Changes In Canadian Grain And Livestock Policies: Implications For U.S. And Minnesota Agriculture

by Robert W. Jolly and Martin E. Abel*

Canada's relations with the United States are complex and have undergone considerable change in the past 5 years. The essential characteristic of all Canadian policy—foreign, domestic, industrial, and agricultural—has been a deliberate move toward increased diversification. In the future, that nation will be less dependent on the United States as a trading partner. With respect to agriculture, it means less dependence on wheat monoculture and less dependence on traditional markets in developed countries.

The official death knell of the U.S.-Canadian “special relationship” sounded in 1971 when Canada adopted the “Third Option.” This explicit and far-reaching policy stance is “a comprehensive, long-term strategy intended to give direction to specific policies and programs which will reduce Canadian vulnerability to the magnetic pull of the United States.” Since the United States and Canada are mutually important trading partners and competitors in agricultural markets, the Third Option has relevance to U.S. and Minnesota agriculture.

This issue of Minnesota Agricultural Economist discusses Canada’s grain and livestock policies and how they affect Canada’s competitive position in world markets.

Canadian agriculture is distinctly regional. Two broadly distinct agro-climatic regions are: the Prairie Provinces of Manitoba, Saskatchewan, and Alberta together with British Columbia — Western Canada; and Ontario, Quebec, and the Maritimes—Eastern Canada. The distinction between East and West lies not only in their differing resource bases, but also in their markedly different agricultural institutions.

Western Canada Crop production

About 80 percent of Canada’s improved agricultural land is in Western Canada.

The growing season there is short, ranging from 115 frost-free days in the south to 80 days or less in the north. Longer days compensate somewhat for the reduced growing season. Rainfall is minimal and less dramatic technical changes: improved disease resistance; increased fertilizer and herbicide utilization; and improved cultural and management practices.

Livestock production

Livestock production is an important alternative to cash grain marketing. Beef and hog production are the primary livestock enterprises. Beef cattle numbers increased from 2.8 to 9 million head between 1947 and 1975. Hog numbers went from about 1.9 to 3.1 million head during the same period. Cow-calf operations increased in Manitoba and Saskatchewan. The expansion of cattle-feeding operations was the greatest, however, in Alberta. Although Western Canada’s urban population has been increasing, the dairy cow population has declined slowly the past 25 years.

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1Allan J. MacEachen, “Canada/United States relations,” speech delivered to the Winnipeg Branch of the Canadian Institute of International Affairs, Jan. 23, 1975.

Flaxseed acreage has been relatively constant. Rapeseed acreage increased from virtually zero in the mid-1950’s to roughly 4 million acres at present. Rapeseed is a cool-season crop best suited to the parkland zone in the Prairie Provinces. This restricted area of adaptation makes its sudden rise to prominence even more impressive.

The two most striking characteristics of grain yields are the relatively modest upward trend in yields for all grains and the uniform, weather-induced variability across all grains. Although improved varieties of Prairie grains have been introduced, nothing has occurred approaching the technological gains attained in hybrid corn in the United States. Yield increases in the West are the result of slower and less dramatic technical changes: improved disease resistance; increased fertilizer and herbicide utilization; and improved cultural and management practices.

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The peaks in hog numbers on farms generally correspond to periods of surplus grain production. Hog production provides an alternative to cash grain markets for many Prairie farmers.

**Eastern Canada**

**Crop production**

The Eastern Provinces are geographically diverse. Most crop production is in Ontario, which accounts for about 12 percent of Canada's improved farmland. Soils and climate are quite varied in the East. The effect of the Great Lakes is significant. The lower peninsula of Ontario has a growing season of over 200 frost-free days. Rainfall is generally plentiful throughout Eastern Canada, ranging from 30-45 inches annually.

Major field crops are oats, wheat, corn, barley, soybeans, tobacco, horticultural crops, and forages.

