

Bell Asbestos Mines
Foster Wheeler Ltd.

*Companies receiving disbursements of $1,000,000 (Cdn. $1,080,000) or more over period.

**Companies receiving disbursements of $500,000 (Cdn.$540,000) or more over period.

TABLE 9

CANADIAN CONSULTANTS EMPLOYED ON WORLD BANK GROUP PROJECTS

Country	Project	Loan/ Credit Number	Consultants
IBRD			
Algeria	Gas liquefaction	378-AL	L'Air Liquide
Chile	Power	479-CH	International Power & Engineering Consultants
Colombia	Power	339-CO	Acres International
Finland	Power, woodworking and agriculture	61-FI	Stadler Hurter
Ghana	Power	310-GH	Ontario Hydro
India	Port	199-IN	Howe International
Malaysia	Power	579-MA	Shawinigan Engineering Co.
Mexico	Power	544-ME	Tecsult International with others
Nigeria	Power	383-UNI	Ontario Hydro
Pakistan	Paper mill	125-PAK	Stadler Hurter
Peru	Port	446-PE	Wright Engineers Ltd.
Singapore	Power	595-SI	Montreal Engineering Co.
Thailand	Roads	535-TH	N. D. Lea
Thailand	Irrigation	514-TH	Acres International
Trinidad	Roads	497-TR	G. C. Parker & Associates
IDA			
Bolivia	Power	61-BO) 62-BO)	Montreal Engineering Co.
Pakistan	Port	16-PAK) 65-PAK)	Tecsult International
Pakistan	Irrigation	22-PAK	Canadian Hoosier Eng. Co.
Somalia	Roads	74-SO	L. G. Grimble & Associates
Togo	Roads	131-TO	Kez and Associates
Projects Administered by the Bank on Behalf of Consultative Group			
Laos	Nam Ngum hydro project		Acres International

Syria Reorganizes SIMEX

Syria has recently reorganized its largest state trading company. SIMEX, P.O. Box 829, Damascus, is now divided into four organizations according to the products for which each is the sole importer. The following list should be of interest to Canadian manufacturers who wish to sell their products in Syria.

Foreign Trade Organization for Machinery and Equipment
P.O. Box 3130, Damascus, (S.A.E.)
Cable: AFTOMACHINE
Chairman and General Director: Dr. Mufid Hilmi

Foreign Trade Organization for Chemicals and Foodstuffs
P.O. Box 893, Damascus, (S.A.R.)
Cable: TAFCO
Chairman and General Director: Mr. Abdul-Fadi Shadid

Foreign Trade Organization for Metals and Building Materials
P.O. Box 3136, Damascus, (S.A.R.)
Cable: AFTOMETAL
Chairman and General Director: Mr. Mustafa Janoudi

Foreign Trade Organization for Textiles
P.O. Box 814, Damascus, (S.A.R.)
Cable: AFTOTEX
Chairman and General Director: Mr. Muteb Hazim

Tubewells and Transmission Lines

The cable for a transmission line from Sukkur to the Khairpur tubewell project in West Pakistan is being pulled along by human hands and backs, not by 20-ton trucks, as in Western countries. Sometimes bullock carts are used.

Some three hundred miles north of Karachi, West Pakistan, a Canadian company recently completed its share of a project designed to return over 300,000 acres of waterlogged, salt-encrusted land to cultivation. Known as the Khairpur Tubewell Drainage Scheme, it was made possible by an $18.5 million loan from the World Bank to the West Pakistan Water and Power Development Authority (WAPDA).

This Khairpur project resulted from a study covering the Lower Indus Valley, directed by two British companies, Hunting Technical Services Limited and Sir M. MacDonald & Partners, both of London. The problem they faced was pumping out surplus ground water over a large area and disposing of it, lowering the water table to at least seven feet below the surface, and restoring the land to fertility by leaching out the salt. In places the water could simply be pumped from open ditches into disposal channels. In others, where ordinary methods of drainage could not be used or the water was saline, tubewells using fiberglass casings had to be sunk. Altogether the Khairpur scheme called for 568 wells, normally 6,730 feet apart, from which the water must be pumped by electrically driven pumps.

That's where the Canadian firm, Canadian Hoosier Engineering Ltd. of Montreal, came into the picture. Hoosier's vice-president and chief engineer, L. Swift, stresses that it had a great advantage when it came to competing for the business— it was already on the spot. The power to work the pumps was to come from the Sukkur thermal generating plant 28 miles away, designed by Canadian engineers and built under Canadian grant aid. Canadian Hoosier Engineering Company, experienced in the long-distance transmission of power, had worked on the power lines radiating from Sukkur and its engineers knew the terrain thoroughly. The company therefore proposed to Sir M. MacDonald & Partners and Hunting Technical Services that it be retained as electrical consultants for the project.

The appointment had to be approved by both the World Bank and the Pakistani authorities and the competition from foreign firms proved to be stiff. Eventually the matter was settled and Canadian Hoosier initiated engineering studies for 16 miles of S.C. 66 kv lines, 600 miles of 11 kv transmission lines, 5 – 11/.4 kv pumping stations, one new 66/11 kv substation and extensions to three existing 66/11 kv substations. In August 1963 the design engineering for the power lines began. Canadian Hoosier sent four men out to Pakistan to carry out field investigations on the route that the line should follow, the strength and other qualities of the soil, and the proper design for the pole and anchor settings. Because of the salinity of the water, only poles made of prestressed concrete could provide a reasonable life and reduce expenditures in foreign exchange. A plant was installed by the contractor to produce these poles. Practically all other materials and equipment, including the prestressing strand, had to be imported.

Once the design was completed and the actual work began, it took nearly four years to complete the project. Getting the needed materials made for delays and the pace of construction sometimes suffered because of the heat, which occasionally reached 128 degrees. In March 1969, a one-year maintenance period began and soon Canadian Hoosier will hand the project over to the Pakistani authorities. An important part of its work has been training local labor; at the peak of activity the company had eight engineers and technicians on site and the rest were Pakistanis. Compared with Canada, a great deal more of the work was done by human hands and backs and less by machine; it became standard practice, for example, for the wire for the transmission lines to be pulled by men and by bullock carts rather than by trucks.

This was Canadian Hoosier's first assignment for the World Bank but it hopes to get others as time goes on. Douglas Lowrie, its manager of foreign projects, admits that working in the developing countries has its difficulties but adds tremendously to the engineer's experience. For one thing, says Mr. Lowrie, on an overseas site he has to solve problems that he seldom confronts in Canada. In addition, he can't delegate nearly as much; often he has to act as his own foreman. But he emerges with a broader understanding both of engineering and of people. The company benefits in other ways: foreign contracts make for a more even workload and can counterbalance slack times in Canada. The one great hurdle is the stiff competition, but each completed job enhances a company's reputation and hence its competitiveness.

Better Transportation for Togo

Some of the Togolese who helped in the task of surveying possible routes for new roads in Togo, a project financed by IDA of the World Bank Group. Surveys were part of the road feasibility studies done last year.

Togo, a country of about 1.7 million people living in an area of some 22,000 square miles, badly needs better roads. It has only 250 km. of paved highways and another 7,000 km. of unpaved roads and trails and, not surprisingly, only about 10,000 motor vehicles of all kinds. Most of the bridges and culverts along these roads cannot support loads over 10 tons.

Better highways are given priority in Togo's Five Year Development Plan and the problem is already being tackled with the aid of a loan from the International Development Association and the services of a Canadian engineering firm. Kez & Associates of Montreal sent a team of engineers and economists into Togo in February 1969 to carry out a feasibility study of 270 km. of proposed new roads, mainly centered on Sokodé in the Central Region of the country. This study, phase one of the project, has lately been completed and the report submitted to the IDA and to the Government of Togo. Work on phase two, detailed engineering for the routes selected and the preparation of tender documents, will shortly begin. It should be completed by August.

Kez & Associates, a completely bilingual firm, was drawn to Francophone Africa when it began to look for work beyond the borders of Canada. Its first step was to make itself and its capabilities known to the World Bank authorities in Washington and to other international financing organizations. The next was to carry out some personal prospecting in West Africa. Accordingly, Mr. Kez and some of his confrères visited a number of countries in that area, including Ghana, Togo and Dahomey. In Togo they became acquainted with officials of the Departments of Planning and Public Works and also spent some money on preliminary market research.

When it was making these important contacts, the firm heard about the possibility of IDA financing for road feasibility studies in Togo. It was quick to register its interest in undertaking this work not only with the Togo authorities but also with IDA officials in Washington. Eventually it was placed on a short list of firms invited to submit proposals. In May 1968 it sent in a non-price proposal that reviewed the technical aspects of the project, set out how the firm would approach the job, and included a tentative plan of operation. The proposal also listed the staff members who would be assigned to the work and gave complete details of their careers and qualifications. In trying for the contract, the firm faced stiff competition from French and German engineers, but in August 1968 it was asked to submit price proposals and soon after was awarded the contract.

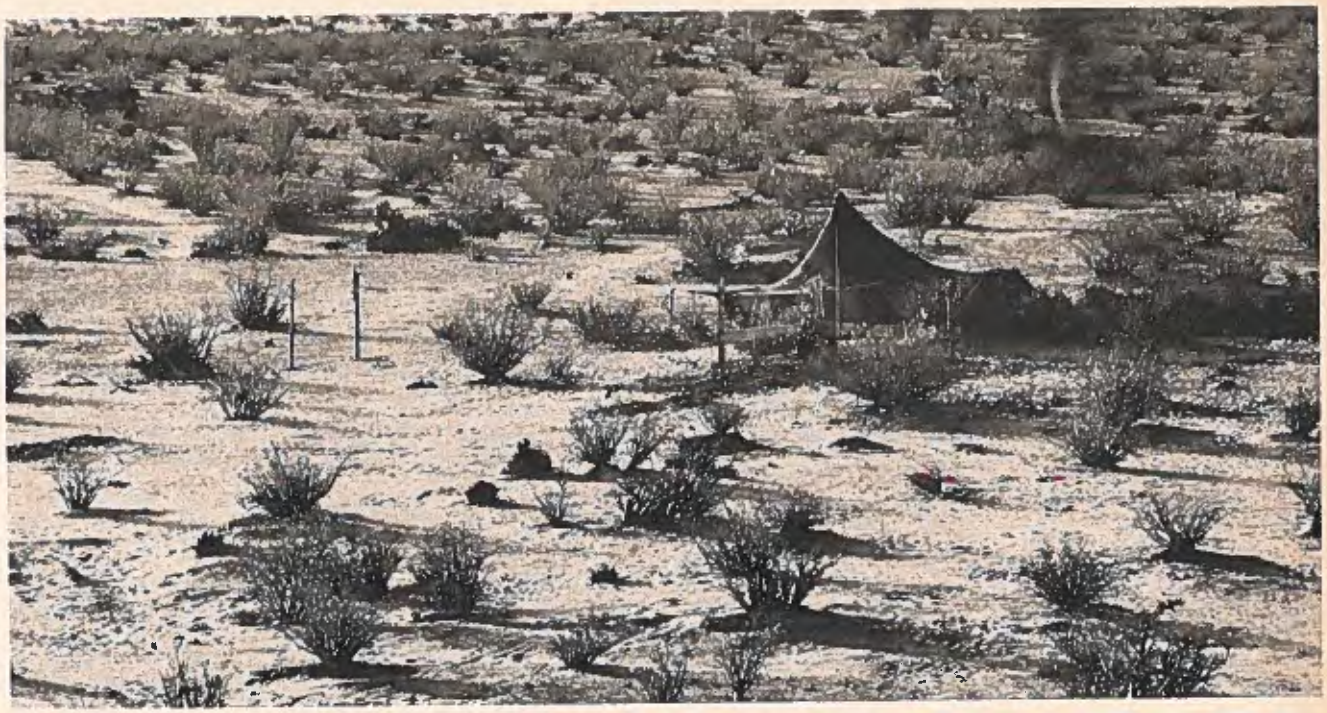
One of the assets of his firm, says Mr. Kez, is that it includes both engineers and economists. Both were needed when in February 1969 the feasibility study in Togo began. At times it had a staff of 19 working out of Sokodé and in addition, trained local personnel to do drafting, surveying, traffic counts, etc. The economists studied the potential economic benefits to the country of the three proposed routes, including attainable level of production within the area served, improvement in markets with better access, population, traffic volume and distribution, cost levels of highway transport and other questions. The engineers investigated construction and maintenance costs, undertook surveying work and geotechnical and soil identification studies, etc. One of the routes studied (155 km.) was an agricultural feeder road connecting at both ends with the main north-south artery of the country. The second (78 km.) was from the Ghana border to the main north-south artery and the third (38 km.) was a road to the Dahomey border. The terrain varied from hilly to fairly flat.

With the completion of phase one, all Kez personnel were withdrawn with the exception of one administrative officer and the report was completed in the Montreal head office. Next month the buildup for phase two will begin. Of the 270 km. covered by the feasibility study, only 180 km. were recommended for detailed engineering.

For a firm like his, Mr. Kez points out, the benefits of securing work like the project in Togo are obvious: wider professional experience, more flexibility in operation, and international recognition that may result in further assignments. But there are wider implications for Canadian business, because sales of capital equipment made in Canada often follow where the consultant leads.

To those thinking about seeking international contracts he offers a word of advice: concentrate on one carefully chosen area first, because it takes time and money to develop a market. (His company today, however, is fast expanding its work not only in Africa but also in Latin America and Asia.) Equally important, make yourself known to the international financing organizations and cultivate your contacts with them.

Hands across the Oceans...



This is Mauritania, a country where large areas are desert but where mineral resources are being explored. Ores from Mauritania were given to a Canadian company to determine whether copper could be produced from them by a special process.

A highly technical project requiring the participation of a number of companies located in three continents is not an everyday occurrence. But that is what A. H. Ross & Associates, a firm of consulting metallurgical and chemical engineers of Toronto, was asked to participate in.

The International Finance Corporation (IFC), a World Bank affiliate, awarded the contract to Prospection Limited of Toronto for a feasibility study on the production of copper from ores in Mauritania. Prospection's recommendation to IFC that A. H. Ross complete the metallurgical processing portion of the report was accepted. Work on the combined feasibility study began in August 1967 and the final report was submitted to IFC in April 1968.

K. R. Coyne, a principal of A. H. Ross & Associates, explained the purpose of the study to *Foreign Trade*. "We had to determine if the TORCO (treatment of refractory copper ores) process was feasible for installation in Mauritania." The actual development and testing of the process was carried out by Anglo-American International (U.K.) Limited, the company seeking the loan to build the Mauritanian plant. The ore samples from Mauritania were ground in a special type of grinding equipment in France, and shipped to a refractory copper ore pilot plant in Italy for testing.

"There was no need for us to go to Mauritania," said Mr. Coyne. "We visited the experimental plant in Zambia where ores similar to those in Mauritania were being processed on a semi-commercial scale, and observed the grinding and ore-testing investigations in France and Italy."

