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## WORKING PAPER



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THE CANADIAN CUT FLOWER INDUSTRY
(Working Paper 12/86)
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June 1986

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There has been considerable development, in the international trade of cut flowers in the last two decades. Improved productivity of traditional producing countries and new producing countries entering the international scene have increased the movement of floriculture products around the world. Most of the new countries that started exporting cut flowers benefit from certain advantages (favorable climatic conditions, lower initial investment for structural costs, low labor cost, etc.) which increase their competitiveness. As a result, imports of cut flowers from those countries have risen dramatically. Several Canadian growers question the future production in Canada of some cut flower varieties. One example, is that of carnations. For years, the Canadian production of carnations was very substantive but in recent years has been almost completely replaced by imports.

This study was undertaken in response to concerns expressed by Canadian greenhouse growers about changes in the Canadian industry that have occurred as a result of constantly rising Canadian imports of cut flowers.

The purpose of this paper is to review the Canadian industry and identify a number of factors that affect Canada's greenhouse industry.

In order to address this objective, the structure of the greenhouse industry as well as trends in Canada's production and importation of cut flowers over the last decade are examined. Finally, the effect (past, present and future) of cut flower imports on Canada's cut flower industry is evaluated.

Canadian producers have not been able to meet all of the year round cut flower demand of Canadian consumers. There are several reasons for this:
(a) Consumer demand is seasonal. At certain times of the year, demand greatly exceeds the capacity of domestic production, thus creating a demand for imports (i.e. Valentines day, Mother's Day, Christmas, Thanksgiving, Easter, etc.).
(b) Some varieties of flowers are not well known to consumers and demand is sporatic. Canadian growers are reluctant to provide such a product or to produce at times of the year when costs of production are very high. Greenhouse heating and the perishable nature of the product generate high production costs.
(c) Some varieties of flowers are imported into Canada in large quantities and at prices below the cost of production level in Canada, even though they can be produced domestically. Canadian growers cannot afford to continue producing those varieties that come into competition with low priced imports, and as a result, Canadian production is replaced by imports.

The floriculture industry in Canada is relatively important to the horticultural. sector. Farm sales of floricultural products (including potted plants, cut flowers and bedding plants) amounted to $\$ 227.6$ million and represented 15 percent of the total value of sales of all horticulture crops in 1983.

Cut flower, bedding plant and ornamental plant production while spread across Canada, is concentrated around the three main population centers of Vancouver, Toronto and Montreal. Ontario is the largest producing province accounting for about 60 percent of total sales. Ontario producers are located in proximity to the Toronto market. Some of them are able to take advantage of the demand from the Montreal area as well. The second largest production center, Vancouver, has a definite advantage in terms of Canadian production. Climatic conditions in the Vancouver area permit a longer production season and thus a greater diversity of varieties.

The area devoted to floriculture production (floriculture producers only) in the past decade has fluctuated from 141.8 hectares in 1973 to 287.7 hectares in 1981 and to 212.1 hectares in 1983. The main increase in the land base was recorded during the late 1970's and early 1980's. The average enterprise size for those same years was: 1435.4, 2288.4 and 1639.8 square meters respectively.

Product sales have been increasing over the period 1973-83. Total sales for all products (from floriculture producers only) in 1973 were reported to be approximately $\$ 59$ million. In 1983, they had jumped to about $\$ 204$ million, an increase of $345 \%$.

Total cut flower production (Table 1) over the period 1973-83 has varied as follows:

TABLE 1: TOTAL CUT FLOWER PRODUCTION IN CANADA, 1973-83 (From Floriculture Producers only)

## (number of stemis or bunches)

1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983

114, 326, 171
112,965,391
114, 404, 907
106,662, 435
112,603,206
115,901,449
116,680,299
111,874,536
110,715,938
101,111,819
108,235,363

Source: Statistics Canada \#22-202, 1973-1983

Sales of cut flowers (by Canadian producers) were historically made through traditional retail florist shops, wholesalers, and chain stores, with very little to the export market. Over the years, the sales pattern has changed greatly. What used to be the most important marketing channel 10 years ago, the traditional florist shop, has decreased in importance and been replaced by chain stores and wholesale businesses.

