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FOREIGN TRADE

DEPARTMENT OF TRADE AND COMMERCE, OTTAWA

Profile of an In-Store Promotion

Irradiation Around the World

The Soviet Power Industry

Foreign Trade Service Abroad

FOREIGN TRADE

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Profile of an In-Store Promotion

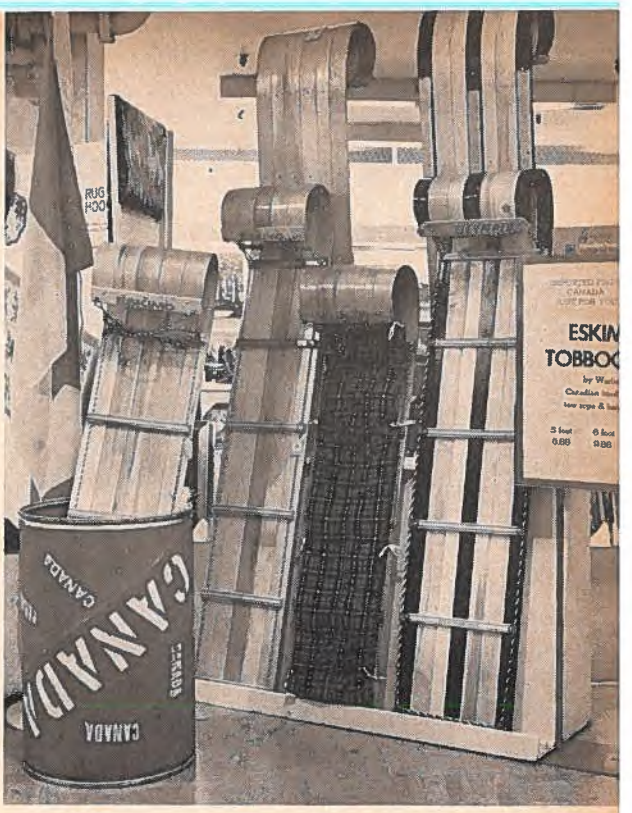
THE FIRST IN-STORE PROMOTION in a United States department store to be sponsored by the Department of Trade and Commerce was held at the Wurzburg Company in Grand Rapids, Michigan, in October 1965.

Michigan's second city, Grand Rapids is a prosperous industrial centre of 400,000 midway between Detroit and Chicago. The Wurzburg Company is its leading merchandiser and prides itself on being a pace setter in the community. The main store, with 300,000 square feet of selling space, is located at the city's principal intersection. The store management considers it an ideal locale for test-marketing new products and prides itself on the active promotion with which it normally backs new lines. For these reasons, Wurzburg's was chosen by the Department of Trade and Commerce as the place to try out this export promotion technique.

Canadian consumer goods up to this time had been relatively unknown in Grand Rapids. Wurzburg's carried three lines but was not really making buying trips into Canada nor was it conscious of Canadian capabilities.

During the spring and summer of 1965 the merchandise manager and 19 buyers spent a total of 60 buying days in Winnipeg, Toronto and Montreal. They examined the lines of about one hundred Canadian manufacturers suggested by the Department. Buyers were instructed to purchase only those Canadian products that seemed in every way potentially competitive with traditionally-stocked U.S. lines. Trial orders totalling $113,000 were placed with sixty newly discovered Canadian sources. Reorders valued at $25,000 were left with the three existing Canadian suppliers.

The *Canadian Festival* was staged on the ten shopping days from October 11 through October 23. This was



an ideal time for a promotion because it was midway between the back-to-school and the Christmas seasons. An estimated 100,000 people visited the store. On Monday morning, October 11th, to the skirl of bagpipes blown by two members of the Essex and Kent Regiment of Windsor, Ontario, the official opening took place outside the main door. Senator Ross MacDonald, former Speaker of the Canadian House of Commons, told the curious crowd in the best trade-promotion language just why Canada was in Grand Rapids and what we hoped to do. Following remarks by the Mayor of Grand Rapids and the President of Wurzburg's, the doors were thrown open and Monday morning shoppers were piped into the store. Each of Wurzburg's windows featured exclusively a co-ordinated display of Canadian merchandise set against Canadian themes. Canadian flags flew over the store for the two weeks.

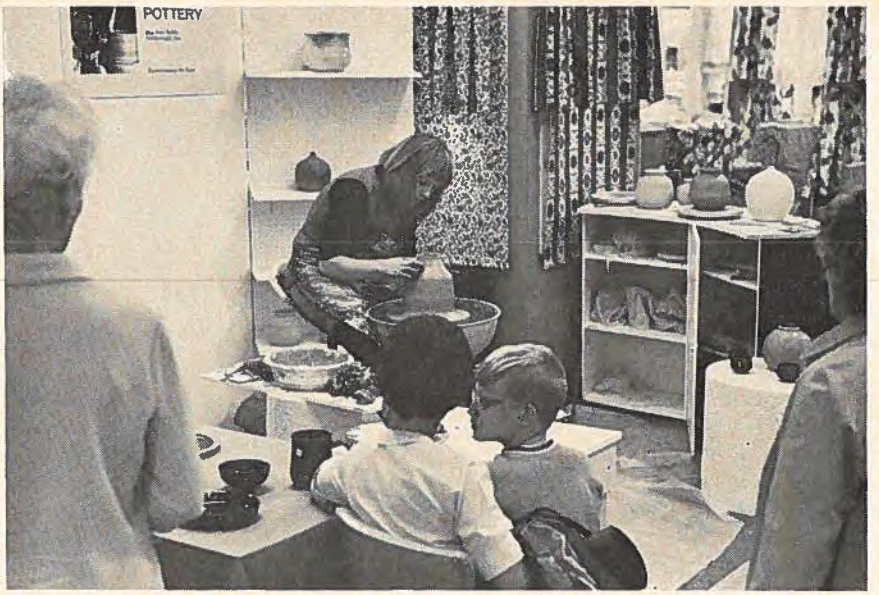
The 63 Canadian lines were spread throughout every department on the six selling floors. Every article bore special Canadian tags and every counter had distinctive festival posters featuring a stylized maple leaf emblem created specifically for the event. Ookpiks of all descriptions were seen everywhere. Fashion shows were held every day in the women's wear departments.

On the ground floor, the Canadian Government Travel Bureau set up shop and during the two weeks signed up 30,000 Grand Rapidians for a chance on a trip for two to Quebec's Winter Carnival. Kits on Canada were subsequently mailed to each entrant.

On each of the five floors above, beside the escalator, a Canadian artisan demonstrated his craft and samples of his wares. The wood-carver, basket-weaver, hand-hooker, weaver and potter were always surrounded by interested crowds.

In a small auditorium on the top floor, an island display of Canadiana depicted our history, anthropology, and culture by means of graphics and works of art. A representative of the Canadian Government Exhibition Commission conducted formal tours through this popular display.

In the first floor restaurant, where 500 luncheons are served every day, a large sign announced the one Canadian dish that was featured each day. Every province and territory had its



day and the chef coped admirably with his Canadian specialties. Demand for the recipes necessitated an emergency printing and resulted in 300 copies being picked up each day. Some slight confusion arose about geography. But although it may be argued that Winnipeg Goldeyes are not normally native to New Brunswick, the effect created couldn't have been better.

Grand Rapids' single newspaper (with a circulation of 200,000) carried one or more imaginative full-page ads each day, showing in turn the complete range of products featured at the Festival. Smaller ads and stories supported these. All the advertising copy was bilingual and so was all the point-of-sale material throughout the store, for although little French is spoken in Grand Rapids, it was felt that the bilingual touch would enhance the appeal of Canadian goods.

A Trade Publicity Officer from Ottawa was most successful in arranging a variety of supporting publicity. The artisans in particular became well-known television and radio personalities and in several hours of programming brought greater awareness of Canada to the area. Meanwhile the pipers skirled on in and out of the store and any visitor to downtown Grand Rapids could hardly have been unaware that something was afoot.

The opportunity presented by Wurzburg's Canadian Festival for market testing an almost unpenetrated new sales territory resulted in at least eight new Canadian lines becoming available at Wurzburg's on a continuing basis. Twenty-two buying days have been spent in Canada since the Festival, bringing follow-up orders of $65,000. On a yearly basis, new business as a result of the promotion should approximate $75,000. Wurzburg buyers now will fly regularly to Winnipeg for women's outerwear, to Toronto for men's clothing, and to Montreal for accessories.

In retrospect, Canadian lines that were successful in Grand Rapids sold not because they were "imported" or because there was any price advantage but because they were competitive, distinctive, and in many instances of superior quality. The Wurzburg Canadian Festival demonstrated once again the market waiting in the United States for Canadian manufacturers enterprising enough to go after it and willing to cater to U.S. customers.

—H. S. HAY
Consul and Trade Commissioner, Detroit.

Brazil Plans for Development

Brazil has no formal comprehensive development plan at the present time, but a Ten Year Plan is being drawn up. Basic industries will receive priority, and this may provide export opportunities for Canadians or possibly openings for joint ventures or licensing.

C. M. FORSYTH-SMITH, *Commercial Counsellor, Rio de Janeiro.*

SHORTLY AFTER the Revolutionary Government came to power in April 1964, the Program of Economic Action (PAEG) was published and this provided the basic guidelines for the development of the economy in 1965 and 1966. This document attempted to pinpoint and analyze the areas within the economy presenting the most pressing problems, and to outline steps necessary to correct these.

The four main problems tackled under this emergency program were inflation, economic stagnation, external insolvency and the breakdown of labour discipline. The program was principally concerned with action that the Government proposed in the public sector to further its policies for economic progress and stability. The main emphasis was on financial policy, international economic policy and social productivity, which includes wages, agrarian reform, housing, and education.

The over-all objective was to lay the foundations for future growth by providing stable conditions, adequate public services, and a climate in which private business could flourish. The program was not a development plan in the usually accepted sense, although some production targets were set for certain government and semi-government industries, such as power development, petroleum production and refining, coal production and highway improvement. In the private field the plan was indicative only but did provide for the establishment of various forms of incentives to encourage industrial growth and exports.

Ministry of Planning's Role

The Ministry of Planning is responsible for the co-ordination of planning procedures, the establishment of priorities in both the government and private sectors, and the formulation of the Ten Year Plan. There are plans covering almost every aspect of the economy, prepared by various government, semi-government and private entities, but so far there has been no real co-ordination. In fact, there have been duplications and conflicts due to lack of a clear-cut delineation of responsibilities. Some of the organizations involved, besides the Planning Ministry, are: BNDE (Banco Nacional de Desenvolvimento Economico—National Economic Development Bank); various state government entities interested in the development of individual states; federal agencies responsible for the development of particular regions of the country or segments of the economy, and government, or semi-government corporations involved in productive, extractive, or service industries.

Control by the Planning Ministry over the implementation of the various plans has largely been confined to the authorization or refusal of requests for use of foreign exchange or foreign credits for specific programs. This has been done in co-operation with the Finance Department and the Central Bank. The Ministry is also influential in decisions related to development loans from government lending agencies. In other words, there has so far been no central direction of development programs; projects have tended to originate at the grass roots and their implementation has been dependent on ad hoc decisions based on the relative political or persuasive talents of the promoters. The Ten Year Plan is to bring more order to the rather haphazard planning procedures now followed.

Ten Year Plan

The Ten Year Development Plan currently under preparation is the first attempt in Brazil to develop a long-range economic strategy. It will be an extremely comprehensive one, encompassing all phases of the economy, public, mixed and private. Emphasis will be placed on the public (federal) sector, which will have an active program including: administrative reform; wages policy; fiscal, budget and accounting systems, and the establishment of a national system of statistics. It will deal with subsidies, employment, population, monetary policy, the capital market, and international economic policy. Planning will cover infrastructure, agriculture, industry and mining.

The Plan will emphasize that planning is a continuous process with a control and revision system forming an integral part. Medium-term plans of five years and one-year plans will be incorporated in the over-all planning procedure.

In the public or mixed public-private sectors, where the Government owns the whole or part of the means of production, there will be estimates of future demand, domestic supplies and imports. For these sectors the Plan will include investment programs and the assignment of priorities to projects. There will be no production or investment goals laid down for the private sector. The Plan will be confined to the presentation of market trends

and the use of fiscal credit and tariff policies to guide private investment into desirable channels and to offer inducements.

Priorities for Capital

No formal priorities have yet been established, but a tentative priority list for foreign financing during the next two years totals about $1 billion. The emphasis appears to be on electric power generation and distribution; road, rail and sea transportation; telecommunications; petrochemicals; aluminum, cement, steel, agriculture, health, education and general infrastructure improvement. It therefore appears that those sectors to which priority is to be given are those in which Canada is generally well qualified to follow up opportunities.

Industrial Development Banks

Brazil is a developing country and does not yet have sufficient means of capital accumulation from private sources. It must rely heavily on the services of industrial development banks to fill this void. There are numerous industrial development banks, all owned by the Federal or State Governments, and many fairly recently formed. Their function is to encourage the establishment of new industries and the expansion of existing ones. Generally they supplement private sources through loans, loan guarantees or equity participation. In some instances where equity has been taken, it is sold to the public and in a few recent instances sold back to the industry concerned after it has become established. In this way the bank's funds are freed for use in fostering further development.

Some of these banks, such as the BNDE (National Economic Development Bank), are well-established organizations with extensive facilities and highly trained personnel, and they receive, in addition to the government funds at their disposal, loans from outside sources, such as AID and the Inter-American Development Bank (IADB). Many of the smaller state-owned banks, however, suffer from lack of funds and competent staff. Recently legislation has been passed authorizing the establishment of private industrial development banks, but none has yet been organized.

