The Canadian Tobacco Market Place

Recent trends in tobacco agriculture in Canada

June 2008

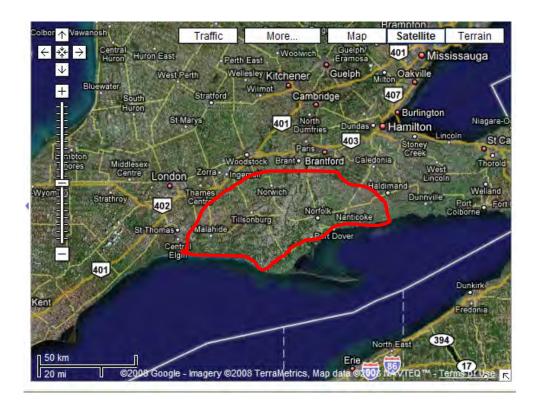
Physicians for a Smoke-Free Canada

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istory of tobacco growing in Canada

Tobacco, in the form of *nicotiana rustica*, was grown in Canada by its aboriginal inhabitants long before the arrival of European settlers. Fluecured tobacco that is used in almost all Canadian cigarettes was first grown in Ontario in 1900, near Leamington. Production shifted to the Norfolk Sand Plain in the 1920s. In 1957, a grower-managed supply management system was established in the form of the Ontario Flue-Cured Tobacco Growers' Marketing Board (OFCTGMB). It continues to this day to be the only agency in Ontario authorized to buy tobacco leaf from farmers and sell it on their behalf. From the 1950s to the 1990s flue-cured tobacco production expanded to Nova Scotia, New Brunswick, Prince Edward Island and Quebec. It has since disappeared entirely from the Maritime provinces and shrunk to a very small amount in Quebec. Almost all of Canada's tobacco is grown in a few counties on the north shore of Lake Erie.



rends in tobacco growing in Canada

In the 1970's there were over 3,000 tobacco farms in Canada, a number that has declined to about 650 today. 2

The Ontario tobacco crop was around 100 million kilograms per year for most years from the mid-1960s to the 1980s. It was at it highest in 1974 when it reached 108 million kilograms. In the 21st century, it has declined precipitously, from 68 million kg in 1998, to just 16 million in 2007 (See Table 1). Smoking prevalence declined since 1998 by about 24%.³ While a significant public health achievement, this decline is far less than the 87% decline in tobacco growing during the same period. Other factors must be at work to help explain the recent precipitous decline in tobacco agriculture.

Table 1: Ontario tobacco production, 1998 - 2007

	Quantity	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Crop	Millions Kg	68.3	64.6	48.3	53.1	49.0	42.6	39.8	38.1	25.2	15.6
Domestic Use	Millions Kg	42.4	41.8	33.9	33.9	29.4	25.3	24.2	25.4	18.5	-
Export	Millions Kg	25.9	22.7	14.3	19.2	19.7	17.3	15.6	12.6	6.6	-
Percent for Export	%	37.9	35.2	29.7	36.2	40.1	40.5	39.2	33.2	26.3	-
Total imported unmanufactured tobacco	Millions Kg	15.5	3.3	7.0	4.9	5.0	6.5	5.9	8.7	5.6	6.8

Source: OFCTGMB annual reports and Statistics Canada, Canadian International Merchandise Trade cat. # 65-001-XIB

ake-up payments, domestic sales and export sales

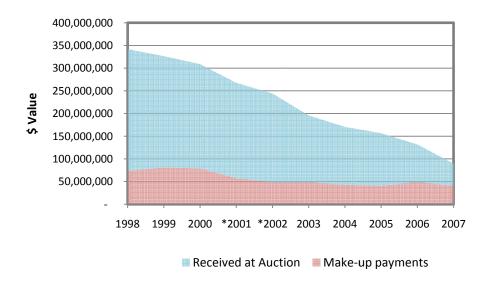
To understand what might be the factors responsible for this rapid decline in tobacco agriculture in recent years, some understanding of how tobacco leaf marketing in Canada operates is required.

With Canada's shorter growing season and higher cost of agricultural inputs, it is not possible for Canadian tobacco farmers to produce tobacco at a price competitive with farmers in countries like Brazil and Malawi. The mechanism found to allow Canadian tobacco farming to become economically viable was a system of "make-up payments" provided by tobacco companies through the Ontario Flue Cured Tobacco Growers Marketing Board (OFCTGMB) to farmers.