Chain stores (mainly food chain stores) have become important for cash and carry business in the past few years. Corner and convenience stores have also taken their share of the cash and carry business. This increase in the availability of flowers has increased consumer exposure to flowers and plants. Provided that there is product freshness and quality, the increase in exposure can contribute to improved consumer puchases. Future expansion in the sector is not likely to come from further development of traditional markets but from increased demand for the cash and carry business. Canadian producers have to adjust their production patterns in order to meet the demand of that second target group.

One important marketing tool for flower and plant producers is the Dutch type clock auction. There are three producer owned and operated flower clock auctions in Canada with one located in each of the main production areas. To be members of the auctions producers must maintain a certain quality and have a minimum volume of product for sale at the clock. The Vancouver clock auction was the first such auction established in Canada. Most growers in the Vancouver area sell at the auction. The Montreal Clock is the most recently established in Canada, with many members from Quebec and Ontario and only one grower from Nova Scotia and one from British Columbia. Curently there are almost as many Ontario growers that are members of the Montreal Clock as there are Quebec growers. However, the volume of production from the Ontario growers is much larger and most cut flowers come from Ontario or B'.C. The Toronto auction is the largest in Canada. However, there are substantial volumes of cut flowers sold in Toronto that do not go through the auction but through other marketing channels.

PHYSICAL MARKET STRUCTURE


- corner and convenience stores
- flower clock auction
- traditional retail
florist shops
- flower and plant shops
- dealers
- other growers


The \% in parenthesis represents the relative percentage of farm sales going to different sectors of the industry in the year 1983.

## Product Quality

According to some Canadian wholesalers, the quality of some imported flowers, at certain periods of the year, is better than the Canadian grown product. This may be due to an ideal production climate in some countries at times when Canadian production is limited. However, some Canadian grown flowers have a quality advantage over imports. In the case of chrysanthemums, Canadian grown products were reported as being fresher because of less handling and transportation. During most of the year the quality of Canadian grown flowers is equivalent or better than that of imported products.

## Transportation

The perishable nature of cut flowers makes their transportation over long distances a concern for producers. However, with the advent of modern air transportation, and the use of improved ground transportation facilities, fresh cut flowers are now shipped all over the world. Within Canada, flowers are shipped mainly by truck. Air transportation is a good means but costs are high and the availability of space at a specific time is also a concern. Transportation costs for cut flowers within Canada and from exporting countries vary greatly with carriers, volumes, frequencies, etc..

## Promotion

The promotion of Canadian grown product has been increasing substantially since 1973. Wire organizations have been the main advertising body for Canada. Flowers Canada has been advertising since 1973 on behalf of Canadian growers, i.e., promoting Canadian products. Specific promotional programs have also been helpful for the industry. The Wine, Cheese and Flower Receptions, a jointly funded Thanksgiving Flower program, coordinated by Agriculture Canada, increased the industry's exposure to the Hotel, Restaurant and Institutional trade sector. Other industry promotions include
secretary's week and the more traditional holidays. The trade organization has also introduced several regional programs to promote . the everyday use of flowers. It is at the point of purchase where price is most elastic, that promotion. programs such as "use of flowers everyday" are more likely to increase the demand for cut flowers and of more diversified varieties. In addition, producers and their organizations are trying to change the seasonal pattern of purchases that Canadian consumers have adopted by using promotional programs and publicity directed at encouraging the everyday purchases of floriculture products.

## III CANADIAN PRODUCTION

## Roses

Commercial production of roses has fluctuated greatly over the last ten years. In 1983, Canada produced more regular or long stemmed roses than it did ten years earlier, but production was down from the levels reached in 1978 and 1980 as a result of increased imports. An increase in the production of roses can be attributed to the general switch away from the production of carnations and chrysanthemums as these two came under heavy competition from imports. Ontario and British Columbia were the leading producers.