Foreign Aid

During the past two years Brazil has received large injections of foreign finance from various sources and this is expected to continue. In 1965 foreign aid loans, credits and rescheduled debts amounted to some $1 billion. Principal sources were United States AID, International Monetary Fund, IADB, IBRD (International Bank for Reconstruction and Development), loans from United States and European banks, the Export-Import Bank, the U.S. Treasury, a German Government loan, and rescheduled repayments of suppliers' credits. Bilateral trade agreements with foreign countries, notably in Eastern Europe, also helped to expand the credit base. Some of the arrangements negotiated in 1965 will carry over into 1966 and subsequent years. Private foreign investment in Brazil in 1965 is estimated by the Brazilian authorities at about $78 million, but may be somewhat less. The extent of suppliers' credits in 1965 is unknown, but it was probably in the vicinity of $100 million.

Brazil has continued to receive credits and loans of various types during 1966, and the total should be roughly the same as in 1965. These include a $125 million loan from the IMF, a $150 million balance-of-payments loan from AID, a $49 million loan from the World Bank for power generation, $85 million in project aid from AID, a $30 million loan from the Export-Import Bank, $65 million in loans under PL 480, and a $25 million housing loan from U.S. trade unions.

Private foreign investment in 1966 is expected to increase substantially as international confidence increases. The Investment Guarantee Agreement signed in 1965 between the United States and Brazil has sparked renewed interest by U.S. companies in investing in Brazil. Total private investment should amount to between $100 million and $150 million in 1966, most of it from the United States.

Canada and Brazil

The Canadian Development Loan Trust Fund for Latin America, administered by the Inter-American Development Bank, is available to finance the provision of Canadian goods and services for economic, education, and technical projects requested by Latin American governments through the Bank. Last August, the fund was increased to $30 million. ECIC is prepared to consider short- and medium-term insurance and limited amounts of Section 21A long-term financing in support of business obtained by Canadian exporters.

Canada is still the largest individual foreign investor in Brazil, principally due to the very large holdings in Brazilian Light & Power. The Aluminum Company of Canada, Massey-Ferguson and a few other companies also have manufacturing operations, and there are a number of Canadian companies with affiliates or branch offices in Brazil. No private Canadian investments have recently been made in Brazil.

Prospects for Canadian Exports

The improvement in Brazil's international credit standing and the promised successful stabilization of the economy should make it considerably more attractive to Canadian industry in the future. Brazil's rapid progress in industrialization justifies thorough study by companies wishing to expand internationally on the basis of wholly-owned subsidiaries, joint ventures or manufacture under licence.

In recent years, commercial relations between Canada and Brazil have been progressing slowly but now the medium-term prospects appear bright. The implementation of the Ten Year Plan with its emphasis on power-generation and distribution, telecommunications and heavy industry should open up opportunities for Canadian engineering services, capital goods and equipment. ●

Dutch Agriculture Meets Changing Conditions

Almost half the Netherlands' purchases of farm products are used to feed livestock. Canada fills an important role in Dutch agricultural trade both as supplier and consumer.

F. W. ZECHNER,
Commercial Officer, The Hague.

THE DUTCH ECONOMY has changed rapidly and dramatically in the last three decades. A country of traders, farmers and fishermen by tradition, the Netherlands has developed into a predominantly industrial nation in a comparatively short time. Yet to the visitor it seems that agriculture still plays the leading role in Dutch economic life. This is not surprising, for most of the land not taken by cities, villages, industry, sports grounds, airfields, lakes, rivers and other waterways is used for farming. Any wasteland is cherished to provide recreation facilities for the 12.4 million Dutch huddled together on an area of 13,186 square miles.

Trend to Larger Farms

With the growing industrialization, agriculture has changed from a distressed segment of the economy before World War II into a highly mechanized and competitive industry. Approximately 9 per cent of the labour force is employed in farming on a total of about 200,000 holdings. This number has been declining at the rate of 3 per cent a year. When farm operators give up agriculture, the land is used partly for farming again and partly for non-agricultural purposes, especially recreation. As a result, the size of the average farm is increasing slowly.

Although the European Common Market is taking on more and more of the responsibilities of the national governments in farm policies, the Dutch Government spends larger sums each year on structural reforms. It hopes that through land consolida-

In the grassland areas of Holland, cattle are often transported from field to field or farm to farm by barges. Although this method is used a great deal, it is generally feasible only for short distances. Note in the picture the width of the waterway.

tion, improvement of soil, better roads and water control, efficiency and productivity in farming will continue to increase. This would, hopefully, offset anticipated declines in production because of abandonment of farms.

How important is agriculture in the over-all Dutch economy? The gross national product for 1965 is estimated at Can.$20.3 billion. Gross farm production last year rose to approximately $2.8 billion, or almost 13.8 per cent of this. Raw and processed farm products account for one quarter of total commodity exports ($7 billion in 1965) and 12 per cent of total imports, ($8.1 billion in 1965).

Dutch farmers provide a good portion of the raw materials that food processing, Holland's second most important industry, requires. Meat, milk, fruit and vegetables processed in the Netherlands have acquired an international reputation.

Field Crops

Field crops are raised on 35 per cent of the total cultivated area of 5.6 million acres and production of most of these does not cover all local requirements. Exceptions include potatoes, sugar beets, flax and seeds, but only 30 per cent of annual bread wheat requirements is produced domestically. Feed grains too are imported in large quantities; so are feedstuffs and oilseeds. Yields are among the highest in the world because of good soils and intensive use of fertilizers.

Dairying

Most cattle in the Netherlands are kept for milk production—grassland takes up 60 per cent of the farming area. Of a total herd of close to four million cattle, 1,750,000 cows produce an annual 16 billion pounds of milk. Approximately one third is sold as fluid milk and the remainder is processed by dairy plants. Because dairy production greatly exceeds market demand, a considerable amount is sold abroad. Holland leads the world as an exporter of condensed milk and cheese.

Horticulture

On the remaining farming area—5 per cent—a wide variety of horticultural items are grown: fruit, vegetables, flowers, flower bulbs, pot plants and nursery stock. Hothouse growing of vegetables, flowers and some fruits has expanded tremendously in the past decade. Although the area under glass may seem small (15,700 acres) compared with the total horticultural acreage (317,000 acres), it actually comprises one quarter of the world's greenhouse area and hothouse products account for 45 per cent of the total value of production in this sector. Here again, Dutch growers depend heavily on exports.

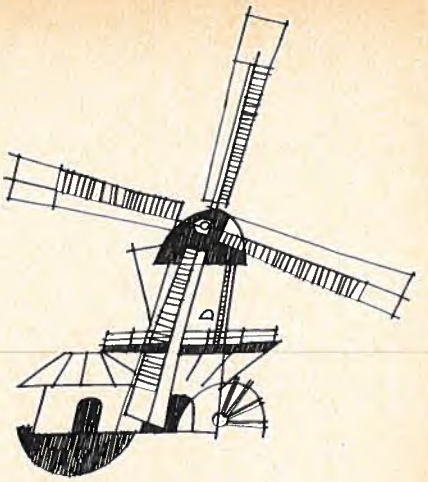
Meat and Eggs

The relatively large number of pigs (four million) and an extensive poultry flock (45 million) necessitate the import of millions of tons of feed grains. This situation is as unique as it is controversial. Although the available raw materials are far below the domestic requirements, an agricultural "conversion" industry has developed that meets a fair part of the European import demand for pork, poultry, meat and eggs. In addition, veal-calf raising has become a good source of income for many livestock farmers. Exports of veal and live veal calves are now among the principal meat sales abroad. Local beef production is based mainly on milk cows which are removed from the herd because they have outlived commercial milk production. There is not sufficient domestic production of beef and a comparatively large number of live cattle are imported for slaughter each year. These imports are, however, adequately compensated by substantial veal exports.

Naturally, the farming community in the Netherlands has its problems. These include the recurrent outbreaks of foot and mouth disease, the ever-rising costs of operation, the constant need for capital, and the changing economic and social conditions. Returns to farmers are not always satisfactory because of declining demand in export markets at a time of increased production. It is felt, however, that Dutch agriculture will lose little of its importance if it continues to search for improvement of farming techniques and increasing efficiency in marketing farm products.

Agriculture and Export Trade

Dutch exports of farm products rise sharply each year but cannot keep pace with the fast rise in over-all commodity exports. This explains why the



agricultural percentage has declined from 33 to about 25 in the most recent five-year period. The value of farm produce sold abroad in 1965 rose to Can.$1,662 million from $1,421 million in 1964. Sales of field crops—mainly peas, beans, flax, grass seeds and potatoes—totalled $290 million. Nearly $300 million worth of dairy products and $600 million of other livestock products were shipped to foreign markets.

Exports of horticultural products have shown impressive gains in recent years, from $285 million in 1960 to $472 million in 1965. Fresh vegetables constitute 47 per cent of this, flower bulbs 21 per cent, and flowers and fruit (fresh and processed) each 10 per cent. The remainder is made up of processed vegetables, nursery stock and garden vegetable seeds.

With a few exceptions, including condensed milk and whole milk powder, the Netherlands sells its farm products mostly to European markets, more specifically to Common Market countries. West Germany is the largest single buyer, taking almost one third of Dutch agricultural exports. The chief market outside the Common Market area is Britain, where the Netherlands competes with Canada in a number of food lines. The United States continues to be a large buyer of canned hams ($33 million in 1965, exactly equal to British imports of this item), and is the biggest outlet for Dutch bulbs outside Europe—over $13 million in 1965.

Imports Also Significant

Although it is an important supplier to world markets, the Netherlands is at the same time a significant buyer of farm products. (See Table

I.) Imports may be classified in three categories, based on the different needs of:

1. The "conversion" industry—feed grains, feeds, skim milk powder.

2. The processing industry—bread grains, meat, oilseeds, fats and oils.

3. The consumer market—meat products, grain products, cheese, fruit, vegetables, and prepared foods.

A small portion of imported farm products is later re-exported, mainly grains (corn), oilseeds (soybeans) and fats and oils.

Approximately 46 per cent of Dutch purchases of farm products from foreign sources in 1965 were made to supplement the small domestic production of raw materials required by livestock farmers for the production of pig meat, veal, poultry meat and eggs. In addition to feed grains and feeds—part of which are used as cattle feed—skim milk powder is now used extensively as a calf starter for veal production. Skimmed milk imports reached a peak in 1964, when 133,000 metric tons valued at $30 million were brought in. Stockpiling caused a 38,000-ton drop the next year, but it may be safely assumed that the Netherlands will remain an interesting market for this product.

The United States is the chief supplier of both bread and feed grains and skim milk powder. Canada has increased its sales of feed grains modestly in recent years, although they declined slightly in 1965. The rather substantial increase in feed imports (mainly fishmeal, oilcakes and meal) is partly the result of tremendous shipments of peas from the Soviet Union (232,000 metric tons), which the Russians offered at very low prices. All of it was used as livestock feed.

Because oilseeds production in the Netherlands is small, the crushing industry must buy its raw materials in the world market. On a fat/oil basis, 60 per cent of total imports is in the form of fats and oils; the remainder covers oilseeds, mostly soybeans, but also palm kernels, copra and flaxseed. Flaxseed oil is normally used for technical purposes. The bulk of soybean requirements comes from the United States; Canada sells fair quantities of flaxseed and some rape.

Unlike countries with a different industrial development, such as West Germany and Britain, the Dutch food industry can easily meet local requirements. It is obvious, therefore, that imports of prepared foods are comparatively small. With the continuously growing prosperity in the Netherlands, however, one may prophesy that Dutch imports of farm products will increase further, particularly prepared foods to satisfy the new demands of the affluent society.

TABLE I

NETHERLANDS IMPORTS OF FARM PRODUCTS

	1964	1965
	(Can.$million)	
Live animals (mainly for slaughter)	36	27
Meat and meat products	58	54
Dairy products	38	42
Grains	253	273
Grain products, including flour	16	17
Fruit and vegetables, including citrus fruit	130	151
Feedstuffs, except grains	126	164
Oilseeds	123	127
Fats and oils	70	92
Miscellaneous foods	15	21
Total farm imports	**876**	**968**
Total commodity imports	**7,662**	**8,106**

Trade with Canada

Official Dutch statistics indicate that total imports into the Netherlands from Canada rose by an unprecedented 40 per cent in 1965, but the increase certainly was not reflected in sales of farm products because these were only $600,000 higher. However, the statistics (see Table II) show an interesting shift in the order of importance of the agricultural products sold by Canadian exporters. Dutch imports of Canadian grains fell sharply from $11 million to less than $6 million because of substantially lower shipments of both wheat and coarse grains.

On the other hand, imports of Canadian skim milk powder (up $3 million), and oilseeds (up $2.5 million) rose sharply. Other increases include meat, feedstuffs not containing grains, and fats and oils, which offset lower sales of butter oil and nursery stock.

Dutch suppliers were able to increase their sales of farm products to Canada slightly last year. The biggest single item continues to be flower bulbs and other nursery stock; the remainder mostly covers traditional foods.

Opportunities to sell to the Dutch market have never been better than in the last few years. Of course, prices must be in line with those of suppliers in competing countries and other specific requirements must be met. But the current level of expenditure should be a guarantee of continued demand for imported foods. ●

TABLE II

DUTCH FARM TRADE WITH CANADA*

	Imports from Canada		Exports to Canada	
	(Can.$'000)			
	1964	1965	1964	1965
Meat and meat products	4	117	50	32
Cheese	—	—	859	917
Butter (oil)	575	—	—	360
Milk powder	308	3,249	8	12
Grains	11,053	5,909	—	—
Grain products	19	5	389	432
Fruit, fresh and processed	29	32	519	483
Vegetables, fresh and processed	9	19	579	654
Feedstuffs, except grains	97	340	42	17
Oilseeds	901	3,458	73	110
Fats and oils	47	791	—	112
Bulbs, plants, nursery stock, forage crop seeds	400	169	3,320	3,509
Prepared foods, n.o.p.	24	4	173	237
Farm products, total	**13,462**	**14,095**	**6,012**	**6,874**
Total foreign trade	**50,786**	**71,151**	**42,643**	**60,894**

*Dutch statistics.

