

foreign trade



Department of Industry, Trade and Commerce, Canada

November 8/69



Johannesburg Reports on Southern Africa

In This Issue

From time to time, **Foreign Trade** likes to report on the unusual, out-of-the-way places of the world, even though the business opportunities may be slim. The Johannesburg office, for example, writes in this issue about its territory and this includes several tiny islands in the Indian Ocean—Réunion, Mauritius, and the Comoro Islands. We remember meeting at a cocktail party at Christmas a man who told us he had just returned from a trip to Mauritius. "You must be in the sugar business," we said. He was—and we remember how surprised he looked at our geographical knowhow.

Included in the Johannesburg territory also are Swaziland and Mozambique. **Our cover shows African women at work repairing sacks of asbestos before they are loaded aboard ship at Lourenco Marques.** We chose it to illustrate how interdependent these countries of Southern Africa are when it comes to communications. The asbestos came

from the Havelock Mine in Swaziland, one of the world's great asbestos deposits, and went by aerial ropeway some 12 miles to the railhead at Barberton. It then travelled by rail to Lourenco Marques, Mozambique's busy port.

It is true that with the exception of South Africa (a \$68 million market for us in 1968) the other areas covered in this survey have a strictly limited trade potential. But there are many development projects going forward that may interest our consultants or equipment suppliers. For example, there's a big hydro-electric project in Mozambique and although the main contract has been let, there may be related opportunities. In arid Lesotho (about 29 inches of rain a year) the Oxbow water supply project is getting under way.

When the Hon. Jean-Luc Pepin visited Malaysia last spring, he discussed with

the authorities and with the Canadian company that was busy on feasibility and other studies the development of the Jengka Triangle area. Mr. Pepin even went out to see the site himself. **In September the project moved further ahead with the signing of an agreement with three Canadian firms to carry forward this Malaysian land-use and timber industry study.** For details on plans and possibilities, turn to page 24.

Our November 22 issue will present a special feature on the market in Britain. The articles that came in from the London office picture a different Britain—a place where supermarkets are slowly taking over from the small shop, where decimal currency is on the way, where computers are becoming widely used, and where management consultants are finding varied assignments. If you want to adapt to this new Britain, watch out for this feature. We know that you will find it worthwhile.

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Vol. 132 No. 10

November 8/69

Johannesburg Office Reports on

South Africa	2
Botswana, Lesotho, Swaziland	5
Mauritius	7
Malagasy, Comoro Islands, Réunion	9
Angola, Mozambique	10

Articles

Selling Food Products in Denmark	11
Roll Up Your Sleeve!	12
Educational Equipment, Texas	14
Electronic Equipment, Switzerland	15
Electrical Equipment, Southern States	17
Businessman in the Netherlands	18
Selling Pharmaceuticals in Sweden	21
The Hong Kong Government Buys by Tender	22
Jengka Triangle Project Begins	24
Argentine Agriculture Has Export Problems	26
Man in Cold Water	36

Departments

Foreign Tariffs and Trade Regulations	29
Trade Commissioners on Tour	31
The Ocean Freight Market	32
Foreign Exchange Rates	34

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Johannesburg Reports

Our Johannesburg office covers a large area that includes three countries with close ties with South Africa, one Commonwealth member, two overseas provinces of Portugal, two in the French franc zone, and one Department of France. The following articles report on economic developments in this widespread and varied territory.

South Africa

Drive to build up industry, improve communications, expand power supply continues in full swing. This, plus relaxation of import controls, enhances Canadian prospects.

WM. JONES

Trade Commissioner, Johannesburg

South Africans can look back upon the past year as one of solid economic progress. Although at the end of September 1969 the business community probably regarded the future with much greater caution than at the end of September 1968, it remains true that plans and projects announced almost daily here convey a feeling of boom conditions that are likely to continue for some time. Yet the past year has not been without some economic problems.

One of these was the delay that followed the tentative award of the Cabora Bassa dam hydroelectric contract to a South African-led consortium about mid-year 1968. The delay in actually awarding the contract reduced the possibility of completing the first phase of the work before the rainy season set in and caused a further year's postponement. Upon this decision and the Cabora Bassa work schedule depended the work schedule of a number of other thermal power development projects by the Electricity Supply Commission and the construction of plants dependent upon the power supply.

The greatest setback during the year was the serious decline in industrial share values on the Johannesburg Stock Exchange. It began in May, reached 20 per cent by the end of August, and as of mid-September was continuing, despite minor rallies. This shook the confidence of investors and a number of announced plans

for new share issues were postponed. From some points of view, the decline can be considered as a measure of the success of the Government in convincing the public of the effectiveness of its counter inflationary program. It also convinced South Africans that it had been and would continue to be successful in marketing the country's gold internationally at an average price higher than \$35 per ounce.

The Reserve Bank in its annual August review of the economy was able to report that the gross domestic product increased in the year ended June 1969 by 5 per cent compared with 7 per cent during the previous year. It pointed out that the decrease resulted from the relative decline in agricultural production during the period; other production increased by 7 per cent. One may conclude from this that the non-agricultural segment of the economy made substantial progress because during the previous period much better than average crop conditions had prevailed.

In reviewing the South African economy it must be remembered that this country is still industrializing rapidly. The Government's drive towards economic independence is only recent and has entailed a program of intense industrialization. This it has carried out under a carrot-and-stick policy of incentives combined with the threat of exclusion by import licensing from selected fields of activity unless certain

levels of local production are achieved. This process still goes on. A case in point is passenger vehicle production. The Government announced in mid-September that cars must have 52 per cent local content by the beginning of 1971 and 66 per cent five years later, by the end of 1976.

These efforts have ensured production of a variety of goods which most South Africans had not previously thought the country capable of manufacturing. The domestic market for some of these goods was, from the mass production viewpoint, uneconomic. Many of them were offered to the consumer at prices higher than those of imported ones, had the latter been available. The demand for skilled workers in these industries and in the service industries continues to exceed the supply, and the classic basis for intense inflation, given a maintenance of easy credit restrictions and of the protective government policy, was apparent.

Fortunately for South Africa its large gold production and reserves of gold and foreign exchange provided the means for relaxing general import controls. **These relaxations in controls began at the beginning of 1967 and have continued until today import permits for most goods are either unnecessary or readily available.** This policy, combined with other deflationary measures (a tightening of credit facilities, a delay in government expenditures on public works, service or

1. A skilled cutter is rounding off the corners of a South African diamond that has been sawn in two. It is then mounted on the end of a revolving spindle and another diamond, mounted on the end of a long stick (tucked under the operator's arm) is held against it and the corners are skilfully smoothed out.

2. The beautiful South African countryside attracts visitors like these, riding in the Royal National Park, Natal, with the Drakensberg Mountains in the background. The excellent climate and the animal life also draw tourists.

4. Large gold production, successfully marketed at an average price higher than \$35 an ounce, benefits the economy substantially. It and the country's large reserves have made import relaxations possible, beginning early in 1967. Here African workers labor in one of the typical gold mines.

3. Much of the South African grape harvest is used for wine-making. At Paarl, two experts test Solera sherry where it is maturing in the cellars.



industrialization projects, and revised taxation procedures) appear to have brought the inflationary trend under control. Nevertheless, inflationary elements continue to exist and unless firm fiscal and monetary policies are maintained and judiciously applied, the situation may still get out of hand.

Industrialization has affected the nature and outlook of the population. Because skilled workers are predominantly of European origin and in extremely short supply, they have been drawn in from the farms and as immigrants to meet the need. Most of those from the farms are Afrikaners and a large proportion of the immigrants are of non-English speaking origin. **This is diluting the control which the English-speaking community has exercised over business and finance.** A measure of Afrikaner emergence is the capitalization of Afrikaner-controlled companies listed on the Johannesburg Stock Exchange—9.13 per cent of the total on March 31, 1969, compared with 6.2 per cent one year earlier. During the same period, the market valuation of listed Afrikaner-controlled companies increased by 97.7 per cent. English will continue to be the language of business in South Africa, but one finds the hardworking Afrikaner, encouraged by the Government, steadily forging his way into the leadership of that community. At the same time he is being modified by it and the Government, which depends on the Afrikaner for its principal support, is also being affected. Its policies and laws reserve to Europeans certain occupations. It follows that when a businessman, Afrikaner or other, concludes that his business will fail or not be a success because of a shortage of Europeans, either skilled or trainable, he resorts to upgrading, surreptitiously or otherwise, of selected non-white labor.

This upgrading of African labor and the increasing value of the skills which they acquire may prove to be the salvation of many a South African firm engaged in production in uneconomic volume. **The average income and standard of living of the African in South Africa is now probably higher than that of the average in any other country in Africa** and it continues to improve, though not quite as rapidly as that of his white counterpart. However, because Africans outnumber

their white counterparts by about 3.5 to 1, a smaller average increase in his income appears as a relatively much larger increase in the total South African market.

This African market has lately become a target for market surveys and sales campaigns and although it continues to be small, the far-seeing businessman has recognized its potential. It is probable that the Afrikaner businessman will be in the best position to take advantage of this new and developing market because, in many instances, he has been raised in the agricultural community and is therefore in closer touch with the African than are city dwellers.

Meanwhile, the business community as a whole is looking to external markets and sources for its outlets and for many of its supplies. This is apparent despite the 11 per cent increase in consumer expenditure during the year ended June 1969 (7.5 per cent in the previous year). The neighboring countries are natural and primary targets for such moves. Thus, we find government-sponsored or encouraged trade missions to Angola, Mozambique, Madagascar and Malawi, as well as Rhodesia; the provision of financing for development projects in many of these areas; the provision of foreign exchange control authority to invest in them, and perhaps more important in the long term, a steady improvement of communications with them of all types.

In air communications, South African Airways, which is part of the South African Railways, a government department, has for some time maintained regular terminal flights from Johannesburg to Lesotho, Botswana, Swaziland, Rhodesia and Mozambique and has served Angola and Mauritius on the way to and from overseas destinations. Recently regular flights between Malawi and Johannesburg were inaugurated. Air Madagascar for the past year has had weekly flights to Johannesburg and these are to be supplemented shortly by regular flights by SAA to Malagasy and Mauritius as end or on-line destinations. Of significance to efforts to penetrate the South American markets was the scheduling early this year of weekly SAA flights to New York via Rio de Janeiro. It is expected that the Brazilian airline Varig will begin flights to Jo-

hannesburg in the near future. Within South Africa the number of flights between main centers is increasing constantly and small feeder lines expand in both number and variety. To meet this growth **the Department of Transport has just ordered three additional air traffic control radar systems at a cost of \$3 million for installation by 1971** at Durban, Port Elizabeth and Bloemfontein. Meanwhile the Jan Smuts international airport at Johannesburg is undergoing a complete revamping designed to increase its capacity and permit it to handle jumbo jets. Three of these have been ordered with delivery expected in the second half of 1971.

The South African road network has also been improved during the past year and work on superhighways connecting the major cities is progressing at high speed. This excellent road network connects with that of Rhodesia and through it gives access to northern Mozambique. By 1971 the Mozambique roads connecting the south and north of the country, a distance of about 1,400 miles, will be completed and tarred and this will provide through connections via South Africa and South West Africa to Angola, which is also improving its road system from the extreme south to Congo border.

In ocean shipping too South Africa is continually expanding. SAFMARINE, the only shipping line of importance, started with three Liberty ships in 1946 and now owns, operates charters and manages some 45 ships transporting to and from South Africa all types of ocean cargo throughout the world, as well as passengers sailing between South Africa and Britain. It is controlled by the Industrial Development Corporation, a government institution, which holds 50.5 per cent of the equity. It probably handles about 15 per cent of the country's import and export trade and its target is said to be 50 per cent.

Last February the first major underwater cable connecting South Africa with Europe via Portugal was opened. Internally, the Government has developed its telex system to the point where every important business center in the country can be dialed direct. Similarly, the direct distance dialing telephone system is being developed and most city exchanges can now be reached by this means. The number

of telephones available to subscribers within the country, however, does not yet meet the demand, but this problem too is being tackled. The internal communications systems have, by contract, long been a market reserved for domestic producers, but their inability to meet the demand may shortly result in certain segments going to world-wide tender to meet urgent needs.

On the whole, long-term economic planning, fully backed by the Government and largely spearheaded by astute Afrikaner civil servants, industrialists, economists and financiers, is the guiding hand behind most of the impressive developments in Southern Africa. A good example is the development of Southern Africa's east coast. Several years ago agreement was reached with Malawi to build a railway line from Blantyre to the head of the railway serving the deep water port of Nacala in northern Mozambique. This work is being undertaken by South African companies and will provide Malawi with a direct, and the most economic, outlet to the Indian Ocean. It will, perhaps by coincidence, also provide the means for shipping abroad bauxite or alumina from Malawi deposits. Meanwhile, the Portuguese Government has decided to develop the Cabora Bassa hydroelectric project on the Zambesi River. The only volume outlet for the power to be produced by

the first stage is South Africa and the South African Electricity Supply Commission has agreed to contract for most of it. It is perhaps not surprising that a consortium of European companies, put together and led by a member of the South African based Anglo-American Group, has won the Cabora Bassa contract. Meanwhile the South African Government had decided to establish an aluminum smelter, (dependent for viability upon a large supply of electricity at economic prices) at a large new ocean port being developed at Richards Bay on the north coast of Natal Province. Coincidentally, a South African group has bought into an Angolan oil producer, SAF-MARINE has ordered additional large tankers, and Richards Bay will have the capacity to handle the largest ships afloat and will be the seaward terminal of a new oil pipeline which is now being completed between the east coast and Johannesburg.

These events give every evidence of a country which knows where it wishes to go and how to go there. It is obvious that those Canadian businessmen who can find a method of associating themselves and working from the outset with the groups involved in these developing projects can benefit greatly. However, those who do not have such large capabilities can take advantage of the growing South Afri-

can market if they realize that efforts expended now to penetrate this market, even if the short-term results appear to be small, may well pay large dividends in the future.

The Canadian producer, large or small, specialized or diversified, who can offer goods competitively can usually arouse interest in South Africa these days. Imports from January to July 1969 of all categories of goods, with the exception of base metals and mineral products, increased substantially over imports during the same period of 1968. The additional imports of about \$150 million are indicative of a trend apparent since the beginning of 1968 and likely to continue. It is also a fact that South Africa has planned or begun construction of a new paper mill, new steel mills, oil refineries, a uranium plant, a hotel chain, an electric transmission grid, an atomic power plant, thermal power stations, computer installations and a host of other projects in addition to those already mentioned. Some Canadian producers can surely supply, at the least, bits and pieces for them or consumer goods for the people who will construct and operate them. Some active and persistent Canadian firms are now finding a market in South Africa which was either closed to them or did not exist until now. What about your firm?

Mineral discoveries, agricultural advance, development plans point to trade openings.

MARC A. BRAULT
Assistant Trade Commissioner, Johannesburg

Botswana

Botswana (formerly Bechuanaland) covers 225,000 square miles, is rather arid, and has a small population. The majority of them live by agriculture or cattle raising. It is estimated that there are 11 million acres of arable land in eastern Botswana, but only one million are under cultivation. The cattle population, although reduced by one third as a result of the recent drought, is estimated at just over one million head.

Since 1961 the value of mineral exports from the Republic has been declining.

Important mineral discoveries have been announced, however, and De Beers Consolidated Mines is planning to exploit a number of kimberlite pipes, one of which is said to carry diamonds, and is investing approximately \$21 million. An estimated 33 million tons of copper and nickel ore have been discovered in the north and press reports are that Roan Selection Trust plans to exploit these at an initial cost of \$100 million. Substantial coal reserves have been found and hopefully these will provide the basis for a thermal electric plant. However, infrastruc-

ture, especially communications, will have to be developed to cope with this industrial and mining activity. Prospecting is still going on, with evaluation of deposits of copper, copper/nickel, copper/lead, antimony and kyanite, salt, precious and semi-precious stones.