Since the establishment of the OFCTGMB in 1957, tobacco farmers have insisted that the price received for their tobacco be enough to return their costs of production to them, along with some profit. The tobacco companies who buy the tobacco went along with this principle until recent years, even though it meant purchasing tobacco above world prices. Since Canadian smokers have developed a particular taste for Canadian tobacco, and since the price paid for tobacco leaf has only been a minor part of the retail price of cigarettes, tobacco companies have been willing to pay a premium above world prices for the highly-desired Canadian-grown tobacco. Of course, this extra cost has been recovered by the tobacco companies from Canadian smokers, who have also been willing to pay a premium for their desired smokes.

Canadian tobacco manufacturers are choosy about which parts of the tobacco plant they prefer for the blends that they use for the cigarettes they make. For the most part, they prefer to purchase more leaves from middle and lower stalk positions and fewer from tips and upper stalk positions. The predominant preference for middle and lower leaves allows them to construct blends that meet their desired targets for taste, low tar and medium nicotine yield and low tar-to-nicotine ratios. Since their arrangements with the OFCTGMB required them to purchase the entire crop, it became more difficult to sell the unused tobacco leaf internationally, particularly as the gap widened between Canadian prices





and international prices. This led in 1978 to the establishment of a twoprice system for Canadian tobacco. It is a system that has been in place ever since, with some minor variations.

Under the two-price system, tobacco growers and manufacturers make a prior agreement on a guaranteed purchase price for the entire crop. This price usually allows for farmers to receive a return on their costs of production and some profit. After harvest, leaf is sold at auction with domestic buyers paying prices in the high range of domestic prices. Export buyers pay prices in the low range, near world prices. The actual sale prices of all sales, domestic and export, are then averaged, and the manufacturers provide a make-up payment to the OFCTGMB that makes up the difference between the average actual price and the guaranteed price. The Marketing Board then distributes this payment equitably to its tobacco farmer members.

From the tobacco farmers' point of view this make-up payment is part of an agreement they successfully negotiated to ensure that there would continue to be adequate return to their tobacco farming enterprises. A more cold-eyed economist's view would be that the make-up payment is a private subsidy that has artificially maintained Canadian tobacco

agriculture at uncompetitive prices for far longer than if all Canadian tobacco traded at competitive, unsubsidized world prices.

The make-up payments have been substantial. Since 1990, they have varied from a high of \$85.8 million in 1994 to a low of \$40.9 million in 2007. The average annual make-up payment over this 17-year period was \$59.5 million, and the total of make-up payments over the same period was \$1.011 billion.

Since 1998, the total value of the Ontario tobacco crop has declined from \$342 million to \$89.8 million in 2007 (See Figure 1 and Table 2). Yet the amount of crop value accounted for by make-up payments has changed less dramatically, dropping from \$73.3 million in 1998 to \$40.9 million in 2007. Relatively speaking, however, make-up a payments have become a much more important part of tobacco farmer revenue. In 1998, they accounted for 21% of total crop value. But for the much smaller crop of 2007, make-up payments accounted for 45% of total crop value.

Table 2: Value of Ontario tobacco crop, 1998 - 2007

	Quantity	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total crop value	Millions \$	342.0	326.6	309.0	267.7	244.1	195.7	170.7	156.8	132.0	89.8
Received at Auction	Millions \$	268.7	245.0	229.9	210.2	195.8	147.3	127.5	115.9	82.7	48.9
Make-up payments	Millions \$	73.3	81.6	79.1	57.5	48.3	48.4	43.2	40.9	49.3	40.9
Make-up payment as percentage of total	%	21.4	25.0	25.6	21.5	19.8	24.7	25.3	26.1	37.3	45.5