The salesmen of Atomic Energy of Canada Limited, Commercial Products, often use fairs to show scale models of irradiators.

Irradiation Around the World

Gamma rays from Cobalt 60 have for a decade been the stock in trade of Atomic Energy of Canada Limited, Commercial Products. This company was an early leader in the international market for isotopes and irradiation equipment and is maintaining that lead.

F. A. COCKRAM,
"Foreign Trade".

THE LAST TEN YEARS have been good to Atomic Energy of Canada Limited, Commercial Products. The company, a pioneer in the use of radioisotopes in both medicine and industry, has seen its sales curve rise constantly since 1956. Sales in 1965/66 totalled $6.6 million compared with $1.5 million in 1955/56.

What are the reasons for this 500 per cent increase? First and foremost is the constant attention through research to finding new products and uses. This in turn leads to the development of a wide range of machines, radioisotopes and installations from which a prospective customer can choose. Many prototypes and production units, for example, have been designed since Commercial Products developed in 1951 the world's first cancer therapy unit using Cobalt 60. Today, four standard production units, the Theratron 80 and 60 and the Eldorado 80 and 60, are available for rotational and fixed-beam applications. All units are suitable for small-field curative therapy as well as large field palliative therapy but designs differ to accommodate installation problems such as available space and room shielding. Maximum convenience and safety, however, are all-important. Each sales agreement stipulates that the AECL servicing staff will supervise the setting up of each instrument and train local staff in its use. At last count 500 units had been installed in clinics in 45 countries including the United States, Saudi Arabia, India, Pakistan, Thailand, Poland, Rhodesia and Uruguay.

A short time ago, AECL supplied its 1,000th Cobalt 60 teletherapy source to Princess Margaret Hospital in Toronto. A few weeks later its 5 millionth curie of Cobalt 60 was shipped in a Gammacell Research Irradiator to Karlsruhe, Germany. These are significant examples of the tremendous strides by which the isotope and

irradiation equipment industry is growing—an industry which recognizes practically no boundaries. The success of AEC Commercial Products ably demonstrates its leadership in the use of atomic energy for peaceful purposes.

Commercial Sales

Commercial Products is responsible for developing, manufacturing and selling any products that can be marketed commercially.

Its activities include the development of diverse uses of radioisotopes—preserving food, improving textiles and wood products and sterilizing materials. In co-operation with other laboratories, it is carrying out research in such fields as biology and chemistry. One project involving both textiles and chemistry is the experimental irradiation of nylon fabric. AECL scientists have found that this type of material has greater tensile strength, higher acid resistance and lower water absorption than does ordinary nylon fabric.

The products developed from this kind of research are sold by a Canadian sales staff of 28, plus 35 agents around the world. In addition to the sales staff, the division's 350 employees include 66 in the development and design of units, 30 in chemical production (processing in Ottawa the irradiated radioactive isotopes from Chalk River Nuclear Laboratories NRX and NRU heavy water reactors), 135 in engineering production (including machinists and other tradesmen who make various units in the shops), and 71 in administration (accounting, personnel, purchasing and safety control).

Irradiation Comes of Age

Gamma-ray irradiation plants or units for commercial or scientific purposes are important in the company's sales picture. There are now eight industrial-sized plants in operation: three in Canada, three in the United States, and one each in Italy and New Zealand. Ethicon Incorporated, with plants in both Somerville, New Jersey, and San Angelo, Texas, is using Canadian continuous-flow production irradiators for sterilizing medical supplies. Ethicon's Peterborough, Ontario, plant is operating a batch-type irradiator for the same purpose; the Commercial Products division itself has a batch-type irradiator in Ottawa for doing custom irradiation and development work. Canada's third irradiation plant, owned by Newfield Products Ltd. of St. Hilaire, Quebec, is the world's only commercial installation irradiating food for the consumer market. Although potatoes are currently the only vegetable being irradiated, the Food and Drug Directorate of Canada's Health and Welfare Department has officially approved this process for onions as well. The effects of irradiation on fish, strawberries, mushrooms, poultry and eggs are now being studied in Ottawa.

Because irradiation lengthens the storage life of various foods, this program will probably become more and more important as the world's food problems increase. At the moment, Canada and the United States are conducting a joint program on the preservation of food by irradiation, including a two-year study of low-dose radiation pasteurization to double the present seven- to ten-day shelf life of poultry. This program is currently under way at Macdonald College near Montreal with the active co-operation of United States officials.

Operations Are Many and Varied

Commercial Products is the only company in its field which manufactures both radioisotopes and the machines they are used in, and out of its long-time experience it has designed and produced a comprehensive group of irradiators for both research and industry. These range all the way from low-capacity, small-chamber, self-shielded units suitable for student experiments at colleges to the huge and versatile source facility demanded by advanced laboratories. Besides the two families of irradiators, Gammacell and Gammabeam, custom units are designed and made to individual specifications. The Gammacell family consists of completely self-contained irradiators for use in laboratories; the three Gammabeam models are panoramic or beam port irradiators designed for research and development, pilot-scale programs and industrial batch or volume irradiation.

R. F. Errington, vice-president of Commercial Products, recently stated, "Gamma irradiation will become important in food preservation by extending the shelf life of many forms of produce, particularly through the reduction in weight losses of root crops during storage. Wider distribution of some fruits will be possible and radiation will extend the operating period for canning and jam plants. The shelf life of seafoods and freshwater fish will be extended by small amounts of radiation. Sterilization will eliminate the present costs of the extremely strict hygiene in plants, for the sterilization will be carried out after products are packaged under normal factory conditions. The preparation of vaccines and serums will be more economical; radiation will be adopted as an important initiator of chemical reactions."

Radioisotopes for medical and scientific applications are a continuing source of revenue for the company. Over 25 radioisotopes, from Bromine 82 to Zinc 65, are shipped all over the world each year, for many and varied uses. (Many of these are processed into solution form for easier handling.) Iodine 125, for instance, is used as a tracer in research and industrial processes; Mercury 197 is used in brain and kidney scanning; beta gauging in such industries as textiles and plastics is the role of Thallium 204.

Safe Shipping a Must

The regulations for shipping radioactive material vary slightly from country to country, and Canadian standards conform to foreign rules. They comply with the requirements of the Canadian Board of Transport Commissioners, the Bureau of Explosives in the United States, and the International Commerce Commission. Binding international rules are currently being negotiated through the International Atomic Energy Agency in Vienna; Canada is a member of this group. Foreign buyers must complete a standard export permit and provide proof of their capability to handle radioactive material safely before Commercial Products will send off a shipment.

Speedy and efficient delivery are hallmarks of the firm's operations. In the majority of instances, air freight is used to ship all processed radioisotopes but in urgent cases, air express is used. If the customer gives no shipping instructions, all orders are routed by the fastest way. The goods are sent either collect or prepaid as desired.

The company has arranged to clear routine radioactive shipments as quickly as possible through U.S. Customs at several points. Customers are advised to arrange for a customs broker to clear shipments at the nearest airport when the radioisotopes are shipped in bond. All users, both domestic and foreign, must have a valid licence to use radioactive products.

Fairs Important to Promotion

The firm's promotion campaign depends heavily on nuclear, medical and radiological fairs and meetings. An ordinary year will see it enter over 20 such events. Last year it exhibited at both the International Samples Fair in Barcelona, Spain, and the American Roentgen Ray Society in San Francisco; it will attend the International Special Exhibition on Clinical Chemistry in Munich, West Germany, later this year. At all major fairs, a full-scale cobalt cancer therapy unit is in operation at the stand. The safe and effective application of the gamma energy from Cobalt 60 is inherent in all equipment supplied by the company. Qualified salesmen and technicians are sent along to explain it to interested customers, and often the equipment taken to a fair will be sold off the floor. Scale models of various installations are sent to the less important exhibitions. Another useful means of exposure is through the advertising pages of various technical magazines.

Political and national boundaries mean nothing to Commercial Products. Although the United States is its largest customer (97 per cent of all sales), radioisotopes, cancer therapy or irradiation units from Canada are found in Yugoslavia, the Soviet Union, Communist China, Italy, New Zealand, and other countries. Company officials say that the only hindrance to greater sales is the lack of Canadian dollars abroad to pay for equipment. Various grant aid and long-term credit programs however, are helping to offset these foreign exchange problems.

The staff of Commercial Products is enthusiastic about the future. Irradiation is already an established tool in both science and industry and researchers are finding new applications almost every day. More and more hospitals all over the world are installing gamma-ray cancer therapy units. As one company executive put it, "We are only on the threshold". ●

businessman's bookshelf

Japan's Trade in Asia

Kyung-Mo Huh. 282 pages. U.S.$15.00.

JAPAN'S ECONOMY, its world trade and the prospects for both up to 1970 are the subject of this doctoral dissertation. As the title suggests, it covers primarily Japan's trade relations with Asia, specifically the ECAFE (Economic Commission for Asia and the Far East) countries of Burma, Ceylon, Taiwan, Malaysia, India, Indonesia, Pakistan, the Philippines, Korea, and Thailand.

A valuable aspect of the study is that Japan's trade is not considered simply as an independent variable but is closely related to its over-all economic history. The postwar period up to 1962 is closely examined for the structural changes in the domestic economy and consequent effects on trade.

Although the most recent statistics provided are for the year 1962, the author has made projections of the trade position for 1970, based on trends and structural changes forecast by Japanese Government planners. The greatest increases (percentages on an annual basis) in imports for the period 1962-1970 are expected to come in finished goods (14.7 per cent), non-ferrous metals (14.4 per cent), and iron and steel (10.8 per cent). Imports of foodstuffs and raw materials other than iron and steel are not expected to increase significantly and machinery is expected to fall off considerably (14.3 per cent).

Order from: Burns and MacEachern Ltd., 82 Railside Road, Don Mills, Ontario.

An Atlas of African Affairs

Andrew Boyd and Patrick Van Resburg. 134 pages. $3.25.

An Atlas of African Affairs is not really an atlas as the title might suggest. The authors give a general description of each African country and supplement the text with one-page, black-and-white maps. For example, they cover very briefly the political developments in each country or explain the main characteristics of a group of countries and then provide a map. They stress the political sphere but deal also with economic trends and geography.

A reader who plans to travel in Africa may find this a useful introduction but he will need to fill in the details elsewhere. This edition is dated 1965, but

the map of Africa changes quickly and it is difficult to keep abreast of these changes.

Order from: Methuen Publications, 145 Adelaide St., West, Toronto, Ontario.

Industrial Fibres

The Commonwealth Economic Committee. 244 pages. $3.00.

THIS study reviews developments up to the close of the 1964-65 season in the following commodities: wool, cotton, rayon and other man-made fibres, mohair and other fine hair, silks, flax, jute and jute manufactures, sisal and other hemps, coir and kapok. The aspects studied are production, international trade, consumption, stocks, prices and customs duties, with emphasis on the Commonwealth countries. The 1964-65 season in the textile industry is viewed in comparison with the four immediately preceding seasons and the averages of earlier postwar years.

World fibre production, the study points out, rose by a further 4 per cent in 1964-65 to a record 50,500 million pounds. Canada shared in this increased production with a larger output of rayon, acetate, and non-cellulosics. The rise in world exports of fibres is mirrored in Canada's cotton exports, up 18 per cent between 1963 and 1964. The projected total output of industrial fibres in 1965-66 is likely to reach a new peak, and Canada's share in this should be in synthetic fibres. Both Union Carbide of Canada and Du Pont of Canada expect to open new plants in Ontario to increase production of nylon and orlon respectively.

Among other features in this review are comments on fibre acreage and consumption, and on government measures affecting fibres. This, the sixteenth edition in the postwar series, contains all the types of data given in earlier editions brought up to date, plus new material.

Order from: The Queen's Printer, Ottawa, Canada.

How Low Income Countries Can Advance Their Own Growth, including Economic Development of Latin America

Committee for Economic Development (CED) and the Inter-American Council for Commerce and Production (CICYP). 130 pages. U.S.$1.50.

THIS book is made up of two studies: the first "How Low Income Countries Can Advance Their Own Growth" is a statement by CED. It builds its study around a central question: what low income countries, given their present levels of income, can do through self-help to achieve sustained high rates of growth in per capita income. After a short introduction, the basic conditions for development, the improvement of the milieu for enterprise and the matching of human with physical resources are all discussed.

The second half consists of a statement on the "Economic Development of Latin America" and is done by the Inter-American Council for Commerce and Production. It is also a high-level statement on the same subject as the first, but related solely to the economic development of Latin America. The study gives the reader good analysis of the situation in Latin America during the last fifteen years, but mainly is oriented to the steps that should be taken to improve the situation.

In developing their statements, CED and CICYP have had the advantages of sharing research and of exchanging ideas. However, it should be stressed that the two studies are independent. The book, dated September 1966, gives a valuable analysis on a fairly high technical level and the reader with an economic background will probably appreciate it best.

Order from: Committee for Economic Development, 711 Fifth Avenue, New York 10022.

Sources of Energy

Commonwealth Economic Committee. 185 pages. $3.00.

DID you know that coal remains the world's largest source of energy? That the share of world energy consumption held by the developing countries is less than 10 per cent? That Canadian consumption of all forms of energy in 1963 was estimated at the equivalent of 19,826 pounds of coal per person?