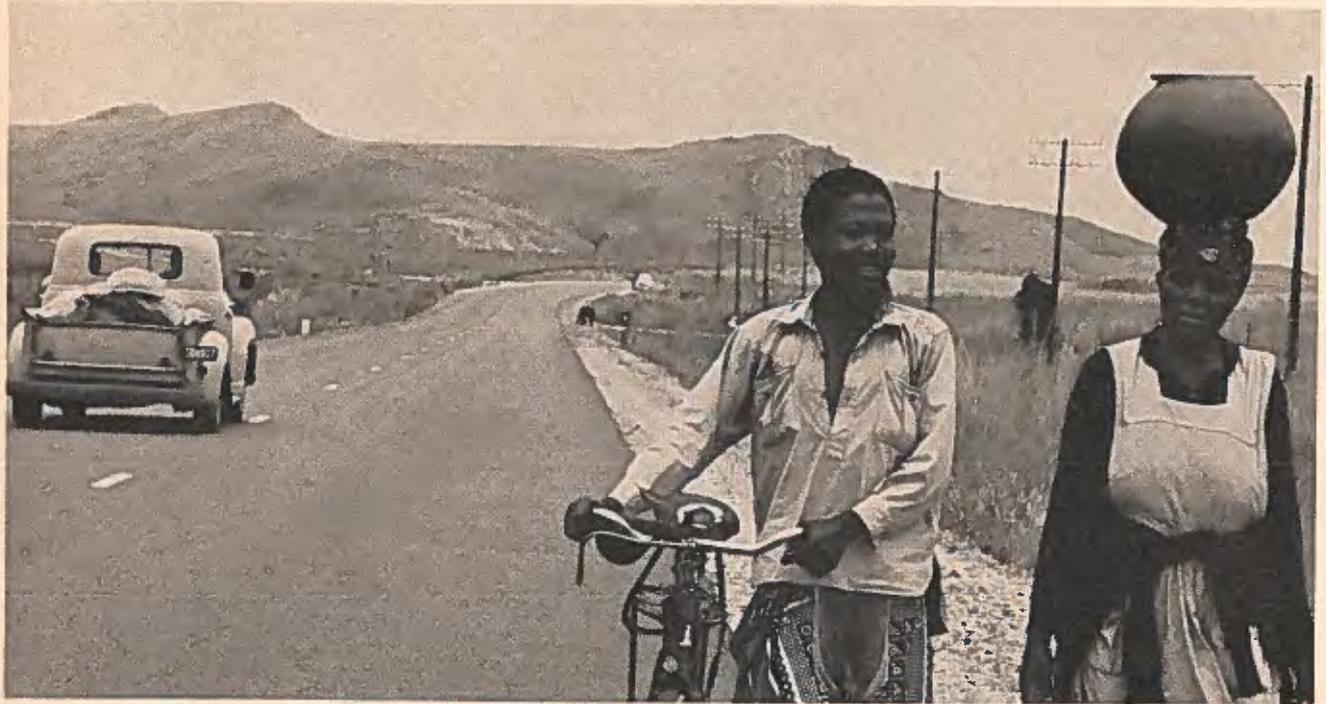
The Government has set up a new National Development Plan (1968-73) based on the capacity of the country to absorb capital investment effectively. Expansion of the industrial base is a prime objective. Botswana has duty-free access to the important South African

market and the establishment of a Botswana Development Corporation willing to enter into joint partnerships with private investors or to assist them with credit is proposed. The Government offers special fiscal relief and is prepared to examine sympathetically any specific proposals from investors.

Botswana is joined to the Republic of South Africa in a Customs Union

under which it receives about 0.3 per cent of customs and excise revenue (excluding that derived from South African manufactured alcoholic beverages) collected by the South African authorities. Goods move freely between the two countries and statistics on imports and exports are not published. Exports are estimated at Cdn. \$18 million, principally cattle (carcasses and live), hides and skins. Im-

ports total an estimated \$24 million—mainly food, beverages, machinery, fuels, chemicals and drugs, and building materials. The majority of these imports come from South Africa and an agent in South Africa normally covers this territory.



This 112-mile, all-weather highway that crosses Swaziland from South Africa on the west to Mozambique on the east was built with the help of IDA credits. It has stimulated growth, improved communications, and has opened up more land to cultivation.

Lesotho

Lesotho (formerly Basutoland) is much smaller than Botswana and is completely surrounded by South Africa. The capital is Maseru and some fifty miles away, at Roma, is the University of Botswana, Lesotho and Swaziland. Canada is well known in Roma and all over Lesotho because Canadian missionaries have been working there for more than 40 years.

The economy depends heavily on agriculture; wool and mohair account for two-thirds of exports and are marketed by the South African agricultural control boards. No minerals, other than a potential diamond field, have been located and there is practically no industry.

The Lesotho market is relatively small partly because of the very low income.

However, greater financial aid and increased remittances from emigrants working principally in the mines in South Africa have increased demand. Lesotho is also part of the Customs Union with South Africa; it uses the same currency, is integrated with the South African communications network, and exports its labor to the Republic.

The Oxbow water project is the main topic of discussion. Lesotho has abundant water cascading down from its high mountains and is the principal source of the Orange River. For almost 20 years investigations into the possibility of harnessing these waters have been going on. The United Nations Development Program has announced the allocation of \$1.5 million for a study of water resources and London-based civil engineers appointed by the World Bank have arrived in Maseru to undertake the study. If the

project proves feasible, it will provide sufficient irrigation and hydroelectric power for Lesotho and badly needed water for South Africa. The first phase of the \$150 million Oxbow scheme, to be completed in 1975, would involve the construction of a series of dams and weirs and also tunnels. The second and third phases would see the installation of generating equipment. Some \$4.5 million a year could be derived from the sale of water and electricity to South Africa alone.

Swaziland

Swaziland, with an area of 6,704 square miles, is the smallest of the former High Commissioner territories, but its natural resources give it the greatest potential. Considerable areas are under irrigation and sugar, rice, tobacco, citrus, pineapples and bananas are grown. In the 1968-69 season Swazi-

land exported some 150,000 tons of sugar; 37,700 tons went to Canada.

Industrial development is based on the processing of agricultural and forest products. The most important industries are two sugar mills, a pulp mill, a meat canning factory and a cotton mill; smaller ones include grain mills, a brewery, sawmills and plants turning out mine props. Swaziland is relatively well placed for industrial development, with a few limitations. It has a wide range of raw materials, plus entry to international markets via the railway to Lourenco Marques in Mozambique and the South African road network, to which it is closely linked. The main limitations are the shortage of trained personnel, the restricted domestic market, and the magnetic influence of South Africa.

Recently a Development Program for Swaziland was published. Among the suggested projects are the exploitation of an extensive coal deposit to produce thermal power, (most of which would have to be sold to South Africa) and the extension of the railway system to link up directly with the South African one, thus facilitating shipments to the Republic.

In 1967 exports were valued at over \$60 million. The main commodities were iron ore (to Japan), sugar (Britain, Canada, U.S.), forest products, asbestos, and meat products. Of total exports, nearly 40 per cent went to Britain and 20 per cent to South Africa.

In 1966 the value of imports was estimated at nearly \$40 million, mainly machinery, transport equipment and

manufactured goods; two-thirds of imports came from South Africa. Like Lesotho and Botswana, Swaziland is part of the South African Customs Union and issues no separate statistics.

Canada has been exporting some forestry equipment to Swaziland and the prospects for the future look good. An agent in South Africa can usually look after the introduction and sales of your product in that country.

Swaziland is a very young country and its economic future is rather bright. Canadian firms should not miss any opportunity to analyze their potential there, especially in forestry and lumbering equipment and machinery.

Canada has become big buyer of Mauritian sugar; sells newsprint, other products there.

Mauritius

MARC A. BRAULT

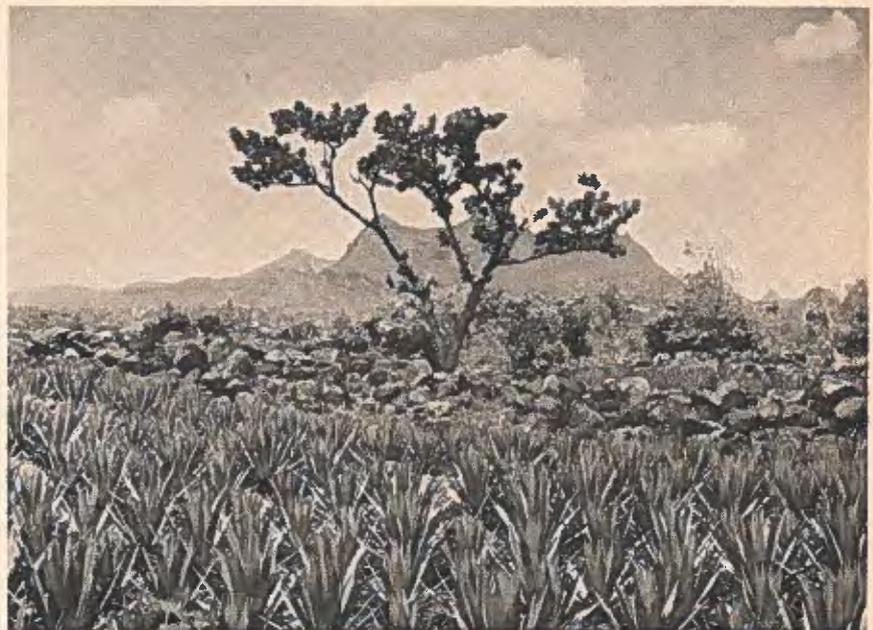
Assistant Trade Commissioner, Johannesburg

Mauritius, ringed almost completely by a coral reef, lies about 1,500 miles off the east coast of Africa. It became an independent member of the Commonwealth in March 1968 and has a population of 850,000.

Sugar is the primary industry and constitutes the main source of wealth and employment. Sugar cane is milled in 23 factories that produce almost exclusively raw sugar for export. The Commonwealth Sugar Agreement, which was renewed in December 1968, enables Mauritius to sell 386,080 metric tons to Britain at a reasonable negotiated price. In addition, Mauritius enjoys a quota in the United States of 16,045 metric tons at premium prices. Under the International Sugar Agreement, which came into effect January 1, 1969, Mauritius has a basic export tonnage of 175,000 tons. However, quotas were fixed at 90 per cent for 1969. Under the Hardship Relief Fund of the Agreement, Mauritius received an additional 35,000 tons, thus enabling it to export to the free market a total of 182,500 metric tons. Total exports for 1969 will be 584,625 metric tons.

The second agricultural product of importance is tea, grown on a commercial scale since 1886. For the past five years the government has been encouraging the development of this

industry and the planting of some 15,000 acres of scrub and forest land in the uplands to tea is progressing successfully.



Mauritius lives on sugar and will export nearly 585,000 metric tons this year. This picture shows another product, sisal, which is also grown on this island.

Manufacturing is limited somewhat by a lack of raw materials, especially mineral resources, and the limited local demand, although markets in neighboring territories such as Malagasy, Réunion, and East Africa offset some of this difficulty. The main advantage Mauritius has over and above its good road network and reasonably good other services is the availability of well educated and cheap labor. A few overseas firms are now studying the possibility of using Mauritius for their labor-intensive operations and a Swiss company is processing jewels for watch bearings on the island.

IMPORTS INTO MAURITIUS 1968

	Cdn. \$ Total imports	From Canada
Agricultural products	30,830,115	167,079
Crude materials and fuels	8,436,293	—
Forest products (mainly newsprint)	—	132,016
Chemicals	9,459,459	20,802
Manufactured goods classified by material	14,980,695	9,839
Machinery and transport equipment	10,907,336	14,648
Miscellaneous manufactured articles	6,679,536	9,779
Total	81,293,434	354,163

The trade of Mauritius depends largely on sugar, which accounts for more than 90 per cent of domestic exports, mainly to Britain (approximately \$44 million in 1968) and to Canada (\$7.3 million in 1968).

Mauritius imports the majority of its foods from Burma and Thailand (rice), Australia (flour, milk and butter), France (flour), Kenya, South Africa and Britain.

Britain is the largest exporter to Mauritius and the principal supplier of textiles, machinery, motor vehicles, electrical goods, fertilizers. India, Hong Kong, Japan, Iran and West Germany also export products to the island.

Canada sold a small amount of goods, valued at \$354,000, there in 1968. The principal difficulty for Canadian exporters is the absence of direct shipping service between Canada and Mauritius; all goods must be transhipped and this delays delivery and increases damage from handling. However, Canada has the advantage of the Commonwealth preferences and great goodwill because most Mauritians know that we are the second major buyer of their sugar. Therefore, if the price is right and the quality satisfactory, the Mauritius importer is often prepared to cope with longer delivery times and will order manu-

factured consumer goods. (This, however, is not always true of the sugar industry, with which delivery date is often the main consideration.) Some imaginative Canadian exporters have recognized these advantages and Canada is now the major exporter of newsprint to the island. Canadian pressure cookers, stationery, baby chicks, salmon, car parts, hunting ammunition and television sets are all meeting the international competition and, of course, you can find Canadian whisky almost everywhere.

There are many fields that warrant investigation. If your firm is a subsidiary of a U.S. company you probably have a definite tariff advantage over your parent company, and it might be worthwhile to study your export potential to Mauritius. Comparative duty rates may be obtained from the Commonwealth Division, Office of Area Relations.

The office of the Canadian Government Trade Commissioner in Johannesburg, which is responsible for Mauritius, regularly receives inquiries for a variety of goods and about every eight months or so an officer visits the island. If you are selling to the West Indies and Cyprus, your products probably can be sold in Mauritius.

Correspondence, labels in French a must in this market—an advantage for Canadians.

MARC A. BRAULT

Assistant Trade Commissioner, Johannesburg

Malagasy

The Malagasy Republic (Madagascar) situated some 280 miles from East Africa and the fourth largest island in the world, attained full independence in 1960. At that time, it entered into a number of agreements with France under which it would remain in the franc zone, with France agreeing to give financial and technical aid. Malagasy is now an associated member of the European Common Market.

Agriculture is the main activity and the chief products are rice, coffee, vanilla and cloves. Agricultural exports provide 90 per cent of total exports,

with coffee in the lead, followed by rice. The major share of these exports goes to Continental France, followed by the United States, Réunion and the EEC countries.

Imports consist mainly of food, consumer goods, cars and industrial equipment. Canadian exporters should bear in mind that if they sell a product to Malagasy once, they will probably do so for a number of years. **One definite advantage Canadians have is the fact that they can correspond, supply labels, etc., in the French language, a must in Malagasy.** This is especially important for any engineering contract or goods requiring installation or servicing.

All imports from countries outside the franc zone are subject to exchange control and import licences. Although goods from the franc zone and the European Common Market may be imported freely, licences for imports from other countries are regulated by quota. Foreign exchange is made available to cover imports under global quotas which are divided between the EEC (other than France) and others. Canadian goods fall under the rather small "other" category, which also includes imports from countries that have bilateral trade agreements with Malagasy. This explains in part the limited trade with Canada.

Comoro Islands

The Comoro Archipelago consists of four islands at the northern entrance of the Mozambique Channel between the African continent and Malagasy, with a total population of about 230,000. A French protectorate, it obtained full administrative and financial autonomy in 1946 and self-government in 1961. It set up a separate tariff last year. The chief products are vanilla and perfume.

Canadian firms that have agents or representatives in France should ask them to check the potential of their products in these two territories. If copies of these letters are sent to the Canadian Government Trade Commissioner, P.O. Box 715, Johannesburg, South Africa, he will be able to follow up on any resulting opportunities.

Réunion

Réunion is situated some 440 miles northeast of Malagasy and has a population of 430,000, a quarter of whom live in the capital, St. Denis. The island is a Department of France and its inhabitants enjoy all the privileges

and share all the responsibilities of Frenchmen.

The absence of natural resources and its distance from any industrial market has forced Réunion to concentrate on agriculture. Sugar (253,000 tons a year), perfume essences from plants, and some food plants are the principal products.

The foreign trade pattern of Réunion is simple. **Almost all its production is exported and its total requirements imported**, which leads to an increasing trade deficit each year. Réunion is producing at capacity while its population is rising and attaining a higher standard of living. At the same time, agricultural products are losing some of their purchasing power and are subject to world market fluctuations.

In the first 11 months of 1968, 34.3 per cent of exports went to France, 2.5 per cent to other EEC countries, and 1.4 per cent to the United States. Of imports, 73.4 per cent came from France, 16.6 per cent from the franc zone outside France, and 8.8 per cent from other EEC countries.

Because Réunion is a Department of France, your agent in France should

be the right person to introduce your products there. There are, however, good manufacturers' representatives or importer/distributors on the island should you wish to try direct selling. The Johannesburg office will be pleased to assist you in any way.