Source: OFCTGMB annual reports

ore on domestic sales and export sales

It is a polite fiction to distinguish between domestic buyers and export buyers of Canadian tobacco leaf. In fact, most export buyers are different overseas branches of the same three multinational tobacco companies that operate in Canada. The Canadian branches of these three companies ensure that their domestic needs are met and then invite other branches of their own companies to bid on the remaining tobacco, pointing out that they can place bids at world prices for what in world tobacco buyers' terms is a relatively small supply of high quality flue-cured tobacco. The effect of this arrangement is to tie export demand to domestic demand, with domestic demand leading export demand. When domestic demand is high, export demand is high and the farmers benefit doubly. On the other hand, when domestic demand shrinks, so does export demand and the farmers are doubly penalized by shrinking demand in both markets. Whatever the domestic market is, the export market is a more or less constant proportion of it. Since 1990, export sales have always been 25% to 50% of the total market (See Table 1). Since the Canadian tobacco available for purchase by export buyers is narrow in its range of variety and of small and ever-shrinking quantity, the amount of tobacco sold for export might drop even more precipitously to near-zero levels in the near future if export buyers decide it is not worth coming to Canada to bid on a small amount of tobacco with just a narrow range of variety.

There are other important recent changes in the global tobacco market that have an impact on tobacco growing in Canada. From the 1970s to the 1990s, global tobacco consumption was increasing. Tobacco companies could and did maintain and increase profits through higher prices and increased sales. Less attention was paid to the cost side of the ledger. In the 21st century, however, global demand for tobacco is shrinking, with decreases in demand most pronounced in North America, Latin America, Western Europe, Australia and New Zealand. In the face of declining markets, tobacco companies are much more strongly motivated to cut costs in an effort to shore up profits. Cost-cutting measures include introducing greater manufacturing efficiencies (less wastage, less tobacco per cigarette), reducing inventories and paying less for Canadian tobacco

leaf or substituting cheaper imported leaf for domestic leaf. All of these cost-cutting measures are being implemented by Canadian companies and mean fewer sales and lower prices for Canadian tobacco farmers.

Tobacco companies have taken tougher and tougher negotiating positions with tobacco farmers and have succeeded in reducing the guaranteed price for tobacco leaf in recent years. There has also been an upward trend in tobacco leaf imports in recent years, but this trend has been inconsistent and imported tobacco leaf still accounts for a small part, in absolute terms, of the tobacco leaf used by Canadian tobacco manufacturers (See Table 1). While tobacco manufacturers might wish that they could use more of the cheaper imported leaf, most of their Canadian customers have developed a taste for Canadian-grown tobacco. Most can quickly taste the difference between Canadian-grown tobacco and those from elsewhere. Most Canadian consumers have been quick to reject the latter. Nevertheless, imported tobacco leaf is making inroads into the Canadian market. It is estimated that leaf imported in 1999 accounted for 7.2% of the total leaf supply, and that this proportion had increased to 21.9% in 2007. It should be noted, however, that this a larger share of a shrinking market. Even though the percentage of imported leaf used tripled from 1999 to 2007, in absolute terms it grew by a much smaller amount (See Table 1).

There was an important change in tobacco manufacturing in Canada in 2006. In that year, Canada largest tobacco company, Imperial Tobacco, closed all of its manufacturing plants in Canada and moved all of its manufacturing operations to Monterey, Mexico. However, it still purchases most of its leaf supplies at auction in Canada, ships the tobacco to Mexico and then re-imports the finished cigarettes and fine-cut tobacco back to Canada. More information on this export of tobacco leaf and re-importation of finished tobacco products is available in a companion fact sheet. In Table 1, this tobacco purchased by Imperial Tobacco for export to Mexico and re-import back to Canada is included in the line "For domestic use."

It is also important to understand the lead times involved in tobacco production. The size and price for a tobacco crop are determined before the crop is planted. The tobacco is then grown, harvested and cured.

Tobacco farmers sell this tobacco six months to one year after the size of the crop is determined. The tobacco is then subject to further drying and processing by leaf processors, a process that adds another six months to two years to tobacco processing time. Transportation, manufacturing, wholesaling and retailing add a further two to six months of time before the tobacco is actually consumed in the form of cigarettes. The size of the crop negotiated therefore reflects what the purchasing manufacturers expect the demand for their product to be a minimum of fourteen months after the size of a tobacco crop to be planted is negotiated. Tobacco companies have a wealth of market information at their disposal and can quite accurately predict the expected size of the tobacco market 1-2 years into the future, and they use this information to inform their crop negotiation positions. The outcome is that tobacco farmers are the first to feel the effect of expected further declines in demand for tobacco.