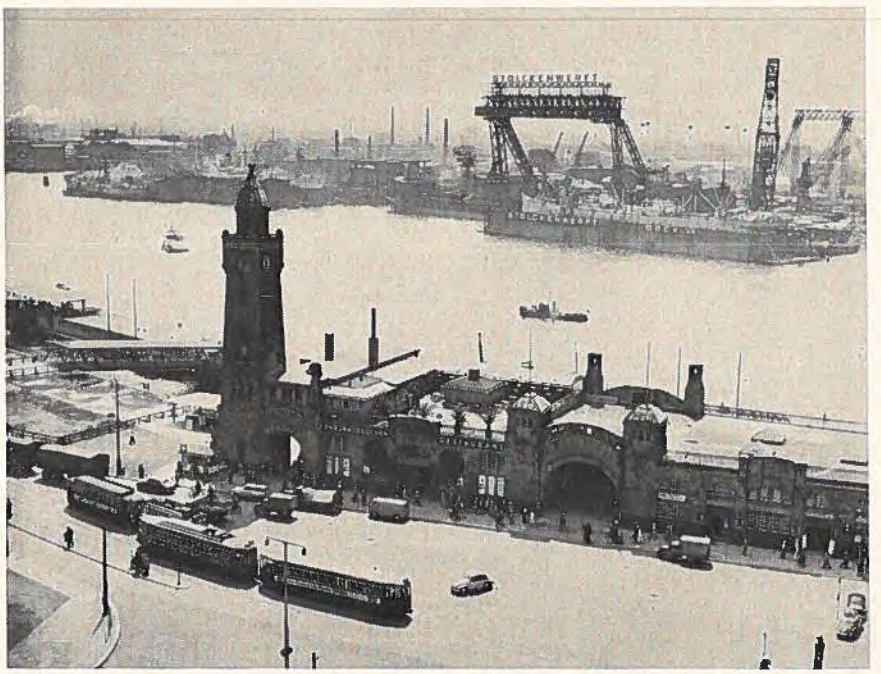
These are a few of the facts culled from *Sources of Energy,* one of a series of commodity reviews published with special reference to Commonwealth countries.

The book uses two approaches. The initial third discusses world trends in the consumption and production of and trade in sources of energy. The investment analyst or economist will enjoy the comparative data and growth rates in consumption of energy by fuel type and country. The bulk of the book comprises chapters on each major source of energy, discussing production, reserves, trade, consumption and price movements. Non-Commonwealth countries receive sufficient statistical coverage to make this a handy source book.

However, businessmen with little time to spare will find that the lack of the usual index, particularly in a book which has some 38 tables, somewhat limits its usefulness.

Order from: The Queen's Printer, Ottawa, Canada.

Hanseatic Agents Can Help you



These are views of the busy Hanseatic ports of Hamburg (right) and Bremen (above). The exporter who is interested in selling in these two cities should plan to spend a few days in these centuries-old trading centres.

Keen competition makes selling in the Hamburg-Bremen area of West Germany tough. It will be simpler if the would-be exporter chooses a good import agent in these old Hanseatic trading cities. The choice depends on how and what he wishes to sell.

ERICH A. SCHULZ, *Commercial Assistant, Hamburg.*

TRADE AND INDUSTRY in the old Hanseatic cities of Hamburg and Bremen are responsible for almost 40 per cent of West Germany's total imports and when imports from overseas only are considered, this percentage may go as high as 60 to 70. To this must be added the business done by agents in the two cities with West German buyers inland.

For this reason, the Canadian exporter who wishes to penetrate the West German market should consider finding ways of selling in this area, with its tradition of firms engaged in world trade that goes back to the foundation of the Hanseatic League in the 13th century. These firms search the world to find the best sources of supply and they look for quality. They think of Canada as a good supplier of foodstuffs, manufactured goods, and a wide range of basic materials.

The first decision that the Canadian company wishing to break into this market needs to make is whether to sell to importer-wholesalers or to the big foreign trade companies, or through commission agents. As in other markets, this will depend to a large degree on the product that it is pushing.

Foreign Trade Companies

Both Hamburg and Bremen have a number of large foreign trade firms which carry on both exporting and importing and some of which are more than 150 years old. They tend to specialize in certain lines, such as pulp and paper, chemicals, electrical appliances, textiles, or hides and skins, or they have a number of departments headed and staffed by commodity experts. They maintain branches in North Germany, the Rhine/Ruhr area, Frankfurt or Munich and they thus are able to sell to all of West Germany and sometimes all over Europe. They hold exclusive sales agencies for many manufacturers all over the world, usually in related but

non-competing lines. Because they depend on a quick turnover, they are always scouring the world for new and cheaper commodities, for something novel, and for new designs at competitive prices. Their staff, in fact, does a lot of travelling abroad. They are on the lookout for goods that domestic manufacturers cannot supply in sufficient volume or akin to those for which the German makers have their own exclusive and long-established agents.

First Steps in the Hanseatic Markets

- Make use of the Canadian Trade Commissioner Service office in Hamburg to get trade information on your products.
- Send over samples and all pertinent details concerning the product you have to sell.
- Ask for help in contacting reliable and knowledgeable importers and agents in the trade.
- Remember that exporting is hard work and demands patience; be prepared to persevere in order to become established.
- Give your agent all possible help in the promotion of your products and visit him regularly.
- Quote prices c.i.f. in D-Marks, German port.

Importer-Wholesalers

Closely akin to the foreign trade companies are the importers who are, to all intents and purposes, wholesalers. They normally buy directly from the manufacturer, keep stocks, and settle invoices on presentation of documents or on sight draft 60/90 days. Sometimes, if he receives a cash discount, the importer will establish a letter of credit. The well-organized wholesaler has a system of distribution set up throughout West Germany and he can therefore push your goods all over the country. Most of them set up their own pricing policy and this is usually flexible, changing with the supply and demand position.

Many of the importers specialize in various fields, such as grain, canned goods, tobacco, lumber, and fresh fish, or in minerals or fibres. Within the produce groups, specialization is carried further: for instance, firms will specialize in feed grain, oil-bearing seeds, Java tobacco or flue-cured tobacco. Most of these wholesalers are alert, well-informed, and ready to adapt themselves to a changing world. Firms which have been dealing in cheap types of wearing apparel, mainly from the East, are now looking for better quality products because of the rising standard of living in Germany—and Canada can undoubtedly supply many of these. Importers of hides and skins are giving some thought to supplementing their supplies of leather with plastic substitutes as leather prices increase and supplies decrease, putting leather goods into the luxury category. The same applies to importers of rubber and natural fibres.

Some textile wholesalers who are doing a satisfactory business with German department stores may be willing to take on allied consumer products, such as headgear, toys, gloves, or even wigs. Their good reputation in the trade can be put to work for the potential Canadian supplier, saving him time and money.

A number of these importers are currently entering the packing and wrapping materials field and Canada is one of the countries to which they look for supplies. If chemicals is their specialty, they do not hesitate to take an engineer on staff, paying him to look around for products that their established customers can use. Importers who are making up tool kits to be offered under their own brand names may need a handy drill or punch or other tool to make their kits the most versatile on the market and the best value for the money. One minerals importer known to the Hamburg office has been experimenting for years with one of the many minerals found in Canadian soil; finally, he is seeing his way clear to doing a profitable business.

Commission Agents

In general, most Canadian firms who wish to sell in Hamburg, Bremen, or other parts of Germany work through a commission agent. A good agent can perform a variety of services for his principal, such as:

1. Passing on latest offers to all regional wholesalers within hours of receiving them.

2. In selling food or agricultural products, helping him with the German text of labels and making sure that the products comply with the local food and drugs act.

3. When the goods are suited to this treatment, finding a large-scale buyer who will purchase in bulk, thus warranting the production of custom-made or custom-labelled goods.

4. In selling technical products, acting as a liaison in getting these approved by the proper authorities. He will also ensure that the goods are listed as suitable for their purposes on the lists maintained by public works authorities, health authorities, and semi-official organizations.

5. Making certain that the importers with whom he does business are financially sound.

In these Hanseatic cities, agents with a good reputation have a good deal of influence on purchasing decisions. Junior purchasing officers often welcome their advice because of the agents' knowledge of the market and of products. In fact, if a reliable agent introduces products the name and design of which are unfamiliar in this market, it is taken for granted that

the product is a good one, without much question. In his own interests, a good agent will only act on behalf of quality-minded producers.

Supporting the Agent

As in other markets, the principal has a responsibility to support his agent's efforts. Manufactured goods face fierce competition from local German companies and other European suppliers in both price and quality. Consumer goods particularly need that extra something to give them appeal—perhaps a novel design or pattern, an appeal to the gourmet in foods, or a labour-saving application. Leisure-time and do-it-yourself products are still fairly new here and customers are interested in them.

But to introduce even a first class product into the West German market calls for a strong initial effort and the best possible co-operation between agent and principal. Offers made by the suppliers (in German, whenever possible) should be clear and easily understood, with quotations c.i.f. Hamburg or Bremen, preferably in German marks. The principal should supply the agent with samples when these would be useful. He should share with the agent his experience in other markets and his knowhow. He should also be generous with sales aids. If the agent recommends an advertising campaign, he should consider it seriously and contribute to the cost. A manufacturer who is spending money on advertising in the home market and providing service should do the same in export markets —or else use the money saved on this to make his product more competitive in price. Quantity discounts, for example, are a good incentive.

The problem of quick delivery and service can often be solved by the agent maintaining stocks or by the use of the excellent warehousing facilities in the free ports of Hamburg and Bremen. Certain goods may be sent over in bulk, put up in standardized packages there, and forwarded to customers as required. The authority to withdraw from stock may be given to the agent or may be entrusted to a bank. Customs duty is payable, of course, only when the goods are taken out of the free port warehouse.

It should be emphasized again that the method of selling in this market depends on the commodity to be sold. Here are a few examples:

1. Chemical compounds used in surface treatment, in the textile industry, or in food processing; the need for these is increasing year by year and depending on the end product, there are 20 to 50 potential customers. For these, the need is for an agent with some technical knowledge.

2. For highly specialized equipment, compounds, custom-made die castings, stampings, alloys, etc., the exporter needs to have an agent who is highly trained and can help solve technical problems on the spot.

3. To sell raw materials for the making of shoes, handbags, luggage, etc., such as leather or plastics, choose an agent who has contacts in the shoe, luggage and handbag manufacturing centres.

4. For textiles or fashion goods, find an agent with connections in Duesseldorf or Berlin, where the largest garment manufacturers are located. We recommend that the yard-goods supplier keep stocks in these cities and that he find an agent who is in constant contact with purchasing departments of companies in the wearing apparel field. The foreign trade firms already discussed often specialize in textiles and also in hides and skins.

The Canadian should bear in mind that German buyers are hesitant to buy through agents or distributors domiciled outside Germany; an exception to this, of course, is when your product is offered through your own office somewhere in Europe, or if you keep a permanent resident agent in one of the European capitals.

Direct Selling

One way of attacking the North German market is, of course, to do direct selling in Germany on your own, by setting up a branch office or even putting up a plant. These steps should be taken after a great deal of thought, doing a feasibility study, and observing carefully the success of other companies which have tried this approach. We know of a number of foreign firms or groups of firms which sustained losses for a number of years before the business was out of the red.

Direct selling should not be undertaken unless the commodity is a specialized one or particularly attractive. Examples are essential components in the electronics field, oil and gas burner parts, and filtering materials which industry can buy direct. Potential customers number between 30 and 100 manufacturers. Custom-packed foods, from fish fillets to marshmallows, from dietetic specialties to dairy products, are popular sellers if prices and quality are competitive. These could be offered directly to the large co-operatives which control 20,000 to 45,000 retail stores and also to the voluntary buying chains. Either may give bulk orders. It might be useful to start a campaign with 12 to 18 of these organizations. Department stores and mail-order houses might be interested in products of new design, those that make for more comfortable living, and in educational toys.

Come and See

The exporter who wants to make headway here should certainly see the market for himself. He should not plan a whirlwind, two-day visit, but should spend two or three days in Hamburg/Bremen and another four visiting important customers in the provinces. When the firm already has an agent, he will help arrange the visit and will accompany his principal on his rounds. This is one of the best ways of finding new business and maintaining established connections.

If a sound preliminary investigation prompts you to consider this market seriously and you are willing to invest in it the same amount of energy and perseverance that your German counterpart does, the chances for success are good. Our office has helped to establish contacts between a large number of Canadian and German businessmen and the results have been gratifying. Canadian exports to Germany are rising year by year and we expect that this growth will continue. You may want to share in this success.

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(continued)

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What's current in commodities?

Small Boats and Pleasure Craft

Britain—The British are taking to the water in powerboats and small craft and the market is booming. Canadians could sell some complete craft and hulls; prospects for marketing instruments, fittings, motors and other marine goods should also be investigated.

D. L. STEVENS, *Commercial Officer, London.*

THERE HAS BEEN an enormous increase in ownership of small boats and pleasure craft in Britain in the last ten years. This has meant opportunities for companies in North America to supply products ranging from power units and marine hardware to completed hulls and technically advanced products.

Restrictions on the import of timber following World War II kept the small boat building industry dormant until the early 1950's, when quotas for certain woods began to be issued. The availability of marine-grade plywood and really efficient adhesives encouraged the design of a large number of hard-chine and double-chine plywood-skinned craft for series production. Traditional methods of construction quickly gave way to the new techniques developed during the war years for use in aircraft and high-speed naval craft. At that time, initial cost was even more important than today so the designs tended to concentrate on the small family-day sailers and racing centre boarders, many of which are still produced today.

Market Develops

Toward the end of the '50's, it became possible to import high-powered, attractively designed outboard motors from North America. This started a demand for fast runabouts. Canadian manufacturers able to take advantage of Commonwealth preference have seen their sales of motors climb with little competition until recently, when Swedish and Italian motors began to appear on the market.

At the same time, the small boat market was also affected by the development of fibreglas hulls. At the International Boat Show at Earls Court, London, in 1958 only two of the craft exhibited were built of this material; in 1966, approximately 47 per cent of the exhibits were of fibreglas construction. Modern designs intended for series production are almost exclusively fibreglas and several established racing centreboard classes, originally produced in plywood, have approved the use of this material. Wooden construction is today used only on those designs intended for home building or very limited production.

Small Craft Needed

Shallow and tidal coastal waters, lack of general shelter facilities, moorings and hardstandings encouraged the use of light craft rather than that of keel-boat types which require deep-water mooring. Most owners looked for a craft that could be readily transported by trailer from home to the different inland or coastal boating areas.