Sweetheart rose production has risen dramatically in Canada over the last ten years for the same reasons as for regular size roses. Ontario is the leading province, producing about nine or ten times as much as British Columbia or Quebec.

Carnations

Carnation production in Canada has plummeted as a result of the increased availability of low-priced imports. Production of regular carnations is now only slightly greater than that of regular
chrysanthemums. Quebec, Ontario, Alberta and British Columbia have experienced the sharpest declines in production. In 1983, Canada produced barely 24 percent of its 1973 volume. Producers have switched to the production of other ..types of cut flowers or to potted plant production.

Production of miniature carnations has almost doubled in the last ten years. Ontario, the leading producer of miniature carnations, has more than doubled its production during the period. The production of miniature carnations requires less labor than the standard type and thus are more profitable to grow in Canada.

## Chrysanthemums

Chrysanthemum production has fallen steadily over the last ten years. A particularly sharp decline was registered in 1982 mainly due to a major leafminer control problem. Ontario is the leading producer of regular chrysanthemums and was the province hardest hit over the last ten years, followed by British Columbia and Alberta. The supply short fall has been filled by low priced imports.

Production of spray or miniature chrysanthemums has fluctuated somewhat in the last ten years. Ontario is the major producing area for this type of chrysanthemum.

## Other Flowers

Production of narcissus and daffodils has more than tripled in the last decade. British Columbia and Ontario have recorded important increases, especially in recent years. These increases can be attributed to a change in consumer demand for a product different than the: traditional. flowers.

Tulip production has remained relatively the same over the last ten years. The breakdown by province has changed, however. Ontario and Quebec now produce about half as many tulips as they did ten years ago, while British Columbia has almost doubled its production. Competition from imported tulips from the Netherlands in eastern Canada accounts for a large share of the decline in production in that region.

Gladioli production in Canada has fallen sharply in the last ten years. The number of units produced in Canada is relatively small. Quebec remains the leading producer even though production in the province has declined significantly over the last ten years.

Iris production in Canada has increased slightly in recent years. Ontario and British Columbia are the leading producers, followed by Quebec. Production in Ontario and British Columbia has fluctuated a little over the last ten years and has followed an upward trend recently. Production in Quebec has fallen sharply.

For many of the flowers mentioned above, production peaks occurred between 1976 and 1980 and in 1983. Recessions occurred in 1974-75 and in 1981-82, and the floriculture industry resumed growth in the subsequent periods of economic recovery. This explains the production peaks in some provinces for the late 1975, 1976, and 1983-84. Imports have also played a major role. Canadian production of some cut flowers has been affected by low priced imports from developing countries as well as by such factors as exchange rates, availability and cost of transportation.

## IV IMPORTS

In recent years, Statistics Canada has provided data on the importation of cut flowers in three main categories; roses, carnations, and others. Unfortunately, the same breakdown does not
exist for the years prior to 1978. For several years now, the United States, the Netherlands and Columbia have been Canada's main suppliers of cut flowers and ornamentals. The value of imports has increased by $250 \%$ during the last ten years (Table 2).

