



# 2010 Agricultural Outlook

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## 1.0 Introduction

This document will focus on four commodities: beef, pork, grains and oilseeds, and horticulture. The commodities that operate under supply management in Canada (milk, chicken, eggs, broiler hatching eggs and turkeys) are not discussed in this document. For each commodity discussed a brief market outlook is provided along with important issues facing each sector. The first section is a general overview of Canadian agriculture.

### 1.1 Canadian Farm Cash Receipts

Table 1 shows total farm cash receipts by province for 2006 to 2008. Total receipts (including government payments) increased from \$36.9 billion in 2006 to \$45.9 billion in 2008. The three largest provinces in terms of 2008 farm cash receipts are Ontario, Alberta and Saskatchewan.

Table 1.1: Total Farm Cash Receipts by Province, 2006-2008 (\$ millions)

Province	2006	2007	2008
Newfoundland	96.2	106.5	115.2
Prince Edward Island	380.4	385.9	390.3
Nova Scotia	473.5	457.8	474.2
New Brunswick	459.0	449.1	480.8
Quebec	6,274.1	6,905.1	7,498.1
Ontario	8,853.3	9,289.6	10,229.8
Manitoba	3,686.5	4,327.3	4,703.8
Saskatchewan	6,626.8	7,730.1	9,432.9
Alberta	7,811.2	8,668.2	10,008.7
British Columbia	2,288.6	2,416.7	2,612.3
Canada	36,949.5	40,736.4	45,946.2

Source: Statistics Canada catalogue 21-011

Note: Includes market receipts and program payments. Figures have been rounded.

Table 2 shows the breakdown by category for the 2008 Canadian total farm cash receipts. Crop commodities accounted for 50.2 percent of all receipts while livestock and products represented 40.8 percent. The three largest individual crops in terms of farm cash receipts were all wheat (\$5.8 billion), canola (\$4.9 billion) and corn (\$1.5 billion). The three largest livestock categories were cattle & calves (\$6.6 billion), dairy products (\$5.3 billion) and hogs (\$3.2 billion).

Table 1.2: Total Farm Cash Receipts By Category, 2008 (\$ millions)

Category	2008 Receipts	Percent of Total Receipts
Total crops	23,075.7	50.2
Total livestock & products	18,743.0	40.8
Total program payments	4,127.5	9.0
Total receipts	45,946.2	100.0

Source: Statistics Canada catalogue 21-011

Note: Includes market receipts and program payments. Figures have been rounded.

## 1.2 Financial Condition of Canadian Farms

Table 3 shows total net farm income for Canada for 2006-2008. Total net income in 2008 was \$6.1 billion, up substantially from 2007 and 2006 levels. Total net income was 13 percent of total cash receipts which is significantly higher than 2006 (0.3 percent) and 2007 (2 percent).

Table 1.3: Net Farm Income, 2006-2008 (\$ millions)

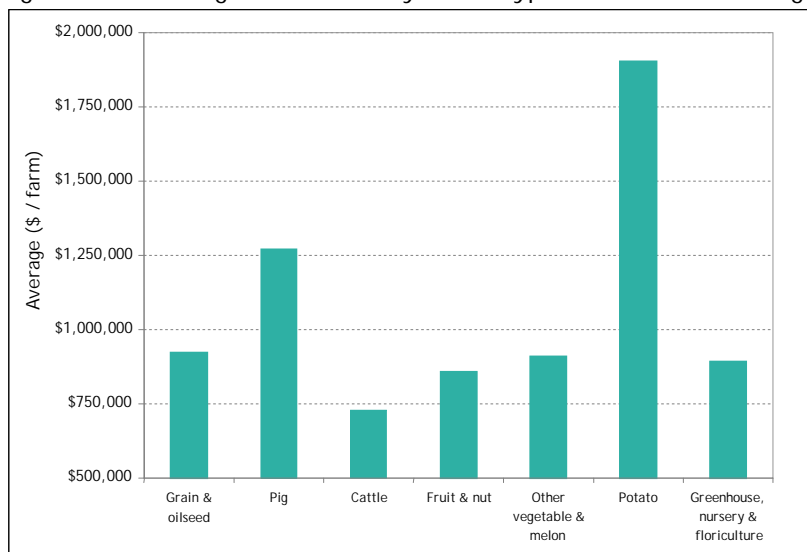
Canada	2006	2007	2008
Total cash receipts	36,949.5	40,736.4	45,946.2
- Operating expenses after rebates	31,189.5	33,743.7	37,493.8
= Net cash income	5,760.1	6,992.6	8,452.4
+ Income in kind	45.6	40.5	40.4
- Depreciation charges	4,848.6	5,021.1	5,209.5
= Realized net income	957.1	2,012.0	3,283.3
+ Value of inventory change	-828.5	-1,010.3	2,849.9
= Total net income	128.6	1,001.8	6,133.2

Source: Statistics Canada catalogue 21-010

Note: Total net income = total cash receipts - operating expenses after rebates + income in kind - depreciation charges + value of inventory change. Figures have been rounded.

Figures 1 and 2 below are based on data from Statistics Canada's Farm Financial Survey. The most recent data available is from 2007. The data in Figures 1 and 2 are the average per farm (\$) by farm type for the 2001-2007 period. Average net worth per farm in Figure 1 showed that potato and pig farms had the highest figures at \$1.9 million and \$1.3 million respectively. Cattle operations had the lowest average net worth at \$727,000 per farm.