After visiting the plant in Zambia, A. H. Ross reviewed the pilot plant data from the tests on the Mauritanian ores, determined the expected metal recoveries, confirmed operating costs, analyzed the possibility of the Zambian plant being scaled-up to full commercial size, and submitted its report to IFC. The plant in Mauritania, now being built by Anglo-American International as a result of the favorable feasibility study completed by the Canadian firm, is expected to be in operation shortly.

Engaged in consulting activities concerned with the recovery of metals from ores and the processing of metal and chemical products since 1955, A. H. Ross functions primarily in the field of extractive metallurgy, including mineral dressing, hydro-, pyro-, and electro-metallurgy.

Although much of its foreign work has been done for United States companies, it has been involved in the technical and economic aspects of a wide variety of projects for private firms in Peru, France, Ireland, Sweden and South Africa. The firm's review of the tin industry in Bolivia in 1958 was completed in co-operation with C.C. Huston & Associates of Toronto through an Inter-American Development Bank loan. In a second assignment, working with Prospection Limited, it determined the feasibility of developing a magnesite ore deposit for Corporacion Venezolana de Fomento, an agency of the Government of Venezuela.

Because the firm's work is highly specialized, it was able to apply the same methods used on projects in Canada to the study of the commercial plant for Mauritania.

This last project required the participation of two Canadian companies, a British firm, a French grinding specialist, an Italian ore-testing facility, a pilot project in Zambia—all for the establishment of a plant in Mauritania financed by a World Bank affiliate in Washington. This is surely an excellent example of helping hands across the oceans.

United Nations Development Program

Canada pledged $16.2 million to projects under UNDP in 1970, bringing total contributions over the years to $100 million. How is this money spent? What share of it goes to Canadian firms? How can more Canadians participate?

R. D. LUCAS
Second Secretary, Mission of Canada to the UN, New York

On October 9, 1969, in the General Assembly Hall of the United Nations in New York, delegates from nearly 125 countries gathered to announce the voluntary financial contribution of their governments to the operations of the United Nations Development Program (UNDP) for 1970. At the pledging conference, opened by Secretary-General U Thant, the delegate of Canada (who was, incidentally, a former Trade Commissioner and now Canada's Ambassador to Venezuela, Bruce Rankin) stated that Canada's contribution would be $16.2 million, a rise of 20 per cent from 1969. Added to its previous pledges—dating back to the first days of United Nations technical assistance efforts in the early 1950's—Canada's cumulative contribution thus went over the $100 million mark. By the end of the day, delegates from both rich and poor countries had pledged a probable $240 million to finance the economic and social development activities of the UNDP for 1970.

With its share of total contributions ranging from 5 to 6 per cent each year, Canada obviously has a large stake in this major international undertaking. Apart from contributions, what are some other aspects of Canada's involvement with UNDP and how does Canada itself benefit as a result? More fundamentally, **what is UNDP and what are the types of project it undertakes?** Perhaps the most effective way of answering these questions is to take a a sampling of its actual activities.

Panama—A mineral survey implemented by the UN's Department of Economic and Social Affairs on behalf of UNDP has made a major discovery of porphyry-type copper in a hitherto geologically unattractive area. The Panamanian Government recently called for bids for further exploration and exploitation which, if successful, could drastically alter the country's economy.

Indonesia—The soft-loan affiliate of the World Bank, the International Development Association (IDA), recently announced a loan of $28 million to Indonesia for a highway and transport co-ordination study sponsored by UNDP and implemented through the World Bank itself.

Africa, Middle East—Throughout much of northern and central Africa and the Middle East, the desert locust destroys hundreds of thousands of tons of cereal grains every year. UNDP, through FAO and with other international agencies and co-operating governments in the area, is heavily involved in isolating the breeding habits and areas of the insect, training local personnel in preventive techniques, and developing more effective ways of destruction in the air and on the ground to bring the desert locust under control.

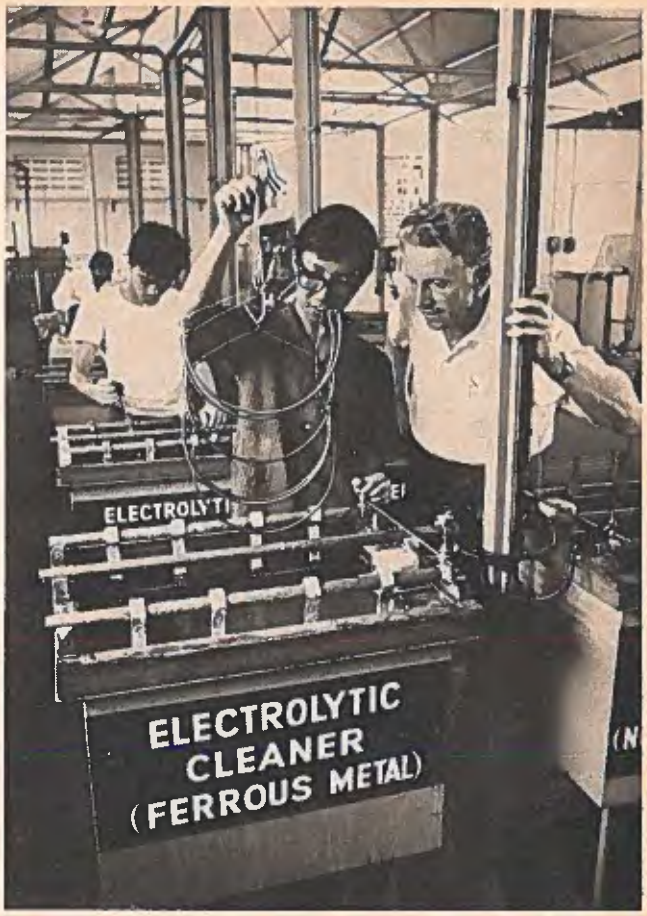
Cyprus—Tourism represents one of the most promising foreign exchange earners in Cyprus. There the UNDP, through its implementing agency, the International Labor Organization, is setting up a Hotel and Catering Institute which will give accelerated training to managerial and supervisory personnel in the travel business.

Latin America—Through the International Wheat and Maize Development Center in Mexico, the UNDP, with the Ford and Rockefeller Foundations, will soon embark on a project to introduce to undernourished regions of the earth, beginning in Latin America, a new strain of maize (corn) containing protein of up to three times that of present varieties grown in these areas.

These examples illustrate the nearly 1,100 UNDP/Special Fund projects carried out or being carried out since the birth of the UN Special Fund ten years ago. Each project represents on the average a UNDP grant of nearly a million dollars, with roughly the same amount being borne by the recipient countries. Thus over two billion dollars has so far been expended on the program, which in turn has generated well over that amount of follow-up capital investment from a variety of sources, principally the World Bank. In addition to the Special Fund portion of UNDP's activities, the technical assistance component finances the operations of

(Top) The UNDP financed and FAO carried out a project to improve livestock production on range land in Kenya. Here a Canadian expert on loan (center) instructs students during a field trip which he made to a cattle research station.

(Below) In Ecuador, a drilling team is trying to locate a vein of gold near Potovelo, as part of a mineral survey carried out by the UN and financed by the UNDP. Deposits of metallic and non-metallic minerals were assessed by the team.



(Top) Now it is industry that is getting a helping hand in Singapore under the UNDP. The aim is to develop small enterprises by providing training. Here an electroplating specialist watches bucket handles being processed.

(Below) Agriculture too comes within the UNDP's purview. Under FAO's guidance, a Central Sheep and Wool Institute was set up in Malpura; here are some of its Rambouillet rams, part of a U.S. consignment of 400 rams and ewes.

thousands of individual technical experts working on a variety of problems in the developing world.

What are some of the chief features of UNDP which are revealed in the projects briefly described above?

1. Projects are jointly financed, with the UNDP generally meeting the foreign exchange costs and the recipient country bearing the responsibility for local costs.

2. Field operations are carried out through a network of implementing agencies and not by UNDP itself, which acts primarily as a financing agency.

3. UNDP acts in response to requests for assistance from governments of developing countries. Its role is to investigate the viability of requests for assistance, provide finance where appropriate, maintain a watching brief on the progress of the project, and attempt to stimulate further investment where warranted.

4. Projects cover a variety of fields, including agriculture, education, public health, industrial development, public utilities, development planning, and natural resource surveys.

Where and how does Canada come into this big and complex picture? In addition to its contributions (in 1970, it will be the fourth largest contributor, after the U.S., Sweden and Denmark) Canada participates in several ways. In the commercial sense, Canada has done particularly well in supply of contractual services (see accompanying tables). To the end of 1968, over $11 million worth of business, embodied in some 52 separate contracts, had been awarded to Canadian firms. The year 1967 was the best one to date, with 13 separate subcontracts valued at $2.8 million, but 1968 was a relatively poor year because few projects were contracted in fields in which Canada excels and the value per contract obtained was lower than average. But 1969 will probably see the highest figure yet attained by Canadian consulting firms. As a supplier of equipment, Canada ranked tenth during 1968 and could probably fare far better given a sustained and energetic effort by possible suppliers. In only one field, that of drilling and geophysical equipment sold to the UN itself, has Canada done well. Potential exists for vocational training, laboratory and other educational equipment both with UNESCO (Paris) and ILO (Geneva), for irradiation equipment and expertise with IAEA (Vienna), and for fishing, forestry and agricultural equipment with FAO (Rome). Purchases during 1969 by agencies included vehicles, portable housing, office equipment, metalworking machinery, cartographic and geophysical equipment, drill rigs and equipment, irrigation pumps, aircraft, plant and animal breeding stock, insecticides, meteorological instruments, telecommunications and test equipment, fishing nets and other gear, camping equipment, air conditioners, X-ray and other medical supplies, and forestry machinery.

Interested suppliers to specialized agencies of the United Nations family are required to make separate approaches to each agency, as there is no centralized procurement office. (See list in accompanying box.) An expression of interest by letter requesting consideration as a supplier usually suffices, although procedures vary from agency to agency.

The UNDP's Executing Agencies

UN/United Nations Secretariat
Director
United Nations Technical Co-operation Office
Department of Economic and Social Affairs
United Nations
New York, N.Y. 10017

UNESCO/United Nations Educational, Scientific and Cultural Organization
Director
Bureau of Relations with International Organizations and Programs
United Nations Educational, Scientific and Cultural Organization
Place de Fontenoy
Paris VIIe, France

UNIDO/United Nations Industrial Development Organization
Director
Technical Co-operation Division
United Nations Industrial Development Organization
Felderhaus, Rathausplatz 2
A-1010 Vienna, Austria

FAO/Food and Agriculture Organization
Assistant Director-General
Program and Budget
Food and Agriculture Organization
Via delle terme di Caracalla
Rome, Italy

IAEA/International Atomic Energy Agency
Deputy Director-General for Technical Assistance
International Atomic Energy Agency
Kaerntnerring 11
Vienna 1, Austria

ICAO/International Civil Aviation Organization
Director
Technical Assistance Bureau
International Civil Aviation Organization
International Aviation Building
1080 University Street
Montreal 3, P.Q.

ILO/International Labour Organization
Chief
Field Department
International Labour Organization
154 rue de Lausanne
Geneva, Switzerland

ITU/International Telecommunications Union
Chief
Technical Co-operation Department
International Telecommunications Union
Place des Nations
Geneva, Switzerland

ADB/African Development Bank
The President
African Development Bank
Boîte Postale 1387
Abidjan, Ivory Coast

IBRD/International Bank for Reconstruction and Development
Projects Department
International Bank for Reconstruction and Development
1818 H. Street, N.W.
Washington, D.C. 20453

IADB/Inter-American Development Bank
The President
Inter-American Development Bank
808 17th Street, N.W.
Washington 25, D.C.

WMO/World Meteorological Organization
Chief
Technical Co-operation Division
World Meteorological Organization
41, avenue Guiseppe Motta
Geneva, Switzerland

WHO/World Health Organization
Deputy Director-General
World Health Organization
20 avenue Appia
Geneva, Switzerland

CONTRACTS AWARDED DURING AND UP TO 1968

TABLE 1

BY AGENCY

	In 1968		Total to end 1968	
	No.	Cost U.S.$'000	No.	Cost U.S.$'000
United Nations	25	3,307	179	27,694
FAO	56	5,611	212	24,958
WHO	6	1,180	15	5,222
IBRD	10	6,924	57	32,515
IAEA	2	56	10	604
UNIDO	3	107	7	697
UNESCO	—	—	4	1,180
WMO	—	—	1	10
ILO	1	12	3	178
Total	**103**	**17,197**	**488**	**93,056**

TABLE 2

BY TYPE OF SERVICE

	In 1968		Total to end 1968	
	No.	Cost U.S.$'000	No.	Cost U.S.$'000
Aerial surveys, photography	6	435	80	6,763
Mineral, geophysical surveys	14	1,200	94	9,444
Soils, hydrological studies	12	1,280	61	14,754
River basin studies	5	1,734	17	7,938
Forestry, forest products studies	8	1,232	22	2,249
Electric power studies	—	—	27	7,347
Transport, communications surveys	12	7,357	46	26,612
Urban planning	4	1,260	21	7,480
Economic studies	9	757	32	2,366
Equipment design, supply	14	1,044	35	3,131
Air transportation	4	118	17	1,250
Other	15	781	36	3,723
Total	**103**	**17,197**	**488**	**93,056**

TABLE 3

BY HEADQUARTERS COUNTRY OF CONTRACTOR

	In 1968		Total to end 1968	
	No.	Cost U.S.$'000	No.	Cost U.S.$'000
Argentina	1	17	1	17
Australia	—	—	1	1,053
Austria	—	—	1	99
Belgium	3	350	8	1,125
Britain	18	2,195	68	7,724
Canada	7	666	51	10,862
Colombia	—	—	1	3
Costa Rica	1	96	1	96
Czechoslovakia	1	240	2	372
Denmark	2	1,808	5	2,561
Ecuador	—	—	1	10
Finland	1	49	3	62
France	22	3,439	95	18,060
Gabon	1	92	1	92
Germany, West	2	876	19	2,471
Greece	—	—	3	1,096
Hungary	—	—	1	8
India	—	—	2	50
Israel	—	—	3	1,850
Italy	5	651	33	7,025
Ivory Coast	—	—	3	138
Jamaica	2	147	3	168
Japan	1	236	10	2,581
Kenya	2	36	3	68
Lebanon	3	46	8	171
Mexico	1	120	4	140
Netherlands	1	6	14	3,164
Nicaragua	1	16	2	116
Norway	2	32	6	946
Panama	1	15	1	15
Peru	1	11	3	119
Philippines	—	—	1	24
Poland	—	—	1	394
Senegal	—	—	1	31
Sierra Leone	—	—	1	24
Spain	—	—	1	227
Sweden	1	12	13	2,099
Switzerland	3	365	8	2,271
Thailand	1	50	1	50
Uganda	—	—	1	12
United States	14	3,789	80	16,506
Venezuela	—	—	2	12
Yugoslavia	1	21	7	665
Inter-governmental agencies	—	—	2	539
International consortia				
Canada/Netherlands	—	—	1	594
France/Italy	2	999	3	1,566
France/Netherlands	—	—	1	325
France/Sweden	—	—	1	230
Italy/Czechoslovakia	1	650	1	650
Italy/Poland	—	—	1	103
Netherlands/United States/Italy	—	—	1	471
Sweden/Denmark	1	166	1	166
Britain/France	—	—	1	480
United States/France	—	—	1	3,346
Total	**103**	**17,197**	**488**	**93,056**

TABLE 4

VALUE OF EQUIPMENT PROCURED BY ALL AGENCIES DURING 1968

Country of Supply	Amount U.S.$	Country of Supply	Amount U.S.$
United States	2,158,032	Israel	29,510
Britain	1,549,189	Austria	18,668
Germany	1,015,408	Ceylon	16,125
Sweden	342,446	Jamaica	15,700
Denmark	288,128	Sudan	14,540
Norway	280,816	Belgium	14,150
France	212,321	Algeria	13,000
Italy	209,347	Tanzania	12,381
Netherlands	200,267	Kenya	11,905
CANADA	186,676	Czechoslovakia	11,573
Australia	136,392	Central African	
Switzerland	132,863	Republic	10,445
Japan	118,651	Chad	10,350
Uganda	47,425		
Nigeria	46,042	Total	7,143,311
Iran	40,961		

Advice from the local Canadian Trade Commissioner stationed in the headquarters city of the agency should also be sought. For consulting services, a technical data questionnaire must usually be completed (and kept up-to-date, for best results) in order to be on the agencies' rosters. It is also good policy to write to the agency when interested in a particular project.