Figure 2: Tobacco Exports and Imports between Canada and Mexico, 2006 and 2007



arket forces affecting tobacco agriculture

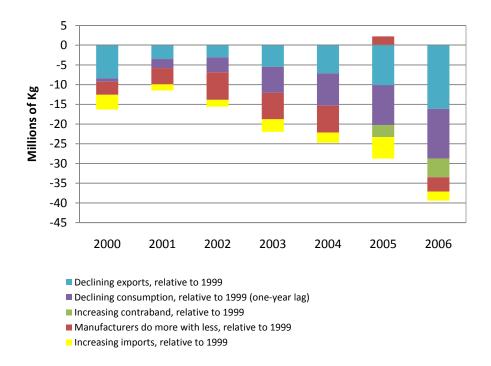
We have seen that many forces can potentially determine how much or how little tobacco is grown in Canada. The most intuitively obvious of these is declining domestic demand for tobacco. It is most certainly an important factor, but is by no means the only one, nor even the largest one. We have calculated the importance of various factors responsible for the declining size of the Canadian tobacco crop since 1999. Figure 2 and Table 3 show what these factors are year by year since 1999. The changes are expressed in relative terms, with 1999 as a base year. Figure 3 provides further information on the market forces that contributed to 40 million fewer kilograms of tobacco being grown in 2006 (the latest year for which complete information is available) than in 1999. The total crop declined from 65 million kg in 1999 to 25 million kg in 2006 (Table 1). As can be seen in Figures 3 and 4, the most important factors responsible for this decline, in declining order of importance were:

- Declining export sales
- Declining domestic consumption
- Increasing contraband tobacco
- Manufacturers are doing more with less
- Increasing tobacco leaf imports

Declining export sales

Declining sales for export is the largest single factor contributing to the precipitous decline in Canada's tobacco crop. Tobacco taken for export declined from 22.7 million kg in 1999 to 6.6 million kg in 2006. As we have seen, the amount of tobacco that will be purchased for export is, because of the particularities of the marketing system, heavily dependent on the amount that will be purchased for domestic consumption. When the latter declines (as it has), so will the former. Decreased export sales account for 41% of the tobacco crop deficit in 2006, compared to 1999.

Figure 3: Factors contributing to decline in sales of Canadian-grown tobacco



Declining domestic consumption

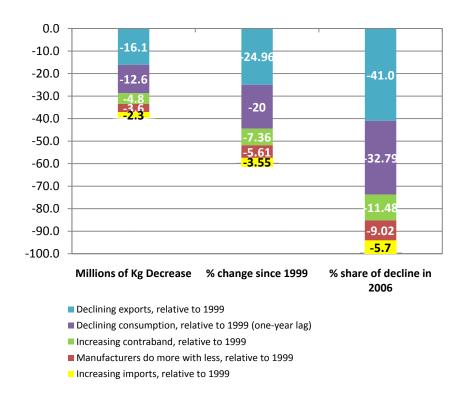
A simple measurement of sales of tobacco leaf destined for domestic production does not truly measure the effect of declining consumption. This is because the leaf sold in a given year will be subject to further drying, processing and storage for a period of one to four years. In addition, actual domestic consumption will be influenced by how much leaf from previous years in current inventories is used in manufacturing. A more direct measurement of actual domestic consumption is needed.

To this end, the effect of declining domestic consumption on tobacco agriculture was measured by examining total legitimate sales of cigarettes and fine cut tobacco in kilograms in the year following the crop year and comparing the sales in that year to sales of these products in the year 2000. The resulting difference was attributed as the effect of declining legal consumption on the tobacco crop in the year previous to the year in

which the decline in consumption of cigarettes and fine-cut tobacco was recorded.

The effect of declining legal domestic consumption is also substantial, accounting for 33% of the tobacco crop deficit in 2006 (Figure 4). As noted above declining domestic demand also triggers a decline in export sales of tobacco leaf. Together, declining domestic demand and declining export sales account for 74% of the total tobacco crop shortfall in 2006, compared to 1999.

Figure 4: Factors contributing to decline in sales of Canadian-grown tobacco, 2006 relative to 1999



Increasing presence of contraband tobacco

The use of contraband tobacco has become more widespread in recent years. It has been estimated that contraband accounted for 10% of consumption in 2005, 16.5% in 2006 and 22% in 2007. Contraband further depresses the demand for legal purchases of tobacco leaf for legal tobacco manufacturing. It is estimated that contraband was responsible for 11.5% of the shortfall in the 2006 tobacco crop, compared to 1999. As the contraband problem is growing, it is expected that contraband has become an even more important factor in further decreases in the tobacco crop that occurred in 2007 and that are expected for 2008.