With a rapidly improving standard of living, there was a greater demand for larger craft. In many instances, rather than purchase a second car, families began to buy a boat in which they could escape from the crowds on land. The lucrative market for runabout craft was soon swamped with new designs but many builders burned their fingers and several went out of business.

Powerboats, Cruisers

The powerboat industry has settled down somewhat and it is here that designs are chiefly imported from overseas. However, two United States companies have boats built to their design in Britain. Italy, on the other hand, is beginning to penetrate this market with high-speed runabouts and ski-tow hulls. But it seems that the marine motorist generally follows trends set by North America and few British designers have provided serious competition.

Small sailing cruisers with two to four berths in which the family can spend the weekend are also finding a ready market. Craft of bilge keel design and 18′ 6″ to 27′ long are most popular because of lack of deep-water mooring facilities mentioned above. Large areas of tidal mud also encourage bilge keels because they will bottom in a more or less upright position. Shallow draft, four-foot maximum, provides designers with problems in their attempts to give the buyer maximum living and cockpit space. Designs tend to provide only the necessities in order to keep down the basic cost and to allow the individual maximum opportunity to use his favourite fittings. Although there are many designs available in this section of the market, there seems to be a great deal of room for improvement.

Facilities for the Sailor

The fact that coastal waters of the area, the Thames Estuary and the coasts of Kent and Sussex, leave much to be desired as cruising grounds and that harbour facilities are generally poor and because the most populated area by far of the British Isles is the southeast of England, the waterways of the region tend to be overcrowded. On the

other hand, the West Country, Ireland, northwestern Scotland and the Scottish Isles provide marvellous cruising grounds. These areas are thinly populated but unfortunately access by road and rail is limited.

In the past few years there have been many moves to improve the facilities available to Britain's estimated over one million boating enthusiasts. The most notable are the many plans to build marinas and the opening-up of reservoirs and disused gravel pits to sailors. Marinas have met with stiff resistance from local populations who feel that such developments would be an intrusion on their privacy. Such schemes also came into disrepute in the early days because many were thinly disguised attempts to erect dwellings and commercial enterprises in protected areas.

Very few of the marinas built so far can be compared with their North American counterparts. Facilities are often limited to a berth alongside a pontoon and a hundred-yard dash to the fresh water tap. The only buildings are the owner's living accommodation and a food and hardware store with limited stocks.

Market Possibilities

Apart from the established market for Canadian manufactured outboard motors, there are opportunities for sales of many other marine goods. Sales of complete craft will not be very large but hulls of power and sail cruisers could be sold for fitting out to local tastes and high speed runabouts have a good potential. Based on the experience of United States boat-builders, manufacturing under licence is the best prospect for makers of boat hulls.

Instruments of all types, from navigation devices to speed and temperature gauges, and both deck and cabin fittings can also be sold. Exporters must remember, however, that the British sailor places soundness of construction and easy handling far above styling. ●

Luggage

Britain—**Sales of Canadian luggage to the British market increased by 16 per cent last year, and may go even higher in '66. Trends to watch are the shift to plastics and synthetic materials and to bright colours for the "total look" traveller.**

M. R. BELL, *Assistant Commercial Secretary, London.*

"I PACKED MY BAG AND IN IT I PUT . . ."—so begins the old game played by children on both sides of the Atlantic. In Britain today, more and more people are packing for travel and the bag is more than likely to be a handsome piece of Canadian luggage. This trend has encouraged Canadian luggage makers to aim at the half-million mark in sales to Britain this year.

Because luggage is usually included with other leather goods for statistical purposes, it is difficult to estimate the total market in Britain. Educated guesses among the trade place annual sales at between $30 and $33 million. Travel has been a big factor in the growth of this sector—some 30 to 35 million Britons are taking holidays of four days or more this year. The new restrictions on foreign exchange for travellers may affect this growth temporarily but people will probably continue to travel even if they must change their destinations somewhat to stay within the new limits.

Changing Tastes

The years have seen a steady shift in luggage tastes in Britain. Before World War II, the majority of the luggage sold was made of leather; now leather's share is estimated at something less than 5 per cent. The sharp rise in leather prices is partially responsible for this trend, but simultaneous developments in plastics and synthetic fibres and the emergence of the weight-conscious air traveller have also reduced the demand for traditional materials. The fashion element has also been introduced, with brightly coloured matching sets in attractive new textures and patterns to enhance any woman's travel wardrobe.

A piece of luggage costs anything from $10 to $100. The major share of the trade is currently being done in the lower price brackets, but there is recent evidence that the market for better qualities is growing.

Sales Outlets

In 1961, according to the *Census of Distribution,* there were 22,413 outlets in Britain selling handbags and travel goods. These included:

Grocers and provision dealers	1,940
Confectioners, tobacconists and newsagents	1,294
Clothing and footwear shops	8,212
Household goods shops	2,935
Booksellers	393
Druggists and photographic dealers	1,099
Jewellery, leather and sports goods	3,292
Department stores	749
Variety stores	1,194
Others	1,305

More than a third of luggage outlets were "clothing and footwear shops". In turnover, however, department stores constituted by far the most important outlets and were probably responsible for over half of total sales, despite their relatively small number.

Most of the leading domestic manufacturers now sell direct to the retail trade in Britain, although wholesalers are used for some of the cheaper lines. One leading firm in Northern England, for example, maintains a display room in central

London and keeps eight to ten travellers on the road visiting retailers and setting up smaller displays in regional centres. Canadian manufacturers exporting to Britain have taken a similar approach, setting up with stocks here and servicing retail accounts direct.

The retail markup on luggage averages between 50 and 65 per cent on the trade price before purchase tax.

Advertising and Displays

A total of $125,000 was spent in Britain in 1965 on luggage advertising, with 85 per cent of this expenditure placed by four firms—three British and one foreign. This total is likely to increase sharply in 1966; in fact one firm alone planned a $90,000 campaign covering the three months just before Christmas. In the past most of the advertising has concentrated on the spring period just before the holidays. The glossy publications in the fashion field are popular media and so are newspapers, particularly Sunday supplements.

The main Canadian firms in the market today have also supported their selling efforts with carefully executed advertising campaigns and contests.

The major trade show for the display of luggage is probably the Leathergoods, Luggage and Handbag Fair, organized by the Leather Institute and held each spring at the Mount Royal Hotel. This fair is open only to domestic manufacturers but in view of this restriction, shows have been arranged at Macdonald House on Grosvenor Square for Canadian firms to assist them in breaking into the market or in introducing new lines. In addition, a number of more general shows such as the Gifts Fair or Giftex provide a vehicle for luggage display.

TABLE I

IMPORTS OF TRAVEL GOODS INTO BRITAIN

Country	1964 12 mos.	1965 12 mos. ($'000)	1966 3 mos.
A. Trunks, suitcases, hatboxes, travelling bags, rucksacks of leather.			
British Commonwealth	58.2	28.3	1.9
Of which:			
Canada	54.3	23.1	0.7
Hong Kong	3.0	3.2	1.2
European Free Trade Association (EFTA)	25.2	20.1	8.6
European Economic Community (EEC)	91.4	94.4	19.3
Of which:			
West Germany	46.0	44.0	14.9
Italy	31.9	34.5	2.9
Eastern Europe	22.7	11.2	1.7
Japan	12.2	23.2	20.8
Communist China	7.5	13.3	7.0
United States	8.7	100.1	3.8
Other	8.9	7.6	2.5
Total	**234.8**	**298.2**	**64.8**
B. Trunks, suitcases, hatboxes, travelling bags, rucksacks—of composition leather, vulcanized fibre, plastic sheeting, paperboard, etc.			
British Commonwealth	231.3	228.6	128.9
Of which:			
Canada	183.8	182.5	111.8
Hong Kong	38.2	43.4	14.9
European Free Trade Association (EFTA)	48.8	56.2	10.0
European Economic Community (EEC)	174.0	204.1	37.2
Of which:			
France	62.4	55.4	7.3
West Germany	56.3	70.9	7.1
Italy	46.2	58.4	15.3
Eastern Europe	236.8	256.7	114.2
Of which:			
Czechoslovakia	150.2	138.0	75.1
Japan	136.7	170.6	108.0
United States	18.9	33.3	4.6
Other	7.7	11.9	13.4
Total	**854.2**	**961.4**	**416.3**

Imports

Imports of luggage have increased with the rise in the over-all market in Britain and in 1964 were valued at $1,089,000. Surprisingly, despite the imposition of the 10 per cent surcharge on imports in late 1964, imports in 1965 increased by 16 per cent to $1,259,600. Figures for the first three months of 1966 seem to indicate that this increase is continuing and indeed accelerating (see Table I).

Canada's Sales

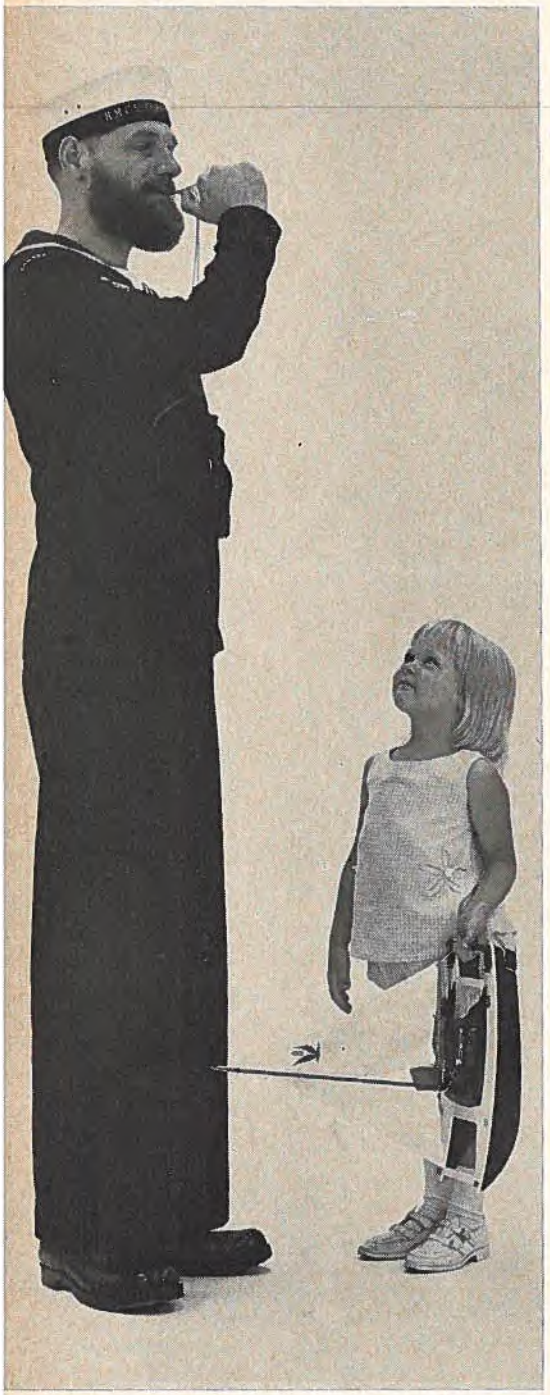
Canada maintained its position as the leading source of imported luggage in 1965, with 16 per cent of imports (worth almost $205,000) coming from Canadian manufacturers. The second most important supplier was Czechoslovakia with $140,000; West Germany and Italy also sent substantial quantities.

British imports of luggage from Canada jumped sharply in the first three months of 1966 to $112,000, an increase almost 100 per cent over the same period last year. With luck, sales could surpass the half-million-dollar mark this year with further growth in the future. ●

Family Planning for Elephants?

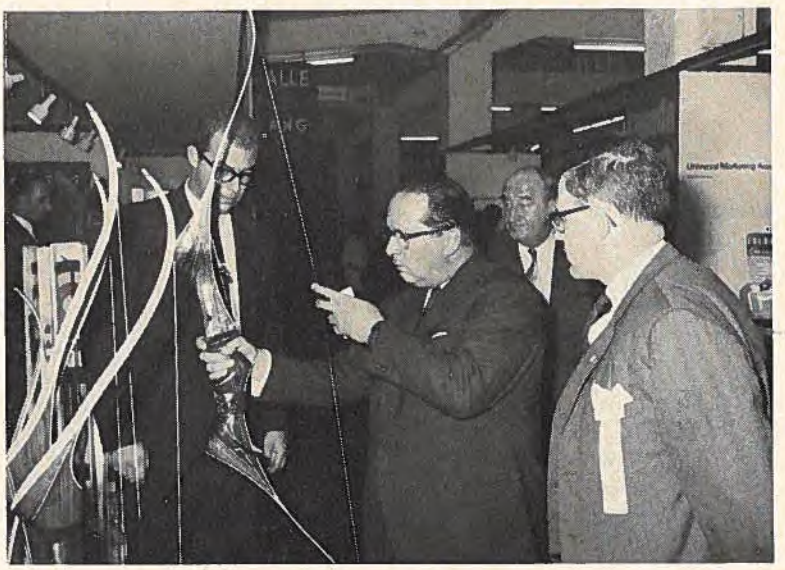
INDIA'S elephant population is booming. Fully protected by game laws, the herds are growing rapidly in eight different states, causing increasing damage to trees and saplings in the forests and adjoining fields. Even Canadian aid projects have suffered when tuskers have mistaken hydro poles for young trees and pulled them up by the roots. The Inspectorate General of Forests has said the day is not far off when some way will have to be found to introduce family planning among elephants. ●

trade fairs



Visitors to the Canadian exhibit at the 7th Annual Marine Trades Exhibition in Chicago were "piped aboard" by Leading Seaman D. W. Kenyon of the Royal Canadian Navy, who stands six feet seven inches tall and is complete with an admirable "full set" beard.

Senator Leverett Saltonstall, a member of the Senate Armed Services Committee, visited our exhibit at the Northeast Electronics Research and Engineering Meeting in Boston last month. He stands between M. R. M. Dale, Canadian Consul and Senior Trade Commissioner in Boston, and C. A. Carruthers, who is Consul and Assistant Trade Commissioner.