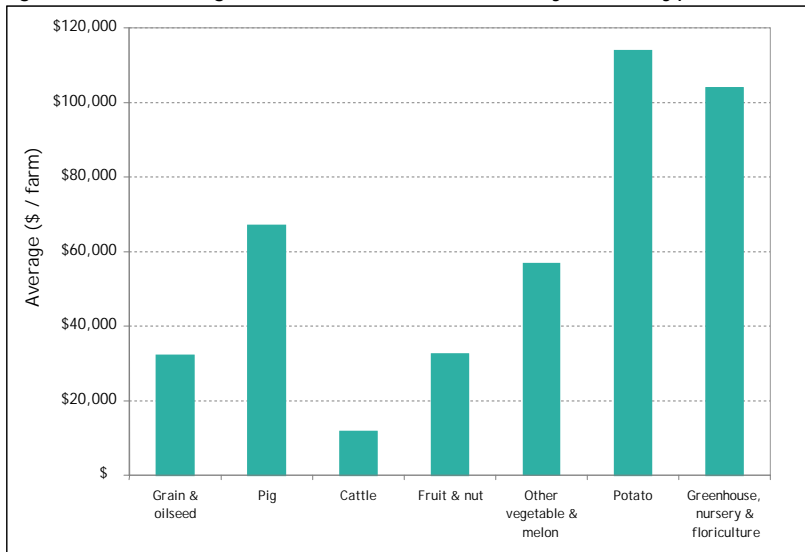
Figure 1.1: Average Net Worth by Farm Type, 2001-2007 Average (\$/farm)



Source: Statistics Canada catalogue 21F0008X

Figure 2 shows average net cash farm income for the 2001 to 2007 period. The farm types with the highest average per farm were potato and greenhouse, nursery & floriculture at \$114,000 and \$104,000 per farm respectively. Cattle operations had the lowest average net cash farm income at \$12,000 per farm.

Figure 1.2: Average Net Cash Farm Income by Farm Type, 2001-2007 Average (\$/farm)



Source: Statistics Canada catalogue 21F0008X

### 1.3 International Exports and Imports

Canada exports a relatively large percentage of its agricultural production and this is the case for most of the commodities discussed in this document. The single most important factor affecting Canadian agricultural exports is the value of the Canadian dollar relative to the U.S. dollar. The trend in the Canada-U.S. exchange rate since early 2003 has seen a rise in the C\$ relative to the US\$. However, there has been a lot of variability between 2006 and 2009 with a rise from C\$ 0.85 to almost \$1.10, followed by a decrease to C\$ 0.76 and a subsequent rise again to the current level of approximately \$0.95 as of November 2009.

The U.S. is Canada's largest trade partner. In 2008, the U.S. accounted for 51 percent of the value (C\$) of total Canadian agri-food exports. Further, the U.S. also accounted for 60 percent of the value (C\$) of total Canadian agri-food imports. From 2004 to 2008, total Canadian exports to all countries have risen from \$26.9 billion to \$38.9 billion, a 44 percent increase. Conversely, total Canadian imports from all countries rose from \$20.9 billion in 2004 to \$27.8 billion in 2008, a 33 percent increase. Canada's net trade balance (exports less imports) changed from \$6 billion to \$11.2 billion during this time which is remarkable considering the variability and strengthening seen in the value of the C\$ during this time.

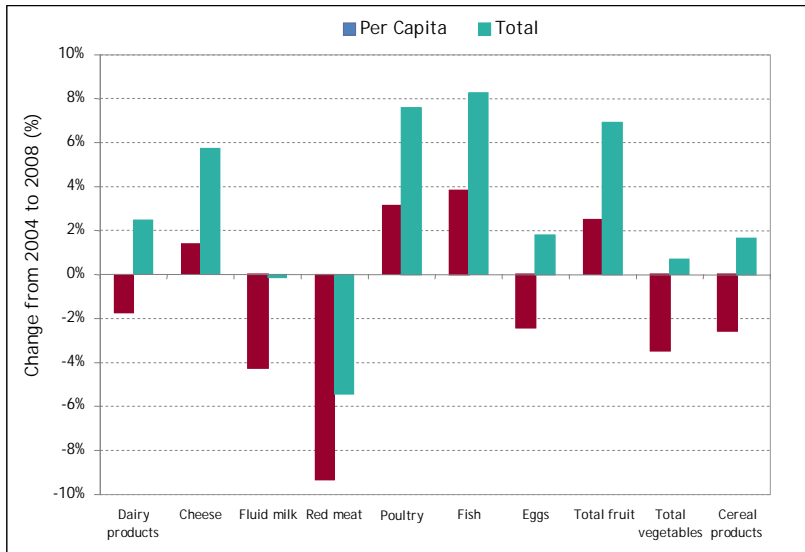
### 1.4 Per Capita Consumption

Over the long term, changes in per capita and total consumption of different food items will impact the production of agricultural commodities. For many commodities produced in Canada, domestic production is greater than domestic consumption. This results in much of the production being exported internationally.

Figure 3 shows the change in per capita and total Canadian consumption from 2004 to 2008 by major food group. The important food groups to note for the purposes of this document are red

meats (which include beef and pork), cereal products (grains), total fruits and total vegetables (horticulture).

Figure 1.3: Changes in Canadian Per Capita and Total Consumption, 2004-2008 (percent)



Source: Statistics Canada catalogue 21020X; CANSIM table 20019

Per capita consumption (i.e. annual demand per person) in Canada has seen increases for cheese, poultry, fish and total fruits. Per capita decreases have been experienced by dairy products, fluid milk, red meat, eggs, total vegetables and cereal products. However, it is important to note that during this period, the Canadian population increased from 31.9 million people in 2004 to 33.3 million in 2008, a 4.3 percent increase.

Using the per capita figures and multiplying by the total Canadian population, a total Canadian consumption value can be determined for each food group. Using this method, total consumption figures have increased in all food groups except for fluid milk which is relatively flat and red meats which saw a 5.4 percent decrease from 2004 to 2008. Specifically within red meats it is estimated that beef decreased 0.7 percent while pork dropped 8 percent. It is speculated that contributing factors to this drop in red meat consumption include an aging population, the mix of recent immigrants to Canada and more attention to diet by Canadians.

### 1.5 Summary

Canada's total farm cash receipts in 2008 had a value of \$45.9 billion. Some farm types appear to be in better financial condition than others. Many commodities in Canada produce more than is consumed within Canada and therefore are very reliant on foreign export markets. These commodities are also facing increasing competition from foreign imports. Changes in total Canadian and per capita consumption over time will also impact Canadian production of individual commodities.