Policy Input—UNDP's governing body is the 37-member Governing Council which meets in January and June of each year to give final approval to projects and make decisions on a wide range of policy questions. Canada is currently serving a three-year term on this body, and is widely regarded as playing a constructive role in formulation of over-all UNDP policy.

Implementation—At the level of field implementation of projects, Canadian skills play a part. Apart from contractors, 240 individual Canadian technical experts served on UNDP projects during 1968. Of these, ten were project managers. Another ten Canadians served in a number of UNDP's 90 field offices at the level of resident representative or deputy "res-rep". Several dozen more Canadians served at the New York headquarters of the organization.

Relationship to CIDA—Canada's large and rapidly growing bilateral aid program, implemented through the Canadian International Development Agency, also has a relationship to UNDP activities. Sometimes efforts are made, for example, to co-ordinate activities so that whenever possible UNDP projects complement CIDA-financed activities. In other instances, further opportunities are opened up by UNDP projects which are appropriate for a separate project financed directly by Canada. With the growing realization that "dollars for development" are not easily come by, there is closer and closer co-ordination of effort among projects.

Good information is the first step in obtaining business from members of the United Nations family. The Department of Industry, Trade and Commerce now has well-established and efficient procedures to ensure that companies do not miss opportunities through lack of timely information on upcoming projects. Several weeks before the January and June sessions of the Governing Council, when Special Fund projects receive approval in "batch lots" of anything up to and over a hundred, a summary listing is prepared and mailed free to firms requesting it. After studying the list to determine which projects are of interest, firms may contact the Permanent Mission of Canada to the United Nations to obtain detailed descriptions of these projects. Project descriptions are also available through the Engineering Services Section of the Department in Ottawa. A third method is to subscribe to *Project Descriptions*, a twin volume set of documents available from the United Nations Sales Section at the time of Governing Council meetings at a cost of $65.00 per year.

Firms can keep abreast of general UNDP activities by obtaining an informative and handy monthly newsletter distributed free, *Pre-Investment News*, published by UNDP (write the editor at the UNDP, 866 UN Plaza, New York 10017). Advice on procedures that individual agencies follow and information on the status of particular projects can be obtained from Canadian trade offices located in the headquarters cities of these agencies. Canada also has trade officers posted to its United Nations Mission in New York who stand ready to offer assistance and advice at all times.

Spain Reforms Education System

Spain's Minister of Education and Science last month released details about his new Education Act to the Spanish press, before its presentation to the Spanish Parliament (Cortes) for approval. The Act is based on a White Paper prepared after consultations with UNESCO representatives who visited Spain. It provides for sweeping reforms at all levels. As a first step, primary education is to become compulsory and free for all children up to the age of 14 and both secondary and higher education are to be completely revised to bring them into harmony with systems in more highly developed countries.

For the first time in Spanish history, education will be allocated the largest slice in the budget; the appropriations will rise from U.S.$416.1 million in 1970 to U.S.$1,336 million in 1981. New taxation is to be introduced to help finance the reform.

One of the interesting aspects of the educational reform will be the acquisition of electronic teaching equipment for schools and universities and there should be excellent opportunities for Canadian suppliers of electronic teaching aids. A UNESCO project for the equipping of the Oviedo School of Mining Engineers is already in existence, and several Canadian firms have shown considerable interest. It is understood that Spain's Finance Minister on a recent visit to Washington held discussions with the President of the World Bank on the pressing need for funds to implement the educational reforms. The World Bank is said to be studying the possibility of granting a sizable loan.

Undoubtedly, there are excellent opportunities for Canadian suppliers of sophisticated electronic educational aids in this country where education, with agriculture, is to be given top priority.

Consultancy in East Pakistan

Two forms of transportation meet on an East Pakistan road—the bullock cart and the jeep used by Acres, general consultants to the Water and Power Development Authority.

East Pakistan, with a population of 65 million and an area of 55,000 square miles, is one of the most densely populated regions of the world. The land consists largely of the deltaic area of two of the world's largest rivers, the Ganges and the Brahmaputra. The development of the vast water resources presents some of the most difficult and complex technological and sociological problems. Although the soils are fertile, agricultural yields are low and food production has not kept pace with rapid population growth. Other resources which could form the basis for economic development are scarce.

The East Pakistan Water and Power Development Authority (EPWAPDA) was established in 1958 to execute the co-ordinated development and utilization of the water and power resources of East Pakistan. In 1968, ten years after the formation of the Authority, the staff had increased to well over 30,000. Fast growth has led to organizational problems and this and other factors have limited the Authority's ability to implement the many water and power projects which are in the planning and construction stages.

To assist the Authority in the execution of its programs, the U.S. AID has provided for many years the services of a firm of consultants to act as general consultants to the Authority. In addition to the general consultants, the Authority employed in 1968 thirty consultants from 15 different countries for specific projects.

Through its staff stationed in Dacca in connection with a Canadian aid-financed project, Acres became aware that there was some doubt that the U.S. AID would renew the contract of the general consultant and advised the Authority of its interest in participating in any new general consultancy assignment which might follow the termination of the existing contract. When the World Bank and the UNDP agreed to finance the continuation of a general consultancy assignment to EPWAPDA, Acres provided these organizations with information on its experience in the various fields of engineering and economics which would be involved in such an assignment. Acres was thus eventually included in the list of seven consultants who were invited to prepare a proposal for this assignment. The other proposals were requested from companies in the United States, Britain, the Netherlands, France and Italy.

The request for a proposal required the responding engineering firms to associate with a firm of management consultants for the organizational aspects of the assignment. To find a suitable firm, Acres contacted several management consulting firms in Canada and the United States and eventually reached agreement with Booz, Allen & Hamilton International Inc., Washington, D.C. (BAHINT). The reason Acres selected this firm was that it showed enthusiasm for the work, had relevant experience in all aspects of the required management services, and had previously worked in Dacca on a similar assignment. The request for a proposal also indicated that the selected firm should have experience in tropical agriculture. For this reason, Acres approached the International Land Development Consultants (ILACO) of the Netherlands (with whom it had worked on many other foreign assigments) and reached agreement with this firm for its participation in the project.

As a result of the association with these companies, Acres was able to present a proposal which showed a good understanding of the problems and presented an approach to the assignment which was both realistic and practical. And the three companies together were able to propose a field team and technical support groups at the home offices which could meet the highest international standards.

After a prolonged evaluation of the proposals received both by EPWAPDA and the World Bank, the contract was finally awarded to Acres in association with BAHINT and ILACO. It is for two years with an option for extension beyond that period.

The long-range objective of the assignment defined in the contract is to assist EPWAPDA in building an organization capable of carrying out efficiently its prescribed functions. This will involve establishing development priorities; initiating and co-ordinating the collection, collation and review of basic data, and reviewing the reports, studies and recommendations prepared by EPWAPDA's project consultants to ensure that all the projects together form an effective and workable development program.

In the association, Acres provides the over-all direction of the general consultancy and is concentrating on the hydraulic, irrigation, power, planning and general economic aspects. ILACO deals mainly with tropical agriculture and agricultural economics and BAHINT is concerned with the management aspects of the assignment.

The full staff complement in Dacca will consist of 29 persons from Acres, four from BAHINT, and six from ILACO. Mobilization is now virtually complete.

The hopes and aspirations of young Africa are in the faces of these children of Chad, listening to a French lesson in a one-room schoolhouse. One of UNICEF's main interests is improving education by building more schools and training more teachers.

United Nations Children's Fund

UNICEF purchases total about $30 million a year; mainly consist of supplies for health and educational projects. Equipment offered should be simple in design, made of basic materials.

DAVID G. ADAM
Third Secretary, Mission of Canada to the UN, New York

The United Nations Children's Fund was created in 1946 to provide emergency relief for children who had been victimized by the Second World War. By the early 1950's, with the end of the emergency, UNICEF was reconstituted to engage humanity's concern with the welfare of children on a broader front. Many countries of the world contribute annually to the Fund out of which the various programs are financed. (See Table 1.)

Today UNICEF responds not only to the major needs of mothers and children in the war-torn areas of Vietnam and Nigeria, but also promotes the welfare of millions of children throughout the world who live in circumstances akin to disaster as a result of poverty, ignorance and disease. The main part of UNICEF's efforts in 1969 continued to be directed towards long-range development programs for children in 119 of the less developed nations.

Often the most significant achievements by UNICEF have been impossible to measure in quantitative terms. However, practical results in health and education have derived from the establishment of teacher training schools, primary schools, prevocational schools for young people, day care centers and mothers' clubs, and subsidiary health centers. UNICEF has always considered and continues to consider the elimination of major diseases of primary importance, and consequently 283 million children have been inoculated against tuberculosis, trachoma, leprosy and malaria.

In addition to the training aspects of the many programs in the health and education fields, UNICEF **has historically been involved in the supply of equipment to its various projects.** In order that the medical and educational projects which it has undertaken have the requisite supplies and equipment, it has a procurement division in its New York headquarters. UNICEF's procurement division has the well-earned reputation of being perhaps one of the most efficient and well-managed of any in the United Nations family. The supply component in its operations has always bulked large but recently it has increased in range and better reflects the more comprehensive projects receiving UNICEF aid, the greater complexity of the problems involved, and the greater awareness of the many needs of children.

The UNICEF procurement division maintains up-to-date lists of suppliers in the various categories of materials required. The two major criteria for suppliers who wish to be included in the list of bidders are that the firm must be a prime manufacturer of the items in question and must have a properly franchised distributor who has exclusive rights from the manufacturer for export sales, or a commercial export firm which covers a wide range of products. Formal invitations to bid are issued to at least three approved suppliers, but UNICEF's requirements are also given the widest possible circulation to companies capable of supplying. Contracts are awarded to the lowest acceptable bidder—that is, the supplier who furnishes satisfactory proof of the quality of his product, his commercial standing, and his ability to provide in the volume that UNICEF requires.

All Canadian purchasing for UNICEF is done through the Canadian Commercial Corporation; this is a long-standing arrangement which has proved satisfactory to both UNICEF and to Canadian manufacturers. During 1968 some $318,000 was spent in Canada to purchase equipment, mainly in the appliance and audio-visual fields. Because of the international sources from which UNICEF draws its funds and the local currencies in which the pledges are made, it is forced to procure on a broad and roughly equitable geographical basis. (See Tables 2 and 3.)

E.T. Bridgewater, Director of the UNICEF Supply Division, is convinced that Canadian manufacturers of educational and hospital equipment could supply a great deal more than they do now. (See Table 4.) However, there is at least one caveat when a Canadian manufacturer is attempting to obtain UNICEF business. Its requirements for equipment are not geared to technically advanced educational systems such as Canadian students generally enjoy, and its health or medical equipment requirements are not those of a large modern Canadian hospital. Rather. **most of the equipment which UNICEF needs is of a simple design, usually made from the most basic materials,** to be used by much less advanced students (generally in rural areas). For example, the need is for strong, sturdy wooden desks and not for modern stainless steel varieties, and instead of a complete electrical panel UNICEF more frequently looks for AC/DC voltage meters and AMP meters. There are, of course, occasional demands for more advanced equipment in pilot projects in technical schools, but these are not yet significant.

UNICEF's main procurement office is located in New York although there is a branch in Paris which carries out recommendations made by the New York headquarters. Procurement for UNICEF and for the other agencies for which it acts runs at an annual rate of some $30 million and covers some 4,500 individual items. To increase efficiency and to reduce costs, UNICEF established in 1962 an assembly and packaging center in Copenhagen. To this center some 4,000 different types of supplies are shipped from all over the world for assembling, packaging into medical, health and education kits, and forwarding to the countries in which projects are located. Shipments from the supply center in 1968 totalled $10.9 million, or 40 per cent of total UNICEF supply shipments.

This Liberian mother smiles happily at her baby. He has a better chance to survive because he has been protected against malaria and yaws, thanks to the work of UNICEF.

Naturally, there are many problems involved in supplying a large volume of small-value items for projects in the maternal, child health, education, nutrition, and prevocational areas. Not the least of these is the inefficiency of the separate procedures for the procurement of the individual items that UNICEF needs. Establishment of the warehouse in Copen-

TABLE 1

MAJOR CONTRIBUTORS TO UNICEF IN 1968

	U.S.$'000 Government	Non-Government*	Total
Australia	537	501	1,038
Britain	1,200	263	1,463
Canada	931	1,129	2,060
Denmark	466	130	596
Germany	1,562	855	2,417
France	1,410	1,180	2,590
India	830	54	884
Netherlands	194	1,195	1,389
Japan	470	66	536
Norway	554	122	676
Sweden	2,346	138	2,484
United States	12,000	6,800	18,800

*Includes Christmas cards.

hagen expedited a rationalization of the procurement program. In 1968, UNIPAC assembled and shipped 12,000 midwifery kits, 22,000 kits for maternal health centers, 11,000 for public health nurses, 25,000 sets of educational supplies for Pakistan, 7,000 sets of educational supplies for Brazil, and 5,500 sets of drugs for Indonesia.