TABLE 2: CANADIAN IMPORTS OF FLOWERS AND ORNAMENTALS AND VOLUME FOR MAJOR EXPORTING COUNTRIES

|  | Total | USA | Columbia | Nether lands |  | Other major exporters ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$(000) |  |  |  |  |  |
| 1971 | 5407 | 4981 | 41 | 148 | 95 | (West Germany) |
| 1972 | 6346 | 5498 | 70 | 288 | 209 | (West Germany) |
| 1973 | 8549 | 7241 | 100 | 476 | 242 | (Italy) |
| 1974 | 10455 | 8540 | 204 | 697 | 368 | (Italy) |
| 1975 | 12355 | 10399 | 464 | 576 | 350 | (Italy) |
| 1976 | 15666 | 12406 | 1186 | 1300 | 507 | (Italy) |
| 1977 | 16424 | 13276 | 1331 | 783 | 347 | (Italy) |
| 1978 | 18864 | 13276 | 3186 | 1300 | 330 | (Italy) |
| 1979 | 19707 | 13673 | 3843 | 871 | 264 | (Italy) |
| 1980 | 19449 | 12355 | 4264 | 1119 | 225 374 | $\begin{aligned} & \text { (Mexico) } \\ & \text { (Italy) } \end{aligned}$ |
| 1981 | 27042 | 15872 | 7025 | 2325 | $\begin{aligned} & 398 \\ & 449 \end{aligned}$ | (Mexico) <br> (Italy) |
| 1982 | 29996 | 16028 | 8451 | 3747 | $\begin{aligned} & 426 \\ & 235 \end{aligned}$ | (Mexico) (Italy) |
| 1983 | 36490 | 16445 | 11382 | 6917 | 522 | (Mexico) |
| 1984 | 43781 | 18851 | 12879 | 9229 | $\begin{aligned} & 517 \\ & 287 \end{aligned}$ | (Mexico) <br> (Peru) |

Tountry in brackets is the major source for that year among the "other" exporters.

Source: Statistics Canada, Catalogue \# 65-207

Included in the value of total imports are imports of production material such as cuttings that are required by Canadian producers for the production of some products.

The big increase in imports since 1981 can be attributed to an increase in cut flower imports. Between 1975 and 1984, imports of flowers and ornamentals rose by 354 percent, while total cut flower production in Canada did not increase.

TABLE 3. CANADIAN IMPORTS OF CUT FLOWERS (MAJOR EXPORTERS)

|  | Total | USA | Columbia | $\begin{gathered} \text { Nether- } \\ \text { lands } \\ \hline \end{gathered}$ |  | er major xporters |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 000) |  |  |
| 1978 ( |  |  |  |  |  |  |
| Roses | 2154 | 2080 | 30 | 25 | - |  |
| Carnations | 3048 | 2253 | 79.1 | - | - |  |
| Other cut |  |  |  |  |  |  |
| flowers | 11084 | 6734 | 2359 | 1036 | 251 | (Israel) |
| Total | 16286 | 11067 | 3180 | 1061 |  |  |
| 1979 |  |  |  |  |  |  |
| Roses | 1644 | 1538 | 50 | 42 | - |  |
| Carnation | 3873 | 2340 | 1514 | 6 | 6 | (Mexico) |
| Other cut flowers | 10368 | 6578 | 2268 | 755 | 166 | (Italy) |
| Total | 15885 | 10456 | 3832 | 803 |  |  |
| 1980 |  |  |  |  |  |  |
| Roses | 1496 | 1320 | 59 | 85 | - |  |
| Carnations | 3,597 | 2210 | 1280 | 32 | 30 | (Mexico) |
| Other cut flowers | 10611 | 6113 | 2856 | 973 | 167 | (Italy) |
| Total | 15704 | 9643 | 4195 | 1090 |  |  |
| 1981 |  |  |  |  |  |  |
| Roses | 2349 | 1793 | 319 | 156 | - |  |
| Carnations | 7,057 | 3084 | 3875 | 30 | - |  |
| Other cut flowers | 12618 | 7128 | 2716 | 2036 | 198 | (New Zealand) |
| Total | 22024 | 12005 | 6910 | 2224 |  |  |
| 1982 |  |  |  |  |  |  |
| Roses | 3171 | 2272 | 386 | 350 | - |  |
| Carnations | 9780 | 4024 | 5437 | 146 | 68 | (Israel) |
| Other cut flowers | 12707 | 6020 | 2615 | 3225 | 194 | (Italy) |
| Total | 25658 | 12316 | 8438 | 3721 |  |  |
| 1983 |  |  |  |  |  |  |
| Roses | 4416 | 2324 | 866 | 774 | - |  |
| Carnations | 12330 | 4124. | 7465 | 461 | 120 | (Chile) |
| Other cut flowers | 15751 | 6304 | 3008 | 5591 | 127 | (New Zealand) |
| Total | 32227 | 12752 | 11339 | 6796 |  | (New Zealand) |
| 1984 |  |  |  |  |  |  |
| Roses | 5164 | 2480 | 944 | 1196 | 180 | (Israel) |
| Carnations | 15590 | 5551 | 8957 | 591 | 180 | (Chile) |
| Other cut flowers | 18232 | 6533 | 2889 | 7380 | 258 | (New Zealand) |
| Total | 38986 | 14564 | 12790 | 9167 |  |  |