Manufacturers are doing more with less

The pressure on tobacco manufacturers to contain costs in the face of declining consumption and increasing contraband gives them increasing incentive to do more with less. This could include reducing inventories, using more tobacco and wasting less in the manufacturing process and decreasing the weight of tobacco per cigarette. It is likely that they have been doing all of these things to some extent in recent years. These actions, too, have an effect on the size of the tobacco crop, accounting for 9% of the difference between the crop in 2006 and the one in 1999 (Figure 4).

Increasing tobacco leaf imports

Tobacco leaf imports are increasing, even as domestic consumption is declining. While the import content of tobacco products consumed in Canada is estimated to have increased to 21.9% of the total leaf supply in 2007 (Table 5), the increase in imported tobacco leaf has been small and inconsistent. It accounts for just 6% of the difference between the Canadian tobacco crop of 2006 and that of 1999 (Figure 4).

Table 3: Changes in source of tobacco used in cigarettes smoked by Canadians, 2000 – 2006, compared with 1999

	Quantity	1999	2000	2001	2002	2003	2004	2005	2006
↓Exports (relative to 1999)	Millions KG	0	-8.4	-3.5	-3.1	-5.5	-7.1	-10.1	-16.1
◆Consumption (relative to 1999)	Millions KG	0	-0.8	-2.3	-3.8	-6.6	-8.2	-10.1	-12.6
◆Contraband (relative to 1999)	Millions KG	0	0	0	0	0	0	-3.1	-4.8
Manufactures do more with less	Millions KG	0	-3.3	-4.1	-7.0	-6.7	-6.8	2.2	-3.6
↑Imports (relative to 1999)	Millions KG	0	-3.7	-1.6	-1.7	-3.2	-2.6	-5.4	-2.3
Total decline (relative to 1999)	Millions KG	0	-16.2	-11.5	-15.6	-22.0	-24.7	-26.5	-39.4

Source: OFCTGMB annual reports and Statistics Canada, Canadian International Merchandise Trade cat. # 65-001-XIB

Figure 5: Sources of tobacco for consumption in Canada, 1999-2007

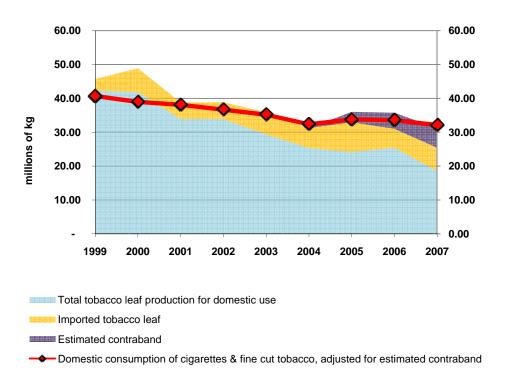
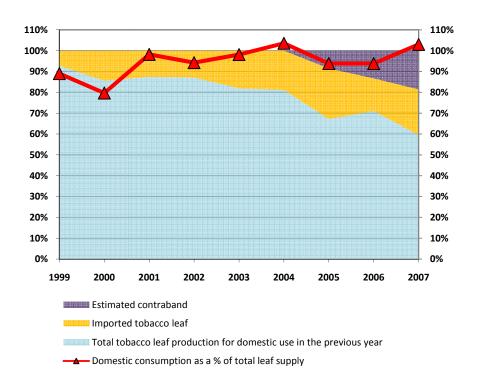


Figure 6: Percentage contribution of domestic leaf production, imported leaf and estimated contraband to total leaf supply and percentage of total leaf supply accounted for by domestic consumption



he growing gap between tobacco leaf production and manufactured tobacco consumption

For decades tobacco leaf production and domestic tobacco consumption were nearly in balance. Very little leaf tobacco was imported and there was very little importing or exporting of manufactured tobacco products. While leaf tobacco exports were substantial, almost all of domestic manufactured tobacco production and consumption were products of tobacco leaf grown in Canada. As Figure 5 shows, that began to change in 1999 and 2000 when tobacco manufacturers built up a substantial inventory of imported tobacco leaf.