## 2.0 Beef Cattle

In 2008, producers of beef cattle in Canada generated \$6.6 billion in farm cash receipts (excluding program payments), which represented 14 percent of all farm cash receipts nationally. More gross revenue is generated through the sale of beef cattle in Canada than any other livestock group.

Despite higher prices during the first half of 2009, total receipts declined 3.2 percent from the first half of 2008 to \$2.9 billion. Fewer animals were slaughtered domestically and fewer were exported to buyers in the United States. Inventory levels are continuing their decline from their peak in 2005 as a result of a number of factors including, but not limited to, large supplies of competing protein (pork and chicken), an appreciating Canadian dollar relative to the US dollar, high feed grain costs, and lower returns because of increased costs associated with the enhanced feed ban in Canada and the implementation of mandatory country of origin labeling (COOL) in the United States. The confluence of these economic circumstances have negatively impacted the profitability of primary production and have provided a clear signal to producers to reduce output and in some cases, exit the industry.

Table 2.1 shows that as of 1 July 2009, there were 14.8 million head of cattle in Canada. The largest declines since 1 July 2007 have occurred in the West, with inventories down over the past two years by 12.4 percent in British Columbia, 8.4 percent in Alberta and 8.5 percent in Manitoba. National beef cow and heifer numbers (5.22 million head) are at their lowest levels in fifteen years. With the number beef heifers and cows for slaughter rising and replacement heifers falling, it does not appear the national inventory of beef cattle and calves is going to stabilize or expand in the near term.

Table 2.1: Canadian Cattle Inventory, as at July 1, in 000 head.

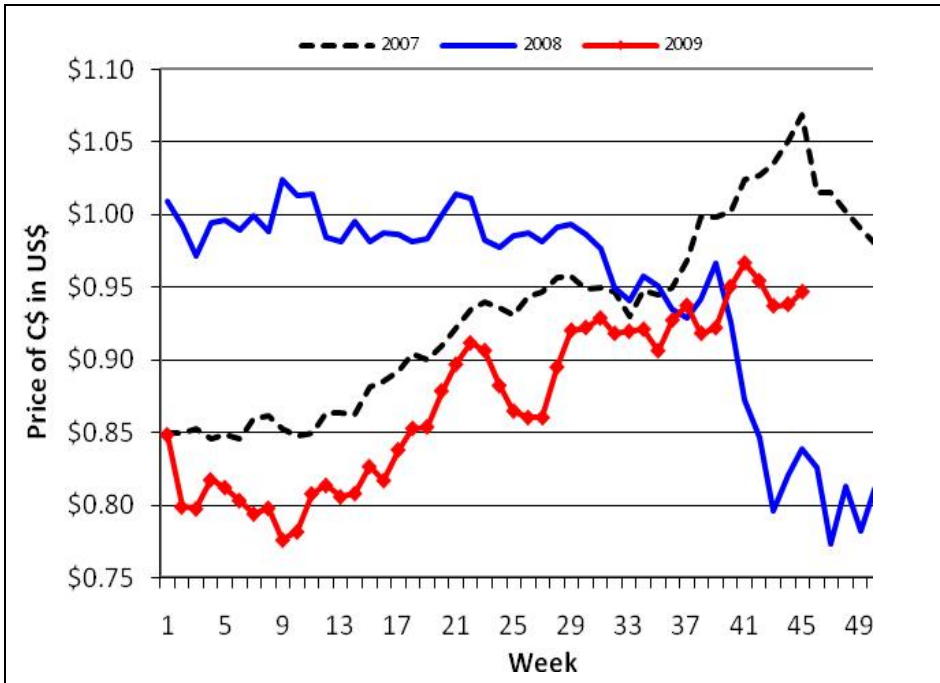
	2009	2008	2007	2009	2008	2007	2009	2008	2007
	All Cattle and Calves			Beef Cows and Heifers			Slaughter		
Atlantic	251	279	289	60	68	72	34	40	43
Quebec	1,385	1,375	1,395	257	252	252	158	145	148
Ontario	1,829	1,881	1,956	391	410	418	462	451	492
Manitoba	1,430	1,515	1,540	623	679	684	186	165	200
Saskatchewan	3,370	3,385	3,430	1,597	1,605	1,670	340	317	280
Alberta	5,870	6,010	6,410	2,040	2,222	2,360	1,630	1,555	1,835
B.C.	705	750	805	259	281	317	79	79	82
<b>CANADA</b>	<b>14,840</b>	<b>15,195</b>	<b>15,825</b>	<b>5,227</b>	<b>5,517</b>	<b>5,773</b>	<b>2,889</b>	<b>2,752</b>	<b>3,080</b>

Source: Canfax, 2009.

Because of its relatively small size and interconnectedness with markets in the United States, the level and volatility of the currency exchange rate affects the profitability of both livestock feeding and cow-calf enterprises. A one cent appreciation of the C\$ relative to the US\$ immediately reduces the price of live cattle in Canada by roughly one cent. In addition to an appreciating currency over most of 2009 (Figure 2.1), lower prices of competing meats, poor packer margins and the effects of country of origin labeling requirements in the United States