There was a considerable increase in the value of floriculture products entering Canada (Table 3 over the period 1978-84).

The United States is a major source of imports although the level of imports of cut flowers into Canada went from $68 \%$ in 1978 to $37 \%$ in 1984. For the same period, Columbia's share increased from 20 to $33 \%$ and the Netherland's share went from 7 to $24 \%$. (It is recognized that some material from the Netherlands was produced in other countries.) The growth of imports from Columbia can be attributed to lower production costs (labour, capital costs) and their efficient distribution system. The Netherlands growth can be explained by increased use and introduction of improved greenhouse technology, the selection and improvement of varieties, the efficient distribution system and the promotion of their cut flowers.

Imports of roses since 1978 went from $\$ 2.1$ million to $\$ 4.1$ million in 1983, an increase of $92 \%$ over that period. Rose production is a good example of a flower that cannot be produced for peak demand periods only. Roses require enough light all year round to yield good quality and volume. Once rose beds are in the ground they have a production life of four to five years. They must be cut, fertilized, pruned, etc. Rosebeds cannot be increased substantially to try to replace all imports. If producers attempted to increase their production base to meet all peak demand periods, they would be left with an oversupply of roses on the market for the remainder of the year.

Producers would have to increase promotion in the hope of increasing consumption or they would need to develop reliable export markets to dispose of the oversupply if they decided to increase their rose production base. Without changing the base of rose beds, the use of supplemental lighting could increase yields greatly and thus increase the response to Canadian demand at peak periods. However, the cost of
using supplemental lighting would be great and may not justify its use which would be tied to climatic conditions in different regions. Because of the necessity of sufficient light for rose production, it is critical that managers plan to have the crop harvested to meet the peak demand. Use of cold storage prior to a peak demand period could also help producers in meeting the lucrative special occasion market and reduce imports.(eg. Valentine's Days)

In 1978, imports of carnations represented $19 \%$ of total imports of cut flowers while in 1983 this percentage was increased to $38 \%$. Since the late sixties, carnations have been grown on a commercial scale in several developing or semi-industrialized countries that have an ideal climate. The availability of cheap labor (regular carnation production is very labor intensive), low or non existant heating costs and smaller initial capital outlay are all factors that contributed to increased or sustained production of cut flowers in these countries.

Imports of other cut flowers except roses and carnations increased from $\$ 11.1$ million in 1978 to $\$ 18.2$ million in 1984. The major exporter of other cut flowers to Canada in 1984 was the Netherlands followed closely by the United States. It is probably in that category that producers can compete with imports because the input costs in Canada are somewhat similar to those in the Netherlands and some parts of the United States. Several producers in B.C. and Ontario have started the production of cool crops as a switch from the production of flowers competing directly with imports. Some cool crop flowers were introduced on the Canadian market by Dutch producers and they seemed to be well accepted by consumers. Their Canadian production has been increasing over the past few years.

In 1984, the U.S. was still our major supplier of roses, accounting for $48 \%$ of the value of imports; however, it declined from $97 \%$ in. 1978.