It is important that Canadian manufacturers and commercial export firms recognize the possible limitations on the sale of some of their products to UNICEF. Nevertheless it is important for those who do have the type of equipment which UNICEF requires to realize that there is a substantial amount of business to be done at UNICEF. Canadian firms who manufacture or sell products that UNICEF could use are advised to write to E. T. Bridgewater, Director, Supply Division, United Nations Children's Fund, 866 United Nations Plaza, Sixth Floor, New York 10017.

We would appreciate it if copies of all correspondence with UNICEF are sent to: R. D. Lucas, First Secretary, Permanent Mission of Canada to the United Nations, 866 United Nations Plaza, Suite 250, New York 10017.

TABLE 2

ARTICLES PURCHASED FROM MAJOR SUPPLIERS

United States
Insecticides, vehicles, hospital and laboratory equipment, medical supplies, kitchenware, boats and outboard motors, books and visual aids.

Britain
Vehicles, milk processing equipment, hand tools, wood and metal equipment, antibiotics, vaccines, audio-visual aids, educational supplies.

Japan
Water pipes, vaccines, garden tools, audio-visual aids, microscopes, dental equipment, bicycles, sewing machines.

Sweden
Milk-processing equipment, machinery, vehicles, outboard motors, office machines, hardware, hand tools.

Germany
Laboratory equipment, vehicles, kitchen equipment and supplies, pharmaceuticals, glassware, refrigeration equipment, X-ray equipment.

Canada
Refrigerators, pharmaceuticals, kitchen equipment, dietary supplements, hand tools.

France
Vehicles, motorcycles, pumps, milk tanks, audio-visual equipment, school supplies.

TABLE 3

PROCUREMENT IN 1968

	U.S.$		
Britain	2,574,000	Japan	2,169,000
Canada	318,300	Sweden	693,000
France	1,299,000	United States	8,081,000
Germany	2,337,000		

TABLE 4

UNICEF STANDARD STOCK ITEMS WHICH CANADA MIGHT SUPPLY

Audio-visual—projectors, movie and slide, overhead; photo supplies

Sporting goods—badminton sets, basketball nets and frames, table tennis sets, tumbling mats

Garden supplies—polyethylene bags and sheeting, watering cans, wheelbarrows

Hand tools (tools for prevocational training)—bits, hand drills, screwdrivers, augurs, mallets

Classroom supplies—school furniture, chalkboard panel, chalkboard accessories, ballpoint pens, pencils, chalk, crayons, paper scribblers

Hospital equipment—operating tables, wheeled stretchers, bassinets, wheelchairs, scales, plasticware, rubber-coated sheeting, laboratory equipment (physics and chemistry teaching aids)

Kitchenware—refrigerators; utensils, both institutional and home; kerosene and gas stoves; cups, saucers, bowls; housewares and ovenware.

Commercial Agent for Netherlands Antilles

To promote and develop Canadian trade with the Netherlands Antilles, the Department of Industry, Trade and Commerce has appointed Mr. Gordon I. Edmonds of Curacao as its Honorary Commercial Agent there. He will assist the Commercial Division of the Canadian Embassy in Caracas, Venezuela, whose territory includes the Netherlands Antilles, in promoting trade and capitalizing on opportunities for Canada as they arise. Mr. Edmonds is the Manager of the Crown Life Insurance Company agency in the Netherlands Antilles and is a Guyanese citizen. He becomes one of the eleven Honorary Commercial Agents in various parts of the world. These agents are initially appointed for two years, and this appointment can be extended year by year under mutual agreement.

Trinidad Needs Building Materials

The National Housing Authority in Trinidad and Tobago intends to embark on a large building program in 1970. This includes, under an international agreement, construction of some 2,100 houses by the end of 1971, in addition to multi-storied flats and other housing units. Increased mortgage loans made by both the Government and lending institutions will provide a further stimulus, as will the school-building program, construction of hotels, etc. The Authority anticipates some problems in the supply of sufficient building materials, both local and imported, and this should mean a good opening for Canadian companies active in this field. Those interested should get in touch with the Canadian Trade Commissioner in Port-of-Spain, (P.O. Box 1246, 72 South Quay), Trinidad.

Contacts Get Contracts

In the old town of Ibadan, Nigeria, there is no regular street pattern and this makes it impossible to install a sewerage system of the type used in North America, as Canadian engineers soon discovered. Their solution was to set up communal facilities in strategic locations.

MacLaren International Limited, a wholly-owned subsidiary of James F. MacLaren Limited, is the first Canadian firm of consulting engineers to be selected for a major project undertaken by the World Health Organization (WHO) and financed by the UNDP/Special Fund.

The contract, calling for the preparation of ten-year master plans for sewerage, waste disposal and drainage for Ibadan, the capital of the Western State of Nigeria, did not come by chance. MacLaren made itself known by registering with WHO and other international agencies and kept its contacts alive through personal visits to them from time to time. As a result, WHO asked for proposals from a list of six firms and MacLaren's was chosen to undertake the study.

No stranger to overseas work, MacLaren has established a reputation for successful achievement in a number of countries. In 1966, in co-operation with Engineering Sciences Inc., of California, MacLaren International Ltd. answered a request from the Pan-American Health Organization (an affiliate of WHO) to undertake the design work for a water supply system in Port-au-Prince and Pétionville, Haiti, financed by an Inter-American Development Bank loan. The same year, under contract with the Canadian International Development Agency (CIDA), the firm undertook a study of rural water supply schemes in 40 towns in Western Nigeria.

MacLaren has also completed feasibility studies and design work for projects in Libya, Jamaica, the Bahamas and Cyprus in direct consultation with these foreign governments. The firm has also achieved an impressive record of experience on projects required by major Canadian metropolitan areas.

The contract in Nigeria came at a time when this city of more than one million people was staging a "Keep Ibadan Clean" campaign. Many prominent citizens were accordingly already aware of the need for improving sanitary conditions and have since expressed their interest in supporting measures proposed by the study team.

Mr. H. Fennerty, Vice-President, MacLaren International Ltd., Toronto, outlined some of the implications of the program. "In the old town area of Ibadan, where there is no regular street pattern, it is impractical in an engineering sense as well as financially to install a sewerage system as we know it in North America. As there is no plan for redevelopment in this area, the only possible approach is to try to find practical means of improving conditions within the site limitations which exist at the present time. MacLaren hopes to do this by installing communal facilities—toilets, showers and clothes washing—strategically located to concentrate the wastes in areas where they can be dealt with."

In the central business district of Ibadan, the study to date indicates that it may be financially feasible to put in a sewerage system. The physical layout of the less congested areas of the city surrounding the old town would also lend itself to the eventual establishment of a more conventional sewerage and waste disposal program.

The study is scheduled for completion within two years; however, some work is already being implemented in an attempt to alleviate problems in areas of more acute congestion.

MacLaren, as project co-ordinator, has a study team of five staff members in Ibadan, together with a specialist from Urwick, Currie & Partners Ltd., who are associating in the management studies. In addition, the Nigerian Government has furnished 35 counterpart personnel to the project. As part of its contract, MacLaren is identifying needs for formalized training of some of these counterpart staff in Canada or elsewhere.

"One of the prime aspects of our study is sociological," added Mr. Fennerty. "It's our relationship with the people who will eventually take over the running of the systems. We are working with the Nigerians to study the physical and the organizational side of the program, to get something started that they can build on, to set ground rules so that they can carry on. This is real grass-roots stuff. We must keep our thinking flexible and be sensitive to what can work in the country, otherwise we could be making bad mistakes. We find this to be basic in all our overseas work."

The residents of Ibadan are helping themselves to obtain a more sanitary sewerage disposal system. And MacLaren, by keeping its contacts alive, is adding another project to its already long list of achievements.

Better Crops for Cyprus

Better water cantrol and management was the abjective af a Canadian study an Cyprus. This wauld increase the area af land with enaugh water—such as the regians where citrus, bananas and early vegetables are grawn for expart.

T. Ingledow & Associates Limited of Vancouver has been active internationally for some years, with a growing volume of business and a growing reputation in the field of resource development surveys and studies. It has undertaken a number of overseas assignments financed by the United Nations, the Inter-American Development Bank, and the Canadian International Development Agency, and also directly for government clients in Africa, South America, Southeast Asia, and the Middle East.

In October 1968 the firm was awarded a contract for the study of water control and management in the Paphos area in Cyprus, leading to a feasibility report to standards acceptable to international agencies, such as the World Bank. The program is now in its second phase and the final report is due in the spring. The company submitted its credentials to the Food and Agriculture Organization on September 8, 1967, and in March 1968 FAO requested a proposal. This Ingledow submitted in association with Canadian Aero Service Limited, thus supplementing its basic engineering skills with Canadian Aero's expertise in land use and land capability studies, soils classification, establishment of crop patterns, farm management, agricultural and economic surveys, and hydrogeology.

The Paphos area forms the southwestern part of the island of Cyprus and comprises the watershed of the main rivers draining the southwestern slopes of the dome-shaped Troodos Mountains. This is the region which holds the greatest promise for agricultural development on a major scale in Cyprus. The Government owns large tracts of land which are farmed far below their potential. The coastal plain has many good soils but because there is not enough irrigation water at all seasons, farmers must grow cereals, legumes, and certain vegetables which bring comparatively low returns. Only in areas with sufficient water are the more lucrative crops—such as bananas, citrus fruit and early vegetables—being grown.

Paphos has the right climate for intensive irrigated agriculture. In the coastal areas the growing season is long and frosts are infrequent. In the more elevated areas the growing season is shorter and there are killing frosts during the winter. The irrigable areas studied are for the most part at lower elevations and are suitable for growing early season vegetables and fruits. These early agricultural crops are often protected by plastic covers during the tender seedbed periods. Prices for early vegetables and early maturing fruits are extremely good, especially when these are exported by air to Britain and to other Northern European countries. Expansion of these crops would bring in more foreign exchange which Cyprus badly needs.

Paphos receives the highest annual rainfall on the island—from a mean of 400 mm at the coast to 600 mm at 500 metres, 750 mm at 800 and slightly over 1,000 on the mountain peaks. Unfortunately the distribution during the growing season makes irrigation necessary except for the hardiest dryland crops. In the coastal areas, 85 per cent of the annual rain falls during the five months November 1 to March 31. Two winter months, December and January, account for more than 40 per cent of it. The normal growing season is characteristically hot and very dry.

Paphos has some of the best rivers in Cyprus. Because the high precipitation in the mountains provides them with a plentiful supply of water, especially during fall and winter when crop needs are at the minimum, the study estimates that more than 120 million tons of water each year flow unused to the sea. The four largest rivers in the area have not been developed to any significant extent and the recently constructed Mavrokolymbos Reservoir is on the fifth. There are important sources of ground water in the alluvial deposits of the major rivers and the calcarenites of the coastal plain. These hidden water resources are evaluated in the report.

The actual studies being done by Ingledow and Canadian Aero Service include:

1. A field reconnaissance survey by each of the specialists on the study team.

2. A farm survey covering some 21 villages in the area.

3. Studies of sedimentation and ground water, more than a dozen dam sites, irrigation works, soils and agronomy work and an assessment of alternative development schemes using different combinations of dams, with and without ground water, to enable an optimum plan to be selected. Following this selection, the economic and technical feasibility of the project will be assessed to the standards required by international financing agencies under the final phase.

The Eye of the Needle

This young Icelander is helping to salt the herring catch. UNIDO is financing a study of the expansion of the canned fish industry.

"Management consultants aren't headline catchers. We don't find jobs by simply being on lists; we find them by going out and looking for them." That's the answer H. A. F. Rowntree, Manager, International Division, Stevenson & Kellogg Ltd. of Toronto, gave *Foreign Trade* on the question of how management consultants obtain contracts with international financing agencies. Naturally, the firm registers with these agencies and keeps in touch with them, but does not consider this a door-opener because it offers no guarantees.

Stevenson & Kellogg's personal search for business, experience, expertise and team spirit are paying dividends. The company was founded in 1934 as a subsidiary of a United States management consultant firm, but Stevenson & Kellogg personnel completed the purchase of the Canadian subsidiary in 1950. Since then, it has been a wholly Canadian company owned by its active professional staff.

Included in this staff are cost accountants, analytical and control accountants; general and market research economists; industrial, civil and mechanical engineers; computer mathematicians, and industrial psychologists. On major assignments Stevenson & Kellogg draws on the collective experience and technical knowledge of the group. In practice, the work required by its clients almost always involves more than one discipline; one principal is assigned to co-ordinate the professional knowledge and experience that the client requires.

One such project in which the firm is currently involved is the canned fish industry in Iceland. In April 1969 Stevenson & Kellogg was asked by UNIDO (the United Nations Industrial Development Organization)—with which it had previously registered—to submit proposals for this project. Its submission was accepted and work started the following month with a December 1969 deadline.

Stevenson & Kellogg is examining the present status of the canned fish industry in Iceland to determine ways in which it could expand, to identify any new product that could be developed, and to find new markets for the industry. In actual fact it is involved in every step from catching fish to its distribution. This involves expeditions with fishermen; discussions with boat designers and builders; inspection of processing plants, warehouses and packaging design firms; wholesale and retail methods of distribution; product palatability and consumer acceptance; supply and demand; export sales; accounting practices, and sales profits. All are part and parcel of the extensive analysis required for sound production and marketing. And Stevenson & Kellogg, as a comprehensive firm of management consultants, is well equipped to do all this.

The five staff members assigned to the project at various times work in co-operation with the Ministry of Foreign Affairs of Iceland, and through this department, with the people specifically interested in the development of the fish canning industry. They enjoy working in foreign countries but admit that, as in Canada, things do not always happen as planned; they must make changes as required to achieve the ultimate goal.

Stevenson & Kellogg has a backup of experience in this type of project. It is currently completing a market study for the Fisheries Council of Canada to identify ways and means of increasing domestic fish consumption. Prior to this, Stevenson & Kellogg's industrial engineers had carried out a dozen projects in the production end of the fishing industry—on trawler design, plant equipment and layout, equipment design, operating methods and standards, and organization. It also carried out an economic study of Tanzania at the request of CIDA.

Contracts are not obtained by simply registering with the international agencies. As Mr. Rowntree puts it: "Luck comes through the eye of the needle, but you must have the needle in your possession to take advantage of it. And we have a wall of needles."

The Inter-American Development Bank

"A multilateral channel for accelerating the economic and social development and integration of Latin America"—Filipe Herrera, President, IADB.