This is the old Royal Palace, a relic of the former Hova dynasty, at Tananarive, the capital of the Malagasy Republic. Once a French colony, Malagasy became independent nine years ago.

Angolan opportunities lie within framework of Development Plan; so do those in Mozambique where power, mining, industrial projects are vital.

GEORGE P. ORBAN
Assistant Trade Commissioner, Johannesburg

Angola

The potential for Angolan development is impressive. Large mineral deposits have just been discovered; the territory has undeveloped power resources estimated at 3.3 million kw.; the climate is suitable for a wide variety of agricultural activity and the tourist potential remains virtually untapped. And Angola has an ideal location for communications by sea with the rest of the world.

The Portuguese Government, with a view to increasing the development of the economy and strengthening the infrastructure, passed several laws between 1962 and 1964 designed to attract foreign investment. The laws

specify activities in which a majority of Portuguese capital is required: these include public utilities, fishing, and activities basically connected with defence. The foreign investor is granted tax holidays of up to 10 years, customs exemptions on plant and raw materials, and freedom to repatriate profits, capital and dividends, depending on the type of industry.

Angolan development over the next four years is governed by the Third Development Plan covering 1968-73. This calls for a total investment of \$910 million with the aim of achieving a real growth rate of 4.8 per cent a year. Lisbon will contribute about 60 per cent, mainly from government sources, and 40 per cent is expected

to come from foreign investors. In addition, the provincial budget provides for development funds.

HYDROELECTRIC PROJECTS IN ANGOLA

Dam	Installed capacity kw.	Area supplied
Cambambe	130,000*	Luanda
Matala	90,000*	Nova Lisboa
Luman	20,000	Nova Lisboa
Biopio	15,000	Benguela/ Lobita
Mabubas	17,500	Luanda

*Additional capacity: Cambambe 130,000 kw., Matala 45,000 kw.

The main fields of expenditure under the Plan are mining (\$450 million); transport, communications and meteorology (\$143 million); industry (\$127 million); agriculture, forestry and stock breeding (\$77.4 million); education and research (\$51.3 million); power (\$47 million), fisheries (\$20 million).

Within the framework of the Plan, the following are the areas of principal interest to Canadian businessmen.

Industry (\$127 million)—At the moment industry concentrates on import substitution and the processing of agricultural products. Three areas are to be stressed: food processing, textiles, and vehicle production. Dairies and canning plants are going up in the agricultural areas and more flour mills and vegetable oil plants are being built in Luanda. There is still no large-scale meat packing plant, essential to the development of ranching. In textiles, local production has almost doubled to \$25.2 million in 1968 from \$14.8 million in 1967. Imports, however, were valued at \$50 million. Cotton production is increasing and the demand for textiles is growing.

In vehicles, three plants, including Mercedes, are turning out truck and bus bodies and many importers assemble cars from CKD chassis. MABOR, in which American General Tire has a minority interest, saw the value of its production of rubber automotive goods rise from \$1.2 million in 1967 to \$5.4 million in 1968.

Mining (\$450 million)—Important discoveries of oil and iron ore have altered Angola's traditional export pattern. The Cassinga iron mines (supplied with equipment by Krupp) exported three million tons of iron ore last year and exploitation of its huge low-grade reserves will certainly require integrated development of power sources and rail facilities, plus construction of ore-loading facilities in Luanda. Gulf Oil has invested \$135 million since its initial strike in the coastal waters off Cabinda and hopes to export 7½ million tons of crude per year by 1971. Other discoveries include encouraging quantities of gold, copper, phosphates and sulphur. The two latter could form the basis of a fertilizer industry.

Hydroelectric Power (\$47 million)—Among the existing projects are those

listed in the table. Expansion of the Cambambe and Matala projects will soon begin.

Agriculture (\$77.4 million)—The Agricultural Research Institute in Nova Lisboa has been granted \$7.2 million under the Third Plan for agricultural research and development and cattle ranching. The Government is already spending money on vaccination of cattle and the development of water supplies. In addition, timber exists in large volume and is being exported, but has not been fully exploited.



Lobito is the main port of Angola and handles cargo for much of Southern Africa. It has rail connections which stretch across the continent to Mozambique.

Tourism and Education (\$55.5 million)—The country has miles of white sand beaches and attractions such as big game hunting and fishing. So far no one has developed this resource on a large scale. Schools and universities are also to be built up under the Plan.

Transport and Communications (\$143 million)—If hydroelectric power is to be exploited, mineral resources developed, and further exploration carried out, the air, rail, road and telephone systems will have to be expanded and improved.

Canadian experience in communications, in mining, in agriculture, in electric power and in the building-up of educational systems and of the tourist trade should mean that **Angolan development offers good openings to**

Canadian companies in these fields.

There will, of course, be strong competition from British, German, U.S., Japanese, and South African companies. There is also the problem of language (especially in dealing with the Government) and the fact that until recently banks were restricted by law to short-term credit operations. This situation has changed and the banks are in the midst of altering their operations to provide medium- and long-term credit as well. In addition, communications with Portuguese companies tend to be slow and the

attitude towards business is less hard-nosed than it is in North America. **But Canadians who feel they can cope with these and other problems and offer goods and services competitively should certainly investigate opportunities.**

Mozambique

The 600-foot-high Cabora Bassa dam, which will be larger than Egypt's Aswan Dam, should alter the face of Mozambique and open up mineral, agricultural, industrial and other opportunities in what is almost virgin bush.

Because 1.2 million kw. of power to be generated in the first stage (to be completed by 1973) is too much for Mozambique to absorb, South Africa has signed a provisional commitment

to buy a million kw. in 1974. The Malawi Government will take about 200,000 kw. when additional power becomes available and the remainder will be used in Mozambique and possibly Rhodesia, Zambia, Tanzania and Malawi.

Total power output of the completed project will be two million kw. Construction is being undertaken by ZAMCO, a consortium of 16 civil engineering, transmission line and equipment contractors from South Africa, France and Germany in three stages, to be completed in 1973, 1977 and 1979, at a total cost of \$413 million.

Mozambique is basically an underdeveloped territory, with 70 per cent of total industrial production coming from Lourenco Marques and Beira. Agriculture provides 25 per cent of the GNP and accounted for \$81 million

of the \$127 million in foreign exchange earnings for 1967.

Among the resources that the Government considers offer substantial development possibilities are: iron deposits which could produce a million tons of ore a year, and a 35-million-ton reserve of titaniferous magnetites, and deposits of manganese, nickel, copper, fluorspar, chrome and asbestos. Some 3.7 million acres of land could be irrigated for growing sugar, grains, citrus, vegetables, jute and cotton, and forestry operations carried out on some 470,000 acres. The Zambesi River could be made navigable for barges of 1,000 tons for 516 miles from Rhodesia to the mouth, a little north of the port of Beira. The government survey indicates that 85,000 square miles could be developed to support a million people.

The province of Mozambique has a Third Development Plan and projected

expenditures under it include transport and communications \$203.6 million, industry \$206.3 million, agriculture \$87 million, and power \$24 million.

In addition to this plan and the dam project there is a "starting plan" for developing infrastructure and agriculture in the Zambesi Delta. Estimated expenditure there includes \$81 million for agriculture, \$63 million for power, \$21 million for transportation.

The various projects going forward or planned should interest Canadian businessmen. Prospecting for business would probably call for a visit to Lisbon and appointment of a representative there who has either a branch office or close contacts in Lourenco Marques.

Selling Food Products to Denmark

Denmark's imports of raw materials for agriculture and of food, beverages and tobacco products, have declined gradually over the past three years. Canadian exports of these products to Denmark, excluding relatively large but sporadic sales of barley, rye, flaxseed and skim milk powder, also showed a declining trend, from \$2.3 million in 1966 to \$2.1 million in 1967 and \$1.8 million in 1968.

To protect local producers of bread grains, the milling of Danish wheat and rye for human consumption within Denmark is subject to obligatory milling percentages established by local authorities. The milling percentage of Danish wheat has remained constant at 100 per cent for several years, and the percentage of Danish rye—March 1969, 70 per cent—has varied from 50 to 85 per cent, depending on the harvest. Despite its considerable barley production, Denmark remains a large importer of barley. Barley imports in 1968, although 33 per cent lower than in the previous year, still totalled 249,000 metric tons, most of it supplied by Britain and France. Canada exported some 41,000 metric tons of barley in 1967; some was shipped in 1968.

Imports of skim milk powder for feeding purposes in Denmark are subject to import licensing requirements, but licences

are granted freely, subject to the passing of the Storch Test. Canadian exports of skim milk powder to Denmark, almost nil in 1967, amounted to Cdn.\$1.1 million in 1968 as Canadian prices became competitive with those of other Danish sources of supply. Exports of Canadian skim milk powder have continued throughout the early months of 1969, although at a significantly lower rate.

Canadian exports of Irish moss and sea grasses to Denmark in 1968 increased to approximately Cdn.\$1 million from Cdn.\$600,000 in 1967. Denmark processes this raw material into a jelling agent for use in the preparation of chocolate milk, ice cream, desserts and salad dressings, as well as in pharmaceutical and cosmetic preparations, and exports some 90 per cent of the manufactured product.

Significant fluctuations appear in Canadian exports of a number of other commodities. Canadian exports of bright Virginia flue-cured tobacco to Denmark fell from the \$800,000 achieved in 1966 and 1967 to \$250,000 in 1968, about the same as in 1965. Consumption of Canadian maple sugar for tobacco processing and flavoring also fell. Canadian exports of raw and prepared rennet for use in Denmark's cheese industry, fresh apples, cereal products and farinaceous substitutes also declined in 1968.

Canadian consumer food products now being sold in Denmark include canned and frozen corn, pickles and relishes, sauces, dressings and spreads, peanut butter and honey. The marketing of branded consumer food products in Denmark is highly competitive, particularly with groups of chain stores, which expect and receive advertising and promotion support from their suppliers. The chains are also involved to a significant degree in processing foods under private brand labels.

The quality of Danish food and the standard of its preparation are high. The Danish housewife has a wide selection of imported specialty foods she can choose from and, like her Canadian counterpart, demands top quality, attractively packaged merchandise.

Efficient Canadian suppliers are encouraged to introduce competitive new products to the Danish market. We would be happy to put them in touch with a good food import agent. Danish agents are only prepared to study offers which are accompanied by samples, c.i.f. Copenhagen prices, terms of payment and delivery, agent's commission and other relevant information.

JOHN M. HILL, Assistant
Commercial Secretary, Copenhagen

Roll Up Your Sleeve!

Exporting is hard work and exporting vaccines is no exception. Connaught Laboratories has built a world-wide reputation for its products, based as much on service as on quality. The profits support medical research at the University of Toronto.

M. A. JOHNSTON

Paralytic poliomyelitis struck almost 4,000 Canadians in 1953 when the epidemic was at its height. Since then, the Salk and Sabin vaccines have cut the number of paralytic cases to two or three a year. The Connaught Medical Research Laboratories of the University of Toronto played an important part in the development of the Salk vaccine. In fact, the live polio virus fluids which were used to make the vaccine for the first clinical trials in the United States were prepared at Connaught in Toronto.

Manufacture of Salk vaccine began in Canada in 1955 and soon some 40 foreign countries were asking for supplies. Connaught had for many years exported insulin, heparin (prevents blood clotting and is used in transfusions and for the treatment of angina), and crystalline penicillin without ever setting up a full-fledged export department. By 1958, however, business was growing too rapidly for ad hoc arrangements, and the new vaccines presented many more problems. Connaught therefore looked around for a man to create an integrated marketing organization. R. E. Binnerts, who had lived in the Far East and managed May and Baker's pharmaceutical sales there, was chosen to head up the new department.

If you have met Robert Binnerts, you probably have a good idea of how he went about the task. He is a most methodical man. As he explained to *Foreign Trade*, "Connaught is not interested in making quick sales. All our profits are ploughed back to finance further research. Besides," he told us, "we sell mainly to government health authorities and international agencies and I will not bulldoze them. Accurate presentation and a clear understanding of the customer's real requirements are absolutely fundamental to marketing vaccines."

The new export department spent most of its first year making market surveys, trying to determine where to focus its main effort in the future. There is generally only one potential customer in each country for Connaught's products for human use, and that is the Ministry of Health. But the procedure for registering vaccines varies and may involve anything from a mere formality to complete clinical trials lasting up to two years; naturally this makes a considerable difference to the return on capital. The Trade Commissioners continue to give Connaught invaluable assistance, obtaining information and arranging introductions to the right people, and Robert Binnerts is full of praise for them.

An export manager needs stamina because business travel is frequently arduous. His brain has to keep working at top pressure while his stomach copes with unfamiliar food, irregular mealtimes and usually a fair amount of liquor. An export manager needs patience too. People do not always put out a red carpet when a foreigner arrives. In fact, after crossing half the world, he may have to wait in the reception area while his prospect finishes dictation. It helps to ease the strain if he has all his facts and figures well organized and can spend odd moments boning up for the next appointment. Too tight a schedule invites ulcers and often irritates customers as well—no one likes to be pressured because the export man wants to catch the next plane.

"I always read as much as I can about the countries I am going to visit," Mr. Binnerts told us. "I recommend *Passports and Profits* by Richard G. Lurie, which you can buy for U.S. \$5.95 from Pan Am, PanAm Building, New York 10017, and the little giveaway *Passport to Profits* by the same author. I also use *International Trans-*

actions—Commentary and Forms by Stitt and Baker, published by the Canada Law Book Co. Ltd., 100 Richmond Street East, Toronto. *The Reader's Digest Almanac and Yearbook* is another good source of information. I read *Foreign Trade* when I receive it and turn up back numbers before I make a trip. If I want a more detailed index than the one printed in the magazine I get it from the Department of Industry, Trade and Commerce."

Connaught keeps its name before the Canadian International Development Agency in Ottawa and international agencies such as WHO, FAO, the UNDP and UNICEF, all of which are potential sources of contacts or business. It makes a point of keeping Trade Commissioners in its main markets well informed all the time, not just when it runs into trouble. The Permanent Mission of Canada to the United Nations is another valuable contact.

A large part of Connaught's work is planned ahead. For example, UNICEF and the Government of Taiwan began a vaccination program in 1964 which will require Sabin polio vaccine from Canada over a five-year period. On the other hand, an epidemic can break out at any moment. Connaught sent millions of doses of smallpox vaccine to Britain, Ireland and Norway in 1960 and in subsequent years rushed millions of doses of Sabin vaccine to Central and South America. "No matter how busy we are developing long-term markets," Mr. Binnerts emphasized, "we can never forget about the panic button. When we have to press it, everybody must know exactly what to do. People's lives—usually children's—may depend on a consignment of our vaccine being on the next plane."



A new type of anti-rabies serum, Ravax, supplied by Connaught Laboratories, is to be used in Venezuela in an experimental dog-vaccination program. Connaught, through its Venezuelan representative, is presenting to the Ministry of Health and Public Assistance 10,000 doses, or half the quantity that is needed for the three-year experiment to control and eliminate rabies.

Shipping vaccines and the documentation connected with it can be quite a complicated operation; it is the responsibility of Mr. Neves, Connaught's Export Administration Manager. Connaught uses air freight because it is fast and chooses its local distributors with great care. "We don't issue price lists for our products," Mr. Binnerts informed us, "because the freight element can account for a large part of the cost, as we may have to ship insulated containers with dry ice for several thousand miles. We have one advantage over the ordinary exporter—our products are often needed urgently so that the authorities will cut through the red tape."

Connaught provides technical advice to distributors on its biological products and their use. It also is consultant to the Pan American Health Organization to assist in improving the quality of smallpox vaccine, pertussis vaccine, and diphtheria and tetanus toxoids produced in Latin America, and maintains a reference testing service to monitor the quality of other prepara-

tions manufactured in the Latin American countries.

Foreign Trade asked how it handled the language problem. "A number of our staff are competent linguists, but experience has taught us that it is best if both parties use their own language wherever possible, I write to German customers, for example, in English and they reply in German. In this way we can be sure that each says precisely what he means. A term which is only approximately equivalent is quite useless to a scientist and an ambiguous phrase is worse," Mr. Binnerts explained. "We have trained ourselves to speak simple English so that visitors can understand us readily. It is amazing how much slang and jargon there is in normal everyday speech—you don't realize this until you make the effort to eliminate it."