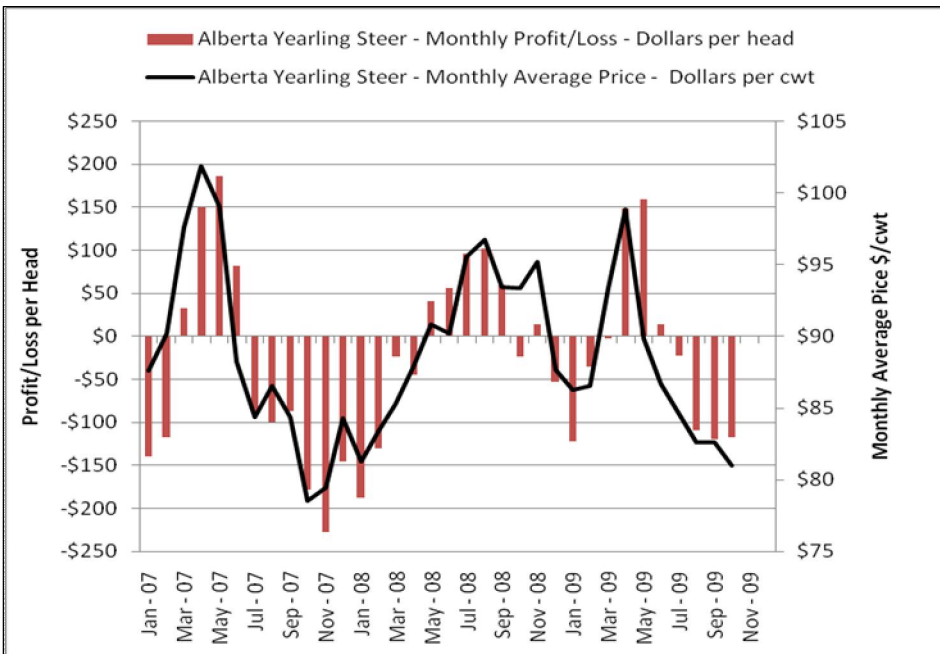
have reduced the prices received by producers and the profitability of feeding livestock in Canada (Figure 2.2).

Figure 2.1: Price of C\$ in US\$



Source: Canfax, 2009.

Figure 2.2: Yearling Steer Profit/Loss vs Cash Price, Alberta



Source: Canfax, 2009.



2010 Outlook:

Further reductions in the national inventory of beef cattle and calves appears likely. It is difficult for many beef cattle enterprises in Canada to generate a sustained level of profitability given current supply and demand conditions, the currency exchange rate and government policy. The rising and volatile price of C\$ in terms of US\$ makes cattle price forecasting very problematic, even in the short term. At the moment in Alberta, prices forecasts into mid-2010 range from C\$74-C\$84/cwt for slaughter ready cattle and C\$72-C\$82/cwt for feeder cattle.

To date, the impact on the quantity of beef supplied from decreased fed cattle production in Canada has been offset by high levels of cow and heifer slaughter. However, at some point (perhaps in 2010 or 2011) smaller cow herds and decreasing calf crops ultimately will lead to lower levels of domestic beef production and relatively higher beef prices for consumers.

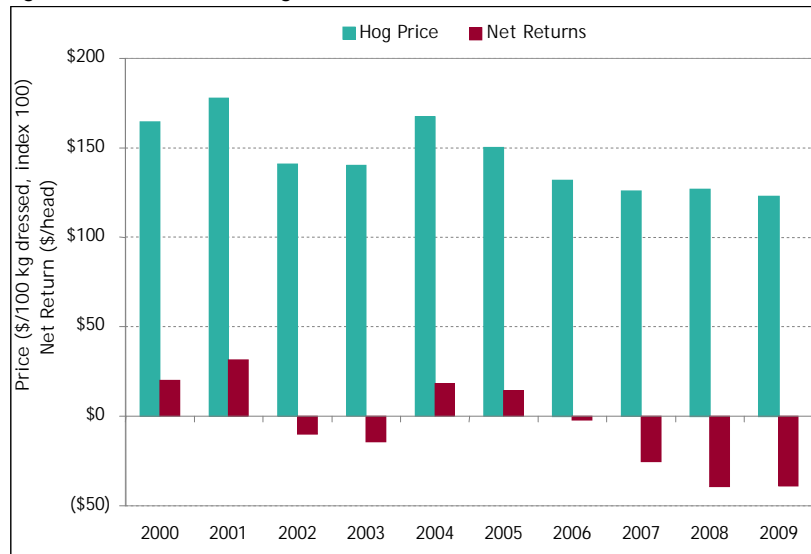
### 3.0 Pork

#### 3.1 Background

The pork industry in Canada in 2008 had farm cash receipts of \$3.2 billion which was approximately 8 percent of total agricultural farm cash receipts (excluding program payments). This ranked the sector as the third largest livestock industry behind cattle and calves, and dairy products. The three largest provinces in terms of farm cash receipts from hogs are Quebec, Ontario and Manitoba which accounted for 77 percent of Canada's total. The 2009 year continued to not be kind to the Canadian pork industry as large losses have been incurred. The pork industry has faced a combination of market factors that have created an unprofitable industry since 2006. Some of these factors include: low hog prices, a strong Canadian dollar relative to the U.S. dollar, high feed costs, country of origin labeling legislation by the U.S., large supplies of pork and other protein sources in the market, decreased demand for pork exports due to the world economic recession and concerns regarding the H1N1 flu. This long period of negative profits and the extent of losses have prompted many producers to re-evaluate business plans and determine strategies for the future.

Figure 3.1 shows the Ontario average weighted hog price from 2000-2009. Historically, as a result of production increases and decreases, two years of relatively lower prices would be followed by two years of relatively higher prices. This was evident from 2000-2005. However, since 2005 there have been four consecutive years of low prices. Productivity gains, higher hog weights, rigidity in production capacity, changing foreign export markets and foreign government policy (i.e. U.S. ethanol policy) along with the factors noted above have resulted in a sustained period of low prices and profitability.

Figure 3.1: Ontario Hog Prices and Estimated Net Returns, 2000-2009



Source: OMAFRA, Ontario Pork.  
 Note: 2009 is for January to October.