The Lord Mayor of Cologne, Mr. T. Burauen, tests a bow at the Canadian stand during SPOGA. Standing to his right is Mr. Mitchelle, of Archery Craft Ltd. Behind him is the director of the foreign section, Dr. Krugmann, and to his left J. A. Elliott, Canadian Consul in Duesseldorf.

Canadians Pleased with First World Nuclear Fair

THE INTERNATIONAL NUCLEAR INDUSTRIES FAIR (NUCLEX) which was held in Basel, Switzerland, from September 8 to 14, gave 12 Canadian companies an unparallelled opportunity to show their capabilities to nuclear experts from all over the world. Although there were 250 exhibitors from 16 countries, only four countries mounted national exhibits: the United States, Britain, France and, of course, Canada. Officials considered the fair important because it was the first time that exhibits and representatives of major world-wide government and industrial organizations were brought together.

The exhibition was well attended, with 12,000 business and professional people from 49 countries on hand. The companies' assessment of their visitors was summed up by one official: "It was more than we hoped for; all the right people were there." Technical meetings also formed an important part of NUCLEX. Over 1,400 professional and technical people heard papers given by experts who had been invited to participate; Canadians presented 14 of these.

The giveaways at the Canadian stand included maple leaf pins, Canadian flag lapel pins, and books of matches. In addition, guests at a special reception were presented with neckties and clutch purses in the maple leaf tartan. This reception was arranged by the Canadian Nuclear Association and was held in one of the fair restaurants. Almost 500 guests were treated to a sit-down buffet supper of Arctic char, smoked salmon, beef and cheese. The Canadian Ambassador in Switzerland gave a welcoming speech and made a presentation to the president of the fair. Everyone had a good time, and exhibitors reported next morning that they had had fruitful conversations with their dinner companions.

Canada's participation was wide in scope. Among the equipment displayed were heavy water reactors, nuclear pump equipment, and hydrostatic and hydrodynamic rotating shaft seals. Members of consulting engineering firms were on hand, as were suppliers of fuels for nuclear power and research reactors. The exhibitors were backed up by Department of Trade and Commerce officers from Ottawa, Berne, Bonn and Paris. The Department of Industry and the Department of External Affairs also had personnel on site.

The Trade Publicity Officer in Ottawa distributed releases to 44 trade, technical and professional publications all over the world. A Canadian press conference was arranged at which specially prepared press kits were distributed. Each exhibitor spoke about his nuclear activities and a question-and-answer period followed. There was also a general press conference arranged by the fair authorities and attended by about 250 journalists at which the Department's Commodity Officer outlined Canadian nuclear achievements.

Our Commercial Assistant in Berne, Dr. Max Meister, was invited to take part in a radio program "From Day to Day" and spoke for some ten minutes on Canadian nuclear development.

No sales were made at the show and none were expected. There are few buyers and few sellers in the nuclear field and in most cases contacts had already been made. But the exhibitors, without exception, were happy. They felt that they had developed old contacts and met people previously known only by correspondence. Some of the smaller firms made first-time contacts. A few of the exhibitors even reported hiring engineers or other professional people to work for their companies in Canada.

One of the post-fair letters from exhibitors to the Department of Trade and Commerce read in part: "From all reports, NUCLEX was a complete success, particularly for the Canadian participation. The individual firms were most pleased with the results and I am sure that such a record will serve us well in the future whenever we decide to sponsor a collective Canadian exhibit or trade mission."

Mr. R. F. Gross, General Manager of the Canadian Nuclear Association, is shown discussing Canada's nuclear capabilities with a number of interested visitors at the Canadian stand during NUCLEX, held in Basle last September.

Poultry and a Fishing Trip

LIKE SOME MISSIONS, some foreign exhibits are really a form of reconnaissance, like the one undertaken recently by the Department of Trade and Commerce in conjunction with three of Canada's suppliers of poultry stock and equipment. Executives from Shaver Poultry Breeding Farms, Interag Food Exports of Canada Ltd., and Seven Oaks Manufacturing and Sales Ltd. teamed up with officers from the Canadian Departments of Agriculture and Trade and Commerce and with a professor from the University of Manitoba to present Canada's first national exhibit in the U.S.S.R. at the World Poultry Exhibition in Kiev, August 13 to 28. The purpose was to display the achievements of the Canadian poultry industry to both Soviet and international buyers and to promote the sale of Canadian poultry, poultry feeds and equipment. The Canadians were also keeping a weather-eye open for the present and future needs of the European industry, and especially in the U.S.S.R.

Although quarantine regulations were too strict to allow the import of live fowl, exhibitors supplied plenty of information; it included pictures of typical fowl and breeding plants as well as other data and specifications.

The fair authorities maintained a press centre on the exhibition grounds and a Canadian press release was issued with articles describing the activities of the exhibitors; these articles were published in the exhibition journal. The Canadians also held a press conference on Canada's National Day to which about 60 Soviet journalists were invited. They were served refreshments, presented with a special press kit, and heard a panel of Canadian exhibitors speak on various aspects of our poultry industry. Afterwards the conference was thrown open to questions from the journalists. Three agricultural films were shown to about 600 visitors.

A great deal of promotion literature was handed out at the stand itself: almost 6,000 folders on the Canadian poultry industry, 12,000 in Russian on Canadian agriculture, and 40,500 small brochures illustrating all facets of the Canadian poultry industry. During the fair the Department's officers handed out about 50,000 maple leaf pins; these were attached to cards bearing a short message in Russian.

Officials were well satisfied with the Canadian participation. Although, as expected, no sales were made, the exhibitors received many inquiries from Soviet technicians and specialists and some of these may later result in orders. As an exercise in public relations the fair was a great success. It marked the first time that Canadians had appeared officially in the Ukraine and the interest in the exhibit was far beyond expectations. As any businessman knows, making friends is as important to making sales as making a good product. That's why the Canadians went to Kiev.

Up-coming in Germany

GERMAN TRADE FAIRS AND EXHIBITIONS have come to be among the most important and lucrative in Europe. Although the Department of Trade and Commerce cannot sponsor exhibits in all of them, it believes that many may be of interest to individual companies or industrial groups across Canada. The following is a list of these fairs for the first three months of the coming year.

January 4-7 in Cologne
IFADA—International Exhibition of the Ladies' Hat Industry

January 19-25 in Hamburg
German Boat Show—International

January 21-29 in Hanover
CONSTRUCTA II—International Building Exhibition

January 27-February 5 in West Berlin
International Green Week agricultural exhibition with Regional North German Exhibition

February 11-16 in Nuremberg
18th International Toy Fair

February 18-19 in Hamburg
77th Textile and Clothing Fair

February 23-26 in West Berlin
8th Second-Hand Car Show at the Funkturm fairgrounds

February 23-26 in Cologne
International Household Goods and Hardware Fair

February 25-March 2 in Offenbach/Main
International Leather Goods Fair

February 26-March 2 in Frankfurt/Main
International Spring Fair

March 1-5 in Stuttgart
INTHERM—International Trade Fair Oil and Gas Firing

March 3-6 in Kiel
Campina 67—4th Schleswig-Holstein Camping Exhibition and Nordboot 67 Boat Exhibition

March 5-10 in West Berlin
67th International Fashion Week

March 9-15 in Hamburg
INTERNORGA—International Trade Fair for North European Gastronomy for bakers and confectioners

March 9-29 in Munich
19th International Handicrafts and Trade Fair

March 10-19 in West Berlin
International Boat Show & Water Sports Exhibition—camping, touring, leisure time

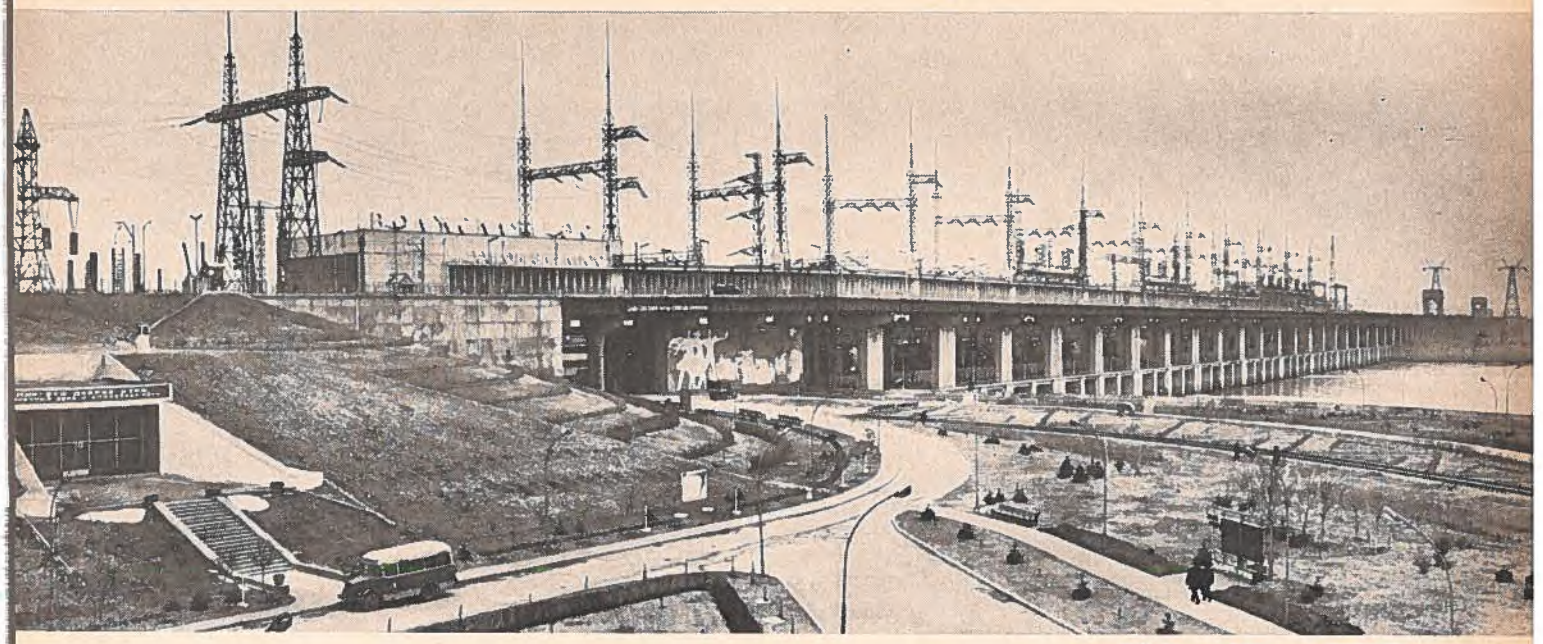
March 11-19 in Munich
BAUMA—International Construction Machinery Fair

March 11-19 in Nuremberg
"Urlaub 67"—Exhibition for travel, camping, caravaning, weekend and water sports

March 12-15 in Duesseldorf
72nd International Fashion & Sales Week for Ladies' Outerwear

March 17-19 in Nuremberg
17th "Day of the Bicycle" with trade exhibition

March 31-April 2 in Bremen
SUEFA Confectionery Trade Show



—Ministry of Power, U.S.S.R.

This is a panoramic view of the Volga hydroelectric power station, which was named after the 22nd Party Congress.

The Soviet Power Industry

Power generation has always had a high priority in the Soviet Union because it provides the basis for industrialization. Today, the U.S.S.R. ranks second only to the United States in the production of electric power, but a further expansion is planned. For Canadian manufacturers of electrical equipment, there may be opportunities in the Soviet Union which are worth exploring.

YVON C. JAURON, *Assistant Commercial Secretary, Moscow.*

PRODUCTION of electric power in the Soviet Union rose markedly from 235 million kwh. in 1958 to 509 million in 1965. During this period, 115 new power stations were put into operation and construction started on another 135. More significant, perhaps, was the increase in capacity of individual stations: before 1958 there were no thermal stations with a capacity exceeding one million kilowatts, but by the end of 1965 there were twelve. The Pridneprovsky station, with 2.1 million kilowatts capacity, is still among the largest thermal stations in the world.

The Lenin hydro power station on the Volga established a world record in 1960 with a capacity of 2.3 million kilowatts and was soon followed by the 22nd CPSU Congress hydro station with a capacity of 2.5 million.

During the current Five Year Plan, capital expenditure on power generation will continue to receive high priority. By 1970, production capacity will be increased to 900 billion kwh., approximately U.S. production. Most of this 70 per cent increase will come from new thermal stations.

Already, more than 83 per cent of electricity generated in the U.S.S.R. comes from thermal stations. The decision to concentrate on thermal power takes account of the tremendous resources of fossil fuels in the U.S.S.R. (in many eastern areas coal can be mined very economically by open-pit methods) and the Soviet experience that thermal stations can be erected more cheaply and more quickly than hydro stations. Soviet specialists believe that the supply of fossil fuels in the country makes it possible to generate electricity from them at a cost close to that of hydro power.

Although several atomic power stations have been commissioned, it is thought unlikely that nuclear power will have a significant impact on present plans for thermal stations.

Bigger Stations and Generators

The trend towards bigger power stations continues. The Bratsk hydro power station will be operating next year with a capacity of 3.6 million kilowatts. The Krasnovarsk hydro power station on the Yenisei River

with a capacity of 5 million kilowatts is scheduled for completion at the end of 1967. In all, twelve huge new stations are scheduled for construction by 1970.

Soviet engineers are working on the feasibility of vast power-generating complexes, such as the ITATSKY in Central Siberia which will include ten large thermal power stations with an eventual capacity of 50 million kilowatts, equivalent to about half the U.S.S.R.'s capacity in 1965, which was provided by 200,000 power stations.