Table 1. Canada's agricultural exports by major commodity groups, 1964-68 and 1972-73

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<tbody>
<tr>
<td>Grains</td>
<td>938.9 million</td>
<td>1339.0 million</td>
<td>1.6</td>
<td>2.1</td>
<td>Barley (60.5/83.1)</td>
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<td>Grain products (human)</td>
<td>94.1</td>
<td>96.4</td>
<td>13.2</td>
<td>32.0</td>
<td>Bakery products (61.3/66.0)</td>
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<td>Oilseeds</td>
<td>94.0</td>
<td>291.0</td>
<td>3.8</td>
<td>2.0</td>
<td>Mustard seed (80.5/89.7)</td>
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<tr>
<td>Other animal products</td>
<td>85.1</td>
<td>136.2</td>
<td>27.0</td>
<td>32.7</td>
<td>Hides, skins, and furs (62.2/51.4)</td>
</tr>
<tr>
<td>Meats</td>
<td>65.1</td>
<td>165.1</td>
<td>75.6</td>
<td>56.0</td>
<td>Beef, veal, pork, fresh and frozen (77.0/87.2)</td>
</tr>
<tr>
<td>Live animals</td>
<td>53.7</td>
<td>104.8</td>
<td>88.3</td>
<td>80.8</td>
<td>Cattle and calves (96.2/87.1)</td>
</tr>
<tr>
<td>Tobacco, raw</td>
<td>42.3</td>
<td>55.0</td>
<td>1.2</td>
<td>3.6</td>
<td>chuckled</td>
</tr>
<tr>
<td>Dairy products</td>
<td>41.9</td>
<td>69.2</td>
<td>10.3</td>
<td>29.3</td>
<td>chuckled</td>
</tr>
<tr>
<td>Animal feeds</td>
<td>33.8</td>
<td>71.4</td>
<td>56.8</td>
<td>54.6</td>
<td>chuckled</td>
</tr>
<tr>
<td>Oilseed products</td>
<td>28.1</td>
<td>37.9</td>
<td>2.8</td>
<td>8.4</td>
<td>chuckled</td>
</tr>
<tr>
<td>Vegetables, excl. potatoes</td>
<td>27.1</td>
<td>48.6</td>
<td>22.9</td>
<td>22.8</td>
<td>Carrots, turnips, fresh (71.0/53.2)</td>
</tr>
<tr>
<td>Other agricultural</td>
<td>102.9</td>
<td>154.6</td>
<td>74.0</td>
<td>60.4</td>
<td>chuckled</td>
</tr>
<tr>
<td>Total agricultural</td>
<td>1607.0</td>
<td>2569.2</td>
<td>16.0</td>
<td>17.7</td>
<td>chuckled</td>
</tr>
</tbody>
</table>

1Adjusted for transshipments.

Table 2. Canada's agricultural imports by major commodity groups, 1964-68 and 1972-73

<table>
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<tbody>
<tr>
<td>Fruits and nuts</td>
<td>223.0</td>
<td>361.5</td>
<td>59.4</td>
<td>60.9</td>
<td>Grapes, citrus fruits, juices, and concentrates (58.4/54.4)</td>
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<tr>
<td>Plantation crops¹</td>
<td>147.1</td>
<td>112.0</td>
<td>11.1</td>
<td>31.9</td>
<td>Coffee and products (81.2/85.2)</td>
</tr>
<tr>
<td>Other animal products</td>
<td>91.1</td>
<td>117.7</td>
<td>38.1</td>
<td>53.0</td>
<td>Hides, skins, and furs (62.0/65.4)</td>
</tr>
<tr>
<td>Vegetables</td>
<td>90.7</td>
<td>172.1</td>
<td>76.6</td>
<td>73.1</td>
<td>Lettuce, tomatoes, celery (43.7/42.8)</td>
</tr>
<tr>
<td>Vegetable fibers</td>
<td>69.6</td>
<td>68.1</td>
<td>59.5</td>
<td>81.2</td>
<td>Raw cotton (93.2/90.8)</td>
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<tr>
<td>Sugar</td>
<td>61.3</td>
<td>149.6</td>
<td>2.4</td>
<td>2.1</td>
<td>chuckled</td>
</tr>
<tr>
<td>Oilseeds products</td>
<td>59.9</td>
<td>97.9</td>
<td>68.9</td>
<td>46.4</td>
<td>chuckled</td>
</tr>
<tr>
<td>Oilseeds²</td>
<td>59.0</td>
<td>66.9</td>
<td>91.7</td>
<td>95.7</td>
<td>chuckled</td>
</tr>
<tr>
<td>Meats</td>
<td>52.9</td>
<td>188.6</td>
<td>46.3</td>
<td>36.0</td>
<td>chuckled</td>
</tr>
<tr>
<td>Grains²</td>
<td>44.1</td>
<td>62.8</td>
<td>97.5</td>
<td>97.4</td>
<td>chuckled</td>
</tr>
<tr>
<td>Live animals</td>
<td>10.0</td>
<td>83.0</td>
<td>92.0</td>
<td>94.3</td>
<td>chuckled</td>
</tr>
<tr>
<td>Other agricultural</td>
<td>146.0</td>
<td>369.2</td>
<td>67.1</td>
<td>53.7</td>
<td>chuckled</td>
</tr>
<tr>
<td>Total agricultural</td>
<td>1054.7</td>
<td>1849.4</td>
<td>53.6</td>
<td>55.0</td>
<td>chuckled</td>
</tr>
</tbody>
</table>