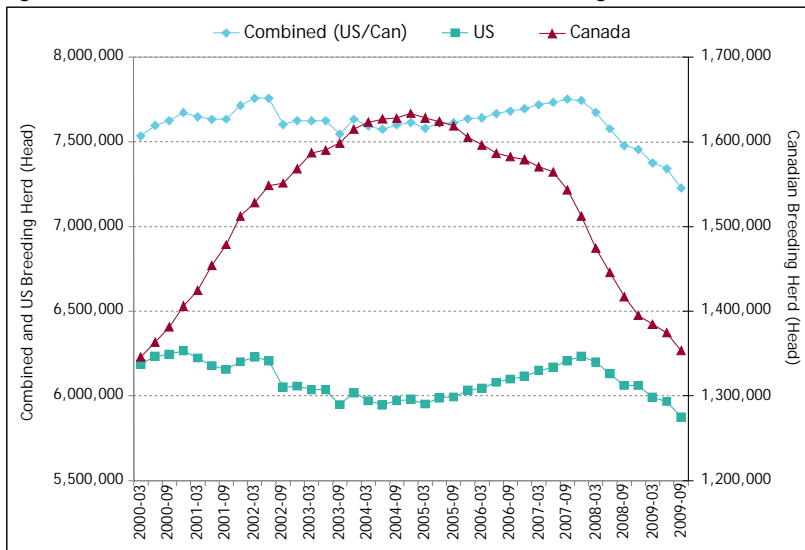
Historical estimated net returns for an Ontario farrow-to-finish operation from 2000-2009 are also shown in Figure 3.1. As a result of the historical four year hog price cycle, normally higher prices coincided with net profits while lower prices coincided with net losses. This appeared to be the case from 2000-2005. However, since 2005 there has been four consecutive years of losses. The four year cycle would have projected losses for 2006 and 2007. However, the losses

in 2008 and 2009 have been excessive and have been a result of the factors listed above but also a result of significantly higher production costs due mainly to higher feed costs as a result of North American ethanol policy and its impact on corn and other feed grain prices.

### 3.2 Inventories

Canada has been reducing its breeding herd and production significantly and continues to liquidate. The U.S. began its reduction later than Canada and is also in the midst of a herd reduction. However, the combined North American reduction so far has not been sufficient to increase hog prices. Some hog market analysts have suggested that the U.S. breeding herd has to be reduced about 10 percent to see significant price improvements. Figure 3.2 shows the breeding herds for the U.S., Canada and the combined U.S./Canadian herds for the period 2000-2009. Canada has been liquidating since 2005 and has seen its breeding herd decrease by 17 percent since its peak. The U.S. has only been liquidating since the end of 2007 and has seen its breeding herd decrease by 6 percent since then. Combined, Canada and the U.S. have decreased 7 percent since the end of 2007.

Figure 3.2: US, Canadian and Combined Breeding Herds, 2000-2009



Source: USDA, Statistics Canada.

Because of the biological time lag in the pork industry, reductions in breeding herds don't appear in market pig production until approximately one year later. The combined U.S./Canada market pig inventories have only been decreasing since early 2008. The impact of the North American reduction so far has been negligible as productivity gains have offset a lot of the reduction. As a result of COOL, live pig exports to the U.S. have decreased significantly with 2009 year-to-date (Jan-Oct) figures for Canada down 33 percent. Hog slaughter in Canada is up 3 percent for 2009 year-to-date. Total Canadian pig production (domestic slaughter plus live exports to U.S.) is down 8 percent. U.S. production has seen a 2 percent decrease in total federally inspected slaughter in 2009. However, higher carcass weights for hogs have resulted in projected pork production in the U.S. to be down slightly over 1 percent vs. 2008. The forecast for 2010 is projecting U.S. pork production to be down almost 3 percent vs. 2009 and 4 percent compared to 2008 levels.

### 3.3 Prices

Hog price forecasts in US\$ per 100 pounds lean for the U.S. for 2010 are indicated in Table 3.1 along with the Ontario price equivalent in C\$ per 100 kilograms dressed and the Ontario forward contract prices which are based off the U.S. futures market prices. Most hog sales in Canada use some type of price formula based on U.S. hog prices and converted to a Canadian equivalent by adjusting for exchange rate, dressing percentage differences, metric conversion and local basis.

Table 3.1: Forecast Hog Prices, 2009-2010

Period	US (US\$/100 lb lean)	Ontario Equivalent (C\$/100 kg dressed)	Ontario Forward Contract Prices (C\$/100 kg dressed)*
2009Q4	46-51	87-97	100-112
2009 (Year)	56-57	106-108	107-142
2010Q1	50-55	95-104	124-131
2010Q2	57-62	108-118	140-147
2010Q3	55-60	104-114	131-145

*Source: September 2009 Quarterly Hogs & Pigs Report Summary by Glen Grimes and Ron Plain, University of Missouri; Ontario Pork; University of Guelph-Ridgetown Campus calculations*

*Note: Assumed exchange rate of C\$ 0.95 = US\$ 1. Figures have been rounded.*

*\*Ontario forward contract prices as of November 18, 2009 (before basis adjustments). 2009Q4 and 2009(Year) based on average closing price +/- one standard deviation.*

### 3.4 Outlook for 2010

Prices for most of 2010 are not going to be sufficient to cover expected costs of production. The estimated cost for Ontario as of October 2009 was approximately \$150-\$160 per 100 kilograms dressed. Further breeding herd reductions in Canada and the U.S. are expected to continue during much of 2010. Depending on the rate of the breeding herd reductions, lower pork production and a recovery of foreign export markets should boost hog prices in 2011 or sooner.

### 3.5 Issues that may impact the pork sector in 2010 include:

- Exchange rate
- Feed costs
- Access to domestic slaughter capacity
- Dependency on foreign export markets
- Increasing pork imports from the U.S.
- Decreased demand due to global recession
- Consumption concerns relating to H1N1 flu
- COOL
- Access to credit
- Safety net funding

#### 4.0 Grains & Oilseeds - Western Canada

Grains grown in Canada include wheat, barley, corn, and oats, while canola and soybeans account for most of the oilseed acreage. With the exception of corn and soybeans, grain and oilseed production is geographically concentrated in the Prairie region but producers are found in every province of the country. Output from the more than 61,000 grain and oilseed farms in Canada is marketed globally.

The demand for grains and oilseeds are derived from the demand for food (flour, starch and edible oils), feed (livestock) and innumerable industrial uses (such as fibre and energy). Grains and oilseed prices affect how these commodities are used and to what extent, while being affected by broader economic conditions and government policy.

As is the case with cattle and hogs, important influences on future earnings of growers in Canada include demand and supply conditions, inventory levels, the price of Canadian dollars in terms of other currencies and government interventionism in the market place. This section focuses on crops where the majority of the production occurs in Western Canada (wheat, barley, oats, canola and flaxseed) while corn and soybeans will be the object of subsequent section. The figures below relate to the crop year in Western Canada which is from August to July.