The majority of the generating units installed in the next few years will be of 300 megawatts. It has been reported in the Soviet press that Elecktrokisa in Leningrad has completed testing its first 500-megawatt turbogenerator and Soviet engineers believe that such generators will furnish the basis for future development. Plans are said to have been drawn up for the manufacture of eight 500-megawatt generators in the course of the next five years. Engineers at Elecktrokisa claim to have completed a project report for an 800-megawatt generator (said to have an efficiency of 98.8 per cent) with a single-shaft turbine of the same capacity for the Slavyansk (Donbasin) power station. (Canada is now building 500-megawatt turbogenerators and 700- and 1,000-megawatt units are being built in the United States.)

Distribution Problems

Water and fuel resources in the western parts of the U.S.S.R. are virtually fully exploited. The biggest hydro and thermal power stations are to be found east of the Urals and future development will be concentrated in the east. This poses a formidable distribution problem to Soviet engineers.

At the moment, there are nine power grids in the U.S.S.R., with the single grid in the European part of the country being by far the most important because half of Soviet production is there. Integration of the grids is a priority project and planners forsee a unified power grid after 1970, with a power "bridge" linking the eastern and western systems.

Most thermal and hydro power stations are located far from the densely-populated consuming areas. The transmission of power over great distances has always been a major problem for Soviet engineers. There are already some 180,000 miles of high tension power transmission lines (35,000 volts and above) and it is expected that this figure will be doubled by 1970. Several lines of 500,000 volts AC or more are reported and the 750,000 volt AC line linking the Konakovskaya thermal power station and Moscow is believed to be complete. Plans are under way for the 1,800-mile 1,500/2,200 kilovolt DC power line to connect the eastern systems with the European areas.

Scope for Development

Expansion of electric power production will remain a primary objective because of its direct bearing on Soviet industry and agriculture. In spite of spectacular achievements in the expansion of electric power production, the U.S.S.R. remains basically under-supplied. Power generated per capita is much below that of the United States, Canada or Britain.

Industry consumes 77 per cent of Soviet electric power production, although consumption by transport and domestic users has also risen sharply in recent years. Only 4 per cent goes to the agricultural sector, but Soviet leaders have recently stated that more electric power will be made available to collective and state farms.

Western technology will continue to be invaluable for the Soviet power program. In particular, there will be interesting opportunities for Canadian manufacturers of sophisticated equipment for power generation and transmission systems. ●

Ocean delicacies like these lobsters were a special feature of the "Canada Night" dinner held recently at International House in New Orleans. The gourmet meal included Arctic char, hard shell lobsters, Canadian pea soup, green salad with Thousand Islands dressing, vanilla ice cream with maple syrup, apples and cheddar cheese, honey, beer and ale. After the dinner (which was attended by well over 200 guests) three films were shown, including the latest one on Expo 67. The picture shows some of the lobsters, very much alive, being prepared for cooking in the restaurant kitchen. P. A. Savard, Consul and Trade Commissioner in New Orleans (left), handles one gingerly.

This is a section of waterlogged and saline land in West Pakistan. Note the white salt deposits in the foreground. In this as in many areas the water table is almost up to ground level. Evaporation of ground water, plus salts from irrigation water, have resulted in this desolate picture.

Making West Pakistan More Fertile

In West Pakistan, the rising water table poses problems of salinity and waterlogging which only vast engineering works can solve. Needed also is a general improvement in agricultural methods.

R. D. LEE, *Assistant Commercial Secretary, Karachi.*

THE PROBLEMS of salinity and waterlogging in West Pakistan result from the need for irrigation. At one time the main method used was inundation of the land when the rivers were in flood. The next step was the construction of barrages across the rivers to head up the waters and fill the canals all the year round. During the last 75 years, this has developed into the world's largest single irrigation system, irrigating 24 million acres by means of some 40,000 miles of canals. Even so, 50 million people live in an area of 198 million acres of which only one-third is arable.

Over the years, some of the water from the canals and the fields seeped down into the ground. The underground reservoir was unable to shed surplus water by gravity or through evaporation as fast as water entered it. The water table began to rise and has, in fact, been rising as much as two feet a year until in many places it is close to the surface. Today, out of 33 million acres within the span of the irrigation system, over 11 million are either waterlogged or very poorly drained.

The problem does not end there. With the rising of the water table, there was more evaporation of ground water through the upper layers of the soil. Salts, which are characteristic of arid and semi-arid areas, came up with the rising moisture. The moisture evaporated, leaving the salts behind in the root zone of the crops. To these were added the salts in the irrigation water.

The practice conceived half a century ago was to cover the maximum area with the minimum of water. This meant there was enough water to go down to the root zone but not beyond it. As a result, the salts in the irrigation water tended to become localized through evaporation and transpiration by crops. An environment was created where the salinity problem was aggravated as the water table approached the surface. Salinity today is even more widespread than waterlogging. Some 16 million acres are affected, of which 5 million are classified as severely saline.

In West Pakistan there are some 40,000 villages and over 80 per cent of the population lives in them. The main crops are wheat and rice, cotton and sugar cane, millet and oilseeds. The country's progress and the well-being of future generations depend on the soundness of the agricultural economy, for Pakistan's expanding industrial complex also is based largely on agricultural products.

West Pakistan loses an acre of land every five minutes and an acre produces barely enough at present to feed one person. Every five minutes the population increases by 10. This means that more land must be brought under the plough. To feed the growing population of 50 million, which will have doubled by the end of the century, the land itself will have to be made much more productive.

Comprehensive Plan Drafted

During the last 50 years a number of different measures to combat salinity and waterlogging have been tried, but none of them was applied extensively enough or pursued far enough.

Under instructions from the president, Field Marshal Mohammed Ayub Khan, the West Pakistan Water and Power Development Authority (WAPDA), has produced a master plan to reclaim all affected lands. It provides for the sinking of over 31,000 tube wells and the digging of 32,000 miles of drainage channels. The cost is estimated at Rs. 3,400 million, plus another Rs. 2,500 million for power facilities—a total of over a billion dollars. Finance for the plan is to be provided by friendly nations, including Canada.

In 1961, a team of leading United States scientists, including Dr. Jerome B. Wiesmer, President Johnson's special assistant for Sciences and Technology, and Dr. Roger Revelle, the former Science Adviser to the United States Secretary of the Interior, visited Pakistan to get first-hand information on the problem. Their draft report, submitted to the Pakistan Government in 1962, supported WAPDA's reclamation program but recommended greater emphasis on the agricultural aspect and spreading the program over a longer period. It proposed that reclamation should proceed at a rate of about a million acres a year over 20 to 25 years, instead of 10 years as suggested in the original plan. The final version of the Revelle Report on Land and Water Development in the Indus Plain was received by the Pakistan Government in April 1964 and is being implemented.

The 26 projects which are included in the WAPDA plan will improve 29 million acres within the reach of existing irrigation schemes. Ten projects are in the northern part of the Indus plain and are based primarily on the use of tubewells for subsoil drainage, combined with surface drains for the removal of storm run-off. The sixteen in the southern zone will place the emphasis on open drains for the removal of subsoil and surface water; tubewells will also be used where this is feasible.

Thousands of auxiliary works such as construction of bridges, culverts, pump houses, and other miscellaneous structures will also have to be undertaken. For the operation of the tubewells and the pumping plants, at least another 600,000 kilowatts of generating capacity will have to be provided, in addition to the already allocated capacity of 200,000 kilowatts. There will also have to be several hundred miles of high-tension transmission lines and 36,000 miles of secondary distribution lines.

The first big WAPDA project was in the Central Rechma Doab. Begun five years ago and already completed, it has touched only the fringe of the total problem.

Canadians Successful

Canadians already have a stake in the reclamation program. In the face of international competition, Canadian Hoosier Engineering Company Ltd. obtained the contract for a project financed by the World Bank, partly because the firm's presence in West Pakistan on a Colombo Plan project put it in an advantageous position.

The project area is located in the former state of Khairpur and under the tubewell drainage contract Canadian Hoosier is to provide the design and engineering supervision for one 66/11 kv. substation and extensions to three others currently being constructed under the Colombo Plan, 17 miles of 66 kv. transmission line, approximately 600 miles of 11 kv. distribution lines, and transformers to serve approximately 600 tubewells and pumping stations.

When the whole of the WAPDA plan is completed, crop production in most areas will be nearly doubled. The increased gross value of crops is expected to exceed in a single year the entire capital cost of the reclamation works. West Pakistan's economy will be strengthened and the farmer will benefit substantially. ●

Writing Contest Stresses Answers to World Feeding

THE WORLD'S FOOD PROBLEMS and how they can be lessened by an intelligent approach to animal husbandry is the subject of a contest currently being run by the Grandi Zootecniche Associate GI & GI of Rome.

The contest is open to journalists and writers from Eastern and Western Europe, Africa and the Middle East, America, and Asia-Australia who publish one or more articles, features or surveys in daily or weekly publications, and in economic or agricultural journals, or produce a radio broadcast within the period May 1966 to June 15, 1967, under the general topic: "Industrial Animal Husbandry: a Contribution to the Fight against Hunger in the World."

The impressive list of prizes includes five cash awards of $1,000 and diplomas for each of the area winners in each of the categories. In addition, there will be three prizes of $2,500 and a statuette of a golden calf for the best entry in each category.

Entries are confined to articles or broadcasts written in French, English, Spanish, German and Italian. An International Commission meeting in Rome in February and July 1967 will act as judges.

Anyone interested in participating should send seven copies of his published article (or, for broadcasts, a magnetic tape) to the Grandi Industrie Zootecniche Associate, Centro Informazioni Stampa e GI & GI, Via XX Settembre 5—Rome. Deadlines are January 15, 1967, and June 15, 1967. ●

trade lines

British experts have studied the possibility of making sulphuric acid in Pakistan from the abundant gypsum. The survey was sponsored by the Pakistan Industrial Credit and Investment Corporation with Colombo Plan aid. Sulphuric acid is currently manufactured in Pakistan from imported sulphur and as much as Rs.80 million (about Can.$16 million) a year is spent on imports—Karachi.

Yugoslavia has had record grain harvests this year. According to reports, the wheat crop will total 4.1 million tons and rye, 210,000 tons, a 19.6 per cent increase over last year—Vienna.

Port Elizabeth harbour is handling an increasing amount of cargo, approaching 5,000,000 short tons a year. A 7.2 per cent increase over 1965 was registered during the financial year ended March 1966. The faster tempo of ore and mineral exports, especially manganese and bulk iron ore shipments to Japan, are the main causes. Fewer ships docked, but they carried bigger cargoes—Cape Town.

Hydraulic turbines and paper machinery will be made at a new factory valued at U.S.$5 million, recently established in São Paulo by Voith S.A., Maquinas e Equipamentos—São Paulo.

Colombian exports of crude oil are increasing. In 1965 exports reached 40.7 million barrels valued at U.S. $88.1 million, compared with 31.0 million barrels valued at U.S. $75.6 million in 1964—Bogota.

Electric circuit breakers are being made in Jurabatuba, São Paulo, at a factory set up by Sprecher & Schuh do Brasil S.A.—São Paulo.

British manufacturers report sales of pens, pencils and allied products at $8.4 million in the first three months of 1966, a 4 per cent increase over the same period in 1965. Exports, however, which accounted for 19 per cent of total sales, were 22 per cent below last year. Sales to the home market rose by 13 per cent—London.

Food imports and exports in West Germany were larger in 1965-66. Imports (without coffee and tobacco) had a value of DM 15,980 million, an increase of 21 per cent over last year. The share of EEC member countries rose by 25 per cent to DM 6,360 million, but the share of third countries went up 19 per cent to DM 9,620 million. During the same time, exports reached a value of DM 1,830 million, compared with DM 1,700 million the year before. Exports to EEC member countries, at DM 680 million, were 3 per cent larger than the year before; exports to third countries went up 10.6 per cent to DM 1,150 million—Bad Godesberg.

Production of cement last year in Argentina achieved a new record of 3,272,354 tons, an increase of 14.5 per cent over 1964. The 15 portland cement factories employ 7,120 and have an annual production potential of 4.9 million tons. The increase in consumption in 1965 resulted largely from private building, which increased demand by 16 per cent; public works used only 9.4 per cent more—Buenos Aires.

Production of bauxite, Hungary's most important natural resource, has risen from an insignificant prewar figure to 268,000 tons of alumina and 58,000 of aluminum products in 1965. The bulk of the alumina is shipped to power-rich countries, chiefly the U.S.S.R., for smelting; a portion is returned for fabrication in Hungary. Under the present Five Year Plan (1966-1970) the annual production of alumina is to be raised to 460,000 tons—Vienna.

Synthetic rubber is now being made in Spain for the first time at the INI (National Industrial Institute) factory in Santander, Northern Spain, which has an annual production capacity of 40,000 tons. The basic raw material for this production, butadiene, is manufactured in the INI petrochemical plant in Puertollano—Madrid.

The "big four" of the world's trading nations (figures in parentheses representing their share of world sales in 1965) are the United States (15 per cent), the Federal Republic of Germany (10.6 per cent), Britain (8.6 per cent) and France (6.1 per cent)—Bad Godesberg.

The Hunedoara iron and steel complex in west-central Rumania is expected to double Rumanian production of alloy steels by 1970. In 1965 the output of alloy steel at Hunedoara topped 184,000 metric tons out of a total of 2.4 million metric tons of steel produced there. Two high-capacity electric furnaces are to be

built as part of the alloy steel expansion program. The current Five Year Plan sees total Rumanian steel output in 1970 increasing to 6.3 million metric tons compared with 3.4 million in 1965—Vienna.

Television sets in use in West Germany are increasing by more than two million a year. The estimate is based on figures for 1966's first quarter: 542,900 new receivers registered with the Post Office. The radio audience is also growing: registered receivers passed 18 million by April 1966. New radios are being installed in homes at the rate of about 400,000 a year—Dusseldorf.

A new Chilean company, the Sociedad Petroquimica Nacional Ltda., will begin activities shortly. Its first operation will be the construction of five petrochemical plans, four in the Concepción area in the south of Chile and one near the petroleum refinery of Concón in central Chile. The plants are expected to begin operations in 1968—Santiago.