J. DENIS BELISLE
Assistant Commercial Secretary, Washington

In Brazil, Centrais Eletricas Brasileiras S.A., with 11 power enterprises, is carrying out a program which will bring electric power to an additional two million people; Companhia Vale do Rio Doce is expanding its production and export facilities for iron ore. In Colombia, Central Hidroelectrica del Rio Anchicaya, Ltda. is building a 340,000 kilowatt hydroelectric power plant near Cali. In Brazil again, a team of engineers is conducting a study of an international airport capable of handling the jumbo jets of the seventies. These projects and others are being made possible by the allocation of resources both from the Inter-American Development Bank and from Canada. In these projects, Canadian funds, equipment and knowhow are all involved. Before reviewing the Canadian participation in the Bank and its implications for Canadian consultants and suppliers of equipment, let us have a look at the Bank itself.

The Inter-American Development Bank (IADB) is a regional financial institution currently composed of 22 member nations—21 Latin American countries and the United States—and was created in 1959 to accelerate the economic and social development of Latin America. The IADB was the first regional agency created to assist in solving the development problems of the Latin American countries, both individually and collectively. To promote its objectives, the Bank makes loans for economic and social development projects and provides technical assistance to government and private industry in the member countries.

Since the time it approved its first loan in February 1961 and up to June 30, 1969, the Bank had authorized 526 loans totalling over $3 billion which helped to finance projects calling for a total investment of some $8 billion. The Bank's contribution to Latin American development thus accounted for about one third of the total amount authorized by all sources of public international financing for the development of this region during that period. In addition to its financing activities, the Bank also plays a leading role in such fields as rural and urban development, education, communications, export financing, preinvestment studies and the promotion of the economic integration of Latin America.

Looking at the future of the Bank with enthusiasm, its President recently said, "It is not unrealistic to program our loan activity 40 to 50 per cent above the $400 million annual average recorded by the Bank in the past."

Initially established with two sources of funds, the Ordinary Capital Resources and the Fund for Special Operations, the Bank began to administer the Social Progress Trust Fund for the Government of the United States in 1961 and later entered into various arrangements with non-member countries, including Canada, to attract additional development funds to Latin America.

Ordinary Capital Resources: Fixed at $850 million—$400 million in paid-in capital and $450 million in callable capital—when the Bank was established, the authorized Ordinary Capital Resources were later increased by member countries and now total $3.15 billion—$475 million paid-in and $2.675 billion callable. The callable capital represents a guarantee for Bank securities and would only be called if the Bank needed it to meet its obligations created by its borrowings of funds in the world's capital markets.

As shown in the table, most of the loans made from Ordinary Capital Resources went to finance economic development projects. Over 80 per cent of all funds authorized so far have gone to industry, mining and agriculture and to electric power projects. These loans are made for periods ranging from 7 to 25 years, carry interest rates reflecting those prevailing on the world's capital markets, and are repayable in the currencies lent. **All Free World countries,**

The IABD helped to alleviate a critical housing shortage in Guatemala with a $5.3 million loan. One result was 5,260 housing units, some of which are seen above. Families with incomes that range from $40 to $140 a month live in them.

including Canada, which have made appropriate contributions to Latin American development through the Bank are entitled to bid on projects financed from the Ordinary Capital Resources.

Fund for Special Operations—Established to make "loans on terms and conditions appropriate for dealing with special circumstances arising in specific countries or with respect to specific projects," this fund gives the Bank the flexibility it requires to handle special situations. In 1965, the Board of Governors of the Bank expanded the field of activity of this fund to include financing of social development projects previously financed through the Social Progress Trust Fund. Starting with $150 million, this fund was augmented on three occasions and now totals $2,323.2 million. As of June 30, 1969, the Bank had authorized 219 loans from this fund for a total of $1,358.5 million. These loans helped finance economic and social development projects totalling over $2.5 billion. Agriculture, transportation, water supply and sewerage, industry and mining received over 70 per cent of all funds allocated.

This fund permits the Bank to lend some of its resources at lower interest rates and for longer periods. Repayment of these loans can also be made in local currency. **Bidding on these projects is limited to countries which are members of the Bank and is not open to Canada.**

Social Progress Trust Fund—This was created in 1961 by an agreement between the Bank (the administrator) and the Government of the United States (the donor) to foster social development in Latin America in the fields of land settlement and improved land use, low-income housing, water supply and sewerage facilities, education and transportation and the $525 million in this fund had been virtually all used by 1965. The Bank then started to finance social development projects through the Fund for Special Operations. Amounts being repaid to this fund are used to participate in loans made from the Fund for Special Operations which meet criteria set by the Trust Fund.

Other Sources—Through various arrangements with non-member countries, the Bank has so far succeeded in funnelling an extra $400 million into development in Latin America. These arrangements include $269 million worth of bonds and direct loans; funds administered by the Bank for Canada, Germany, Sweden, Britain, and the Vatican totalling $70.4 million; parallel and independent financing

THE INTER-AMERICAN DEVELOPMENT BANK

RESOURCES

U.S.$ million

ORDINARY CAPITAL RESOURCES—bidding open to all countries

Paid in as of December 31, 1968	475
Callable	2,175
Callable due in 1970	500
Total after 1970	**3,150**

Fund increased by $1 billion from $2.15 billion June 20, 1968.

FUND FOR SPECIAL OPERATIONS—bidding open to member countries only

Paid in as of December 31, 1968	1,922
Payable in 1969	401
Total after increase	**2,323**

Fund increased by $1.2 billion in 1967 payable in 3 instalments over the 1967-1969 period.

SOCIAL PROGRESS TRUST FUND—bidding open to member countries only

U.S. Government assigned to this fund when established (1961) and a further in 1964	394
	131
Total	**525**

OTHER SOURCES—funds under administration tied to country of origin

Summary of financial arrangements with non-member countries as of June 30, 1969	
Bond issues and direct loans	269.0
Funds under administration (Canada 46.2, Germany 8.2, Sweden 5, Britain 10, Vatican 1)	70.4
Parallel financing agreements (Canada 13.9, Netherlands 25)	38.9
Loan participations and other arrangements (Finland 10, Spain 7.5, other countries 5.2)	22.7
Total	401.0

LOANS

Cumulative lending as of June 30, 1969
U.S.$ million

Sector	No.	Amount
Industry and mining	82	419.3
Agriculture	31	228.3
Electric power	21	250.7
Transportation	10	86.5
Water supply and sewerage	16	71.8
Preinvestment	3	6.4
Export financing	9	35.6
Total	**172**	**1,098.6**

Sector	No.	Amount
Agriculture	55	418.0
Transportation	18	234.1
Water supply and sewerage	28	192.6
Industry and mining	26	130.6
Electric power	12	124.4
Housing	13	107.0
Education	25	97.9
Preinvestment	42	53.9
Total	**219**	**1,358.5**

Sector	No.	Amount
Housing	32	215.8
Water supply and sewerage	32	160.1
Agriculture	26	83.2
Education	19	31.6
Transportation	2	5.6
Preinvestment	5	1.2
Total	**116**	**497.5**

Sector	No.	Amount
Electric power	3	25.6
Transportation	4	14.6
Preinvestment	7	5.4
Water supply and sewerage	1	5.0
Education	1	4.0
Industry and mining	3	3.2
Total	**19**	**57.8**

Compiled by the Canadian Embassy in Washington from IADB 9th Annual Report and other publications.

from Canada and the Netherlands for $38.9 million, and sales of loan participations and other arrangements for a total of $22.7 million. As of June 30, 1969, the Bank had authorized 19 loans totalling $57.8 million from the resources it administers for non-member countries. These loans helped to finance projects in the fields of electric power, transportation, water supply and sewerage, education, industry, mining and some preinvestment studies. Generally the funds administered for non-member countries are tied to the countries of origin.

On December 4, 1964, the Canadian External Aid Office (now the Canadian International Development Agency) entered into an agreement with the Inter-American Development Bank under which the Bank administers Canadian aid resources to finance economic, technical and educational assistance projects in Latin America. These funds are offered for up to 50 years at little or no interest and are tied to procurement in Canada.

By the end of 1968, Canada had made available to Latin America through the Bank some $50 million which has been used for such purposes as an industrial credit program in Bolivia; the undertaking of preinvestment studies in Argentina, Brazil, Colombia, Mexico and Peru; the financing of a hydroelectric power plant in Colombia; the en-

largement of the port of Acajutla in El Salvador; the promotion of economic integration in Central America, and the improvement of education and the expansion of the telecommunications system in Chile.

On June 28, 1965, a further agreement was signed between Canada's Export Credits Insurance Corporation (now the Export Development Corporation) and the Bank, making available $15 million for long-term financing of exports of Canadian capital goods and related services for economic development projects in Latin America. These funds are offered for terms ranging up to 20 years at commercial interest rates. In 1968, a $2.3 million loan was made to Companhia Vale do Rio Doce of Brazil to help it finance the second phase of its iron ore expansion program.

The projects financed throughout Latin America by the Inter-American Development Bank create many opportunities for work and sales by internationally competitive consultants and equipment suppliers. As already indicated, Canadian consultants and equipment suppliers are eligible to bid on any project financed from the Ordinary Capital Resources of the Bank as well as to participate exclusively in the projects financed with Canadian funds.

To obtain contracts under projects financed from these two sources, Canadian consultants and equipment suppliers should keep abreast of developments in Latin America and actively promote their services and products in the borrowing countries. Canadian Trade Commissioners can give valuable assistance in this.

Consultants must also register with the Bank in Washington so that their capacity can be judged to perform the services required by a borrower which is considering them for consulting work or by the Bank itself in some instances.

It should be noted, however, that the Bank does not prequalify consultants nor does it maintain lists of approved consultants. It is not until the name of a firm is submitted by a borrower or is placed on a list developed by the Bank for a specific project that the acceptability of an individual firm is determined.

In order to register with IADB, consultants should obtain the Professional Services Contractor Résumé, IDB Form 91-A, from the Chief, Professional Services, Contractors' Section, Division Analysis of Infrastructure and Industrial Development Projects, Inter-American Development Bank, 808-17th Street, N.W., Washington, D.C. 20577. They should return it completed, together with any brochures, pamphlets or reports providing information on the firm's qualifications. It is then the responsibility of consultants to update their file with the Bank by sending pertinent material.

For equipment purchased under loans from the Bank's Ordinary Capital Resources, tenders are called and contracts awarded by the recipient in the specific Latin American country. An interested Canadian equipment supplier should therefore get in touch directly with the recipient, its consultant, or the prime contractor, as the case may be, to ensure that it is given a chance to participate in the tender call. The local office of the Canadian Trade Commissioner Service will be pleased to assist.

Firms interested in receiving IADB news releases on loans authorized as well as other Bank publications should register with the Division of Information, Inter-American Development Bank, 808-17th Street, N.W., Washington, D.C. 20577, if they wish to be placed on its mailing list. The loan announcements (which are made as soon as the Board of Executive Directors of the Bank authorizes the loans) give succinct information about the loan operation, the borrower, the amount and terms, the purpose, the source of funds, the total cost of the project, and the purpose for which the Bank's financing will be used. Generally speaking, the contracts are let some months after the loan announcement.

The Department of Industry, Trade and Commerce in Ottawa and the Canadian Embassy in Washington will also be pleased to advise and assist you in your efforts to obtain work and make sales to projects financed by the Inter-American Development Bank.

It's Still True in 1970

Fifty years ago, the Deputy Minister of the Department of Trade and Commerce had some common-sense advice to offer about corresponding with foreign firms. His comments appeared in the Annual Report of the Department for fiscal 1920.

"In dealing with foreigners, the Canadian businessman has always a tendency to forget that the best methods to use are seldom those which produce the best results in Canada. Two cases in point are the character of letters written to prospective customers abroad, and the failure to supply the foreign correspondent—when opening negotiations—with proper information about one's financial standing and responsibility. If, when writing to a possible foreign buyer, the Canadian firm will bear in mind that the foreigner is probably unfamiliar with their name and the merits of their line, and that full particulars are much more to be desired than the short, businesslike quotations submitted to a local concern, a great deal of benefit would accrue.

"On this subject a businessman, himself interested in selling Canadian specialties abroad, recently suggested that Canadian manufacturers and exporters should write an individual letter when sending catalogues, giving full details regarding prices, discounts, mode of payment, and other obvious particulars which are necessary in order to develop business, especially in foreign countries.

"Form letters explaining a line have their advantages if accompanied by a more personal communication referring to the particular inquiry, but more experienced Canadian exporters believe that, as a general rule, their use should not be encouraged.

"In commencing correspondence with a foreigner with a view to establishing commercial relations, the Canadian businessman should more than ever bear in mind that his correspondent has perhaps never heard of him, and cannot readily learn anything of his financial standing or integrity. Moreover, as it is he who is making the overture, business courtesy—to say nothing of better business itself—demands that he give sufficient information about himself, rather than expect his correspondent to search for it. Instead of this, however, some Canadian firms go so far as to request credit information without first supplying it on themselves."

Power Potential in Brazil

Scene on one of the many rivers of south central Brazil, where Montreal Engineering carried out a mammoth study of power potential. This involved, among many other aspects, measuring the flow of the rivers.

"If you do a good job on a foreign project, you can almost be certain of continuing assignments in the area." That's the opinion of Ken Littzen, manager of the Business Development Division of Montreal Engineering Company Limited. And he can prove his point by outlining his company's involvement in the study and development of the electric power potential in Brazil over the past seven years.

In 1963 the World Bank awarded a $2.5 million contract for the study of power resources in South Central Brazil to a consortium headed by Montreal Engineering and including another Canadian firm, G. E. Crippen, and Gibbs & Hill of New York. The grant towards financing the study came from the United Nations Development Program, with the World Bank designated as the executing agency. This contract, won in the face of stiff competition from six other international firms, was Montreal Engineering's first from the World Bank. The study it undertook covered an enormous area—483,000 square miles with a population of 80 million—including the industrial complex around Sao Paulo. It was, in fact, the most extensive study ever supervised by the World Bank.

At the peak of the project, which the consortium completed in 1966, Montreal Engineering had 15 engineers working in Brazil. Some were in helicopters, surveying jungle areas, others were measuring the flow of the rivers with special instruments, and still others were concentrating on other aspects of the survey. The work included estimating the hydroelectric resources of the area, making a power market study, forecasting load up to 1980, formulating plans to meet the forecast load (these included the use of hydro and thermal and possibly nuclear power), and planning generation facilities. When the study was completed, the report was presented to the World Bank and to Eletrobras, the government-owned central power authority in Brazil.

The report had scarcely been sent forward when Montreal Engineering received on its own the contract for the second phase of the power study. This was to be carried out in South Brazil and centered on Curitiba. This time the external financing, some $750,000, came from the Canadian International Development Agency through its soft loans arrangement with the Inter-American Development Bank. This second phase, which began in 1966, was intended to pinpoint the power needs in the southernmost part of the country and suggest how these could be met. At peak, seven or eight engineers from the Montreal head office were working in Brazil and specialists were engaged under subcontract as needed. This second report was recently submitted to the World Bank.