¹Coffee, tea, rubber, etc. ²Adjusted for transshipments.
are of relatively minor importance. Soybeans have become a strong competitor for corn; however, their cultivation is restricted to the lower portion of the Ontario Peninsula. Crop yields in the East are generally higher than in Western Canada, and they exhibit less fluctuation. Corn yields have improved since 1947. As in the West, however, yield gains in the small grains have been much less dramatic.

Livestock production

The regional distinction between East and West in livestock production is clearly important. Hog populations in the two regions are roughly equal. Dairying is more important in the East. Although beef cattle numbers have increased in Eastern Canada, the increase has been rather gradual compared to the West.

Regional composition of agricultural output

The value of farm output (1972-73 average) was 6.1 billion $Can. with 3.2 billion $Can. in Western Canada and 2.9 billion $Can. in Eastern Canada. By comparison, the average value of farm sales in the United States for the same period was 74 billion $U.S.; for Minnesota, the value was 3 billion $U.S.

Of the total value of commodity groups, Western Canada accounted for 96.3 percent of the grains, 89.3 percent of the oilseeds, 50.3 percent of the livestock, 12.5 percent of the dairy products, and 20.8 percent of other agricultural commodities.

Trade and competition

Trade in agricultural products is of great importance to the Canadian economy; 42.4 percent of total cash receipts (1972-73 average) came from exports. Although Canada's productive capacity is small compared to the United States, its consumption requirements are also small. Canada's export potential in certain commodity groups is therefore quite high.

The Prairies play a dominant role in production for export, with exports accounting for 67.5 percent of farm cash receipts (1972-73 average). Comparable figures for other areas are 26.7 percent for British Columbia, 18.5 percent for Ontario and Quebec, and 17.0 percent for the Maritimes. A similar statistic for Minnesota presently would be about 15 percent.

Overview

Tables 1 and 2 broadly summarize Canada's agricultural trade characteristics as well as its competitive position with the United States. Grains and oilseeds and their products clearly dominate Canada's agricultural exports, accounting for over 70 percent of the average total in the 1972-73 period. Livestock and animal products accounted for 16 percent of total exports. The U.S. share of Canadian exports is heavily concentrated in livestock and products.

Canada's agricultural imports consist primarily of supplementary commodities not grown in Canada. Citrus fruits, coffee, fresh salad vegetables, raw cotton, and sugar are major supplementary goods. Except for sugar and coffee, most of these commodities originate in the United States. Competitive imports include livestock, meat, corn, and soybeans, again primarily of U.S. origin. The United States has been Canada's primary source of agricultural imports for over 50 years.

Table 3 summarizes Canada's trade patterns. Canada's primary single markets are the United States, the European Economic Community, Japan, Russia, and the People's Republic of China (PRC). Canada's trade patterns have tended to fluctuate from year to year, and only broad generalizations are possible. Japan's rise as an outlet for Canadian agricultural output is noteworthy. Trade with developing nations is important for Canada. A better understanding of Canada's trade patterns can be obtained by looking at key commodity groups.

Wheat and flour

Wheat is Canada's major agricultural export commodity. Roughly two-thirds of domestic production is exported each year. Over the past 20 years, Canada's share of world wheat trade has ranged between 17-28 percent, second only to the United States (at about 50 percent). Wheat and flour exports have ranged from 250 to 575 million bushels per year.

Canadian hard red spring wheat is regarded as the quality standard for bread wheats. Although protein levels are high for Western Canadian wheat, they are subject to considerable variation—depending both on growing conditions and the locations in which the wheat is produced.

Before 1960, Canadian wheat was exported primarily to developed nations. The United Kingdom and Europe purchased over 70 percent of Canada's total wheat exports in the mid-1950's. In 1960, the Chorleywood Bread Process was developed in the United Kingdom. This innovation allowed the blending of locally grown low protein soft wheats in the grist. Bread that formerly required 60-75 percent imported hard wheat can now be produced with only 25 percent hard wheat.