Most of Connaught's products are sold to public authorities, but not all. One of the exceptions is an anti-rabies vaccine which is sold not only to Governments but also through

agents, and is used to protect domestic animals, from cats to cattle. Its markets range from Denmark to Latin America. Scandinavian Governments buy vaccines to protect their mink against enteritis, botulism and distemper. Connaught is also doing a growing business in hybrid swine from its farm at Bolton.

It is not often that we meet an export manager who does business worth millions of dollars a year in 40-odd countries and doesn't employ a single salesman. Not surprisingly, Mr. Binnerts is an advocate of comprehensive export training—he has little time for quick courses in this and that. He puts it this way: "When there is no one to delegate to, you must make your colleagues feel that they can respect your knowledge and judgment. And you can only delegate effectively if you yourself know enough about the task to demand a high standard of performance and to realize when you are getting it."

Educational Equipment

Drive in Texas to step up technical education opens up new avenues to Canadian manufacturers of equipment for use in technical training of many types.

ROBERT C. LEE

Vice Consul and Assistant Trade Commissioner, Dallas

Governor Preston Smith of Texas recently made a plea for increased technical education programs in the state. Some months before, Dr. Nolan Estes, the new superintendent of the Dallas Public Schools, said, "We must revamp vocational education in our schools." Vocational education in Texas is therefore being given high priority at the state and municipal levels. Canada's expertise in this field gives us a head start as a potential supplier of equipment. In fact, one Canadian supplier of laboratory equipment was told recently that his particular equipment was somewhat advanced for Texas schools at present, but that in three or four years they would need just the type he makes. The great emphasis on vocational education in schools in Canada during the last ten years means that when Canadians offer their equipment they are offering proven and tested systems rather than new or pilot programs.

Schools always make major purchases by open tender, but most of them have discretionary authority for minor purchases. If price, quality and delivery are right, Texas educators generally have no reservations about "buying Canadian" but they all insist that suppliers be represented in Texas. In any case, it is essential to appoint a representative because he is in a position to maintain liaison with school authorities, to anticipate requirements, to receive invitations to bid, and to follow up inquiries. After-sales service is of prime importance and here too the local representative is indispensable.

The results of Canadian participation in the American Vocational Association Convention last December in Dallas and the American Association of School Administrators Convention in Atlantic City last February confirmed the general acceptance of Canadian equipment in the United States. The Dallas show resulted in almost \$2

million worth of business and in Atlantic City sales approached some \$5.3 million. Exhibiting in co-operative displays sponsored and designed by the Department of Industry, Trade and Commerce, the companies in these two shows displayed everything from electronic trainers to machine shop equipment, sophisticated apparatus for fluid mechanics and thermodynamics experiments, portable classrooms and furniture. Most of the vocational equipment was designed by companies that turned from the industrial field to provide specialized products for student training which resembled closely the modern equipment in industrial shops and laboratories.

Why Texas particularly for educational equipment? The Lone Star State is going through a rapid transition from an agricultural to an industrial society and one way to attract industry is to provide people with technical training. Recognizing this need, Governor Preston Smith has proposed that state aid to vocational education be increased by \$25 million over the next two years. Included in his recommendations are proposals that state support of vocational technical programs in Texas junior colleges be increased from \$1.8 million in 1969 to \$6 million in 1970 and \$7.3 million in 1971. Governor Smith's proposals would also add commercial education and occupational training to the state's automatically funded school programs and allow the Texas Education Agency to add other programs. Currently, vocational agriculture, homemaking, distributive education and industrial education are financed automatically by the state but occupational training and commercial education are limited to a special appropriation. Although these programs are only in embryo, there is little doubt that substantial progress in technical education will be made in the years ahead. In general, the state and federal allocations pay about 65 per cent of the cost of voca-

These companies showed their products at the American Vocational Association Convention in Dallas, December 1968.

The Pedlar People Limited
Oshawa, Ontario
Steel lockers and work benches

Ashman Industries (1966) Limited
Hamilton, Ontario
Senior electronic teaching compartment

CETA Limited
Fort Erie, Ontario
Electronic teaching kits; laboratory planning assistance

Edwards of Canada
Owen Sound, Ontario
Motor generator training sets; ancillaries

Electronic Controls Limited
Belleville, Ontario
Small motor generator trainer

Ex-Cell-O Corporation of Canada Ltd.
London, Ontario
Numerical control milling machine

Experimental Engineering Equipment Limited
Niagara-on-the-Lake, Ontario
Custom experimental equipment for fluid mechanics and thermodynamics laboratories

Fritz Werner Limited
Montreal, Quebec
Heavy metal milling machine for schools

General Manufacturing Company Limited
Drummondville, Quebec
Arbor saws, disc and belt sanders, drill presses

Guy-Chart Tools Ltd.
Scarborough, Ontario
Auto body and frame straighteners

Mimik Ltd.
Galt, Ontario
Hydraulic tracers for milling machines

Richardson Equipment Company Limited
Scarborough, Ontario
Educational oil hydraulics equipment

Wayne Forge Limited
Toronto, Ontario
Gas-fired utility forges

tional education and local taxpayers furnish the remainder. For academic education, these percentages are generally reversed.

The proposal to revamp vocational education covers a lot of territory. It means enlarging and updating traditional job and laboratory programs to train much larger numbers of students in specific occupations. But it also visualizes changes in the concept of vocational education so sweeping that ultimately almost every high school student will be involved in the real world of work. "All youths need occupational education before high school graduation," Dr. Estes states. The plan is that all education, beginning in elementary school, will be occupationally oriented for children who may become lawyers and chemical engineers as well as for those who may become technicians and tile-setters. At present 11 per cent of the Dallas district high schools' juniors and seniors are taking vocational shop or work study courses and this enrollment is forecast to treble within the next three to five years. It is expected that all students will have some form of vocational education within ten years.

The potential for educational equipment in Texas is brought into focus by a look at the statistics. The population of the state is currently 11.3 million and is projected at 12.5 million by 1975. The Dallas-Fort Worth area alone has close to two million people and Houston has another 1.7 million. Add to this the population of San Antonio (775,000) plus the smaller communities of El Paso, Austin, Corpus Christi and Beaumont-Port Arthur, each with populations of over 200,000, and this potential can be appreciated.

Dallas-Fort Worth and Houston have become two of the largest manufacturing complexes in the South. Houston is well known for its chemical industries and is world famous as a space center. Many Houston and Dallas industries are geared to the space age. Dallas-Fort Worth is particularly strong in electronics, with such industrial giants as Texas Instruments, Ling-Temco-Vought, Collins Radio and General Dynamics. Both are also centers of medicine and with their rapid growth require skilled technicians. A general shortage of labor, particularly in the technically advanced industries, points to the

necessity for increased stress on technical education.

Given the rapidly expanding economy of Texas and the dual thrust of technical grounding and basic academic subjects coming in the major cities, there is no doubt that Texas is a growing market for educational and vocational equipment. **If you are a manufacturer of vocational training equipment looking for export markets, don't overlook Texas.** Training programs are being expanded and some Canadian firms are already selling here. Study the market, visit the territory and appoint a good representative. You will then be in an excellent position to compete as the various programs are introduced or developed. The facilities of the Canadian Trade Commissioner's office are at your disposal to assist you in your surveys and in locating representatives. If you feel you are ready for Texas, then Texas educators are ready to talk to you. Write to the Consul and Trade Commissioner, Canadian Consulate, 2100 Adolphus Tower, 1412 Main Street, Dallas, Texas 75202.

Electronics

Swiss industry buys imported components, electronic systems and equipment; competition is stiff. Canadians selling to the U.S. should succeed in this low-tariff market.

G. E. BLACKSTOCK
Commercial Secretary, Berne

The electronics industry in Switzerland is highly specialized, but over-all, it supplies only 10 per cent of the market. Automation, industrial and remote control equipment and telecommunications are the main fields. There is little or no production of consumer goods, including TV sets, and no computers are made here. Production of components covers only a fraction of the demand. Many of the electronic products made in this country are supplied to the main manufacturing industries—watchmaking, precision machinery, chemicals, pharmaceuticals, and textiles. One example is automation and control equipment for the chemical industry. (One of the big

chemical firms, Ciba, has itself gone into electronics, turning out photographic equipment and closed circuit TV, for which there is a rapidly expanding market.) Another example is the textile industry which requires electronic equipment for control, thread measurement and automation.

Electrical measuring and metering is another specialized field in which Switzerland leads. A small number of large manufacturers make specialized radio transmitters, receivers and accessories.

The market for electronics in Switzerland is extremely competitive, but im-

porters, manufacturers' representatives and manufacturers themselves agree that Canadian products should sell here if they can be sold in the United States. The market is open because Switzerland has a low tariff and a liberal trading regime. Duty is based on weight which makes it relatively unimportant for high-value goods such as electronics.

Components, equipment and consumer products make up the three main divisions of the Swiss market. Marketing consumer electronic products is much like marketing other consumer goods. There is a big demand for them and if Canadian manufacturers can meet the



At the Montreux Television Symposium last May, G. E. Blackstock, Commercial Secretary in Berne at the time (second from left) and Peter Macfarlane of Central Dynamics Ltd., Pointe Claire, Quebec, (third from left) study a TV broadcast equipment catalogue with K. Schat (left) and T. Gerritsen from Holland.

competition from Germany, France and the other well-established European suppliers to whom the peculiarities of electrical current and standard approvals here have long been familiar and present no further problem, they should be able to get a foot in the door. The Japanese have.

There is a substantial demand for components in Switzerland, as the table shows. There is some specialized manufacturing here, but 70 to 90 per cent of all components are imported.

Complete electronic systems and equipment are bought in Switzerland in considerable quantity and variety (see table) for communications, navigation, broadcasting, air traffic control, computers and data processing equipment, and industrial process control.

There is no domestic production of most of the electronic equipment the Swiss Post, Telegraph and Telephone Administration buys for its various public services. Thus there is an interesting market for imported TV and radio studio equipment, transmitters, mobile and fixed communication links, relays, retransmitters and short-wave receivers. But competition with other European suppliers is tough. They are better established in the market and can usually give better and faster service.

There are no Swiss manufacturers of air traffic control equipment. Britain, the United States and Germany supply very high frequency equipment, radar display equipment comes from France, and some radar equipment with microwave links has been supplied from Canada. Problems which will soon face the Swiss air traffic control authorities and with which foreign equipment suppliers could help include replacing of old equipment, especially VHF receivers and transmitters; providing automation equipment for air traffic control; replacing radars of 10, 23 and 50 cm. within the next three or four years, and replacing three cm. weather radar equipment.

Little military electronic equipment is manufactured in Switzerland with the exception of radio transmitters. Swiss military forces are generally well provided with the latest equipment and offer a specialized market which should not be overlooked. Already a number of Canadian exporters are active in this field.

The only way to sell foreign-made electronics in Switzerland is through active and reliable Swiss agents. Technical people in Swiss industry and government like to see factory representatives but the buyers—those who make purchasing decisions and sign the order forms—like to deal with a

local agent who speaks their language and is nearby for after-sales service. The Swiss agent can be a manufacturer's representative who works on commission but more common is the stocking importer who buys for his own account and carries substantial inventories on which customers can draw on short notice. This is especially important for components. Working with Swiss agents should be regarded as a long-term arrangement. This office can help you find a good one, and you should be prepared to give him support, particularly over the first year or so when he is getting

SWITZERLAND IMPORTS THESE ELECTRONIC COMPONENTS AND EQUIPMENT

Components	Cdn.\$'000 1968	1969 (est.)
Printed circuits	1,500	1,600
Relays*	4,950	5,300
Resistors	3,100	3,450
Diodes under 200 mA*	2,500	2,800
Integrated circuits	2,100	3,200
Transistors*	5,500	5,900
Thyristors, silicon-controlled rectifiers*	600	750
Servo- and synchronomotors*	320	320
Manual switches*	1,300	1,300
Small transformers*	6,100	6,100
Receiving tubes	1,800	1,700
Power tubes	2,500	2,800
Picture tubes	3,650	3,975
Equipment		
Transmitters and receivers*	7,750	7,750
Mobile stations (land)	1,300	1,400
Microwave links*	5,000	6,000
Navigation (air and water)	45,000	45,000
Radar	2,150	2,250
Analogue + hybrid computers	320	320
D/A, A/D converters	100	200
Digital computers, except on-line computers	35,000	45,000
Memory units	1,800	2,050
Nuclear electronic equipment, accelerators and measuring equipment (except reactors)*	3,420	3,650
Infrared equipment*	3,900	4,075
Numerical controls	3,550	3,650
Controlled drives*	3,900	4,075
On-line computers for control of industrial processes	22,000	24,000
Welding equipment*	650	650
Photoelectric equipment*	325	325

*Some Swiss manufacturing in these fields.

started. Advertising in trade papers (we can provide lists of them) is also a valuable means of marketing in Switzerland.

Almost all domestic and foreign electronics manufacturers in Switzerland and all Swiss importers and manufacturers' representatives of any importance take part in **Switzerland's only electronics trade fair, the International Exhibition of Industrial Electronics, held every second year in Basel.** Foreign companies usually participate through their local representatives. The latest edition of the fair, INEL'69, was held in March 1969.

A second fair in Switzerland is the International TV Symposium and Technical Exhibition held every other year in Montreux. It is a small exhibition, relatively less important to Switzerland itself but of growing im-

portance elsewhere. Several Canadian exhibitors have taken part independently, one of whom called this year's show held last May "probably the most sophisticated broadcasting get-together, outside the American National Association of Broadcasters' Show, held anywhere in the world."

Approvals of electrical equipment in Switzerland, including electronics, are the responsibility of the Swiss Electro-Technical Association in Zurich. Anything for domestic use but only certain limited categories of industrial equipment must be tested and approved before it can be sold in Switzerland. Sometimes the waiting period for testing is long—from two to six months. Products for testing can be sent or brought in for a preliminary look on short notice, however, so that obvious failings can be pointed out and corrected during the waiting period.

The Association accepts only applications presented by Swiss but the applicant can be an agent or a customer, a lawyer, or even a private person willing to act for you.

To develop sales of electronic products in Switzerland is a major project of our office in Berne this year. There are many excellent opportunities, largely untapped by Canadian exporters, to participate in the nearly \$200 million electronics market in Switzerland. Many Canadian manufacturers who read this article will already have heard from our office. We have contacts with almost all Swiss agents, manufacturers, importers and wholesalers. The lists are on file and we can quickly put the right individuals in touch with you. We can distribute your literature, make market surveys, or supply specific information in response to most inquiries.

Southern States Need Electrical Equipment

The eight states covered by the New Orleans office—Louisiana, Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Mississippi—constitute a large market for electrical equipment and one that is close to Canada. In 1966 industry in these eight states used slightly over 27 billion kwh. of electrical energy and their Power Commissions forecast that the figure will reach 60 billion kwh. by 1980 and 120 billion by 1990. The demand for component parts and related products to generate and transmit this power is already large and is continually increasing.

The market for generating equipment in itself could well provide millions of dollars worth of business for Canadian firms. Added to this are the some 14,000 manufacturers who use this power and who create the demand for products that alter the delivered power to the user's needs.

Opportunities for Canadian companies to sell electrical equipment in the Southern States are arising because many companies there are finding it difficult to obtain their requirements within the United States and are compelled to look for outside sources.

Here is one example. A Florida-based company recently contacted the Consulate in New Orleans. This company, started in 1950 with 12 people, now employs 4,200 and operates out of a large modern plant. Over the years it has contributed in one way or another to nearly every U.S. aerospace program, including Telstar and Courier communications satellites, Nimbus and Tiros, weather satellites, and such missile systems as Atlas, Polaris, Minuteman, Terrier and Tartar. Today the company is manufacturing equipment and systems for the Apollo Manned Spacecraft Program, Saturn Launch Vehicle, Poseidon and Titan series of ICBM's. In addition, the company also makes tracking and communication antennae, data processing systems, integrated circuits, supervisory controls and automation equipment.

Obviously this firm, involved in so many projects, has been making extensive use of the production capacity and capabilities of many other plants, both in Florida and elsewhere in the United States, on a subcontract basis. These local suppliers (here I include the entire U.S.) are having difficulty meeting the demand. The company contacted us to enlist our assistance

in obtaining possible Canadian suppliers for the following items: computers, (digital and analogue); electric motors and servo control systems, MG sets, SCR drives; parametric amplifiers, cryogenic and uncooled; receivers; transmitters; microwave components—wave-guide, rotary joints, switches, coaxial cable; power supplies; power cables, multiconductor signal cable connectors; printed circuits, modules; consoles, racks, cable trays; switches; portable generators, arc welding machines and air compressors.