Carnations were mainly supplied by the U.S. in 1978. In fact, of all carnation exports to Canada in 1973, the U.S. accounted for $74 \%$. In 1984, the U.S. shipped only $36 \%$ of the value imported. During that period, Columbia's share of Canadian imports of carnations went from $26 \%$ to $57 \%$.

For other cut flowers, the U.S. is now the second major exporter to Canada; its share went from $61 \%$ in 1978 to $42 \%$ in 1984. Meanwhile the Netherlands share went from $9 \%$ in 1978 to $47 \%$ in 1983. That increase is attributed partly to changes in the preferences of consumers which have gone in the past few years toward less traditional flowers and several new high valued flowers which the Netherlands supplies and the increased availability of transportation. Colombia's share of other cut flowers decreased from $21 \%$ in 1978 to $16 \%$ in 1984. Most of the flowers from Colombia included in that category would be cut chrysanthemums (spray and regular).

## $v$ FACTORS AFFECTING PRICES IN CANADA

The major concern of Canadian producers is that some of the imports come into the country at very low prices. In some cases, those imports rather than complementing the Canadian production, create chaos in the Canadian cut flower industry. A comparison of production costs between Canada and the main exporting countries would help determine the degree of competition.

Unfortunately, because of limited Canadian data, the main production costs cannot be compared in detail between Canada and other countries. Cut flower production is practiced from one end of the country to the other. Heterogenous climatic conditions and different cultural practices from one province to the other and from one grower to another in the same province, does not permit the establishment of a cost of production for a typical enterprise producing cut flowers in Canada. Furthermore, there is no recent cost of production data published by the major producing provinces for a typical enterprise.

Due to a lack of data, a few producers in different regions were contacted to draw up a list of the main costs of Canadian cut flower producers. From that survey, the largest production input is the cost of labour. Depending on the mechanization of the enterprise and where it is situated, the labor cost was followed by either energy or materials costs.

The following table shows the farm input price index for different costs in eastern and western Canada, and gives an idea of the evolution of costs for Canadian producers for the three main cash cost items.

TABLE 4.

|  | Eastern Canada |  |  |  | Western Canada |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Labour | Fuel | Materia]* |  | Labour | Fuel | Materiat* |
| 1971 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1972 | 106.15 | 100.47 | 105.00 | 104.8 | 108.55 | 103.00 | 107.09 |
| 1973 | 119.85 | 107.32 | 112.56 | 112.8 | 124.10 | 108.77 | 112.69 |
| 1974 | 139.47 | 131.87 | 173.26 | 125.0 | 148.30 | 119.67 | 159.66 |
| 1975 | 157.75 | 155.77 | 205.52 | 138.5 | 176.30 | 144.47 | 212.72 |
| 1976 | 180.92 | 177.90 | 213.15 | 148.9 | 203.40 | 166.65 | 232.94 |
| 1977 | 197.85 | 193.90 | 218.39 | 160.8 | 225.77 | 181.30 | 234.25 |
| 1978 | 208.25 | 205.45 | 229.01 | 175.1 | 239.90 | 190.32 | 247.20 |
| 1979 | 220.85 | 223.70 | 266.90 | 191.2 | 254.07 | 198.42 | 279.16 |
| 1980 | 231.85 | 271.02 | 318.36 | 210.6 | 272.32 | 236.37 | 324.55 |
| 1981 | 250.38 | 370.92 | 345.49 | 236.9 | 291.05 | 327.02 | 373.19 |
| 1982 | 266.55 | 435.62 | 359.49 | 262.5 | 309.87 | 382.52 | 370.0 |
| 1983 | 285.00 | 432.87 | 358.76 | 283.37 | 321.25 | 402.55 | 365.22 |

*Average of FIPI for chemicals and FIPI for fertilizer
Source: Statistics Canada, F.I.P.I.