A second outgrowth of the original South Central Brazil study was a contract, made directly with the Inter-American Development Bank, to undertake an independent appraisal of the Ilha Solteira hydro project on the Panama River. The installed capacity of the plant was to be between 2,500 and 3,200 mw and it was intended to meet primarily the needs of industry. The IADB selected Montreal Engineering to examine the proposals made by the owners of the site, including the design of the plant, the construction approach, the dependable power potential when the plant became operative, and the estimated cost of the entire project.

Montreal Engineering's fourth contract in Brazil, also under an IADB loan, covers procurement ol equipment needed for power projects to the value of $16.4 million. This contract, won against worldwide competition, will be completed in March. It involves not only purchasing equipment but also training Brazilian procurement officers so that they can fill purchasing jobs throughout the Eletrobras system. In administering this contract, the Montreal company has proved that other business often follows where the consultant leads; Canadian firms have obtained $4 million worth of orders for equipment on which they could quote competitively.

One of the principal reasons for Montreal Engineering's success in foreign work, Mr. Littzen believes, is the calibre of the people it assigns to these jobs. "We send out our best," he says, and adds that the director of the South Central Brazil study was a senior vice-president of the company, J. K. Sexton. In competing for assignments under the World Bank, it takes care to furnish complete biographies of those who would be working on a project, stressing their qualifications and experience. Its engineers are expected to acquire the language of the country in which they are living and their wives also receive language lessons. All MECO people are expected to become a part of the local scene while they are on site.

South America was not new territory to Montreal Engineering when it acquired the Brazil contract; it had been working there for forty years, though not in Brazil. Today it covers the world in its search for new business, with representatives appointed in 52 countries, most of them in the past three years. Whenever possible the company associates itself with a local consulting firm, though in some countries it must be content with agents with some technical training or with good politica connections. These agents keep the company informed about projects that are coming up, help with negotiations and furnish good contacts—all important in the stiffening competition for international engineering work.

Aerial view of the port of Manila, the Philippines. The headquarters of the Asian Development Bank are in this city.

The Asian Development Bank

Began operations late in 1966; 19 regional members, 13 non-regional, including Canada. Authorized capital, U.S.$1,100 million; headquarters, Manila, Philippines.

D. S. BAKER, Consul and Assistant Trade Commissioner, Manila

Since the inception of the Asian Development Bank in 1966, there has been considerable interest in business opportunities for private firms that could arise. As it steps up its activities, these opportunities increase and it is therefore worthwhile to review the procedures for and methods of doing business with the ADB.

The ADB expanded its operations considerably in 1968. During the year it extended seven loans amounting to U.S. $41.6 million. Five loans were for specific projects: tea factory modernization in Ceylon, an expressway project in the Republic of Korea, a road feasibility study in the Republic of China (Taiwan), a water supply scheme in Penang, Malaysia, and a plant for the production of an intermediate for polyester fiber in Taiwan. Two were for institutions financing industrial development—one in Thailand and the other in Pakistan. So far in 1969, seven loans amounting to U.S.$43.3 million have been made. They went to Taiwan for deepsea fisheries development, to Indonesia for irrigation, to Korea for cold storage facilities and for transport and stevedoring equipment (two loans), and to Malaysia for palm oil mills. The two remaining ones were for institutions financing industrial development in the Philippines and Singapore.

Also in 1968, eleven technical assistance proposals involving an outlay of U.S.$1,137,000 in grants were approved by the Board of Directors. These proposals covered both the preparation of specific projects and programs which the Bank might consider later for financing and sectoral activities of importance to the countries concerned. Up to September 30, 1969, the ADB had committed a total of U.S.$1,218,000 for technical assistance in seven developing member countries. One project is a regional research center.

The year 1968 also saw a promising start on the constitution of Special Funds for concessional lending to the Bank's developing member countries. The "Special Funds Rules and Regulations" adopted by the Board of Directors make provision for an Agricultural Special Fund, a Multipurpose Special Fund, a Technical Assistance Special Fund and such other Special Funds as may be established or accepted by the Bank.

It is important for the businessman to recognize the three different ways that the ADB can employ funds. These are technical assistance, ordinary loans, and special fund operations.

Technical assistance is financed directly by the Bank on either a reimbursable or non-reimbursable basis. The Bank itself, if appropriate, will select individual consultants or consulting firms either to supplement its own staff or to act in their own right to undertake some specific technical

study. Thus technical assistance is generally provided by the Bank to develop a project to the point where it can be considered for a loan. It is also provided for making studies of specific economic problems of national or regional concern. The names of firms to be solicited for proposals are usually submitted to the beneficiary for comment and statement of any objection before invitations for proposals are sent out.

Selling effort must be directed towards the Bank. Consultants must be drawn from a member country of the Bank such as Canada and many Canadian consultants have already registered with the ADB. Firms not now registered but interested in being considered for future work should register this interest with the Chief Engineer. They will receive appropriate registration forms which, when correctly completed, the ADB can use to identify expertise in various fields for future reference. It is important to supply all data requested and not simply refer the Bank to brochures which may or may not contain the information asked for. It is also useful to maintain up-to-date data on the firm's file. In other words, selling effort includes precision and completeness in informing the Bank of the firm's qualifications. Personal contact, as always, is also worthwhile. Selection of consultants involves human judgment and it is valuable for bank officials to meet representatives of consulting firms, both to help the firm understand the needs of the Bank and the Bank to learn more about the firm. Such knowledge is always improved by personal calls during which the Bank can get instant feedback to questions.

In some instances, borrowers may find it desirable to employ individual consultants as advisers where expertise not otherwise available is needed, or to employ consulting firms to facilitate the satisfactory implementation of the project for which the Bank has made a loan. The need for the employment of consultants will be carefully considered by the Bank and the borrower at the time of making the loan—and subsequently as circumstances warrant. The Bank may, where necessary, require that the borrower engage consultants. Where borrowers employ consultants, they will be responsible for the selection made. The Bank will, however, need to be satisfied as to the competence and functions of consultants so engaged. The employment of domestic firms, either alone or in combination with foreign firms, is encouraged where such firms are found to be qualified to perform the work.

Such consultants should direct their selling efforts to the borrower. Usually the Trade Commissioner in the country concerned is an appropriate contact for arranging initial meetings with the government agency and giving background to the project. He can also alert interested Canadian consultants on appropriate times to follow up on project proposals, etc. A consultant can be involved in one or both stages of consulting but is precluded from any involvement in either the procurement or construction of the project.

The ADB has published guidelines for procurement by borrowers[1] (separate from the guidelines governing uses of consultants).[2] Borrowers may use the proceeds of a loan only for procurement in member countries of goods and services that these countries produce, except in any instance in which the Board of Directors determines otherwise. The Bank has published a booklet containing these guidelines. Topics include: international competition and advertising, prequalification (and exceptions), size of contracts, specifications and standards, bid procedure, and contracts.

Because the ADB is intimately concerned with the various projects and may review any bids, it is considered important not only to solicit business from a borrower but also to be known to the ADB. Again, registration can be completed by contacting the Chief Engineer. Interested parties can also obtain copies of the guidelines mentioned above directly from the Bank, from the Canadian Trade Commissioner's office in Manila, or from the International Financing Branch of the Department of Industry, Trade and Commerce in Ottawa.

The third form of financing available from the Bank is Special Funds. Special Funds are to be used for projects where the country's balance-of-payments situation and the nature of the project itself dictate the need for concessionary lending (that is, below the conventional lending rate, now 6-7/8 per cent). To date the only Special Fund contributors are Canada, Japan, Denmark and the Netherlands. Competitive bidding takes place only among those countries that have made contributions to the Special Funds. On occasion, however, the Bank may decide to use "set-aside" funds and then bidding is open to all Bank member countries. The first use of Special Funds was for the Tadjum irrigation project in Indonesia.

The Department of Industry, Trade and Commerce is the government department specifically concerned with commercial aspects of Canada's relations with the ADB. The **Department is informed of Bank activities and, in turn, disseminates information to prospective Canadian consultants, contractors and suppliers**. In addition, the Department, through its officers in Manila, Philippines, is in regular contact with ADB officials and can assist in arranging appointments for visitors, obtain specific information, and generally keep in touch with developments.

Mr. R. W. H. du Boulay of Britain is now the Director representing Britain, Canada, Sweden, Finland, Denmark and Norway. The Alternate Director is at present a Canadian, J. A. Copland. By definition, neither the Director nor the Alternate Director can be concerned with promoting the commercial interests of any one country that they represent. However, both the Director and the Alternate are in a good position to advise Canadian businessmen on bank policy, new developments and general projects.

As in other areas, you cannot do business with the ADB at arm's length. In fact, personal contact is probably more important in this region than in many others. Canadian businessmen who are seriously considering the prospect of business with the ADB are therefore strongly advised to visit both the Bank and personnel connected with the specific country in which they are interested.

The ADB is a new institution and will inevitably become more and more involved in the economic development of Asia. Now is the time for interested Canadian businessmen to make themselves known to the Bank so that they will be in the best possible position to take advantage of future commercial opportunities.

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[1] Published in *Foreign Trade* on May 10, 1969

[2] Published in *Foreign Trade* on December 7, 1968

Key personnel of the African Development Bank are photographed in conference at the Bank's headquarters in Abidjan, Ivory Coast. Representative of nine African nations, they are discussing a proposed project and its cost.

The African Development Bank

Operations began in July 1966. Bank has 31 members, all African states, and capital of U.S.$250 million. Headquarters have been established at Abidjan, Ivory Coast.

JOHN P. BELL
Commercial Secretary, Accra

The concept of a development bank for Africa was first discussed at the All African People's Conference in 1960 at the time when a number of African colonial countries were achieving independence. In 1961 the United Nations Economic Commission for Africa began a study of the possibility of establishing an African Development Bank and its subsequent report was agreed upon at a meeting of African finance ministers in Khartoum in 1963. The bank became a legal entity in 1964 and started operations at its headquarters in Abidjan, Ivory Coast, July 1, 1966.

The African Development Bank has as members 31 African states. These are:

Algeria	Kenya	Somalia
Burundi	Liberia	Sudan
Cameroon	Malawi	Tanzania
Chad	Mali	Togo
Congo (Brazzaville)	Mauritania	Tunisia
Congo (Kinshasa)	Morocco	Uganda
Dahomey	Niger	United Arab Republic
Ethiopia	Nigeria	Upper Volta
Ghana	Rwanda	Zambia
Guinea	Senegal	
Ivory Coast	Sierra Leone	

The capital of the Bank is set at U.S.$250 million, split into paid-up and callable shares, and members' subscriptions are also equally divided into callable and paid-up shares. To date paid-in subscriptions, which must be in gold or convertible currencies, have fallen somewhat behind schedule because of economic difficulties facing some of the member states. **By June 30, 1969, out of the subscribed capital, $109 million had been called up and $59.3 million received in convertible currencies.**

The African Development Bank adheres to the philosophy that development must be the responsibility of the people who are going to benefit from it. Its stated objective is to contribute to the economic and social development of members either individually or jointly. To this end, it aims to promote investment of public and private capital in Africa, to use its normal capital resources to make or gurarantee loans and investments, and to provide technical assistance in the preparation, financing, and implementation of development projects. **The ADB may grant specific or global credits and it may operate alone or in concert with other financial institutions.** The ADB and the UNDP have co-operated in the formation of a Pre-Investment Unit within the Bank for the purpose of identifying, evaluating and preparing projects in member countries. The unit in-

cludes staff experts in economics, agriculture, industry, water resources, power, engineering, transport and communications and they work in close co-operation with the Bank's own staff. In addition, the Bank has a co-operative program with the FAO and a co-operative agreement with UNESCO.

It is the intention of the ADB to augment its financial resources by establishing a development fund in which non-African nations would participate. It is also concerned with the investment of private capital in Africa and seeks to interest foreign industries and private lenders in working out methods of financing industrial development.

In his paper entitled "The African Development Bank", Mamoun Beheiry, president of the ADB, explained the problems facing the organization in this way:

"Looking at the enormous economic and other problems facing the continent of Africa today and, by international monetary yardsticks, the slender resources of the Bank, it is appropriate to look at the problems which faced us at the outset, many of which are still with us. These were:

"The lack of experienced men in the field of development finance in Africa, indeed the lack of such men in the whole world.

"The paucity of actual African resources in relation to the known needs.

"The dearth of well-formulated development projects, especially the multi-national ones.

"The structure of the Bank's shareholding, which could be conceived to militate against sound business organization, even though it eliminates the possibility of political domination by one or more member states.

"The apparent difficulties of linguistic divisions in the continent.

"The strength of the external vested interests which still abound in Africa everywhere, almost without exception.

"The initial scarce and timid support for the cause of the Bank and the scepticism prevalent at that time from the outside world and even in some parts of Africa itself.

"Added to this was the growing external and internal cynicism in regard to the Africans' ability to manage the political independence they had won, or to conceive and run the economic and social organizations needed for the development of the countries they were destined to control.

"Even so, the attempt had to be made. The African Development Bank was, and is, the unique attempt on a continental basis to translate the concepts of African solidarity and co-operation into action in the sphere of development."

In spite of these rather serious problems, **the African Development Bank has already undertaken a number of interesting projects.** The provision of technical assistance or the making of loans has been or will be done by the Bank alone or jointly with other international financing organizations for the following projects:

1. Upgrading of two international roads in Kenya
2. Assistance to the National Investment Bank of Sierra Leone.
3. Topographical and soil survey in connection with the Zambia-East African Railway
4. Urban water supply and sewerage schemes for Uganda
5. Engineering road studies for the Republic of Somalia
6. Shipping study in Somalia
7. Fertilizer plant in the Ivory Coast.

A number of studies have also been undertaken by the Bank, in some instances jointly with other organizations, with the objective of identifying national or multinational projects. Some of these are:

1. Possibility of economic co-operation between Ghana and the Entente States
2. Tourism survey in West Africa
3. Insurance
4. Survey of resources for shrimp fishery
5. Survey of transport studies in Africa
6. Power
7. Survey of mineral resources
8. Telecommunications.

An article on the use of consultants by the ADB, based on an African Development Bank publication, was published in the June 7, 1969, edition of *Foreign Trade*, and readers should refer to it for the procedure followed in the selection of consultants. It pointed out that both individual consultants and consultant firms may be employed by the ADB and its borrowers.

The Bank does not intend to establish a list of approved firms but it does maintain an extensive file of information on professional consulting firms from as many countries as possible. It prefers to produce a short list of firms for each individual assignment rather than to maintain a long list of firms approved for a wide variety of works.

Canadian consulting firms are encouraged to make their capabilities known to the bank and should direct their correspondence to: The African Development Bank, B.P. 1387, Abidjan, Côte d'Ivoire.

To date about ten Canadian firms have notified this office that they have registered with the African Development Bank. Because most of the work of the Bank is undertaken in either French or English, Canadian firms with bilingual competence appear to be in a preferred position. This office is accredited to the Ivory Coast and officers visit Abidjan monthly. Firms writing to the Bank might find it useful to direct copies of their correspondence to this office for followup.