Although this one company's request was much more wide-ranging than most, their search for foreign suppliers was by no means unique. Many companies, both small and large, are struggling with sourcing difficulties. Canadians could definitely find many dollars worth of business in the southern U.S. provided they have the right products, the right delivered prices, and most important, make repeated contacts. The South is not far away and the prospects are promising.

WARREN M. MAYBEE
Vice-Consul and Assistant Trade
Commissioner, New Orleans

Businessman in the Netherlands

This prosperous market is wide open to Canadian products and you should investigate it personally now. Let the men-on-the-spot in the Canadian Trade office help you plan a visit.

W. L. CLARKE

Assistant Commercial Secretary, The Hague

Many Canadian businessmen are familiar with this beautiful country of almost 13,000 square miles (half the size of Nova Scotia), with the greenest grass in the world and spectacular canals and waterways reflecting the famous windmills. Familiar too are the names of its historic and treasure-laden towns—Amsterdam, Rotterdam, The Hague, Utrecht, Nijmegen, Leiden, Groningen and Arnhem. Right now is a good time to visit this bustling country, which continues to prosper. The guilder is strong, foreign trade rose sharply again last year, and only about 1 per cent of Dutch workers were unemployed. Some 12.8 million consumers with money in their pockets are looking for things to buy—perhaps the products your firm makes. Make plans today for a worthwhile business trip and if you can, combine it with a pleasant holiday.

When you begin to plan your trip you should contact the European Division, Office of Area Relations, Department of Industry, Trade and Commerce, Ottawa, for information on duties, documentation, shipping services and other matters which may affect the export of your products to the Netherlands. You should also advise us in The Hague of your intended visit, so that we can set up useful appointments. Write to D. H. Cheney, Commercial Counsellor, Canadian Embassy, 7 Sophialaan, The Hague, Netherlands. Telex: 312 70; cable address: Canadian Hague; telephone: 070-61.41.11.

The Trade Commissioners can help you draw up your itinerary and will make a brief survey of the market potential for your products before you arrive.

When to come? The climate in the Netherlands is very similar to that of Vancouver and comfortable at any time of the year. July and August, however, are the traditional holiday months and a difficult time to call on



Amsterdam, where many Dutch companies have their head offices, is well worth visiting. These stately merchant houses face on one of the many canals.

buyers and importers. Also transportation and accommodation are at a premium during these months when thousands of North American and European tourists invade Holland. It's a good idea to avoid the period mid-April to mid-May when the annual Tulip Festivals attract a great influx of tourists. Firm bookings should be made well in advance if you intend to come at either of these times. The Netherlands observes the following national holidays: New Year's Day, Good Friday, Easter Monday, Queen Juliana's Birthday (April 30), Ascension Day, Whit Monday, Christmas Day and Boxing Day and generally all offices are closed on these days.

Your itinerary will almost certainly include Amsterdam, Rotterdam and/or The Hague because the great majority of Dutch companies have their offices

in these cities. In addition, you may wish to visit manufacturing operations which are spread throughout the country. The Hague office can advise you on location, travelling time and hotel accommodation for any tours you want to make.

You can fly direct to Amsterdam from Montreal, Toronto, Vancouver, Edmonton or Calgary via Canadian Pacific Airlines. Fares for a round trip all year are Cdn. \$879 (first class) and \$524 (economy) (Toronto). The 21-day economy class excursion rate is \$389 (Toronto), but does not include flights on Friday, Saturday or Sunday. There is one passenger ship that sails directly from the Netherlands to Canada, owned by the Transatlantic Lakes Line (Tacline) and which operates from mid-August to mid-October. An economy class ticket is \$225 and return

fare is \$430. For further details contact: Canadian Overseas Shipping Ltd., 410 St. Nicholas Street, Montreal, P.Q., or 159 Bay Street, Room 411, Toronto, Ontario.

Good accommodation at a rate within your range is available in almost every city and town. Rates vary from \$25 (luxury) to \$5 (economy). Service charges of 15 per cent plus value added tax (BTW) of 12 per cent are now almost always included in hotel and restaurant bills. However, a small tip of 5 to 10 per cent is expected. Meals will cost \$10 to \$12 a day, depending on your choice of restaurant. The unit of currency is the Dutch guilder, which is worth about 30 cents in Canadian money. There is no restriction on the amount of foreign currency a visitor may bring into the Netherlands.

Before you come you may wish to do some reading about the Netherlands. You will find these interesting:

The Dutch Puzzle, an Analysis of Dutch Life by Duke de Baena. L.J.C. Boucher Ltd., The Hague, 1966.

The Land and People of Holland by A. J. Barnouw. Lippincott, Philadelphia, 1961.

The Netherlands by D. Carew. MacMillan & Co., New York, London, 1965.

Holland Growing Greater by E. Willems. Des Bezige Bij, Amsterdam, 1963.

Commerce and Industry in the Netherlands. Amsterdam-Rotterdam Bank N.V., Amsterdam, 1969.

The Information You Need When Planning a Business in the Netherlands. Algemene Bank Nederland N.V., Amsterdam, 1968.

The last two publications can be obtained free from our office in The Hague. If you have time before you leave, ask the Netherlands Government offices in Canada for tourist, economic and commercial background material. The Netherlands Embassy is in the Congill Building, 275 Slater Street, Ottawa 4, Ontario.

Canadian businessmen visiting the Netherlands need bring only a valid passport. If you plan to do any driving, don't forget a Canadian driver's licence that is valid for one year. Make sure that you bring complete technical and descriptive literature about your product, with prices quoted c.i.f. Netherlands port and f.o.b. Canadian port. It is important to convert specifications of your product into metric terms for easy comparison with competitive offerings. You may bring in samples free of duty as long as you take them out again. It may be necessary to post a bond at Customs, but in our experience the Netherlands authorities are fairly flexible about this. The bond is refundable when the samples are taken out. It is essential to have a good supply of business cards which it is customary to exchange. You may find it helpful to

carry a small dictating machine; most hotels have typewriting services.

As for clothes, the normal business dress for men in the Netherlands is the same as that in Canada; a dark business suit is essential if you are invited out to dinner. We recommend all-year-weight suits and clothing but if you come in the summer bring a tropical suit in case you hit a heat wave, and swimming trunks because you may have the chance to visit the beautiful North Sea beaches. At any time of the year, bring an umbrella! Some of the large hotels provide a one-day dry cleaning service but at most, laundry and dry cleaning take four to seven days. Voltage and current for electric razors and other electrical appliances is 220 V-50 cycles a.c. Clothing and other articles for personal use are admitted duty-free.

As soon as you have checked into your hotel, telephone our office and make an appointment. If possible, you should visit our office before making your calls because we may have some information that will assist you in discussions with Netherlands businessmen. We also recommend that you make a brief telephone call to each of your contacts just to confirm your appointment and avoid any misunderstanding. Business hours are generally from 8.30 to 12.30 and from 1.30 to 5.00 or 5.30. Most firms are closed on Saturday although some may be open in the morning. You should reckon on four calls a day, depending on the location of the Dutch firms.



Black and white dairy cows, rich green grass, a windmill in the distance—these all make for a typical Dutch landscape.

1. Canadian grain going to Western Europe often passes through Rotterdam. Here is the new grain transshipment and storage depot in the Botlek area. The silo in the background consists of 170 cells with a combined capacity of 60,000 tons.

2. The only Dutch producer of iron and steel is the Royal Netherlands Blast Furnaces. This is the main plant at IJmuiden.

3. These are containers waiting to be loaded on board ship or picked up and moved to a European destination. The European Container Terminal at Rotterdam is expected to handle about 120,000 containers this year, compared with 80,000 in 1968. It is equipped with special cranes, tractors, weighbridges, and terminal chassis and can provide efficient inland movement of containers.



Taxi service is excellent in the large cities and in most of the towns and is reasonably priced. The flat rate is usually 45 cents plus 15 cents per kilometer; there is a 15 per cent charge for service as well. **You may find it more convenient to rent a car, especially if your appointments are scattered throughout the country.** A medium-sized European car (Opel, Peugeot) will cost about \$8.00 a day plus 10 cents per kilometer and the cost of the gasoline. There is a top-notch national and international train service. All major towns and cities are connected by a swift modern network and trains run about every 15 minutes to almost any destination from Amsterdam, Rotterdam and The Hague. Railway stations are invariably in the center of the cities. Telephone, cable and telex services are good.

For your free time the Netherlands offers a wide and varied tourist program. Make sure that you visit one of the beautiful museums; Amsterdam has the famous Rijksmuseum contain-

ing the largest collection of Rembrandts in the world and the Stedelijk Museum with its modern aesthetic beauty. A canal tour is another must; tours run every hour during the mid-April to mid-October season. For a real treat, try the distinctive menu at one of the many Indonesian restaurants throughout the country. The hot, spicy "rijsttafel" is wonderful, especially with a refreshing glass of cold Dutch beer. Amsterdam is justifiably famous for its night life; the Leidseplein is where it's at! Even if you do not have appointments in Rotterdam, it is worth a visit just to see the amazing port—an array of loading cranes fill the horizon. The Peace Palace in the center of The Hague is a highlight of a visit to this city.

If you are considering exporting to the Netherlands for the first time, your best approach is to send information on your product to our office. We will investigate the opportunities and select suitable Dutch importers, agents and buyers. When an interested importer

has been found, your next step is to send him complete descriptive literature, c.i.f. Rotterdam prices and, if possible, a sample of your product. It may take some time for the Dutch firm to reply to your initial correspondence because it must first assess the local market. Please send us a copy of your letter so that we can do the necessary follow-up. You may then receive a trial order. No matter how small it is, don't complain! The Dutch have an old saying, "De cost gaet voor de baet uit", meaning that you have to spend money first to make profits later. Payment against documents or sight draft are the normal terms used in the Netherlands. We can supply a status or credit report on local firms. If opportunities for your product look good, you should certainly consider a visit. There is nothing better than a firsthand look at the market and personal contact with representatives and buyers. Remember we are here to assist you in selling Canadian goods and services. See you soon, in the Netherlands.

Selling Pharmaceuticals in Sweden

The Swedish market for pharmaceuticals today is a sophisticated one—a far cry from the days when the best selling spring tonic was a mixture containing ground moose brains. Production of pharmaceuticals began in 1913 and 40 local and 170 foreign firms now have products on the Swedish market. Six companies and their subsidiaries account for the majority of domestic production. Vigorous expansion is continuing mainly because of export demand; shipments abroad have risen from about \$2 million in 1950 to about \$40 million in 1968.

Drug consumption in Sweden has been rising by about 10 per cent a year and now stands at \$200 million, or about \$25 a year for each member of the population. About half of the pharmaceuticals sold are made in Sweden, 40 per cent are imported, and the remaining 10 per cent consists of miscellaneous preparations. Seventy five per cent of the total turnover is drugs ordered by prescription and more than 90 per cent of these are pharmaceutical specialties.

Because of its medicare plan, the Swedish Government has a direct interest in seeing that drug costs are kept down. This is one of the reasons why it grants monopoly selling rights to the Association of Swedish Pharmacies, which in turn is held responsible for the quality of the drugs,

prices and service its 560 members offer. Pharmaceutical manufacturers are responsible for the quality of their own products and a state-owned laboratory carries out a continuous quality-control check on all pharmaceutical specialties. None of these can be sold without approval as well from the Board of Social Welfare.

Canadian exporters of both finished pharmaceuticals and the raw materials for their production should be interested in selling in Sweden, though opportunities in the raw materials field are probably the more promising. A number of the large drug producers do buy raw materials abroad and import duties are negligible. Imports of finished pharmaceuticals, however, are also rising and Canadian shipments of these to Sweden nearly doubled in 1968 over 1967—from \$79,000 to \$135,000. Antibiotics, vitamins, biological products for humans, and veterinary medicine feed supplements were the main commodities sold.

There are two main problems in entering this market: the strong position that local manufacturers hold and the lengthy registration process. Usually the Swedish firm wishing to import the product undertakes to look after this registration. It must submit to the Board of Social Welfare samples of the drug, with as much data as possible on its characteristics and side

effects. The cost of the preparation must also be justified. If the application is approved, the product is assigned a registration number. There is no limit on these and about 3,000 numbers are already in existence. Approval for preparations similar to those already on the market is also sometimes granted.

There are five drug wholesalers in the country, all of whom are connected either directly or indirectly with local manufacturers. In addition ACO, a firm owned by the Association of Swedish Pharmacies, sells directly to retail outlets. Individual pharmacies are free to buy from any source, provided that the registration requirements have been complied with.

Canadian companies which would like to introduce their products into Sweden might, as a first step, study the prices shown in a current issue of *European Chemical News*. This should help them to determine which of their products are most competitive. They should then send ten sets of descriptive literature, plus prices and samples if possible, to the Commercial Counsellor, Canadian Embassy, Stockholm. Copies of correspondence with Swedish firms should also be sent to the office so that it can follow up.

E. C. H. SHELLY
Assistant Commercial Secretary, Stockholm

Hong Kong

Our Commercial Officer in Hong Kong outlines how Canadian firms can participate in tenders called by the Hong Kong Government and by public utilities.

BERNARD W. H. YEUNG
Commercial Officer, Hong Kong

The Hong Kong Government procures its requirements through a central agency known as the Department of Government Supplies. Its activities extend to the maintenance of furniture in government offices, quarters and official residences, and the administration of the sand supply monopoly.

In 1967, the Department of Government Supplies issued 6,121 tender inquiries and some 51,609 tender forms. This resulted in the placing of 49,741 orders, worth Cdn.\$25.1 million, for 113,167 items for stock and client departments. These orders were placed through the Crown Agents in London, Washington and Tokyo, through the local agents of manufacturers in all parts of the world and—for some Hong Kong products—directly with the producers. The products the Stores Department has purchased include such a great variety that only some of them can be mentioned for information and reference. (These are listed on page 23.)

With the exception of some purchases from the Crown Agents, supplies are subject to competitive tender. At the same time, details of requirements are forwarded to resident official trade representatives of Commonwealth and other countries. Canadian firms are therefore given an equal opportunity to participate in government tenders and to compete with local or international suppliers.

How can a Canadian firm best approach this important buyer? The following points are important to bear in mind.

Issuing tenders—Government tenders, regardless of value, are issued either locally (to agents of overseas manufacturers or local manufacturers), or overseas (through the Crown Agents in London, Washington or Tokyo), or locally and overseas (usually only for high-value tenders).

Invitations to submit offers—This depends on the class of the tender: that is, if it is restricted to known and registered suppliers; public, that is, advertised in the newspaper and gazette; or overseas—through the Crown Agents. Invitations to submit offers are issued to known suppliers who have registered with the Department of Government Supplies or the Crown Agents, usually as a result of previous experience with particular agencies or manufacturers. For local public tenders, there is no restriction on who may request copies of tender documents. None the less, offers from unknown suppliers are vetted carefully before acceptance.

Registration of suppliers—Manufacturers or authorized agents may request registration as suppliers with either the Director of Government Supplies or the Crown Agents. After their credentials have been examined, these suppliers are normally considered for future requirements.

Submitting offers—Unless tenders are issued overseas through the Crown Agents in London, Washington or Tokyo, or locally and overseas (usually for high-value tenders), they are issued on a restricted basis locally. This depends on previous purchasing of the product required. Tender documents clearly indicate the name and address of the office to which offers should be submitted. Tenders issued by the Crown Agents must be returned to their offices and not directly to Hong Kong unless the Crown Agents instruct otherwise. In most cases, the Crown Agents have to forward the offers received to the Stores Department by the closing dates specified on local tenders. Consequently, they have to set the closing dates of their overseas tenders a week or so earlier. However, if extensions are required, they will be considered sympathetically and tenderers are advised of changes.

Offers may be submitted by firms or agents not domiciled in Britain but they must be submitted either through a local agency in Hong Kong or through one of the Crown Agents' overseas representatives. Crown Agents' tender documents differ from those of the Government Supplies Department. But the relevant specifications, general and/or special conditions of contract would apply, subject to modification in shipping, payment and other local requirements.