It is clear that greenhouse operators faced increased labour costs, fuel and material costs that were well above the average CPI for Canada from 1971 to 1983. After 1974 for eastern Canadian producers and after 1975 for western Canadian producers, the price of fuel went up considerably compared to the price of other items in Canada. Growers have reacted to this price increase by being more concious of the use of energy savings equipment. The same is true for the price of materials across Canada after 1973.

Prices of cut flowers (at the growers level) are not published by Statistics Canada. However, the B.C. United Flower growers have supplied the average prices for all flowers and plants sold at the auction in Vancouver over the period 1975-1984.

TABLE 6. AVERAGE ANNUAL CHANGE IN PRICE FOR CUT FLOWER SALES AT THE B.C. VANCOUVER AUCTION AND THE Changes in Fipi for the same PERIOD (1975-1984)

|  | \% of Price Change <br> at B.C. Clock Auction | \% change of the Farm <br> Input Price Index |
| :--- | :---: | :---: |
| 1975 | $+11.2 \%$ |  |
| 1976 | $+12.1 \%$ | 9.2 |
| 1977 | $+7.2 \%$ | 4.2 |
| 1978 | $+16.8 \%$ | 11.8 |
| 1979 | $+4.3 \%$ | 16.7 |
| 1980 | $+9.2 \%$ | 9.6 |
| 1981 | $-1.3 \%$ | 13.5 |
| 1982 | $+0.4 \%$ | 3.2 |
| 1983 | $+13.1 \%$ | 1.0 |
| 1984 | $+7.9 \%$ | 3.1 |

Source: United Flower Growers, B.C. Clock auction.

The percentage increase in the price of the flowers did not always reflect the change in the cost of inputs as demonstrated above. Despite the introduction of new types of flowers and plants, growers did not receive a large increase in real price since 1979 except in 1983.

Factors, other than production costs, that affect price include the exchange rate and tariffs. Transportation costs and handling charges are two other important factors to study but were not included in this analysis because of limited availability of data.

## Exchange Rates

The exchange rate plays an important role in the purchasing power of buying or selling cut flowers. The following table lists the exchange rates between Canada and the three main partners for cut flower trade from 1974 to 1984.

TABLE 6. EXCHANGE RATES

|  | Value <br> Year <br> Canadian dollars | Value of 1 <br> dutch guilder in <br> Canadian dollars | Value of 1 <br> Colombian peso in <br> Canadian dollars |
| :--- | :--- | :--- | :--- |
| 1974 | 0.9780 | 0.3644 | 0.03825 |
| 1975 | 1.0173 | 0.4031 | 0.03373 |
| 1976 | 0.9861 | 0.3734 | 0.02948 |
| 1977 | 1.0635 | 0.4336 | 0.02980 |
| 1978 | 1.1402 | 0.5283 | 0.03299 |
| 1979 | 1.1716 | 0.5841 | 0.02949 |
| 1980 | 1.1690 | 0.5892 | 0.02657 |
| 1981 | 1.1990 | 0.4822 | 0.02225 |
| 1982 | 1.2341 | 0.4622 | 0.01939 |
| 1983 | 1.2324 | 0.4327 | 0.01577 |
| 1984 | 1.2948 | 0.4048 | 0.01301 |

Exchange rates between Canada and the Netherlands and Colombia have recently been in favor of the Canadian importers, i.e. for the past four years in the case of the Netherlands and six years for Colombia (Table 6): This means that in addition to the advantage of increased technology or climatic conditions and a larger assortment of flowers, an importer could buy more dutch flowers with Canadian currency than four years ago (ceteris paribus). The same is true for Colombian flowers. The purchasing of cut flowers from Colombia is not only made attractive by the lower costs of production in that country and an ideal production climate for some flowers, but also by the fact that an importer in 1984 could buy 2.54 times more flowers with a Canadian dollar than in 1980 (ceteris paribus).

The case of the United States is different. The purchasing power of Canadian importers has been declining over the past few years. The value of the U.S. dollar has been increasing making purchases of products from the United States more expensive for Canadian importers. This partly explains the fact that the imports of cut flowers from the United States as a percentage of total imports of cut flowers has decreased over the years.