Jengka Triangle Project

In the article on the Jengka Triangle Project in our November 8, 1969, issue an address was given to which companies should write who wish to have their names placed on tender lists. Some mail addressed to Cantrans Services (1965) Ltd., 1744 West Broadway, Vancouver 9, B.C., has been returned. We therefore suggest that companies interested in supplying equipment or services get in touch with S. G. Gardiner Engineering Services, 395 West Broadway, Vancouver 10, B.C.

The Caribbean Development Bank

The Bank, set up recently with 14 regional and two non-regional members, holds its first meeting in Nassau this month; should begin operations late this year.

LAWRENCE H. BROWN
International Financing Branch

The Caribbean will shortly have a new Development Bank, of which Canada will be a charter member and substantial supporter. Last October 18 plenipotentiaries met in Kingston, Jamaica, to sign the agreement formally establishing the Caribbean Regional Development Bank. Canada was represented by the Honourable Senator Paul Martin.

Speaking at the ceremony, Senator Martin hailed Canadian participation in the Bank as a further expression of Canada's long-standing concern with the economic development of the area and its development assistance commitment to the Commonwealth Caribbean. "This is a step," he said "which will undoubtedly benefit the Commonwealth Caribbean and is a reflection of Canada's close relations with the region. Our ties with the Caribbean are among the strongest and oldest of our relations with the developing world. The trade, tourism and business links between the Caribbean and Canada have grown steadily during the past several decades and have been augmented in recent years by the increasing flow of Canadian development assistance. We have," he added in addressing the meeting of plenipotentiaries, "been allocating more development assistance funds per capita to the Commonwealth Caribbean than to any other area in the world. Our ties with you are clearly a natural result of our common political heritage and close geographic proximity. This is also the result of a confidence which Canadian businessmen, investors and travellers have in the stability and future of the Commonwealth Caribbean."

Discussions leading to the formation of the Bank were initiated at the Commonwealth Caribbean-Canada Conference in Ottawa in July 1966 when the final communique called for a study of the possibility of establishing a financial institution for regional development. Following this conference, the regional governments decided, with the support of Canada, Britain and the United States, to request the United Nations Development Program to undertake a detailed feasibility study of the desirability of creating such an institution. The UNDP report recommended creation of a Bank similar to the Asian Development Bank but on a smaller scale, with an equity capital of U.S.$50 million, plus an initial soft loan fund of U.S.$20 million; and **Canada participated with the Commonwealth Caribbean Governments, Britain and the United States in the negotiations leading up to the establishment of the Bank.**

The purpose of the new Bank is to contribute to the harmonious economic growth and development of the members of the Commonwealth Caribbean and to promote economic co-operation and integration among these countries, with special regard to the needs of the less developed members. The Bank will deal with both infrastructure development and the development of industries. It is authorized, among other things:

1. To finance projects and programs contributing to the development of the region or any of the regional members.
2. To provide appropriate technical assistance to regional members, particularly by undertaking or commissioning preinvestment surveys and by assisting in the identification and preparation of project proposals.
3. To promote public and private investment in development projects.
4. To stimulate and encourage the development of capital markets within the region and to co-operate and assist in regional efforts to promote regional and locally controlled financial institutions and a regional market for credit and savings.

The Bank may provide or facilitate financing for any regional member, or any political subdivision or agency of a regional member, or any other entity or enterprise in the public or private sector of such a member. It may also

provide similar assistance to international or regional agencies or other entities concerned with the economic development of the region.

Under its charter the Bank will provide principally for the financing of specific projects, including those forming part of a national, sub-regional, or regional development program. It may also extend loans or loan guarantees to national development banks or other suitable financial institutions to enable the latter to finance development projects, on terms approved by the Bank, where the individual financing requirements of such projects are not, in the opinion of the Bank, large enough to warrant individual direct loans from the Caribbean Development Bank itself.

Except in special cases, procurement under the Bank's ordinary capital resources will be restricted to member countries.

Present regional membership in the Bank consists of Jamaica, Trinidad, Bahamas, Guyana, Barbados, Antigua, British Honduras, Dominica, Grenada, St. Vincent, Montserrat, the British Virgin Islands, the Cayman Islands, and the Turks and Caicos Islands. Provision is also made for the possible entry later of other states and territories, such as Puerto Rico and the French and Dutch islands.

Non-regional membership currently consists of Britain and Canada but is open to any other non-regional state which is a member of the United Nations or any of its specialized agencies or of the International Atomic Energy Agency.

Canada and Britain are each subscribing U.S.$10 million to the capital stock of the Bank and the Commonwealth Caribbean regional members are subscribing the remaining U.S.$30 million. Although provision is made for future stock increases, **the authorized capital stock will at all times be held or be available for subscription on the basis of 60 per cent for regional members and 40 per cent for other members.** The Bank is also empowered to augment its capital resources by borrowing in world financial markets.

The United States is not a member of the Bank but is making available an AID loan line of credit for the Special Development Fund which has been established to provide financing on more concessional terms than are possible under the Bank's ordinary capital resource lending. Canada and Britain have also each announced $5 million contributions to this Special Development Fund over and above their capital stock subscriptions.

The first meeting of the Caribbean Development Bank's Board of Governors will be held in the Bahamas on January 31, when the principal staff members and officers of the Bank will probably be selected. The Bank is expected to begin operations later in 1970. As Senator Paul Martin declared in his concluding remarks at the Conference of Plenipotentiaries convened on October 18 in Kingston, Jamaica, to formally sign the Bank Charter, "We look forward to the Bank playing an ever increasing role in the prosperity of the Caribbean as a whole through its own lending activities and through its role as a catalyst for foreign investment."

There's Nothing Really New . . .

Hesitating about going abroad yourself to investigate business opportunities in a foreign market? Here are some good reasons for changing your mind—just as cogent now as they were when they were presented by the Deputy Minister in the Annual Report of the Department of Trade and Commerce for the fiscal year ended March 31, 1920.

"World-wide business offers greater opportunities for the man of big, broad virile imagination than the home market. The man of practical far-sight sees a great new idea while the little man holds back. The foreign markets call for great skill, for intelligent care in planning, for real merchandising judgment, for the best business brains of any country. They invite the man of ideas and courage.

"The executive who can go abroad himself will always profit by doing so. Nobody can see just as he does. No subordinate will see the bold opportunity and take it, and then make it go, as he will. No executive can see, through typewritten reports and vague opinions, as he will see when he gets the human touch in a foreign city, sees the way the people live, finds that foreigners feel about things pretty much as he does, and seizes the faith that he can appeal successfully for the trade of foreign populations.

"In order to make a success in foreign trade, exporters must first grasp the fundamental conditions. The foreign importer should be offered good inducements to push the particular goods. He must be made to see that it is to his personal advantage to buy your goods. He must be able to resell the goods at profit to himself. Exporters should endeavor to place themselves in the position of the foreign importer, and insure that the latter gets the very last bit of necessary information to enable him to decide as to whether he will buy. This is frequently difficult for the exporter to do without first-hand knowledge of the foreign importer's requirements.

"Therefore I may say to executives and principals of exporting firms: 'Go abroad yourself.' The business which can be picked up over the coffee cups with your prospective customers can scarcely be overestimated. You, alone, or your responsible representatives, are in a position to give definite information as to prices or make concessions as will insure the business. Big men abroad want to talk to big men, and not to irresponsible representatives. Many instances, too numerous to recite, can be given of lasting business connections having been made by principals themselves going abroad . . .

"Over and over again information has come to the writer as to exclusiveness of the wealthy principals of large foreign commercial houses. They are loath to permit any one to intrude upon their time. They can easily turn a visiting agent over to a subordinate to deal with when they would hesitate to refuse to receive one whom they recognize to be the head of a foreign house."

International Loans Announced

Brazil is building a 220,000-kilowatt hydroelectric power plant on the Passo Fundo River, 190 miles northwest of Porto Alegre, the capital of Rio Grande do Sul, the southernmost state. The plant is part of a program that calls for an expansion in Brazilian electric power generating capacity to 11.2 million kilowatts in 1970. The $62.58 million project will be financed partly by a $21.3 million Inter-American Development Bank loan extended to Centrais Eletricas Brasileiras S.A. (ELETROBRAS), and will be carried out by Centrais Eletricas do Sul do Brasil S.A. (ELETROSUL). This IADB loan is open to Canadian procurement.

The project includes the construction of a dam 1,860 feet long and 122 feet high to impound a 60-square-mile reservoir, an intake, a 3.6-mile tunnel, a surge tank, a powerhouse and an elevator substation. A transformer substation will be built in Porto Alegre for interconnection with the local distribution system and another at Farroupilha, 62 miles from Porto Alegre.

A recent study by ELETROBRAS indicates that by 1975 Brazil will need a generating capacity of 17.6 million kilowatts; current electric power output in Rio Grande do Sul is 430,000. This figure must be doubled by 1975 if needs are to be met. The Passo Fundo project will begin providing power in 1972.

Kenya is continuing its long-range road expansion and improvement program that will result in major benefits to agriculture and tourism. A $23.5 million World Bank loan will help defray the cost of the $36.3 million project. The program includes the reconstruction of 288 miles of feeder roads and 85 miles of trunk roads. The feeder roads, mostly in the fertile area between Nairobi, Mount Kenya and Lake Victoria, will prove important for further agricultural development and the trunk roads will link key production and market centers. In addition, 268 miles of roads will be built in the sugar-growing district; 366 miles of farm-access roads in the settled areas will be improved. Engineering services and a study to strengthen the organization of the Ministry of Works are also part of this segment of the program. The new roads for the sugar-cane scheme east of Kisumu will add 18,700 acres to the area already under sugar and enable the three existing factories to reach their planned production capacity of 6,000 tons of cane a day for domestic consumption. Contracts will be placed under international competition and are open to Canadian firms.

The irrigation of 73,000 acres of farmland and the construction of two diversion dams in Mexico will be furthered by two Inter-American Development Bank loans totalling $17.9 million to Nacional Financiera, S.A., the Mexican Government agency in charge of negotiating the nation's external credits. The Mexican Government will supply 50 per cent of the total estimated cost of $35.8 million. The 73,000-acre project, located in the Armeria River basin of the Pacific coast State of Colima, will benefit some 2,340 farmers. The construction of the Las Piedas dam in the State of Jalisco will control and store the waters of the Tuxcacuesco River, one of the major tributaries of the Armeria. The Jala diversion dam will use these waters to irrigate the lands along the Armeria. A sum of $5.11 million will be used to pay for goods and services of external origin, and these will be open to Canadian procurement.

The Federal Republic of Cameroon is preparing to carry out an educational project designed to increase the supply of qualified teachers for agricultural and industrial subjects, assisted by an International Development Association credit of $10.5 million. Contracts will be placed under international competition open to Canadian firms. The Government of Cameroon plans to build or expand and equip four teacher training colleges, 15 general secondary schools, a post-secondary school of agriculture, two technical schools, and two other schools. The 24 will enroll 7,140 students, a 5,500 increase.

A special unit established within the Ministry of Education will supervise implementation of the project. Consultants will provide architectural, engineering and supervisory services. The project is scheduled for completion mid-1973 at a cost equivalent to $14 million.

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Over 2,500 architects, engineers, specifications writers and contractors learned about systems building recently in a series of regional conferences put on across Canada by the Department of Industry, Trade and Commerce. These were designed to promote the industrialization of the Canadian construction industry and were part of the BEAM program. A trade development program to promote Canadian industrialized building techniques, systems and components has also been launched. In 1969, Canadian manufacturers participated in two building shows in Europe at Essen and Utrecht. The picture shows members of the panel at the conferences: (Left to right) Herbert C. Auerbach, Vice-President Concordia Estates, Montreal; Robert Halsall, consulting engineer, Toronto; R. G. Robbie of Robbie, Vaughan and Williams, Toronto, and Gerard Corriveau, Executive Director, Irnes Inc., of Montreal.

Trade Commissioners on Tour

In Canada

If you wish to meet the officers whose itineraries are listed below, get in touch with—

In Ottawa—
Department of Industry, Trade and Commerce

In St. John's, Halifax, Montreal, Winnipeg, Regina, Edmonton, Vancouver—
Regional Office, Department of Industry, Trade and Commerce

In Toronto—
Canadian Manufacturers Association

In Windsor, Ontario—
Greater Windsor Industrial Commission

In Fredericton, New Brunswick—
Department of Industry

In all other centers—
Board of Trade or Chamber of Commerce

Germany
C. D. Caldwell, Assistant Commercial Secretary in Bonn, Germany:

Calgary: January 31-February 3
Vancouver: February 4-6

Temporary Duty in Ottawa

Trade Commissioners on temporary duty in Ottawa may be contacted through the Trade Commissioner Service, phone 992-9930 (area code 613).

M. A. Brault
Assistant Trade Commissioner
Johannesburg, South Africa
February 1–7

In Territory

Businessmen who would like Trade Commissioners to undertake assignments for them should write to the post as soon as possible.

Afghanistan
H. W. Guy, Assistant Commercial Secretary in Islamabad, Pakistan, will visit Kabul March 23–27.

Bulgaria, Hungary, Romania
Trade Commissioners in the Vienna, Austria, office make frequent visits to these countries, but often there is not time to publish their itineraries in advance. Therefore, Canadian businessmen who would like the Trade Commissioners to undertake assignments for them in these East European countries are advised to write to the Vienna office immediately.

Chile
J. D. Leach, Assistant Commercial Secretary in Santiago, will visit Concepcion March 23-27.

Costa Rica
A. L. Lyons, Assistant Commercial Secretary in Guatemala City, will visit Costa Rica February 2-7.

Cyprus
An officer from the Tel Aviv, Israel, office will visit Cyprus every month for at least three days, usually in the second half of the month.

El Salvador
J. D. Tennant, Assistant Commercial Secretary in Guatemala City, will visit El Salvador March 16-20.

Guyana
Officers of the Port-of-Spain, Trinidad, office will visit Guyana as follows:

J. M. C. Lavoie, Assistant Commercial Secretary, February 16-20.

D. Hobson-Garcia, Commercial Officer, March 16-20.

Honduras
S. G. Tregaskes, Commercial Counsellor in Guatemala City, will visit Honduras February 23-28.

Pakistan
Officers at the Islamabad office will make the following visits:

Lahore—J. E. G. Gibson, Commercial Secretary, March 2-4.

Dacca—H. W. Guy, Assistant Commercial Secretary, March 9-13.

Taiwan
D. S. Baker, Consul and Assistant Trade Commissioner in Manila, Philippines, will visit Taiwan February 22-March 8.