Canadian manufacturers interested in submitting offers for future tenders issued by the Hong Kong Government should apply to the Crown Agents in London or Washington for registration. However, it is recommended that Canadian firms work through a Hong Kong agent so that their interests are represented on the spot and tenders are acted upon quickly. The local agent must, of course, be registered with the Department of Government Supplies.

The office of the Department of Industry, Trade and Commerce in Hong Kong can effectively assist a Canadian firm in obtaining a first-rate agent in the Colony. Inquiries should be addressed to the Senior Trade Commissioner, Office of the Canadian Trade Commissioner, P & O Building, 11th Floor, P.O. Box 126, Hong Kong.

The Hong Kong office forwards copies of the Hong Kong Government tenders to the Department of Industry, Trade and Commerce in Ottawa for circulating to interested companies, and follows up with the Supplies Department on behalf of the Canadian bidders.

As a major Far East trading center, Hong Kong has grown and flourished and so have the public utility corporations in the Colony. Every year, ferries and buses carry over 830 million passengers. Trams carry another 200

million and ferries transport three million vehicles across the harbor. The Hong Kong telephone exchange can now be connected through Cable and Wireless Ltd. with more than 80 countries, and over 27 direct international telegraph circuits are operating with various countries. The local telephone company is keeping up-to-date with the latest technical developments in the telecommunications industry and is always carrying out field trials. One particularly interesting trial deals with a distribution cable which has foam insulation with a core filled with petroleum jelly. Last year, the local telephone company also went out to international tender for exchange equipment.

However, considering the historical background of Hong Kong and the fact that all local public utility corporations have had well-established connections in Britain, it is and will be difficult for new firms to make them change their sources of supply and to compete in international tenders. To penetrate the market gradually and effectively, **Canadian companies would do well to send, from time to time, catalogues and data sheets on their new equipment to the Hong Kong public utility corporations and ask them for their comments.** By doing so, we can make them aware of the special features and high quality of Canadian products and also keep the Canadian firms informed of local requirements. When an international tender is called,

Canadian manufacturers should ensure that their offers conform strictly to the tender specifications, that their prices are competitive, and that their delivery dates are favorable. These are the important factors that make an offer acceptable.

The Hong Kong Government and the public utilities corporations are important importers with which Canada has done business in the past. Their potential should not be overlooked by Canadian firms interested in developing export markets.

Stores Department Purchases

Products imported from:

Canada—Road-marking paint, laminated sheets, toilet paper rolls, metal measuring tapes and rules

Malaysia—Liquid chlorine

Singapore—Floor wax, steel pipes and specials, asbestos cement pipes and fittings

United States—Refrigerators, radio equipment, vehicles

Australia—Hardwood sleepers, carpets, duplicating paper, filing equipment, liquid emulsion, floor polish, voltage switchboard

South Africa—Copper sulphate, circuit breakers, ethyl alcohol

Switzerland—Drugs, surveying equipment

France—Helicopter spares, camera equipment

Japan—Tires and tubes, steel sheets and plates, uniform materials, explosives, PVC pipes, galvanized steel tubes, pebbles, door closers, sulphate of alumina

Holland—Drugs, PABX, dictating machines

West Germany—Printing machines, drugs, typewriters, salt water pumps, brass stop-cocks, cameras

People's Republic of China—Stoneware pipes, tires and tubes, medical dressings, sanitaryware, bamboo and rattanware, bricks, builders' hardware, toilet paper

Taiwan—Hydrated lime

Belgium—X-ray films, chemicals

Italy—Drugs, ventilation fans

India—Punched cards, tires and tubes

Norway—Radio equipment

Kuwait—Furnace fuel oil

Hungary—Sanitaryware

The Hong Kong Government has also purchased a considerable variety of goods manufactured in Britain and the Colony.

International Loans Announced

Accra is to get a dependable water supply and a sewerage system. A credit equivalent to U.S.\$3.5 million to the Republic of Ghana by the International Development Association (IDA) will help finance the foreign exchange cost of extending the water distribution system in the capital city of Accra and the neighboring port of Tema, and the installation of a sewerage system in Accra. The water supply project will use surplus water available north of the capital at the Kpong waterworks. The sewerage installations will meet acute problems of collection and disposal and will lay the foundation for a modern, expandable system in Accra. Total cost of the project is estimated at \$5.9 million. The project will be administered by the Ghana

Water Sewerage Corporation and procurement will be through international tender.

A leading Latin American printing and publishing firm, Editorial Codex Sociedad Anonima of Buenos Aires, will receive a \$5 million loan and a \$2 million equity from International Finance Corporation (IFC), affiliate of the World Bank, to expand production and enlarge and modernize its selling methods in a development program with total costs equivalent to \$25.7 million.

Editorial Codex, established in 1944, is owned by Argentines and has more than 3,600 full-time and 1,950 part-time employees. Its export sales in 1968 were ap-

proximately \$6 million out of total sales of \$17 million. It produces a wide variety of books and magazines on art, history, natural sciences, technology, food and the home, as well as textbooks, encyclopedias and dictionaries.

The company's printing, binding, storage and shipping facilities will be enlarged, integrated and consolidated in a single plant at Martinex, on the outskirts of Buenos Aires. Part of the loan will also supply working capital to finance expansion of sales in Spanish and Portuguese speaking countries, based on large-scale introduction of computerized marketing techniques and on intensification of traditional selling methods.

Jengka Triangle

Canadian companies have won the contract to manage this big forest development in Malaysia. This should result in excellent opportunities for our forest equipment producers.

DOUGLAS LINDORES

Acting Commercial Secretary, Kuala Lumpur

Three Vancouver companies are embarking upon a \$12 million project to establish a model forest industries complex in the heart of West Malaysia. The agreement for developing the Jengka Triangle, an area of approximately 150,000 acres of virgin jungle, was signed in mid-September between MARA (Majlis Amanah Ra'ayat), the Malaysian Government Council of Trust for the Indigenous People, and Cantrans Services (1965) Limited, a Canadian development company.

The Jengka Triangle project is an ambitious program of land clearing to be carried out by Malaysia's Federal Land Development Authority and made possible by a World Bank loan. The cleared land is to be planted with rubber and oil palm trees and distributed to landless small farmers. The development of villages, roads, power and water supply, and palm oil and rubber processing plants is an integral part of the program.

The three Canadian companies have definite roles in the project. Cantrans Services Ltd. will undertake the overall legal, purchasing and administrative functions for the project. Logging is the responsibility of Charnell International Consultants Ltd., and the processing of the logs in terms of sawmill, plywood and veneer mills, dry kilns, and impregnation and moulding plants will be under the control of S. G. Gardiner Engineering. As training is an important element of the project, MARA will appoint local counterpart officers corresponding to the three senior Canadian positions of project manager, logging manager and manufacturing manager.

The initial master planning study of the Jengka Triangle project was submitted to the Malaysian Government in 1967. At the time, it was noted that large quantities of valuable merchantable timber would have to be

removed in the course of land clearing. The study recommended that a forest industries complex be established to log, process and market the timber. It was to consist of a large-scale logging operation, sawmill, plywood and veneer factory, and perhaps a pre-fabricated housing plant.

MARA was assigned the responsibility of establishing the industry to use the Jengka wood resources, because one of its prime responsibilities is to assist the Malays in entering the mainstream of the economy. The Malays constitute the largest ethnic group in the country, 52 per cent, but the Chinese, 35 per cent, have traditionally dominated the economy. The project's personnel training aspects were equally as important to MARA as the financial exploitation of the wood resources. MARA was eager to develop within the Malay community the necessary logging and processing skills to sustain the project and to provide a nucleus for similar endeavors elsewhere in the country. MARA's undertaking in the Jengka Triangle is the first major Malay venture in the traditionally Chinese-dominated forest industry.

MARA then conducted an international competition for proposals for the development of this complex. A consortium of Canadian firms operating under the name of Cantrans Services (1965) Limited carried out extensive investigations of the area to ascertain the logging and processing requirements. The resulting Canadian proposal was an extremely thorough one. It provided for the design of all the necessary logging and processing functions, the procurement of all equipment required, the supervision of construction of all facilities, the technical management of the project for a period of several years, and an extensive training program for Malaysian personnel in Malaysia and Canada.

Following the consideration of all international and local proposals, MARA decided late in 1968 that the Canadian submission, which was both complete and realistic, would form the basis for operations in the Jengka Triangle. Since late 1968 the Canadian companies and the Malaysian Government have carried out a series of negotiations in which certain concepts of the project have been somewhat modified, but the over-all goal of developing a profitable, modern, integrated forest industry complex under the direction, management and operation of Malays has been retained. The contract calls for immediate implementation of the report and Cantrans personnel are already on the ground laying out factory sites and developing logging plans.

The economic benefits of this forest development will be substantial. The industry can achieve high rates of return on invested capital and will in addition form the basis for a modern Malaysian forest industry of a size capable of competing in world markets. It will develop substantial revenues for state and federal governments in the form of royalties and taxes, and will provide direct employment for between 1,000 and 1,500 people in the logging and manufacturing operations.

The Jengka Triangle project is certainly the most attractive current opportunity for Canadian producers in Malaysia, but it is by no means the only one. Operations in West Malaysia tend to be small and under-capitalized by North American standards, partly because of small and short-term timber concessions. The Government and the private sector are aware of some of the industry's weaknesses, and a major reorientation could occur over the next decade. Even now, several landholders have extensive logging concessions which allow them to de-

velop the industry on a scale more familiar to North American producers. Some North American companies are negotiating with these large land-owners for joint ventures in the forest industry.

In West Malaysia, the Canadian international Development Agency is about to embark on a master planning study for the Pahang Tenggara region, an area of 2.5 million acres of virgin jungle. Forest potential in this area is tremendous. It is certain that the resulting development plan will recommend the establishment of a large-scale forest industry. The opportunity for future sales in the area is great.

In East Malaysia, and particularly in the state of Sabah, several large integrated operators such as Kennedy Bay Timber Co. (Weyerhaeuser), Sabah Timber Co., Wallace Bay Timber Co. and North Borneo Timber Co. have purchased Canadian equipment in the past and offer good potential for sales.

Canadian producers should step up their efforts to sell equipment in the Malaysian market. Tendering for the Jengka Triangle project will be carried out on an international basis. Designs and specifications will allow Canadian producers to bid on the project requirements. It is unlikely that any comparable opportunity to enter this market will occur again. Canadian manufacturers will have to be extremely competitive on prices, which should be the lowest possible, because there are no sales commissions or costs other than the expenses of submitting a tender. Spare part and other future sales will make such an effort well worthwhile.

The Jengka Triangle provides Canadian manufacturers with an ideal entry into a rapidly growing market, a market with significant growth potential over the next decade. Major manufacturers should visit Malaysia to ascertain at first hand the requirements of the market and the opportunities.

Companies wishing to have their names placed on tender lists for the Jengka Triangle project should write to: D.D. Dyck, Purchasing Officer, Cantrans Services (1965) Ltd., 1744 West Broadway, Vancouver 9, B.C., or to Douglas Lindores, Acting Commercial Secretary, Canadian High Commission, P.O. Box 990, Kuala Lumpur, Malaysia.

1. Y. B. Senator Ghafar bin Babe, Minister of Rural Development for Malaysia, and I. G. Pyper, Managing Director, Cantrans Services (1965) Limited, shown signing the Jengka Triangle agreement in Kuala Lumpur.

2. Also photographed at the signing were (left to right) D. P. Lindores, Acting Commercial Secretary, Kuala Lumpur; Frank Wilfert, Vice-President,

S. G. Gardiner Engineering Ltd.; I. G. Pyper, Cantrans' Managing Director; Enche Osman bin Mohd. Sham, Director of MARA, and G. S. Shortliffe, Acting High Commissioner for Canada.

3. The need for new and more efficient forest equipment in the Jengka Triangle is shown by this picture of a winch lorry, World War II vintage.



Agriculture

Argentine farmers are increasing plantings of corn and sorghum at expense of wheat; closing of British market to unboned beef will affect meat exports in coming year.

S. E. KIDD

Assistant Commercial Secretary, Buenos Aires

Agriculture accounts for some 20 per cent of Argentina's GNP and 90 per cent of all foreign exchange earnings. Over half of the earnings in the agricultural sector come from exports, mainly of beef and grain. In addition, about 25 per cent of the labor force is engaged in agriculture. Thus, the well-being of the economy is dependent on a vigorous agricultural sector and the continuous movement of agricultural products into export markets.

Argentina's total farm area is estimated to be about 185 million hectares* of which 140 million hectares are grazed or planted to crops. However, 110 million hectares of this area are in natural pasture and most of this is in the arid and infertile Patagonian plateau and other areas of southern Argentina, and only about 40 million hectares of natural pasture can be

considered good grazing land. About 10 million hectares are in improved pasture while 20 million hectares are planted to crops. The average farm is under 400 hectares in area, although there are a few of more than 100,000 hectares. Almost 80 per cent are under 200 hectares but these cover only 10 per cent of the total farm area.

Cattle raising and grain production are centered on the rich alluvial soils of the Argentine Pampa that covers the eastern half of central Argentina from the Atlantic Ocean to the hills of Cordoba in the west and the barren plains of the provinces of La Pampa and San Luis in the south. This region produces 90 per cent of Argentina's cereal production, forage crops (82 per cent), oilseeds (78), and beef cattle (75).

The most important grain crop is still wheat and Argentina is one of the

world's major exporters. But there is a strong increase in corn and sorghum production at the expense of wheat. In 1968/69, corn production totalled 6.9 million metric tons compared with the lower-than-normal production of wheat at 5.9 million metric tons. Grain sorghum production was a record 2.4 million metric tons. Depending on the condition of pastures, significant quantities of the cereal crops, particularly corn, sorghum, oats, barley, and rye, are often fed to cattle. For instance, in 1968/69, almost one-quarter of the corn crop was foraged. The wheat crop suffered heavy damage from extreme heat in December of 1968 as harvesting was about to begin. The crop was a very disappointing 5.9 million metric tons. As a result, Argentina was forced to import wheat for its domestic requirements, as export commitments had been made. To date, 175,000 tons of wheat have been imported and more

*One hectare equals 2.471 acres.



Cattle raising and grain production are the two most important facets of Argentine agriculture, and wheat and meat rank high among the country's exports. Last year exports of Argentine beef declined by over 110,000 metric tons; wheat crop was small.

may be required before the new crop is harvested this December.

Grain exports in 1968 totalled 6.4 million metric tons including 2.3 million tons of wheat, 2.9 million tons of corn and 0.5 million tons of sorghum. The chief markets for Argentina's wheat are Brazil, Italy and Peru, while corn is exported mainly to Italy and Spain. The main sorghum markets are Belgium and Holland.

Sunflowerseed is the most important of the oilseeds with production in 1968/69 estimated to be 880,000 metric tons; flaxseed production totalled 530,000 tons. Soybean production is small but increasing rapidly, and there is a market for tung oil in a number of international markets including Canada. Peanut production is declining.

The marketing of grains and oilseeds is the responsibility of the National Grain Board (Junta Nacional de Granos), a government organization with functions ranging from grain inspection and quality control to the operation of terminal elevators. Day-to-day prices for grains and oilseeds are established on the open market. But the Government establishes minimum and support prices for the major grains and oilseeds each crop year.

The cattle population of Argentina was estimated to be 51.5 million head in June 1968. Conditions are ideal for cattle raising throughout the Pampa and also in the large areas of northeastern Argentina. However, productivity is low and the cattle population has not increased significantly in the last ten years. The sheep popu-

lation is concentrated in Patagonia and other areas of the south and totals just under 50 million head.