However, the Chorleywood process requires relatively constant protein levels, a characteristic lacking in Canadian wheats. Furthermore, the Canadian grading system did not segregate by protein levels as did the systems employed by the United States.

Table 3. Major Canadian agricultural export markets, 1964-68 and 1972-73

<table>
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<th>1964-1968</th>
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<th>1972-1973</th>
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<tr>
<td></td>
<td>$Can.</td>
<td>Share</td>
<td>$Can.</td>
</tr>
<tr>
<td></td>
<td>millions</td>
<td>percent</td>
<td>millions</td>
</tr>
<tr>
<td>U.K.</td>
<td>307.2</td>
<td>19.1</td>
<td>304.0</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>257.4</td>
<td>16.0</td>
<td>455.5</td>
</tr>
<tr>
<td>E.E.C.</td>
<td>195.6</td>
<td>12.2</td>
<td>326.5</td>
</tr>
<tr>
<td>Japan</td>
<td>161.2</td>
<td>10.0</td>
<td>407.0</td>
</tr>
<tr>
<td>U.S.S.R.</td>
<td>206.2</td>
<td>12.8</td>
<td>276.5</td>
</tr>
<tr>
<td>P.R.C.</td>
<td>134.2</td>
<td>8.4</td>
<td>211.0</td>
</tr>
<tr>
<td>Others</td>
<td>345.4</td>
<td>21.5</td>
<td>588.5</td>
</tr>
<tr>
<td>Total</td>
<td>1607.2</td>
<td>100.0</td>
<td>2569.0</td>
</tr>
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</table>

1United Kingdom.
2Benelux, France, Italy, West Germany.
3People's Republic of China.
States, Australia, and the U.S.S.R. The Chorleywood process and the inadequate grading system have contributed to steadily declining sales to the United Kingdom since 1960. As the Chorleywood bread process spread to Europe and Southeast Asia, Canada’s other traditional markets declined as well. Canada’s trade pattern shifted toward countries with less developed baking technologies, to the less developed countries, and to centrally planned economies.

In 1971, a new wheat grading system was introduced in Canada that guaranteed minimum protein levels for export wheat. This eliminated one problem. However, new technology will continue to be developed and adopted in the baking industry that will further replace imported hard wheats with locally grown soft wheats. Therefore, a further reduction in Canada’s wheat markets can be expected.

To offset these contractions in market shares, Canada has expended considerable effort in market development.

**Barley**

Barley is Canada’s second most important export grain. Since 1969, barley exports have averaged roughly one-third of total production. In the mid-1960’s, only about 16 percent of total production was exported. Most of Canada’s barley is produced in the Prairies. About 50 percent of the crop is fed in the West. Farmers’ marketing is divided between the export market and transshipment to Eastern Canada. Eastern Canada is the largest single destination for Western barley, consuming roughly 18 percent of the crop.

Canadian barley is exported primarily to developed nations: the European Economic Community, Japan, the United Kingdom, and the United States. About 5 percent of total barley is exported as malt. Feed grades comprise 80-90 percent of barley exported as grain.

**Oats**

Oats are the dominant domestic feed grain. However, it is of minor importance as an export grain. An average 2 percent of total production has been exported since 1969. Oats production has, however, averaged 70 percent of barley production. As with barley, Eastern Canada is the principal market for Western Canada. Canada’s primary offshore markets for oats are the United States and the European Economic Community. In 1972-73, the United States accounted for 60 percent of Canada’s oats exports; in 1973-74, this figure fell to 8 percent. Because oats have low energy per unit of volume, their export potential is limited.

**Corn**

Canada is a net importer of corn. The majority of corn imports enter Ontario from Chicago or Toledo. Canada maintains a small tariff (currently 8 cents per bushel) on U.S. corn imports. Some corn is imported into Manitoba and British Columbia. A 1966-67 study of corn movement in Eastern Canada determined that 83 percent of total production was fed to livestock. The remainder went into food and industrial uses. U.S. corn imports were 75 percent as large as total corn production in Canada. Transshipments of U.S. corn through Canadian ports comprised 53 percent of total imports. Of the remaining imports, 28 percent were fed in Eastern Canada, and 19 percent entered commercial channels—primarily distilleries and corn starch plants. The total feed mix in the East, therefore, was made up of 25 percent U.S. corn and 75 percent Canadian corn.