Trinidad
Officers of the Port-of-Spain office will visit North and South Trinidad as follows:

North Trinidad

J. A. Ahow, Commercial Officer, February 25.

South Trinidad

J. A. Ahow, Commercial Officer, March 25.

Businessmen can now obtain a business visit visa from the Libyan Embassy in Washington upon receipt by the Embassy of authorization from the Immigration Department in Libya. Business visitors should therefore ask their associates in Libya to sponsor their visit and request the Immigration Department to telegraph authority to the Embassy.

Readers of "Foreign Trade" who are planning business trips to Hong Kong and other Far Eastern cities during EXPO 70 are aware of the critical situation in hotel accommodation in Japan. Those who include Hong Kong in their itinerary should note that, if anything, hotel accommodation in the Colony is perhaps even more critical than it is in Japan, and reservations should be made at once.

Businessmen who have recently sent mail to the Philippines are advised to send copies to the addressees. Some mail may have been lost during a fire in the Manila Post Office on January 15, the Canadian Trade Commissioner has advised the Department.

Foreign Exchange Rates

These nominal quotations may help exporters in checking prices, but they should consult their banks before making any firm commitments. When more than one rate is shown, the one to be used depends on the commodity traded. Information on the rate for any specific commodity may be obtained from the Office of Area Relations, Department of Industry, Trade and Commerce, Ottawa.

The mid market rates only are quoted, except when buying and selling rates are specified. The buying rate is that at which banks purchase exchange from exporters; the selling rate is that at which banks sell exchange to importers.

Rates used exclusively in non-merchandise trading are *not* included in this table.

For conversion of column one to the U.S. dollar equivalent, *multiply* by .93. **To convert column two, *divide* by .93.**

Country and Currency	Value of foreign currency unit in Canadian dollars at January 14	Canadian dollar in foreign currency units
Algeria Dinar	.1932	5.17
Argentina* Peso (free)	.3070	3.25
Australia Dollar	1.201	.8326
Austria Schilling	.0415	24.03
Bahamas Dollar	1.052	.95
Belgium and Luxembourg Franc	.0216	46.72
Bermuda Pound	2.575	.38
Bolivia Peso	.0906	11.06
Brazil Cruzeiro (official free)	.2474	4.04
Britain Pound	2.575	.38
British Honduras Dollar	.5366	1.86
Burma Kyat	.2255	4.43
Ceylon Rupee	.1804	5.54
Chile Escudo (bank rate)	.1055	9.47
(free)	.0914	10.94
China, Republic of New Taiwan Dollar (official)	.027	37.04
Colombia Peso (fixed)	.062	15.87
Congo (Kinshasa) Zaire	2.154	.4651
Costa Rica Colon	.1620	6.17
Cuba[1] Peso	.....	.....
Czechoslovakia Koruna	.1491	6.70
Denmark Krone	.1434	6.98
Dominican Republic Peso	1.073	.93
Ecuador Sucre (official)	.0599	16.72
(free)	.0536	18.65
El Salvador Colon	.4295	2.32
Fiji Pound	1.232	.81
Finland Markka	.2557	3.91
France, Monaco, etc.[2] Franc	.1932	5.18
Franco-African Republics[3] Franc	.0039	256.4
French Pacific[4] Franc	.0107	93.44
Germany D Mark	.2913	3.43
Ghana New Cedi	1.051	.95
Greece Drachma	.0359	27.93
Guatemala Quetzal	1.073	.93
Guyana Dollar	.5395	1.85
Haiti Gourde	.2148	4.65
Honduras Lempira	.5369	1.86
Hong Kong Dollar	.1772	5.64
Hungary Forint (official)	.0921	10.85
Iceland Krona (official)	.0122	81.96
India Rupee	.1425	7.01
Indonesia[5] Rupiah	.....	.....

*Peso recently revalued.

Country and Currency	Value of foreign currency unit in Canadian dollars at January 14	Canadian dollar in foreign currency units
Iran Rial	.0142	70.42
Iraq Dinar	3.006	.33
Ireland Pound	2.575	.38
Israel Pound	.3068	3.25
Italy Lira	.0017	588.23
Jamaica Dollar	1.286	.77
Japan Yen	.0030	333.33
Kenya Shilling	.1526	6.55
Lebanon Pound (free)	.3329	3.00
Malaysia Dollar	.3508	2.85
Mexico Peso	.0859	11.64
Morocco Dirham	.2218	4.50
Netherlands Florin	.2957	3.35
Netherlands Antilles Florin	.5690	1.75
New Zealand Dollar	1.204	.82
Nicaragua Cordoba	.1534	6.51
Nigeria Pound	3.005	.33
Norway Krone	.1502	6.65
Pakistan Rupee	.2255	4.43
Panama Balboa	1.073	.93
Paraguay Guarani (free)	.0086	116.28
Peru Sol (free)	.0248	40.65
Philippines Peso (free)	.2741	3.64
Poland Zloty (fixed basic rate)	.2700	3.71
Portugal & Colonies[6] Escudo	.0375	26.66
Saudi Arabia Riyal	.2066	4.84
Sierra Leone Leone	1.502	.66
Singapore Dollar	.3506	2.85
South Africa Rand	1.502	.66
Spain & Dependencies Peseta	.0155	64.93
Sweden Krona	.2079	4.81
Switzerland Franc	.2488	4.01
Syria Pound (free)	.2819	3.55
Thailand Baht (free)	.0523	19.15
Trinidad & Tobago[7] Dollar	.5392	1.85
Tunisia Dinar	2.044	.48
Turkey Lira	.1192	8.38
United Arab Republic Pound (official)	2.468	.40
United States Dollar	1.073	.93
Uruguay Peso (free)	.0043	232.56
Venezuela Bolivar (official free)	.2389	4.18
Yugoslavia Dinar (official)	.0858	11.61

1. There is no trading in Cuban pesos in U.S. or Canadian banks at present.

2. Franc is also used in French Guiana, Guadeloupe and Martinique.

3. Chad, Central African Republic, Congo (Brazzaville), Dahomey, Gabon, Ivory Coast, Islamic Republic of Mauretania, Niger, Senegal, Upper Volta, Cameroons, Togoland, and Malagasy. Also Reunion, Comoro Islands, St. Peirre and Miquelon.

4. New Caledonia, New Hebrides, French Polynesia.

5. Because of the complexity of the Indonesian exchange rate system, it is impractical to quote a single representative rate for the rupiah.

6. Approximately same rate for Portuguese territories in Africa.

7. Also used in Barbados, Leeward and Windward Islands.

Bahamas Plans Building Program

J. P. LEFEBVRE
Assistant Commercial Secretary, Kingston

The rising level of investment in the Bahamas is indicated by the number and value of building permits issued. In 1968, the total number of buildings started was 1,566, an increase of 21 per cent over 1967; the value, at B$42 million, was up 49 per cent. The target of one million visitors set for 1970 was reached in December 1968. Additional tourist accommodation, including projects under construction in 1968, represented a 16 per cent rise over the 8,000 rooms available in 1967.

The Government is conscious of the need to diversify its economy and not to rely solely on tourism and international banking. To this effect, a census of industrial firms was carried out in 1968 to evaluate the industrial potential. This census will be complemented by a major survey of land resources expected in 1970 and will provide a basis for further diversification. The industrial census showed that there were 82 firms in the Bahamas: 31 in Nassau, 47 in Freeport, and 4 in the other islands.

Twenty-two of these firms were producing building materials, 13 in Freeport and 9 in New Providence; six were engaged in the bottling of soft drinks; five were producing rum and other alcoholic beverages. The other main industries were the sugar mill in Abaco, growing and refining sugar; the salt plant, and the cement plant in Freeport. Other industries were producing chemicals, processed foods, ice, confectionery, dairy products, petroleum, concrete blocks, fabrics, furniture, plastics, fertilizers, instruments, paints and small boats.

In its continuing efforts to build a strong basis for the economy, the Government is conscious of the need for well-educated workers and it is giving high priority in 1969 to the building of schools. Eighteen per cent of the total estimated expenditure of B$78.3 million will be devoted to education, 36 per cent more than in the record budget of 1968. The school population totalled approximately 60,000 in September 1968 and is expected to reach 80,000 in 1971.

In New Providence Island there are 30 schools at the primary level, seven public schools at the secondary level, and three private schools. The private schools are financially supported by the Government but set their own curriculum. One technical college is currently operating in New Providence, and the curriculum is mainly oriented towards commercial subjects; these are also taught at night school. There is one teachers' college in the island.

Outside New Providence and Grand Bahama there are 120 to 130 all-age schools (5-14 years old); Freeport has nine schools, seven of which are privately owned and financially supported by private organizations. There is also a teachers' training college in San Salvador.

Three primary schools are to be built in New Providence in the next four years at a cost of approximately B$2 million each. It is a new type of school designed by a Boston architect with the newest and most avant-garde features. The schools will be completely enclosed and without windows as a protection against vandalism and to isolate the students from outdoor noises. They will have wall-to-wall carpeting, air conditioning and very modern interior design. One of these schools has already been commissioned and should be ready by next September.

Besides this upgrading in the educational facilities for New Providence, the Government intends to provide the Out Islands with 12 schools, complete with boarding facilities and costing approximately B$3 million each. Some plans have already been drawn up but the major stumbling-block at the present time is financing. The Government is prepared to examine all proposals on this matter, it has stated. The Ministry is also interested in proposals for equipment and furniture for the new schools and would also like to receive samples. Canadian firms interested in pursuing these projects should write our office for the necessary contacts.

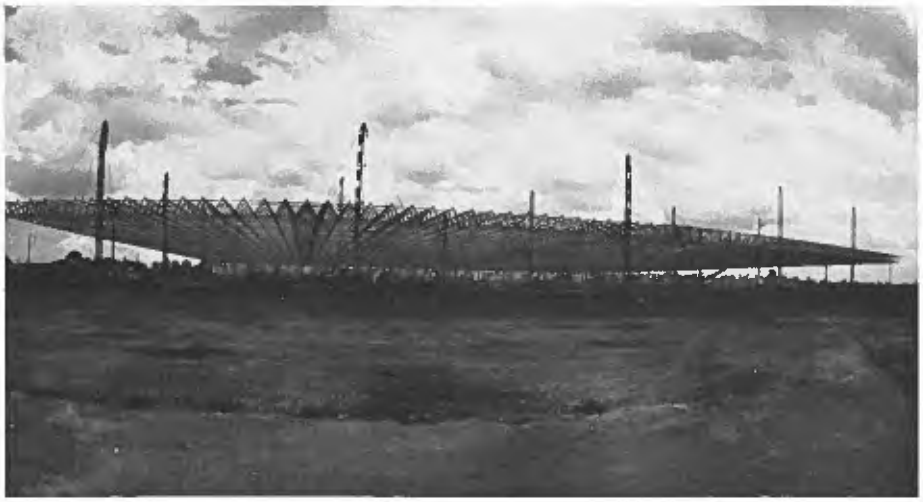
The Ministry of Development is anxious to put more emphasis on low-cost housing. In order to give incentive to private investors, the Government will guarantee all mortgages financed in an approved low-cost development scheme.

How to go about it? Consolidate. Form a consortium consisting of a company that will provide long-term financing (trust company), an architect, a planner and a general contractor. Once a design is agreed upon, build a pilot project of 10 to 12 units to test the public's and the Government's reactions. Present the Government with a master plan which, if accepted, would automatically bring a government guarantee of the money secured for mortgages. Because of the high cost of labor, only prefab or manufactured houses should be considered for such a scheme.

In a typical approved low-cost housing development, the price of a one-fifth or one-sixth acre lot on crown land is B$1,228. The houses cost B$7,882 for two bedrooms and 620 square feet of floor area; B$8,945 for three bedrooms, 738 square feet; B$11,250 for four bedrooms, 924 square feet. Interested firms should write to our office to obtain a list of contacts.

It is advisable for a Canadian firm intending to use timber-frame construction in a housing project to include in its proposal the name of an insurance company willing to insure the project, and show in detail that the buildings meet Bahamian Building Code standards. The main points of these are that the structure is designed to withstand hurricane winds of 120 miles an hour, and that the material used will be termite and rot resistant.

Sao Paulo Raises the Roof



Canadian aluminum and knowhow are playing an essential part in the construction of an aluminum structure considered to be the largest in the world. The structure—basically a metallic scaffold that appears to float—will house Sao Paulo's ultra-modern Palace of Fairs where manufacturers from Brazil and all over the world will exhibit their products. The Palace of Fairs will rise on an 80-acre plot on the border of the Tiete River, known as Anhembi Park, expected to develop into a tourist highlight.

The Canadian-designed Palace of Fairs, which occupies about one sixth of Anhembi Park's total area—close to 13 acres—is the first structure to rise on the site.

Alcan Aluminio do Brasil S.A., a subsidiary of Alcan Aluminium Limited, is supplying and extruding the 856 tons of aluminum required for the structure. The firm hired Professor Cedric Marsh of Montreal, a consulting engineer, (see photo above) who designed the simple looking yet extraordinary complicated project. So complicated is it that its execution required the help of a specially adapted IBM 360/75 computer. Because there is no computer system of this kind in Latin America, the computations were made by Professor Marsh in Canada. What actually motivated the use of a complicated computer system is the daring conception in which the whole weight of the roof rests on supporting columns at 180-foot intervals, without the use of cross-beam girders.

The most exciting part of the project was the erection of the whole basic structure—670 tons of aluminum—all at once. Occupying an area of 62,700 square meters (about 13 acres), the floating roof membrane went up practically overnight early in December.

For about a month and a half before the crucial moment teams of workers of Fichet & Schwartz-Hautmont Companhia Brasileira de Construcoes assembled and connected a maze of aluminum tubes ranging from 80 to 180 mm in diameter, spreading them on the ground according to instructions from the firm's engineers. Twenty-five 30-ton manual hoists, hitched to an equal number of supporting masts, and 16 smaller hoists charged with maintaining the equilibrium of the spatial tubular framework, started to work in unison at predetermined signals transmitted through walkie-talkies manned by engineers. It was an operation of rare precision which went off without the slightest incident in spite of an unscheduled strong wind blowing at an unforeseen 30 miles an hour instead of the expected eight miles. Pulling slowly, inch by inch, the synchronized hoists, working for 30 hours at a stretch, succeeded in lifting the 670-ton load to a pre-established height of 14 meters (about 12 feet). The feat was greeted with shouts of satisfaction from the workmen and many sighs of relief from the engineers—among them Professor Marsh, who had come to Sao Paulo to supervise the raising of the aluminum structure.

Professor Marsh was enthusiastic about the competent co-operation he received from his Brazilian counterparts, both workers and engineers. No less enthusiastic were the "Paulistas" —even the most sophisticated of them —by what appeared to be a dream of modern construction techniques.

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PORT PAYÉ

Donald Robertson (second from left), a Canadian mineralogical expert with the UN, eats lunch with Argentine workers assisting him in a survey of mineral resources in a promising sector of the Argentine Andes. The UN Special Fund contributed expert services, fellowships, equipment and sub contracts.