#### 4.1 Durum Wheat

Durum wheat is the only *tetraploid* species of wheat of commercial importance and it is used primarily in the production of pasta and couscous. Durum grown by western Canadian farmers is marketed on their behalf by agents at the Canadian Wheat Board to customers in more than 40 countries. The majority of the durum grown domestically is sold in export markets, the most important of which are in the South Western Europe (Italy, Portugal), North Africa (Algeria, Morocco, Tunisia), South America (Venezuela, Chile, Peru) and the United States. Domestic millers and pasta producers are usually among the top five buyers (8 - 10 million bushels annually).

Relative to other coarse grains, the global durum market is small. While 10 - 15 percent of world durum supply originates in Canada, exports from Canada account for roughly half of global trade. Eighty percent of the market for the durum produced in Canada lies beyond North America, so supply and demand conditions in these areas have important consequences for growers in Canada.

Table 4.1 shows the most recent estimates of global durum production for 2009/10 in comparison to the 2008/09 and 2007/08 crop years. Forecasters at the International Grain Council are predicting that durum producers in many regions will experience larger than expected harvests. In the United States for example, the United States Department of Agriculture increased its forecast durum production from 81 million bushels in July to 110 million bushels in October, an increase of over 35 percent. The durum crop in the United States is the largest since 1998. Another key development is the 70 percent increase in durum production in North Africa. The large increase local supply will reduce consumer demand for imports from Canadian suppliers, at least until later in the marketing year.

Table 4.1: Major Durum Producers (million bushels)

Region	2009/10 Projections	2008/09	2007/08
EU-27	301	367	309
North Africa	213	125	140
Canada	186	203	135
Turkey and Syria	180	158	165
US	110	85	73
Mexico	81	73	66
Australia	18	18	11
<b>Total (including other regions)</b>	<b>1091</b>	<b>1029</b>	<b>900</b>

Source: International Grains Council as reported by the Canadian Wheat Board, 2009.

Note: Figures have been rounded.

Table 4.2 shows the Canadian durum supply and disposition estimates published by Agriculture and Agri-food Canada for the 2009/10 crop year in context of the previous two crop years. For 2009/10, production is estimated at 186 million bushels, down eight percent from 2008/09 partly in response to a seven percent smaller seeded acreage. Total supply is forecast to rise by ten percent to 256 million bushels because of higher carryover stocks. According to the International Grains Commission, the anticipated durum supply in Canada will roughly equal the total quantity of durum traded globally in 2009/10. Exports are forecast to increase by seven percent to 143 million bushels, due to lower production in the European Union. Ending stocks are expected to increase by 11 percent to 77 million bushels.

Table 4.2: Canadian Durum Supply and Disposition, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	4.82	6.03	5.58
Area harvested (million acres)	4.76	5.97	5.48
Yield per harvested acre (bushels)	28.4	33.9	33.9
Beginning stocks	47	30	70
Production	135	203	186
Imports	0	0	0
Total supply	182	233	256
Exports	117	133	143
Food & industrial use	8	8	10
Feed, wastage & dockage	18	14	19
Total use	35	30	35
Ending stocks	30	70	77
Average price (\$ / bushel)	13.88	9.93	5.88

Source: Canada: Grains and Oilseeds Outlook: 2009-10, October 8, 2009, AAFC; CWB PRO, October 22, 2009. Note: Figures have been rounded.

#### 4.1.1 Prices

The Canadian Wheat Board Pool Return Outlook for durum is currently 39 percent lower than average prices in 2008/09 and almost 57 percent lower than those in 2007/08. Two factors contributing to lower prices can be identified easily: increased output in Canada and increased output in foreign markets (particularly, North Africa, the United States and Mexico). During October, sales of Canadian durum in Europe were affected by an import tax that had been calculated erroneously at the prohibitively high level of C\$0.68 per bushel. The import tax has since been removed.

#### 4.1.2 Outlook for 2010

At this point into the 2009/10 crop year, durum exports are up compared to the same date a year ago, but down from the rate of the previous two years. Global supply and demand conditions and large carryover stocks are keeping durum prices considerably lower than in the previous two years, and at the bottom of a price range dating back at least 15 years. As at 22 October 2009, the Canadian Wheat Board Pool Return Outlook for durum with 13 percent protein for the 2009/10 crop year is \$5.88 per bushel. After deductions for freight and elevator charges, net prices to growers for will likely be about \$4.50 per bushel.

#### 4.2 Non-durum Wheat

Several classes of non-durum wheat are grown in Canada: Six in the East (Canada Eastern Hard Red Winter, Canada Eastern Hard White Spring, Canada Eastern Red Spring, Canada Eastern Soft Red Winter, Canada Eastern Soft White Spring and Canada Eastern White Winter) and seven in the West (Canada Prairie Spring Red, Canada Prairie Spring White, Canada Western Extra Strong, Canada Western Hard White Spring, Canada Western Red Spring, Canada Western Red Winter, and Canada Western Soft White Spring). Non-durum wheat typically is used to make flour for leavened, flat and steamed breads, biscuits, cookies, cakes, breakfast cereal, noodles, and for fermentation to make alcohol. In Canada, it is also planted to a limited extent for livestock feed. Straw, an important co-product of wheat production, has several agricultural and industrial uses.

Wheat production in Canada typically varies between three to four percent of global wheat production. Most of the wheat produced in Canada is grown in the Prairie region and wheat produced in this region is marketed on behalf of growers by agents at the Canadian Wheat Board. Like durum, the majority of the wheat grown domestically is sold to foreign consumers. According to the World Agricultural Supply and Demand Estimates published by the United States Department of Agriculture, in 2007/08 exports from Canada represented almost 14 percent of global exports.