**Oilseeds**

Rapeseed, flaxseed, and soybeans are Canada’s primary oilseed crops. Principal markets for rapeseed and flaxseed are Japan and the European Economic Community. Canada is a net importer of soybeans. The value of soybean imports averaged less than 25 percent of total rapeseed exports in 1972-73. Generally, Canada views the export potential of oilseeds, particularly rapeseed, with considerable optimism. Rapeseed offers a valuable alternative to wheat production in the West.

**Cattle and beef**

Approximately 2.5 percent (1971-72) of total farm cash receipts in

of Canadian cattle and beef exports to the United States has been 60 percent of the total value of U.S. imports. However in 1973, Canadian imports and exports of cattle and beef to and from the United States were almost equal in value.

The sudden upsurge in Canadian imports of slaughter cattle and fresh and frozen beef can be linked partially to income-induced shifts in demand and a lack of response by the domestic livestock industry.

However, changes in Canada’s beef grading system also had a significant impact. In October 1972, the new grading system went into effect. The emphasis was placed on youthfulness and carcass cutability, rather than marbling and other quality factors. The top Canadian grades (A1, A2) were roughly equivalent to United States medium-top good. The bottom grade (A4) was equivalent to the United States high choice and prime. Domestic production of A4 cattle dropped off substantially. Demand for prime beef by the hotel and restaurant trade in the East was unaffected by the new grading system, and Canadian prices surged. This situation was further worsened by U.S. wage-price controls in 1973. Since prices in Canada were not regulated, a significant spread between U.S. and Canadian cattle prices occurred. Consequently, imports of United States-fed cattle and fresh table beef increased. The Canadian government attempted to stop the import of U.S. beef by erecting various trade barriers. In November 1974, the United States retaliated, establishing quotas on most Canadian livestock imports. This situation has recently been reversed.

Hogs and pork

Live hogs and pork exports generated less than 1 percent of total farm cash receipts in 1972-73. By weight, exports represent roughly 7 percent of Canada’s total pork production. Primary export markets for Canadian hogs and pork are the United States and Japan.

Live animal trade between Canada and the United States historically has been insignificant. Recently, Canadian sows and heavy slaughter hogs have been moving from Manitoba to South St. Paul, Minn. There is also some movement of hogs from Alberta into Washington and Oregon. This movement was halted by United States import quotas, but it has recently resumed, although not to levels existing before the trade restrictions.

Before 1950, the United Kingdom was the primary destination of Canadian pork. With the end of the British Agreement, the United States replaced the United Kingdom as Canada’s major market. Fresh and frozen pork is the primary export category. The dominant product category is heavy hams destined for New York City. Hams accounted for 80 percent of all pork exports to the United States. In 1973, Japan replaced the United States as Canada’s major pork market.

Canadian agricultural policy

Although Canadian agricultural problems are similar to those confronting many developed nations, the policies and programs reflect Canada’s agricultural resource endowment and stage of economic development. There are three basic characteristics:

1. The legislated division of labor between federal and provincial governments has had important effects. The former is involved primarily with price policy, research, credit, and market regulation. The latter governments have been involved with extension education and marketing board legislation. Their activities overlap in the area of agricultural adjustment.

2. Canadian policy has tended to be commodity-oriented. Policies are evolutionary and generally fragmented.

3. Canada possesses insufficient national wealth to simply “support” agriculture in the U.S. tradition.

Canadian grains policy: West

Canadian grain policy, particularly in Western Canada, was and is linked inextricably with grain marketing. Marketing agents and policymakers merge, often sharing common instruments.

The Canadian Wheat Board

The Canadian Wheat Board (CWB) is a government-controlled monopoly responsible for marketing — on behalf of farmers — all wheat, oats, and barley grown in the Prairies and the Peace River area of British Columbia. Before Aug. 1, 1974, the Board had monopoly control over all purchases and sales of wheat, oats, and barley moving between provinces and into the export market. Since then, a new national feed grain policy restricts the CWB’s domain to wheat and feed grains destined for offshore markets. Domestic feed grains (utility wheat, barley, oats) can now be purchased and sold by private trade anywhere in Canada.