The per capita consumption of beef in Argentina is among the largest in the world at about 90 kilos a year. However, export markets are declining. Britain, traditionally the best customer for Argentine beef, has prohibited imports, effective October 1, 1969, unless the beef has been boned before shipment. This is because foot and mouth disease is endemic in Argentina. In addition, shipments to the EEC have been hurt by growing trade barriers. The total slaughter of beef cattle in 1968 amounted to about 13 million head. However, exports fell to 356,000 metric tons, compared with 470,000 metric tons in 1967, primarily because of the closing of the British market

ARGENTINA'S AGRICULTURAL PRODUCTION

Product	10-Year Average 1958/59—1967/68		1967/68		1968/69	
	Area	Production	Area	Production	Area	Production
	'000 hectares*	'000 metric tons	'000 hectares*	'000 metric tons	'000 hectares*	'000 metric tons
Cereals						
Wheat	5,598	6,803	6,613	7,320	6,680	5,900
Corn	3,592	5,607	4,473	6,560	4,604	6,900
Sorghum	1,160	1,247	1,841	1,897	2,147	2,440
Oats	1,353	728	1,193	690	1,299	490
Rye	2,451	511	2,286	352	2,500	360
Barley	1,091	736	882	588	1,011	556
Oilseeds						
Flax	1,188	678	711	385	887	530
Sunflower	1,183	716	1,194	940	1,362	880
Tung	51**	107**	50	137	—	—
Peanut	298	328	294	283	249	250
Soya	12	12	23	22	31	32
Fruits						
Apples	—	449	—	470	—	433
Pears	—	100	—	112	—	102
Citrus	—	847	—	1,079	—	1,305
Vegetables						
Potatoes	191	1,660	169	1,797	210	1,967
Onions	13	194	16	217	20	226
Industrial crops						
Tea	28	49	29	68	29	88
Grapes	257	2,360	291	2,540	298	2,062
Tobacco	49**	45**	65	59	—	—
Cotton	550	—	307	—	426	—
(Whole)	—	343	—	230	—	304
(Fiber)	—	107	—	72	—	96
Sugar Cane	247	10,792	195	9,470	—	—

* One hectare equals 2.471 acres

**1957/58—1966/67

to Argentine beef from December 1967 to mid-April 1968. The traditional exports of chilled and frozen beef quarters were 52 per cent less than in 1967, but exports of processed items increased considerably. The value of export shipments, therefore, fell only 15 per cent. In 1968 Canada imported 5.2 million pounds of canned corned beef from Argentina and shipments of cooked frozen boneless beef began this year.

The Government has recently set up a full-time veterinary meat inspection service. Vaccination of cattle against foot and mouth disease is compulsory three times a year. A decree was recently signed making the vaccination of sheep also compulsory. The National Meat Board (Junta Nacional de Carnes), a government organization, has wide regulatory powers which include establishing meat grading standards, minimum export prices, export control procedures and so on.

Several pasture improvement programs are under way and the areas sown to forage crops are increasing each year. In 1967, Argentina imported 1.3 million pounds of forage seeds from Canada.

The bulk of summer fruit production is on irrigated lands of the Mendoza and the upper valley of the province of Rio Negro. About 90 per cent of the country's fresh fruit exports are made up of apples and pears from this region. The 1967/68 summer fruit crop was somewhat lower than the record production of the previous year but the quality of the fruit was good. The production of apples and pears is

estimated to have been 469,000 metric tons and 111,800 metric tons. Fruit exports in 1968 totalled 14,841,458 boxes with an average weight of 20 kilos each. This was the largest value of fruit exports in Argentina's history. The chief markets were Brazil (48 per cent), West Germany (19), Holland (18), and Sweden (7). Apples accounted for 80 per cent of total fruit exports and pears 15 per cent.

A good potato crop of almost two million metric tons was harvested in 1967/68. Argentine imports a considerable amount of Canadian seed potatoes each year, especially the Kennebec variety. In 1968 imports from Canada amounted to 18 million pounds.

Tea production was a record 88,000 metric tons in 1968/69 as a result of favorable weather conditions in the northern province of Misiones where most of the crop is grown. Canada imported 1.1 million pounds of tea from Argentina in 1968. Whole cotton production in 1968/69 was 304,000 metric tons compared with the ten-year average of 343,000 metric tons. It is estimated that 96,000 metric tons of pure fiber will be produced. High quality long-fiber cottons are imported from Peru and elsewhere to supplement domestic production.

Tobacco production in the northern provinces is increasing significantly. The indigenous black tobaccos still account for the bulk of production and exports but golden tobaccos are becoming more important. Virginia tobacco is now the main variety produced in Argentina. Production in 1967/68 amounted to 61.6 thousand metric tons.

Some 13.8 thousand metric tons, mainly the black varieties, were exported to France, Germany, the United States and other markets.

When the Argentine peso was devalued in 1967 a series of variable export retention taxes were applied to a range of grains and oilseeds and meats and meat products. The use of this tax was effective in forcing exporters to adjust their prices in line with the devaluation and also in stabilizing prices on the domestic market. The export retention taxes were initially set at 25 per cent for most products, but have been adjusted downward since. Some export taxes have been eliminated altogether, while others are now at a level of some 6 per cent. In addition to the export retention taxes, a wide range of exports of both agricultural and non-agricultural products are subject to a series of fixed export taxes, generally amounting to about 5 per cent. Apart from this somewhat elaborated export tax structure, the marketing of agricultural products is basically free of government intervention.

There are not too many bright spots in the agricultural sector in Argentina. Prices for livestock and crops are often not remunerative and do not encourage the level of investment which is necessary for the most efficient production. In addition, Argentine exports are facing growing impediments to agricultural trade in certain European markets. None the less, the potential for production, particularly of livestock and feed grains, is good. Although the outlook for the near future may be gloomy, the more distant perspective is much brighter.

Glasgow Opens New Market

A new eight-acre covered fruit and vegetable market was recently opened on Blochairn Road in Glasgow, Scotland. It is the second largest in Britain after Covent Garden and one of the most modern of its kind in Europe. Canadian exporters of apples, onions, carrots and other vegetables will greet this development enthusiastically.

Incoming shipments to Glasgow, whether they are packed on pallets or loaded in containers, will be handled more efficient-

ly and economically because the market has the most modern off-loading equipment in the world. Ocean-freight containers and even railway cars can be moved into any of the 86 individual stands, each 24 feet wide and 90 feet deep. Some of the larger firms are renting the equivalent of four units in order to have their fruit, vegetables and flowers in three separate sections under the same roof.

The Glasgow market handles more than \$60 million worth of business a year and

will serve over four million people from Wick in the north of Scotland to Newcastle and Carlisle in the north of England. The Corporation of Glasgow owns and administers it and all the premises are on lease.

The trade in Scotland still welcomes good quality Canadian red apples. With the new market, Scottish buyers are well equipped to receive shipments of other Canadian fruit and also of vegetables.

Foreign Tariffs and Trade Regulations

The British Government has announced that the Import Deposit Scheme is to be extended for another year, until November 1970. The rate of deposit, however, is reduced from 50 per cent to 40 per cent. Under the British Import Deposit Scheme, the British importer, or his agent, is required to post the required percentage deposit with H.M. Customs at the time of import. British Customs holds the deposit for six months, then refunds it on a non-interest paying basis.

In recent Central Bank circulars, Chile has eliminated prior import deposits on certain foods and many other goods considered essential. All items previously subject to prior deposits of 10 and 20 per cent are now exempt. For items that remain subject to deposit requirements the rates have been reduced as follows: from 50 to 30, from 100 to 60, from 200 to 120. Further information on specific commodities is available from the Latin American Division, Office of Area Relations, Department of Industry, Trade and Commerce, Ottawa.

Metric markings of weights and measures are to become compulsory in South Africa from January 1, 1970.

Following is a list of proposed metric quantities that, if officially implemented, will be acceptable after the new regulations become effective. The list outlines suggested prescribed metric quantities and details the commodity, the units in which they are to be packed, commencement date, and final date. The commencement date is the date after which it will be permissible for metric units to be used. The final date is the date after which these goods must comply fully with the requirements for metric markings. Although this information should at this stage be considered tentative, the South African Department of Weights and Measures has advised that radical departures from the proposed dates are unlikely. The South African authorities are currently considering metric markings that will apply to industries not covered in the list below.

Commodity and Pattern	Date Commencement	Final
Bird seed 200, 500 g., 1.2, 5, 10, 20, 50 kg.	1/10/69	1/1/70
Biscuits 25, 50, 75, 125, 250, 500 g., 1, 1.5, 2, 5, 10 kg. (100 g. pack is under consideration)	No dates yet decided	
Brake fluid, anti-freeze and automotive and chemical specialties 200, 500 ml., 5, 20, 200, 210 liters	1/10/69	31/3/70
Building and construction industry Target date for completion	31/12/73	
Butter 250, 500 g., 25 kg.	1/6/70	31/12/70
Jams and marmalades Until Europe metricates these packs, the following conversion pattern will apply: 20, 226, 340, 453, 680, 907 g., 3.628 and 22.68 kg. (M.A.B.)		
Cement 50 kg.	1/1/72	1/1/72
Chicken feed 1, 2, 10 kg.	1/10/69	1/1/70
Cottonseed 50 kg.	1/1/70	to be ascertained
Cotton wool 50, 125, 250, 500 g., 1 kg. and multiples of 1 kg.	1/4/70	
Dried fruits Up to 50 g. without declaration of mass, any mass between 50 and 125 g. with declaration of mass, 250, 500 g., 1 kg. and multiples of 0.5 kg. above 1 kg.	1/12/69	1/5/70
Edible fats (excluding margarine) 125, 250, 500 g., 5, 12.5, 25 and 160 kg.	1/5/70	1/5/70
Edible oils 250, 500, 750 ml., 1, 2.5, 5, 20, 50, 200 liters and multiples of 1 liter above 200	1/5/70	1/5/70
Edible nuts (in flexible packs only, not bottles) 30, 55, 100, 200, 500g., 1 kg. and further multiples of 1 kg.	1/6/70	1/6/70
Fertilizers (a) garden 5, 10, 20 kg. (b) agricultural 50 kg.	1/1/70 1/1/70	1/1/70 1/1/70

Commodity and Pattern	Date Commencement	Final
Liquid petroleum products 100, 200, 500 ml., 1, 5, 20, 100, 200, 210 liters, and bulk packings in multiples of 1 liter above 500 liters	1/1/70	1/1/70
Hand-knitting yarns 10, 25, 50 g. with multiples of 50 g. packed in 100 and 500 g. boxes/bags/ packets	5/1/70	to be as- certained
Industrial chemicals (a) Capacity packs Any quantity up to and including 10 ml., then 20, 50, 100, 200, 500 ml., 1, 2, 5, 20, 50, 100, 200 l. Bulk volumes 500 ml. and above in multiples of 1 liter	1/1/70	
(b) Solids (i) When packed in standard capacity drums to the nearest kg./g.	1/1/70	
(ii) When packed in flexible contain- ers, any mass up to and including 10 g., then 20, 50, 100, 200, 500 g., 1, 2, 5, 10, 25, 50, 100 kg.	1/1/70	
Invoicing Petroleum industry—in metric units	1/7/70	
Lime 10, 25, 40 kg.	1/4/70	
Paint Any quantity up to 125 ml., 250, 500 ml., 1, 5, 20 and 200 liters	1/10/69	1/7/70
Peas, split peas, pea flour, lentils Soup mix 200, 500 g., 1, 2, 5, 10, 20, 50 kg.	1/10/69	1/7/70
Pipe tobacco 25, 50, 100 g., 5, 15 and 40 kg.	1/1/70	30/6/70
Potatoes, seed 15 and 30 kg. Potatoes 15 kg.	1/8/69	
Refined petroleum products—sold by mass 0.5, 5, 15, 50 and 180 kg. (prepacked only, not petrol pumps)	1/1/70	1/1/71
Rice, beans 200, 500 g., 1, 2, 5, 10, 20, 50 kg.	1/10/69	1/1/70
Rice meal and bean meal 100, 200, 500 g., 1, 2, 5, 10, 20, 50 kg.	1/10/69	1/1/70
Road traffic 60 km/h in urban areas —120 km/h in rural areas	1/4/71 end 1972	
Salt 0.5, 1 and 50 kg.	1/10/69	1/1/70

Commodity and Pattern	Date Commencement	Final
Tea and coffee (a) instant coffee and chicory mixture Any mass up to and including 50 g., 100, 250, 500, 750 g., 1 kg. and multiples of 0.5 kg. to a maximum of 50 kg.	1/1/70	1/1/71
(b) pure instant Any mass up to 25 g., 62.5, 125, 250, 600 g., and multiples of 0.5 kg. to a maximum of 50 kg.	1/1/70	1/1/71
(c) ground coffee (including mixture) and tea Any weight up to and including 25, 50, 100, 200, 500 g., 1 kg., and multiples of 0.5 kg. to a maximum of 50 kg.	1/1/70	1/1/71
Textiles Target date to have metrication completed in this industry	31/12/72	31/12/72
Tot measure 25 ml. (50 ml. to be referred to as double tot)		
Unsweetened condensed milk 170, 410 g., 1 kg. and multiples of 1 kg. (merely change of label)	1/6/70	1/6/70
Wine and spirits Any quantity in multiples of 1 ml. up to and including 50, 200, 375, 500, 750 ml., 1, 1.5, 2.25, 2.5, 4.5 and 5 liter with the proviso that it be en- deavoured to have the 2.25 eliminated	1/7/70	

International Loan Announced

Growing congestion in East African Community ports will be eased by the expansion and modernization of the two chief ports at Dar es Salaam in Tanzania and Mombasa in Kenya with the help of a \$35 million loan from the World Bank. The increased capacity of the ports will provide for the continuing economic development of the member states of the Community, Kenya, Tanzania and Uganda, and neighboring landlocked countries. Two general cargo berths at each port, capable of handling container traffic as it develops, are planned. At Mombasa, a wharf for handling bulk grain and cement will be built. Three general cargo berths at Dar es Salaam, now under construction with the assistance of an earlier Bank loan, will be completed, and a new offshore tanker mooring and submarine pipeline will be built. At both ports existing berths and stacking areas will be renovated and re-equipped. The loan will assist in financing the \$58.3 million East African Harbors Corporation's development program for 1969-72 and will be administered by that organization.

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

H. Vogel, Commercial Officer in Duesseldorf:

Victoria: November 9-10

Vancouver: November 12

Edmonton: November 13-14

Regina: November 17

Winnipeg: November 19

Toronto: November 20-26

Halifax: November 27-28

Saint John: December 1

Montreal: December 3-5

Pakistan

J. E. G. Gibson, Commercial Secretary in Islamabad:

Montreal: December 8-10

Toronto: December 11-12

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).

J. E. G. Gibson

Commercial Secretary
Islamabad, Pakistan
December 1-5

In Territory

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

Barbados

D. J. McJanet, Assistant Commercial Secretary in Port-of-Spain, Trinidad, will visit Barbados November 20-22.

Bolivia

M. R. Bell, Commercial Secretary in Lima, Peru, will visit La Paz early in December.

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.

Costa Rica

Officers of the Guatemala City office will visit Costa Rica as follows:

J. D. Tennant, Assistant Commercial Secretary, November 10-15.

A. L. Lyons, Assistant Commercial Secretary, February 2-7.

Cuba

T. F. Harris, Commercial Counsellor, and A. D. McArthur, Assistant Commercial Secretary, in Mexico City will visit Cuba November 4-December 1.

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

Officers of the Guatemala City office will visit El Salvador as follows:

W. Kuhn, Commercial Officer, November 17-22.

S. G. Tregaskes, Commercial Counsellor, November 24-29.

J. D. Tennant, Assistant Commercial Secretary, March 16-20.

Guyana

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

D. Hobson-Garcia, Commercial Officer, December 1-5.

J. M. C. Lavoie, Assistant Commercial Secretary, January 26-30.

D. J. McJanet, Commercial Secretary, February 16-20.

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

Honduras

S. G. Tregaskes, Commercial Counsellor in Port-of-Spain, Trinidad, will visit Honduras February 23-28.

Indo-China

M. Lemieux, Assistant Trade Commissioner in Hong Kong, will visit Laos November 15-22, South Vietnam November 22-December 1, and Cambodia December 1-6.

Leeward Islands

J. M. C. Lavoie, Assistant Commercial Secretary in Port-of-Spain, Trinidad, will visit Dominica, Antigua and St. Martin November 10-14.

Nicaragua

Officers of the Guatemala City office will visit Nicaragua as follows:

S. G. Tregaskes, Commercial Counsellor, November 24-29.

W. Kuhn, Commercial Officer, January 26-31.

Pakistan

M.H. Jafri, Commercial Officer in Islamabad, will visit Karachi December 15-19.