In May, forecasters at the International Grains Council began making projections for the 2009/10 crop year. At that time they expected world wheat production to be 23.9 billion bushels. In each subsequent monthly report, global production estimates were revised upward so that, at present, anticipated production is 24.5 billion bushels. Table 4.3 shows that with expected wheat consumption remaining flat at 23.6 billion bushels, global wheat production in 2009/10 is expected to exceed the quantity demanded by 600 million bushels. Season-end carryover is forecast to expand to a bearishly large 6.9 billion bushels. The quantity of wheat traded is expected to fall 14 percent compared to the previous year.

Table 4.3: World Wheat (including durum) Situation (billion bushels)

	2009/10 Projections	2008/09 Expected	2007/08
Production	24.5	25.2	22.4
Consumption	23.6	23.5	22.6
Carryover	6.9	6.1	4.3
Trade	4.3	5.0	4.0

Source: International Grains Council, 2009.

Note: Figures have been rounded.

Table 4.4 depicts the most recent Agriculture and Agri-food Canada forecast for the supply and disposition of non-durum wheat. Production in 2009/10 is estimated to decrease by 15 percent to 717 million bushels down from 848 million bushels a year earlier despite a three percent increase in seeded area. Supply is estimated to drop by nine percent to 889 million bushels, as higher carryover stocks offset some of the reduced production. In view of expected lower prices, it is anticipated that domestic consumption will increase slightly. Exports are forecast to decrease by 13 percent to 478 million bushels, in part because of lower supplies. Wheat stocks are expected to be drawn down by 14 percent to 147 million bushels at the end of the 2009/10 crop year.

Table 4.4: Canadian Non-durum Supply and Disposition, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	16.80	19.16	19.76
Area harvested (million acres)	16.58	18.82	18.78
Yield per harvested acre (bushels)	36.3	45.1	38.2
Beginning stocks	205	132	171
Production	602	848	717
Imports	1	1	1
Total supply	808	981	889
Exports	466	550	478
Food & industrial use	111	130	132
Feed, wastage & dockage	70	101	102
Total use	211	260	264
Ending stocks	132	171	147
Average price (\$ / bushel)	10.04	8.00	6.29

Source: Canada: Grains and Oilseeds Outlook: 2009-10, October 8, 2009, AAFC; CWB PRO, October 22, 2009. Note: Figures have been rounded.

#### 4.2.1 Prices

The Canadian Wheat Board Pool Return Outlook for non-durum wheat is \$1.71 per bushel below the average price in 2008-09 and \$3.75 per bushel below that in 2007/08. Assuming freight and handling charges of \$1.38 per bushel, farm gate prices for non-durum translate to about \$4.91 per bushel. The relatively lower prices for wheat are the outworking of global market processes, which in turn are sensitive to the inventory positions of exporters. In only three of

the last ten years has global wheat production exceeded consumption with the resulting increase stocks typically requiring more time to draw down than to build up.

#### 4.2.2 Outlook for 2010

The Canadian Wheat Board Pool Return Outlook is 21 percent lower than for 2008/09 due to pressure from higher levels of world and Canadian inventories and increased supply among foreign suppliers. Historical evidence suggests that it may take two or three years for world wheat inventories to shrink to levels that will elicit higher prices. Non-durum wheat production in Canada may fall slightly over this time period as farmers allocate acres to relatively more profitable crop. Non-durum prices could spike if reduced acreage were to coincide adverse growing condition in any of the major wheat producing areas.

#### 4.3 Barley

Barley is a major livestock feed crop in Western Canada, with smaller amounts used for malting (mostly for beer and some distilled beverages), foods such as soups, stews and bread, and for a variety of industrial applications. Most of the barley produced in Canada is grown in the Prairie region. If the barley produced in this region is destined for export or domestic food consumption or for malt, it must be marketed on behalf of growers by agents at the Canadian Wheat Board. Feed barley can be marketed domestically through the Canadian Wheat Board, a grain handling firm or privately through local cash markets.

According to the Food and Agriculture Organization of the United Nations, the quantity of barley produced in Canada in 2007/08 (504 million bushels) was third only to that produced in Russia (719 million bushels) and in Spain (533 million bushels). Producers in the United States ranked 10<sup>th</sup> in terms of total output (210 million bushels). The most important export markets for Canadian growers include those in Asia (Japan, South Korea, Saudi Arabia) and Central and South America (Columbia, Ecuador, Mexico, Peru) and the United States.

Table 4.5 reveals the most recent global barley demand and supply estimates, published by the United States Department of Agriculture. Compared to the previous crop year, total production is forecast to fall almost four percent to 6,790 million bushels, with a two percent increase in global consumption to 6,707 million bushels. The volume of trade is projected to fall 8.5 percent and but stock levels are expected to increase to 1,470 million bushels, their highest level in more than five years.

Table 4.5: World Barley Situation (million bushels)

	2009/10 Projections	2008/09 Expected	2007/08
Production	6790	7061	6101
Consumption	6707	6582	6171
Carryover	1470	1388	908
Trade	791	864	850

Source: United States Department of Agriculture, Foreign Agricultural Service, 2009.

Note: Figures have been rounded.

In terms of volume, the United States is among the most important export destinations for barely produced in Canada. It is also is an important source of barley price information for marketing agents at the Canadian Wheat Board. Should the Federal Government remove the marketing of barley for export, domestic food consumption and for malt from the exclusive purview of the Canadian Wheat Board, expanded marketing alternatives for growers in Canada will influence the process of price discovery and the pattern of barley production and end-use.

Table 4.6 shows the barley supply and use estimates in the United States for 2009/10 in context of the previous two crop years. The estimates for the 2009/10 from the United States Department of Agriculture show large increases in total supply resulting from a 57 percent increase acreage, with imports falling to zero and exports increasing by more than a factor of ten, to 140 million bushels from 13 million in 2008/09. Barley ending stocks are raised five million bushels mostly reflecting a drop in projected exports based on the slow pace of sales and shipments to date. The USDA forecast for the average farm price for 2009/10 ranges from US\$2.85-US\$3.45 per bushel, down from US\$5.37 per bushel, the average price in 2008/09.