The CWB owns no marketing or transportation facilities. Rather, it contracts for these services with the national railroads and cooperative or private elevator companies. The Board’s function, therefore, is essentially administrative. It controls the pricing, delivery, transportation, and ultimate sale of Prairie grains through the private grain trade, acting as agents for the CWB. The CWB’s role in Canadian agriculture can best be understood by examining its major instruments and associated responsibilities.

The price pooling system

The CWB’s price pooling system is intended to provide some price stability for wheat, oats, and barley. When a farmer in the Prairies delivers grain to a country elevator, the elevator — acting as an agent for the CWB — makes a record of the sale and pays the farmer an initial payment, less quality discounts and transportation and handling charges to Thunder Bay or Vancouver. The initial payment is a guaranteed floor price for the crop. The size of the initial payments for wheat, oats, and barley are set each year by the federal government in consultation with the CWB. The initial payment is typically set well below current market prices. In 1973-74, the initial payment for No. 1 Canada Western red spring wheat was $3.75 (Canadian) per bushel. The CWB’s selling quotation for the same grade was $5.49 (Canadian) per bushel. A similar differential is maintained for oats and barley.

After marketing operations for the crop have been completed, the CWB will subtract its operating expenses and the cost of the initial
payments and return the net surplus revenue to farmers on the basis of their deliveries to the Board. This is referred to as the final payment. Any losses in market operations will be paid out of the federal treasury. The farmer is always guaranteed the initial payment.

The grain delivery quota system

The grain delivery quota system (GDQS)—in its present form—provides the CWB with a mechanism for systematically calling in the desired quantities of specific grains from farm storage for delivery to country elevators. Because the price pooling system annihilates the market mechanism for distributing the crop over the year, the GDQS is essential if order is to be maintained in Canada's domestic grain market. With pooling, farmers receive the same initial and final payments for their grain, regardless of delivery date. Consequently, there is no advantage for farmers to defer sale of the crop to country elevators. The GDQS serves as an alternative mechanism for the temporal distribution of the crop.

The GDQS has several other objectives. One often mentioned is market sharing, or equity. The CWB uses the GDQS to provide each producer with an equal or fair opportunity to sell grain. Another objective is to facilitate the efficient operation of country grain elevators. Although these last two objectives are probably discussed more often than is the first, the primary objective of the GDQS, nevertheless, is to provide the CWB with positive control over farm-stored grain, enabling the CWB to compete effectively in the world grain market.

In its present form, the mechanics of the GDQS are relatively simple. The quantity of wheat, oats, barley, rapeseed, or flaxseed which a producer can sell to the CWB is related to the size of the producer’s landholdings. The quota base acreage is equal to land in crops, summer fallow, and land seeded to perennial forages. To understand how the system works, consider this example. Suppose a producer desires to allocate or assign the quota acres to the crops which the farmer wishes to sell to the CWB. In a report sent to farmers before spring planting, the CWB provides some information on the likely range of delivery quotas for each grain. In crop year 1974-75, the CWB estimated minimum quotas for wheat at 9-10 bushels/acre, oats at 15-16 bushels/acre, and barley at 20-25 bushels/acre.

Suppose the producer wished to sell 5,400 bushels of wheat and 4,000 bushels of barley to the CWB. Taking the quotas at 9 and 20 bushels per acre, respectively, for wheat and barley, the producer can receive his desired delivery entitlement by assigning 600 acres to wheat and 200 acres to barley. (In other words, 600 acres × 9 bushels/acre = 5,400 bushels of wheat.) This assignment is reported to the CWB when the producer applies for his delivery permit book. Farmers are permitted to change their acreage assignment through Oct. 31. Thereafter, they must follow their announced marketing plans. It is against the law for any farmer to sell more grain to the CWB than is permitted by his quota base and acreage assignment. If the farmer produces more grain than is anticipated, he must then find an alternative outlet for the excess production; he may feed it to livestock, sell it privately to another farmer, or simply store the excess production on his farm.

At the beginning of the crop year (Aug. 1), the CWB sets an initial quota level at all country elevators in the Prairies. In crop year 1974-75, the initial quota was 3 bushels/acre for wheat and barley, 10 bushels/acre for oats, and open (no quota) on rye, rapeseed, and flaxseed.

In the example given, the farmer could deliver 1,800 bushels of wheat and 600 bushels of barley. If all farmers in the Prairies had assigned, for example, 58 million acres to wheat and 17 million acres to barley, total deliveries to the CWB on the initial quota would be 174 and 51 million bushels of wheat and barley, respectively. As the crop year proceeds and additional quantities of grain are needed by the CWB to meet sales commitments, additional quotas are authorized.