Panama

Officers of the Guatemala City office will visit Panama as follows:

A. L. Lyons, Assistant Commercial Secretary, November 30-December 6.

S. G. Tregaskes, Commercial Counsellor, January 11-15.

Trinidad

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

North Trinidad

J. M. C. Lavoie, Assistant Commercial Secretary, December 2.

D. J. McJanet, Commercial Secretary, February 25.

South Trinidad

J. M. C. Lavoie, Assistant Commercial Secretary, November 27.

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

The Ocean Freight Market

Industrial Traffic Services Division

Dry-cargo charter freight rates in some Canadian trades, notably the transatlantic and transpacific grain trades, tended to rise while rates in certain other trades, particularly the transatlantic coal and scrap iron and steel trades, showed a tendency to ease in the third quarter of 1969. Average charter rates in most Canadian trades were higher than those in the second quarter and, in a number of dry-cargo trades, were also higher than those in the corresponding quarter of 1968.

In the coal trade from Hampton Roads to Japan, fixtures were reported for cargoes ranging up to 90,000 tons each, with rates in this trade dropping to a level of \$4.95 per ton. Indian Government charterers booked tonnage for the movement of heavy grain from the St. Lawrence at a steady rate of 102s.6d. per ton. The normal pattern of seasonal activity in chartering was observed in the grain trade from Churchill to Britain and the Continent. On the Pacific Coast, rates for grain shipments to Japan remained relatively

stable at around \$8.50 per ton during the quarter.

On the basis of fixtures reported for Northern Range discharge, chartering activity in both the Caribbean and Persian Gulf sectors of the tanker market remained fairly moderate but steady throughout the quarter. The tanker rate for black oil from the Caribbean to United States North Atlantic ports varied between Intascale minus 10 per cent and Intascale minus 30 per cent during the quarter.

Charter Rates—Third Quarter 1969

The rates shown in column A are in sterling or U.S. dollars with the Canadian dollar equivalent in column B calculated at £ = \$2.58 and U.S.\$ = \$1.08. For comparison the rates

a year ago are shown in column C with the Canadian dollar equivalent in column D calculated at £ = \$2.56 and U.S.\$ = \$1.07. The rate schedule does not necessarily represent all char-

ter movements to or from Canadian ports since details of certain fixtures are not published.

Time Charters

The classes of motor ships indicated have been selected as representative for the purpose of illustrating time

charter rates. Average rates per dead weight ton per month for the third quarter of the year were as follows:

	Third Quarter 1969		Third Quarter 1968	
	A £ or U.S.\$	B Cdn.\$	C £ or U.S.\$	D Cdn.\$
General Trading (approximately 4 to 12 months)				
11,000-15,000 dwt. 13-16 knots.....	3.93	4.24	3.85	4.15
15,000-20,000 dwt. 13-16 knots.....	3.90*	4.21	3.60*	3.88
20,000-30,000 dwt. 13-16 knots.....	2.69	2.90	2.68	2.89
30,000-40,000 dwt. 13-16 knots.....	2.09	2.26	2.63	2.84

Trip Charters

Average rates for the third quarter of the year were as follows:

	Third Quarter 1969		Third Quarter 1968	
	A £ or U.S.\$	B Cdn.\$	C £ or U.S.\$	D Cdn.\$
Heavy Grain (per long ton)				
St. Lawrence to Britain.....	37s. 3d.	4.84	40s.0d.	5.12
St. Lawrence to Belgium/Holland.....	2.97	3.20	2.50	2.68
St. Lawrence to Portugal.....	6.63	7.15	.....	.....
St. Lawrence to Spain.....	5.50	5.93	.....	.....
St. Lawrence to West Germany.....	2.90*	3.13	.....	.....
St. Lawrence to Italy.....	7.08	7.64	6.42	6.87
St. Lawrence to France.....	6.13*	6.61	.....	.....

*One fixture only reported.

	Third Quarter 1969		Third Quarter 1968	
	A £ or U.S.\$	B Cdn.\$	C £ or U.S.\$	D Cdn.\$
St. Lawrence to Tunisia	7.05	7.61		
St. Lawrence to India	102s.6d.	13.32		
Churchill to Belgium/Holland	3.93	4.24	4.37	4.68
Churchill to Britain	46s.8d.	6.07	49s.5d.	6.43
Churchill to Norway	28.00	4.26		
	(Nw.Kr.)			
Great Lakes to Britain	75s.1d.	9.76	61s.8d.	7.90
Completing St. Lawrence	36s.6d.*	4.74	32s.3d.	4.11
Great Lakes to Belgium/Holland	6.28	6.78	5.68	6.08
Completing St. Lawrence	3.23	3.49	2.96	3.17
Great Lakes to Japan	12.83	13.84	14.00*	14.98
Completing St. Lawrence	10.00	10.79	10.25*	10.97
Great Lakes to Venezuela	9.78	10.55	9.08	9.72
Great Lakes to German North Sea	7.49	8.08		
Completing St. Lawrence	2.70	2.91		
Great Lakes to West Germany	6.42	6.93	5.55	5.94
Completing St. Lawrence	3.50	3.78	2.58	2.76
Great Lakes to Spain	8.00*	8.63	7.16	7.66
British Columbia/North Pacific to Japan	8.43	9.10	7.85	8.40
British Columbia/North Pacific to Philippines	8.62	9.30	9.13	9.77
British Columbia/North Pacific to South Korea	7.11	7.67	7.56	8.09
British Columbia/North Pacific to Taiwan	9.75*	10.52		
British Columbia to Belgium/Holland	5.20	5.61	5.50*	5.89
Coal (per long ton)				
Hampton Roads to Japan	5.85	6.31	6.47	6.92
British Columbia to Japan	3.70*	3.99		
Oilseeds (per long ton)				
British Columbia to Japan	7.38	7.96	7.11	7.61
Scrap Iron and Steel (per long ton)				
U.S. North Atlantic to Japan	10.98	11.85	10.86	11.62
St. Lawrence to People's Republic of China	132s.0d.*	17.16	160s.0d.	20.48
California to Japan	6.25*	6.74	4.35	4.65
Great Lakes to Japan	11.61	12.53	14.54	15.56
Great Lakes to South Korea	13.05	14.08		
Great Lakes to Spain	12.35	13.33		
Sulphur (per long ton)				
British Columbia to east coast of India	11.05	11.92		
British Columbia to west coast of India	11.35*	12.25		
British Columbia to Taiwan	6.15	6.64		
British Columbia to New Zealand	58s.9d.*	7.63		
Fertilizers (per long ton)				
British Columbia/North Pacific to India	12.03	12.98		
Potash (per long ton)				
British Columbia to Belgium/Holland	5.50*	5.93		
British Columbia to South Korea	4.30*	4.64		
British Columbia to U.S. North Atlantic	3.20*	3.45		
Iron Ore (per long ton)				
St. Lawrence to Japan	5.50*	5.93		
St. Lawrence to Britain	24s.0d.*	3.12		
Petroleum Coke (per long ton)				
Great Lakes to Belgium/Holland	7.15	7.71	6.73	7.20
Oil Black (per long ton)				
Venezuela to Portland, Maine	1.87	2.00	2.45	2.62
Persian Gulf to Portland, Maine	6.25	6.74	8.97	9.60
Venezuela to east coast of Canada	2.61	2.82	3.39	3.63

*One fixture only reported.

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 .92.

To convert column two, divide by .92.

Country and Currency	Value of		Country and Currency	Value of	
	foreign currency unit in Canadian dollars at October 21	Canadian dollar in foreign currency units		foreign currency unit in Canadian dollars at October 21	Canadian dollar in foreign currency units
Algeria Dinar	.1939	5.15	Denmark Krone	.1433	6.98
Argentina Peso (free)	.0030	333.33	Dominican Republic Peso	1.078	.93
Australia Dollar	1.202	.8319	Ecuador Sucre (official) (free)	.0599 .0536	16.72 18.65
Austria Schilling	.0417	23.98	El Salvador Colon	.4308	2.32
Bahamas Dollar	1.055	.94	Fiji Pound	1.232	.80
Belgium and Luxembourg Franc	.0215	46.51	Finland Markka	.2568	3.89
Bermuda Pound	2.578	.38	France, Monaco, etc. ² Franc	.1928	5.18
Bolivia Peso	.0906	11.06	Franco-African Republics ³ Franc	.0038	263.15
Brazil Cruzeiro (official free)	.2566	3.89	French Pacific ⁴ Franc	.0106	94.3
Britain Pound	2.578	.38	Germany D Mark	.2889	3.46
British Honduras Dollar	.5384	1.87	Ghana New Cedi	1.056	.94
Burma Kyat	.2266	4.42	Greece Drachma	.0359	27.93
Ceylon Rupee	.1809	5.52	Guatemala Quetzal	1.079	.93
Chile Escudo (bank rate) (free)	.1098 .0960	9.10 10.41	Guyana Dollar	.5395	1.85
China, Republic of New Taiwan Dollar (official)	.027	37.04	Haiti Gourde	.2154	4.64
Colombia Peso (fixed)	.062	15.87	Honduras Lempira	.5384	1.85
Congo (Kinshasa) Zaire	2.154	.4651	Hong Kong Dollar	.1779	5.62
Costa Rica Colon	.1625	6.15	Hungary Forint (official)	.0921	10.85
Cuba ¹ Peso	.....	.....	Iceland Krona (official)	.0123	81.96
Czechoslovakia Koruna	.1498	6.68	India Rupee	.1421	7.03
			Indonesia ⁵ Rupiah	.....	.....

Country and Currency	Value of		Country and Currency	Value of	
	foreign currency unit in Canadian dollars at October 21	Canadian dollar in foreign currency units		foreign currency unit in Canadian dollars at October 21	Canadian dollar in foreign currency units
Iran Rial	.0142	70.42	Peru Sol (free)	.0248	40.65
Iraq Dinar	3.019	.33	Philippines Peso (free)	.2750	3.63
Ireland Pound	2.575	.38	Poland Zloty (fixed basic rate)	.2700	3.71
Israel Pound	.3077	3.24	Portugal & Colonies ⁶ Escudo	.0375	26.66
Italy Lira	.0017	588.23	Saudi Arabia Riyal	.2066	4.84
Jamaica Dollar	1.284	.77	Sierra Leone Leone	1.502	.66
Japan Yen	.0030	333.33	Singapore Dollar	.3525	2.85
Kenya Shilling	.1526	6.55	South Africa Rand	1.504	.66
Lebanon Pound (free)	.3338	2.99	Spain & Dependencies Peseta	.0155	64.93
Malaysia Dollar	.3525	2.85	Sweden Krona	.2086	4.79
Mexico Peso	.0863	11.60	Switzerland Franc	.2502	3.99
Morocco Dirham	.2164	4.69	Syria Pound (free)	.2819	3.55
Netherlands Florin	.2997	3.33	Thailand Baht (free)	.0523	19.15
Netherlands Antilles Florin	.5710	1.75	Trinidad & Tobago ⁷ Dollar	.5392	1.85
New Zealand Dollar	1.204	.82	Tunisia Dinar	2.055	.48
Nicaragua Cordoba	.1542	6.50	Turkey Lira	.1198	8.34
Nigeria Pound	3.003	.33	United Arab Republic Pound (official)	2.480	.40
Norway Krone	.1509	6.63	United States Dollar	1.076	.92
Pakistan Rupee	.2266	4.42	Uruguay Peso (free)	.0043	232.56
Panama Balboa	1.079	.92	Venezuela Bolivar (official free)	.2403	4.17
Paraguay Guarani (free)	.0086	116.28	Yugoslavia Dinar (official)	.0863	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 Mauritania, Niger, Senegal, Upper Volta, Camerons, Togoland, and Malagasy. Also Reunion, Comoro Islands, St. Pierre 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.

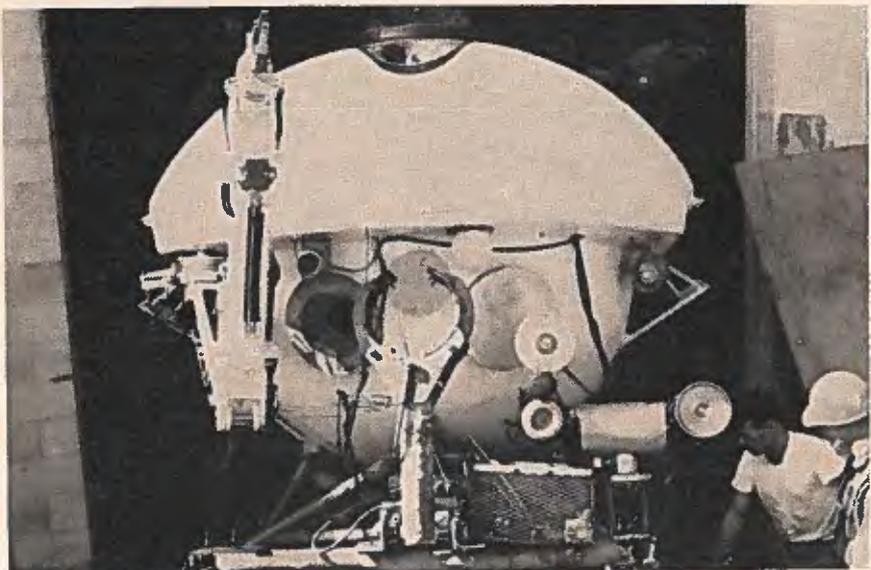
6. Approximately same rate for Portuguese territories in Africa.

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

Man in Cold Water

By the early part of 1968, it was quite clear that more formal arrangements were needed to encourage the interchange of knowledge on new developments in oceanology. Canada has some 33,000 miles of ocean coastline and well over a million square miles of continental shelf. Ad hoc meetings are not the most effective way to exploit a growing body of scientific information on such a vast subject or to promote Canada's capability. Companies involved in oceanology in Montreal and Toronto therefore got together towards the middle of the year with the encouragement of the Department of Industry, Trade and Commerce, and set up a steering committee. In January 1969, the Canadian Association of Marine Equipment Industries was formed and it asked the Canadian Manufacturers Association to provide management services. Among the products which Canadian industry has to offer are offshore drill rigs; oceanographic vessels; Pisces submersibles; cold-water diving suits; decompression chambers; underwater camera housings; oceanographic winches and floating crane barges; measuring and data collection devices; underwater mining equipment, and marine plant harvesting machinery. Most of the companies in this field are also engaged in the production of more traditional marine equipment or instruments for the aerospace industry.

At the same time that the industry was organizing its association, a group of scientists and engineers at McGill University was busy, again with the help of the Department, preparing for a wide-ranging conference on oceanology. M. J. Colpitts of the Aerospace, Marine and Rail Branch undertook the task of coordinating the arrangements and in May this year the first "Man in Cold Water" conference took place. The main topics were exploration for and the development of mineral and fuel resources such as fisheries, and underwater transportation in ice-covered waters. There was also an exhibition of underwater hardware at McGill but it was not a trade show in the usual sense. Exploitation of Canadian undersea resources in the future will owe a lot to the work of the oceanographers who have charted the seabed. The Canadian Committee on Oceanography (which co-ordinates the activities of ten federal



Pisces I underwent sea trials a few years ago. *Pisces II*, ashore, displays T.V. cameras and a chipping hammer used to obtain samples from the ocean floor; a variety of instruments can be carried. The submersibles are manufactured by International Hydrodynamics Co. Ltd. of Vancouver. A *Pisces II* was sold to the Shipbuilding Division of Vickers Limited in Britain. International Hydrodynamics has also set up a subsidiary in California to fabricate submersibles.

government agencies) estimated that Canada spent some \$41 million on basic and applied ocean research in 1967. Taking government and the thirty-odd industrial and university groups together, there are some 700 engineers and scientists engaged in this field.

Another "Man in Cold Water" conference is planned for 1970 and preparations are

already well in hand. Canadian representatives are also playing an active part in conferences in Europe (Mr. Colpitts was invited to make a presentation on Canada's program at Oceanology International '69 at Brighton, England) and in the United States. It's a young science and there are plenty of opportunities for men with keen minds and companies with advanced technological capability.

Yes, women wear them in Switzerland and often they are Canadian-made. Sales of brassieres and bandeaux-bras made in Canada to the Swiss last year totalled over \$156,000. At a fashionable department store in Berne, Mrs. O. Vorlich, Commercial Assistant in the Trade Commissioner's office in Berne, (right) discusses some of the features of a Montreal bra line with a sales supervisor.

Last year, Canadian brassieres were sold in 34 countries and these sales brought in \$528,000. That's small stuff compared with our zooming sales of other apparel, particularly to the United States. But it's still an interesting facet of Canadian trade.



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