Forest products are important in the Rumanian economy, because over 27 per cent of the country's total area is forested. Approximately 80 per cent of the total stock of standing timber, estimated at 1,120 million cubic meters, is made up of resinous and beech woods. Favourable weather and an intelligent reforestation program mean that Rumania's forest productivity is among the highest in Europe—Vienna.

Tasman Pulp and Paper Company of New Zealand produced 4,554 tons of newsprint in the second week of October, 177 tons more than the previous record set in July 1965—Wellington.

Freeport (Bahamas) is to have a $10 million oil refinery. Construction will begin almost immediately on a plant with an initial capacity of 50,000 barrels a day. It is hoped that this will lead to the establishment of a petrochemical industry—Kingston.

West German exports to Canada overtook its imports from Canada in the first six months of 1966. German exports to Canada rose to $101.6 million from $84.9 million in the same period of 1965 and its imports from Canada to $101.4 million from $97 million—Bad Godesberg.

Final figures on West Germany's worldwide commerce last year show a pattern largely independent of trading areas. Nearly two-thirds of its exports and imports were to and from countries outside the European Economic Community. With figures for 1964 in parentheses, 45 per cent (47.1) of Germany's imports came from outside both the EEC and EFTA, 37.8 per cent (34.7) from the EEC, and 17.2 per cent (18.2) from EFTA. Imports were valued at 70,500 million DM and exports at 71,730 million DM. About 35.2 per cent (36.4) of exports went to EEC countries, 27 per cent (27.2) to EFTA, and 37.8 per cent (36.4) to other countries. Trade with Communist countries of Eastern Europe rose from 4,730 million DM last year to 5,590 million DM in 1965, and accounted for 3.9 per cent (3.8) of all German foreign commerce—Bad Godesberg.

Spain, with a 1966 crop of 40,000 tons, has become the world's leading almond producer. Next comes the United States (39,900 tons) followed by Italy (35,000 tons). These three countries together account for 88 per cent of world production—Madrid.

Sales of watches, clocks and timing devices by British manufacturers reached $15.5 million in the first quarter of 1966. Domestic sales increased 4 per cent compared with the same period in 1965, and there was virtually no change in exports. Sales of clocks were lower compared with the first quarter of 1965 but sales of miscellaneous timing mechanisms (time switches, time recorders and parking meters) were slightly higher. Sales of watches increased sharply—London.

Trade Commissioners on Tour

Temporary Duty in Ottawa

The following officers will be on temporary duty in Ottawa. Anyone who wishes to see them should contact the Trade Commissioner Service, phone: 992-9930.

R. D. Lee, Assistant Commercial Secretary in Karachi, Pakistan, December 20-January 3. Mr. Lee will be posted to Philadelphia as Vice Consul and Assistant Trade Commissioner.

In Territory

Communist China—R. G. Woolham and J. M. Fraser, Trade Commissioners in Hong Kong, will visit Peking and other cities December 9-22.

India—R. R. Parlour, Commercial Counsellor in New Delhi, will visit Bombay December 12 to 15.

Pakistan—K. D. Taylor, Commercial Secretary in Karachi, will visit Quetta, Multan, Lyallpur and Lahore December 18-24, and Dacca, Chittagong and Khulna December 27–January 3.

Businessmen who would like these officers to undertake assignments for them should write to them at their posts as soon as possible.

foreign tariffs and trade regulations

Argentina

TRADE LITERATURE AND SAMPLES—Firms sending samples or trade literature to the Canadian Embassy in Buenos Aires are requested to address these packages to "the Commercial Division" and not to any individual Embassy official by name or title.

Customs duties are levied on all goods entering Argentina, including small parcels of goods (such as samples) and trade literature. Firms forwarding this material should be willing to pay any tax involved. However, samples of no commercial value and small consignments of trade literature are not subject to this tariff.

Chile

IMPORT DUTIES REDUCED—A decree has been signed by President Frei of Chile aimed at reducing import duties by percentages ranging between 10, 40 and 100 per cent for new machinery and equipment of types not manufactured in the country and destined for the expansion or installation of manufacturing industries employing domestic raw materials.

Eastern Caribbean

COMMISSION IN CANADA CLOSED—The Department has received the following letter announcing the formal closing on November 30, 1966, of the Eastern Caribbean Commission:

"Concomitant with the constitutional and other changes taking place in Barbados, in British Honduras and in the Leeward and Windward Islands of Antigua, Dominica, Grenada, Montserrat, St. Kitts-Nevis-Anguilla, St. Lucia and St. Vincent, the decision has been taken to discontinue the operation of the Eastern Caribbean Commission, which has officially represented these territories and their Governments, in Canada, since June 1963.

"Arrangements are currently being worked out whereby separate offices will be established in Canada to give official representation to Barbados on the one hand, and to the Windward and Leeward Islands on the other hand. In due course, official announcements will be made of the designations and locations of the new offices."

Uruguay

IMPORT RESTRICTIONS—Our Trade Commissioner in Montevideo reports that by decree of October 26, 1966, the embargo on imports established by decree number 469/965 of October 18, 1965, will no longer apply to imports of merchandise subject to 90 per cent surcharge.

In effect, this permits the resumption of trade in a wide range of items, including consumer-type products. The following are of interest to Canadian exporters:

Fountain pens and mechanical pencils
Clocks and parts
Kits for assembly of radio and television sets
Agricultural machinery parts
Cigarettes
Wallpaper
Fencing and barbed wire
Various paper products and cardboard
Cables, of copper or of aluminum
Battery chargers
Rectifiers, transformers
Hand tools
Key blanks
Saws and saw blades
A wide range of machinery items
Automobile parts

Information for Exporters

THE Office of Trade Relations of the Department of Trade and Commerce publishes bulletins covering shipping documents and customs regulations for a number of countries of interest to Canadian exporters. This information is available in summary form, by area, for the Far East, the Middle East, Latin America, Europe and the Commonwealth.

Also available are bulletins on "Customs Information for Canadian Exporters to the United States" and "Tariff Preferences for Canadian Goods Abroad".

The Office attends to general inquiries from exporters about foreign import duties and trade regulations for particular products and other related subjects affecting Canadian exports.

For copies of any of the documents described, readers should get in touch with the Office of Trade Relations directly. ●

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 Trade Relations, Department of 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 Foreign currency unit in Canadian dollars	Value of Canadian dollar in foreign currency units
	at Nov. 25	
Algeria Dinar	.2188	4.58
Argentina Peso (free)	.0044	232.56
Australia Dollar	1.21	.8333
Austria Schilling	.0418	23.98
Bahamas Dollar	1.057	.9523
Belgium and Luxemhourg Franc	.0217	46.25
Bermuda Pound	3.020	.33
Bolivia Peso	.0913	11.01
Brazil Cruzeiro (official free)	.0005	2,053.39
Britain Pound	3.020	.33
British Honduras Dollar	.7550	1.32
Burma Kyat	.2273	4.40
Ceylon Rupee	.2265	4.41
Chile Escudo (bank rate)	.2514	3.98
(free)	.2195	4.56
Colombia[1] Peso (intermediate)	.080	12.50
Congo, Republic of[2] Franc	.0072	139.50
Costa Rica Colon	.1633	6.15
Cuba[3] Peso	.....	.....
Czechoslovakia Koruna	.1503	6.67
Denmark Krone	.1568	6.41
Dominican Republic Peso	1.082	.92
Ecuador Sucre (official)	.0601	16.67
(free)	.0547	18.35
El Salvador Colon	.4329	2.31
Fiji Pound	2.721	.37
Finland Markka	.3382	2.96
France, Monaco, etc.[4] Franc	.2188	4.58
Franco-African Republics[5] Franc	.0044	227.79
French Pacific[6] Franc	.0120	82.64
Germany D Mark	.2723	3.68
Ghana Cedi	1.258	.80
Greece Drachma	.0361	27.86
Guatemala Quetzal	1.082	.92
Guyana Dollar	.6291	1.59
Haiti Gourde	.2164	4.65
Honduras Lempira	.5411	1.85
Hong Kong Dollar	.1887	5.33
Hungary Forint (official)	.0921	10.86
Iceland[2] Krona (official)	.0252	40.00
India Rupee	.1436	7.02
Indonesia[7] Rupiah	.....	.....

Country and Currency	Value of Foreign currency unit in Canadian dollars	Value of Canadian dollar in foreign currency units
	at Nov. 25	
Iran		
Rial	.0143	70.02
Iraq		
Dinar	3.030	.33
Ireland		
Pound	3.020	.33
Israel		
Pound	.3607	2.77
Italy		
Lira	.0017	581.86
Japan		
Yen	.0030	335.37
Lebanon		
Pound (free)	.3478	2.87
Malaysia		
Dollar	.3535	2.83
Mexico		
Peso	.0866	11.61
Morocco		
Dirham	.2164	4.42
Netherlands		
Florin	.2990	3.34
Netherlands Antilles		
Florin	.5738	1.74
New Zealand		
Pound	3.010	.33
Nicaragua		
Cordoba	.1546	6.50
Nigeria		
Pound	3.020	.33
Norway		
Krone	.1515	6.64
Pakistan		
Rupee	.2265	4.41
Panama		
Balboa	1.082	.92
Paraguay		
Guarani (free)	.0087	116.27
Peru		
Sol (free)	.0403	24.94
Philippines		
Peso (free)	.2775	3.24
Poland		
Zloty (fixed basic rate)	.2705	3.72
Portugal & Colonies[8]		
Escudo	.0376	26.66
Sierra Leone		
Leone	1.510	.66
South Africa		
Rand	1.510	.66
Spain & Dependencies		
Peseta	.0181	55.55
Sweden		
Krona	.2092	4.79
Switzerland		
Franc	.2508	4.00
Syria		
Pound (free)	.2833	3.59
Thailand[2]		
Baht (free)	.0526	19.25
Tunisia		
Dinar	2.072	.48
Turkey		
Lira	.1202	8.35
United Arab Republic		
Pound (official)	2.489	.44
United States		
Dollar	1.082	.92
Uruguay		
Peso (free)	.0156	63.29
Venezuela		
Bolivar (official free)	.2410	4.11
West Indies		
Dollar[9]	.6291	1.59
Pound[10]	3.020	.33
Yugoslavia		
Dinar (official)	.0866	11.63

1. The fixed rate is no longer in effect, as of August 22, 1966.
2. Additional rates are in effect.
3. There is no trading in Cuban pesos in U.S. or Canadian banks at present.
4. Franc is also used in French Guiana, Guadeloupe and Martinique.
5. Chad, Central African Republic, Congo, Dahomey, Gabon, Ivory Coast, Mali, Islamic Republic of Mauritania, Niger, Senegal, Upper Volta, Cameroons, Togoland, and Malagasy. Also Reunion, Comoro Islands, St. Pierre and Miquelon.
6. New Caledonia, New Hebrides, French Polynesia.
7. As Indonesia is no longer a member of the IMF, a realistic rate is not available.
8. Approximately same rate for Portuguese territories in Africa.
9. Barbados, Trinidad and Tobago, Leeward and Windward Islands.
10. Jamaica.

Marketing Data Sheet

LEBANON

Area

4,000 square miles.

Climate

Ranges from 7°C. to 17°C. in January and 24°C. to 31°C. in July. Humidity ranges from 50 to 90 per cent year round.

Population

Estimated total population is 2.21 million, including 362,000 resident foreigners. Males 1.12 million, females 1.08 million.

50 and over	287,300
21 to 50	773,500
12 to 20	464,100
0 to 11	685,100

Income

National income $946 million; per capita income $430. Average daily wage: unskilled $2 to $3; semi-skilled $4 to $5; skilled $6 to $7.

Motor Vehicles

Passenger vehicles, 104,000; commercial vehicles, 14,000; motorcycles and scooters, 8,000.

Telephones

70 telephones per 1,000 persons.

Radio and Television

500,000 households have radios and 125,000 have TV receivers (625 lines per picture). Radio broadcasting facilities are publicly owned, TV privately owned.

Water Supply

Normally safe to drink. Average pressure is 18 millibars. Hardness is 190 ppm.

Electric Power

50 cycle a.c. 110/220 volts. Single and three phase systems. Cost (domestic and commercial): $0.056 per kw. which decreases to $0.035 per kw. with increased consumption. Industrial cost (on high tension line): day $0.0315 per kw.; night $0.0125. Industrial cost (on low tension line): day $0.0385; night $0.0285. The distribution system has a ground wire and a grounding conductor is not required in the electrical cord attached to an appliance. National capacity in 1965 was 800 million kwh. No changes in the distribution system are proposed.

Coal

Imported anthracite, briquettes and coke are available. Consumption: 10,000 tons. There is no local production.

Gas

Liquid butane is available from two refineries using gas piped from Iraq and Saudi Arabia. Production is 24,000 tons a year. (Total consumption in Lebanon was 30,000 tons in 1965.)

Chemical analysis:

specific gravity at 60°F.	0.572
95% point °F.	33.9
sulphur grains/100 SCF	4.0
vapour pressure at 100° PSIG	62.0
corrosion copperstrip at 100°F.	1

Gas is distributed in 12½ kg. and 25 kg. cylinders and in a few cases in bulk by metered tanks. Cost is $0.168 per kg. in cylinders and $0.6125 per cubic metre in bulk, plus meter rental.

Petroleum Products

	1964 Production (tons)
Fuel oil	560,000
Gas oil	250,000
Kerosene	130,000
Gasoline	280,000
LPG	24,000

Lubricating oils are imported (10,000 tons in 1964).

Weights and Measures

Metric system.

Screw Thread

Metric and Whitworth.

Standards

Official approval for gas, electrical or other fuel appliances is not mandatory but is recommended.

If undelivered return to:
The Queen's Printer, Ottawa, Canada

CANADA
POSTAGE PAID
PORT PAYÉ