The present GDQS is a product of over 30 years of continual modification and refinement. A Canadian farmer must base his land use decisions not only on expected prices and yields, as does his U.S. counterpart, but also on expected delivery quotas. Consequently, the GDQS has an impact on grain production, stockholding, feed consumption, and livestock production in Western Canada.

Grain transportation control

The CWB controls farmers' deliveries via the GDQS. In addition, the CWB also controls the movement of grain from country elevators to export terminals. The Canadian grain transportation system has undergone considerable examination and change since 1969.

Policy implementation for the federal government

The CWB also acts as an administrator for the federal government in carrying out certain programs. The major program is the Prairie Grain Advance Payments Act. This federal policy allows a producer to draw an advance on his initial payment for wheat, oats, or barley before delivery. Since sales by farmers are controlled through the GDQS, short term cash flow problems may result. This Act attempts to offset some of the adverse effects of the GDQS during periods of restricted deliveries.

State trading

The last major activity of the CWB is to act as the state grain trading agency. Before 1970, negotiated sales with foreign governments made up a relatively small proportion of Canada's total grain exports. Commercial international grain trading houses performed most of the pricing and transshipment of Canadian grain overseas. These firms would buy CWB grain and sell it for their own account in the export market. In recent years, however, the CWB has negotiated the bulk of Canadian grain sales directly with foreign governments. The CWB is in a unique position to perform state trading, since it has full information on domestic stocks and can control the movement of Prairie grains to the export terminal elevators.

Another related authority is control over wheat, oats, and barley imports. The CWB has authority to grant import licenses for these commodities. No licenses have been granted in recent years.
Alternative domestic markets for Prairie grains

The CWB occupies a dominant position, both in grain marketing and grain policy in Western Canada. However, an alternative market for Prairie grains exists. Since 1948 when the CWB assumed monopoly control over interprovincial feed grain sales in the West, Prairie farmers could sell wheat, oats, or barley to the CWB, to another farmer within the same province, or, since 1960, to local feed mills. Selling between farmers or to feed mills and feed lot operators is usually called the "offboard" or "non-quota" market. Prices in the offboard market are determined freely. Sales are not subject to any quota restrictions. However, access to rail transportation facilities and, to a lesser extent, elevator services were under CWB control. Furthermore, the offboard market operated in direct competition with the CWB. Until recently, prices in the offboard market were significantly lower than the CWB's selling quotation and the final realized prices.

Canadian grains policy: East

Grain policy and marketing are separated to a greater degree from each other in Eastern Canada than in the West. Grain marketing is done by private and coop grain merchants, by feed mills, and by shipping firms. The pricing mechanism for Ontario corn and soybeans is similar to that of the United States. Daily cash prices are based on the Chicago Board of Trade nearby futures prices, with adjustments for transportation, handling, exchange rate, and tariffs. Pricing of barley, oats, and wheat in Eastern Canada is performed by the CWB.

The major grain policies in the East are those of the Agricultural Stabilization Board (ASB). The ASB was created under the Agricultural Stabilization Act of 1958. This Act provided for the support of farm prices of 9 commodities, among them wheat, oats, and barley grown outside CWB jurisdiction. Prices are supported by the ASB at a rate not less than 80 percent of a 10-year moving average base price. During the life of the Act, prices for these commodities have remained above support levels.

Canadian grains policy: Nationwide

Two important grain programs are intrinsically national in scope: the freight assistance policies; and the two-price wheat policy.

Freight assistance

Two forms of grain freight subsidies have been in effect in Canada for almost 40 years. Although their effects are additive, their origins and intents are quite distinct.

In 1897, the Canadian government and the Canadian Pacific Railroad negotiated maximum allowable freight rates governing the movement of Prairie grain to export terminals. These rates, referred to as the Crows Nest Pass rates, were set by statute in 1927. They remain in effect today. Canadian grain shipped to the Lakehead is estimated to move at one-third to one-fourth of the rates charged by United States railroads for equivalent distances to Duluth-Superior.

The Feed Freight Assistance Policy (FFAP) was established during World War II. Its purpose is to equalize the cost of feed grains throughout Canada. This is accomplished by subsidies that essentially pay the cost of grain transportation from Thunder Bay to Eastern Canada.