In 2001, a historic shift occurred. Domestic leaf supply from the previous year fell below domestic consumption, with the difference being made up by imported leaf. Since then, the gap has continued to widen. In 2005, 2006 and 2007 the growing use of contraband cigarettes has increased the size of the gap between domestic leaf production and domestic consumption of cigarettes and fine-cut tobacco. By 2007, imported leaf and estimated contraband each accounted for about a fifth of total tobacco leaf supply, leaving only about 60% accounted for by legitimately-supplied Canadian-grown tobacco leaf.

The net result is that Canadian tobacco farmers hold a declining share of the declining market for tobacco products consumed in Canada. Figure 6 shows the same information as Figure 5, expressed as percentages.

Tables 4 and 5 show the actual numbers used to construct Figures 5 and 6, respectively, their sources and some notes about their derivation.

Table 4: Sources of tobacco for consumption in Canada, 1999-2007

	Quantity	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total tobacco leaf production for domestic consumption in the previous year)	Millions KG	42.43	41.84	33.93	33.88	29.35	25.35	24.22	25.41	18.55
Imported tobacco leaf	Millions KG	3.30	7.04	4.86	5.01	6.48	5.89	8.73	5.59	6.84
Contraband	Millions KG	0	0	0	0	0	0	3.07	4.75	5.79
Total leaf supply for domestic consumption	Millions KG	45.73	48.88	38.79	38.88	35.83	31.23	36.02	35.75	31.17
Domestic consumption of cigarettes and fine- cut tobacco	Millions KG	40.69	38.95	38.11	36.65	35.16	32.34	33.80	33.55	32.11

Sources: OFCTGMB annual reports; Statistics Canada Service Bulletin, Production and Disposition of Tobacco products, catalogue number 32-022-X and Statistics Canada, Canadian International Merchandise Trade cat. # 65-001-XIB. Conversion factor: 1 cigarette = 0.75 grams

Table 5: Sources of tobacco for consumption in Canada, 1999-2007 expressed as percentages of total leaf supply for domestic consumption

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total tobacco leaf production for domestic consumption in the previous year)	92.8	85.6	87.5	87.1	81.9	81.2	67.2	71.1	59.5
Imported tobacco leaf	7.2	14.4	12.5	12.9	18.1	18.8	24.2	15.6	21.9
Contraband	0.0	0.0	0.0	0.0	0.0	0.0	8.5	13.3	18.6
Total leaf supply for domestic consumption	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Domestic consumption of cigarettes and fine-cut tobacco	89.00	79.68	9823	9427	98.13	103.54	93.84	93.84	103.02

Sources: OFCTGMB annual reports; Statistics Canada Service Bulletin, Production and Disposition of Tobacco products, catalogue number 32-022-X and Statistics Canada, Canadian International Merchandise Trade cat. # 65-001-XIB. Conversion factor: 1 cigarette = 0.75 grams

onclusion

For decades tobacco has been grown and sold in Canada. A two-price system has benefitted tobacco farmers by allowing them to sell their tobacco above world prices. They have been able to recover their costs of production and make some profit. However, several factors have combined in recent years to cause a precipitous decline in the size of the tobacco crop. Chief among these is the collapse of the export market for Canadian tobacco leaf. Because of the particularities of the tobacco leaf marketing system export sales are closely linked to the decline in tobacco consumption in Canada. When the latter goes down, so does the former. Since 2005, increasing smoking of contraband tobacco has also had a major impact on the decline in the size of the Canadian tobacco crop.

Even within Canada, Canadian tobacco farmers hold a declining share of the Canadian tobacco product market. Previously, Canadian-grown tobacco accounted for nearly all of the cigarettes and fine-cut tobacco consumed in Canada. By 2007, the market share of legitimately-supplied Canadian –grown tobacco had shrunk to 60%, with legitimately-supplied imported tobacco leaf and contraband tobacco each holding about one-fifth of the market

Tobacco consumption can be expected to decrease in Canada for the foreseeable future. Even if the tobacco contraband problem could be brought under control, it is unlikely that tobacco agriculture could be sustained at its current level of about 650 farm enterprises. Given the market forces at work, plans should be made to phase out tobacco growing in Canada.

It should be noted that tobacco manufacturers have been paying an average of \$60 million a year in make-up payments to help sustain tobacco agriculture in Canada. Perhaps they could alter the form of their make-up payments to an amount about equal to fifteen years of make-up payments to help support an orderly phase-out of tobacco growing in Canada.

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