## Tariffs

Cut flowers entering the country are subject to different duties depending on the type of flower and the country of origin.

Since January 1, 1985, Canada has adopted an international system of customs valuation referred to as the transaction value system. With the transaction value method, the duty is calculated on the price of the transaction as adjusted when sold for exportation to Canada. The new custom act provides other ways of calculating duty when there are limitations on the use of. the transaction value method. When i.t cannot be used, transaction value of identical goods or similar goods
can be used. If a customs value for the imported goods cannot be determined on the basis of these methods then the deductive value or computed value method can be used. Previous to January 1, 1985, the duty was based on fair market value of the goods in the country of destination. In the case of cut flowers, fair market value had been determined by a ministerial prescription using the average value of the products in the U.S. for the previous year because there did not exist sufficient data for the Canadian products.

Flowers (except orchids) and foliage, natural, cut, whether or not in designs or bouquets and whether or not coloured by osmosis, are: a) free of duty when they originate from a commonweal th member country or from a country that comes under the General Preferential Tariff Treatment, b) dutiable at $12.5 \%$ if they originate from a member country signatory of the G.A.T.T., c) dutiable at $8.3 \%$ if they originate from the U.K. or Ireland, and d) are dutiable at $40 \%$ from other countries.

When cut flowers are imported to Canada from the United States, the Netherlands, and Columbia, they have a $12.5 \%$ tariff applicable to them.

VI IMPACT OF CUT FLOWER IMPORTS ON THE CANADIAN FLORICULTURE INDUSTRY

It is difficult to summarize the effect of cut flower imports on the Canadian industry as the data available do not permit precise conclusions. Nevertheless, imports of cut flowers have and will continue to have an impact both positive and negative on the Canadian cut flower industry. By providing a large assortment of cut flowers to Canadian consumers, and increasing their availability, exporting countries have changed the buying habits and attitudes of Canadian consumers toward the purchasing of cut flowers.

More and more, consumers are buying cut flowers as an impulse everyday item rather than for traditional occasions only. The Canadian producers can now benefit from that increased demand.

Imports of cut flowers that compete with traditional Canadian grown products (carnations, roses, chrysanthemums) have increased significantly during the past ten years. The increased importation of low priced standard carnations has reduced the Canadian production to a nearly non existant level. In response, Canadian producers have switched to the production of other cut flowers, potted plants and potted flowering plants.

One positive side of low priced imports is that by bringing on the Canadian market low priced cut flowers or bunches, wholesalers may contribute to the development of the cash and carry business which is likely the segment of demand that has the most potential for development. The inelastic part of the demand for cut flowers (traditional markets: weddings, deaths, hospital, births) is not likely to increase in any significant way, however the elastic demand, which is believed to be the cash and carry business, will likely grow.

The development of the cash and carry business will be possible through the increased availability of cut flowers. The development of promising market channels will impact positively on the demand as well. The chain stores have contributed for many years now to the development of the cash and carry business. They started out by importing a large volume of their flowers but now have turned toward Canadian producers to supply a larger volume of their needs. Increased exposure of consumers to cut flowers in locations like chain stores will positively affect the demand.

If low priced imports impact on the demand for flowers, Canadian producers will likely benefit in the long run. However in order to get a fair share of the market Canadian producers will have to be more and more competitive, to continue to adjust production practices and technology to adjust to changing consumer tastes, to develop efficient distribution systems, to encourage the introduction of new point of sale material and to promote the use and care of Canadian cut flowers. Efficient Canadian producers have already started to react to imports by increasing the use of technology in greenhouses and by switching production to the more heavily demanded types of cut flowers. For
those producers, imports are not likely to affect their market as they did before. Market research, improved production, cutting, handling and transportation techniques and promotion will benefit the future of the cut flower industry in Canada.

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