Both the FFAP and the Crows Nest Pass rates have been subject to almost continuous debate since World War II. With the introduction of the new domestic feed grain policy, the debate resumed with considerable intensity. As with most subsidization schemes, the freight assistance policies are highly politicized. Whether any changes are effected remains to be seen.

Two-price wheat

In 1969, the government offered to buy all Canadian wheat intended for domestic consumption at a minimum price of $1.95 a bushel (basis No. 1 Northern). This was undertaken as a price support policy. In 1972, this minimum producer price was raised to $3 a bushel basis No. 1 Canada Western red spring. The prices paid by domestic millers and processors remained at $1.99/bushel. The difference between the two prices was provided by the treasury. Several revisions in this price structure have occurred recently. On July 19, 1973, a minimum producer price was established at $3.25 per bushel for No. 1 Canadian Western red spring basis Thunder Bay. The maximum price is $5 per bushel. The prices paid by Canadian mills is $3.25. This system is to remain in effect until 1980. The two-price wheat policy has important implications for both domestic and the derived industrial demand for wheat in Canada. However with the advent of high world wheat prices and the importance of foreign markets as an outlet for Canadian wheat, it is questionable how much this new policy affects production and feed consumption of wheat in Western Canada.

Livestock policy

Unlike grains, commercial policy and marketing of livestock in Canada can be discussed from a national perspective. It will be convenient to separate the consideration of livestock marketing from policy.

Most cattle in Canada are marketed either through public stockyards or directly to packing plants. Most hogs are marketed directly to packing plants, with a smaller proportion being sold at stockyards. Provincial marketing boards play an important role in hog marketing.

Prices for hogs and cattle are determined at public stockyards or by collective bargaining. Both feeder cattle and feeder pigs are sold at public country auctions.

The primary agency for commercial livestock policy is the Agricultural Stabilization Board (ASB). The basic format employed for grain price support is also provided for livestock. Prices for cattle and hogs are maintained at 80 percent of a 10-year moving average price. This offers protection from temporary price declines, but it is of limited value during long periods of depressed prices.

ASB support was provided for hogs from 1958-60. Prices were supported both by governmental purchase programs and through deficiency payments. No support was required from 1960-70. However in 1971, price supports were once again required because of sharp increases in hog production.

Another area of commercial policy for livestock is centered on the development of pasture, range, or forage production. The Prairie Farm
Rehabilitation Administration has been involved in the development of commercial range land in Western Canada since the 1930's.

Export promotion
During the past several years, Canada has implemented a significant program for promoting farm exports. Funding of this effort by government and other organizations is substantial. The decision to increase the foreign market development effort was designed to counter similar activities by Canada's competitors—especially the United States. Canada seems determined to improve its share of the world wheat market and to stimulate diversification of its production by promoting barley and rapeseed.

Canada has concentrated its export promotion efforts in East Asia—the region which has had the largest growth in demand for U.S. farm products. Exports of rapeseed to Japan have been expanded significantly, competing with U.S. soybeans. Similarly, Canada has successfully expanded its exports of wheat, barley, and pork to Japan, providing strong competition for U.S. exports of wheat and feed grains and especially for corn, which competes directly with barley.

Heavy emphasis is being given to long term efforts such as product development, improvement of production techniques, plant breeding, and animal nutrition. Considerable effort has gone into the development of a high-yielding dual purpose wheat for both feed and food. Efforts are underway to achieve complete detoxification of rapeseed meal to make it more suitable as a protein meal for feed use and in direct human consumption in meat extenders, synthetic dairy products, and other foods.

Summary
Canada possesses great potential to compete directly with the United States for world wheat, feed grain, oilseed, and livestock markets.

Many changes in Canadian agricultural policy have been undertaken in recent years to increase Canada's competitive position. Improvements in grain marketing and distribution have increased Canada's ability to guide producers in their output and marketing decisions and to efficiently distribute supplies between domestic and export markets. A concerted effort at market development has been undertaken to increase Canada's share of major export markets.

Similar programs are aimed at expanding and increasing the efficiency of Canada's livestock sector. From the point of view of United States and Minnesota agriculture, these changes emphasize a simple fact of life. We can no longer afford our benevolent ignorance of Canadian agriculture and agricultural institutions. Canada will continue to increase its competitive position in world agriculture in years to come. It is imperative, therefore, that United States farm leaders and policymakers thoroughly understand Canada's agriculture, institutions, and the resulting interdependences with the United States.

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