Table 4.6: U.S. Barley Supply and Use, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	4.0	4.2	6.6
Area harvested (million acres)	3.5	3.8	5.7
Yield per harvested acre (bushels)	60.0	63.6	64.0
Beginning stocks	69	68	55
Production	210	240	364
Imports	29	29	0
Total supply	308	337	419
Feed and residual	30	67	140
Food, seed and industrial	169	169	90
Total domestic	199	236	230
Exports	41	13	140
Total use	240	249	370
Ending stocks	68	89	49
Avg. farm price (US\$ / bushel)	4.02	5.37	2.85-3.45

Source: World Agricultural Supply and Demand Estimates WASDE-476, November 10, 2009, USDA

Note: Figures have been rounded.

The domestic market for feed barley has been the largest component of total Canadian barley consumption. In the Lethbridge-Calgary-Brooks area between 140 million to 230 million bushels of feed barley is consumed each year by the cattle feeding industry. This represents approximately one-third of the barley produced in Western Canada, making Southern Alberta the primary feed barley market in the country and the main reference point for the pricing. Feed barley prices at Lethbridge are highly correlated with corn prices in the United States. The appreciation of the Canadian dollar has substantially lowered the landed price of US corn, in both eastern and western Canada. This has contributed to increased corn imports from the United States and the creation of an upper price limit for domestic feed barley.

Table 4.7 shows the most recent barley market forecast from Agriculture and Agri-food Canada for 2009/10. Given the expectation of reduced demand from livestock feeding activities in Western Canada and lower corn and barley prices in the United States, barley production in Canada is projected to decrease by 22 percent from 2008/09 to 421 million bushels. Total supply is forecasted to decrease by 10 percent as higher carryover stocks partly offset the drop in production.

Table 4.7: Canadian Barley Supply and Disposition, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	10.87	9.36	8.76
Area harvested (million acres)	9.88	8.65	7.39
Yield per harvested acre (bushels)	51.1	62.5	57.1
Beginning stocks	69	72	131
Production	504	541	421
Imports	3	2	2
Total supply	576	615	553
Exports	180	109	106
Food & industrial use	7	7	9
Feed, wastage & dockage	302	354	341
Total use	324	375	365
Ending stocks	72	131	83
Average price (\$ / bushel)	4.66	3.90	3.05 - 3.70

Source: Canada: Grains and Oilseeds Outlook: 2009-10, October 8, 2009, AAFC

Note: Figures have been rounded.

#### 4.3.1 Prices

At present, the Canadian Wheat Board Pool Return Outlook for feed barley is \$3.16 per bushel and \$4.53 per bushel for Select two-row malting barley. To arrive at farm gate prices, elevation and handling charges would need to be deducted. Two factors contributing to the new lower price level for barley can be identified: lower prices for coarse grains in the United States and reduced demand for feed grains in Canada as livestock feeding activities contract.

#### 4.3.2 Outlook for 2010

As of the first quarter of the 2009/10 crop year, barley exports from Canada are up almost 50 percent compared to the previous year, including sales totaling 4.55 million bushels of feed grade barley to customers in Saudi Arabia, which were non-existent a year ago. However, the outlook for 2010 seems bearish because of global supply and demand conditions and government imposed impediments to trade.

It appears that demand for feed barley by the feedlot sector in Alberta will be down. Global barley inventories are forecast to increase despite a reduction in worldwide production. The Australian Bureau of Agriculture and Resource Economics is forecasting that production in that country will increase by 46 million bushels and that exports to customers in China and Japan will be higher than last year. If Australian producers are able to increase their sales in Asia, it will likely be at the expense of their competitors in Canada.

At this time there is confusion in Canada over new phyto-sanitary requirements imposed by the central government in China on imported barley. The Chinese government has issued a list of weeds that they want exporters to certify are not contained in shipments to China. Some of these weeds may exist in Canadian barley shipments and it would be costly to remove them. If they are not removed, then malt barley exports to China may be suspended until the situation is resolved, likely increasing the supply of barley that ends up in feed markets.

#### 4.4 Oats

While oats are suitable for human consumption as porridge, breakfast cereal, cookies and snack bars, one of the most common uses is as livestock feed. About 73 percent of global oat production is consumed as animal feed. Oats also can be used in cosmetics, lacquers and dyes.

The major production regions are Europe (64 percent), North America (21 percent), and Oceania (5 percent). Producers in Russia supply almost one-fourth of global production. The highest yields occur in Ireland, where growing conditions enable producers to achieve as much as three times the global average.

Like most other coarse grains, oats production is geographically concentrated in Western Canada, but producers are found in every province of the country. Import export markets for oats produced in Canada are millers in the United States including General Mills and PepsiCo Inc's Quaker Oats for human consumption and for livestock feed. In 2007/08, more than 97 percent of Canadian oat exports went to buyers located in the United States.

Since oats were released from the Canadian Wheat Board's mandate in 1989, the Canadian growers have responded price signals generated through market processes. As is with the case of corn and soybeans in Canada, domestic oat prices are based off those in the United States. Domestic prices are the outworking of prices in the United States that are place and time specific (i.e., oat future prices discovered at the Chicago Mercantile Exchange) and a basis that captures variations in the currency exchange rate, costs of transportation and handling, and local supply and demand conditions. Changing conditions in the oats market (and other grains and oilseeds markets) have important consequences for oats growers in Canada.

Table 4.8 depicts the oats supply and use estimates in the United States for 2009/10 in context of the previous two crop years. The estimates for the 2009/10 from the United States Department of Agriculture Barley show steady levels of oat acreage, increasing yields and reduced imports as inventories are drawn down. The USDA forecast for the average farm price for 2009/10 ranges from US\$2.00-US\$2.30 per bushel, down from US\$3.15 per bushel, the average price in 2008/09.

Table 4.8: U.S. Oats Supply and Use, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	3.8	3.2	3.4
Area harvested (million acres)	1.5	1.4	1.4
Yield per harvested acre (bushels)	60.1	63.7	67.5
Beginning stocks	51	67	84
Production	90	89	93
Imports	123	115	95
Total supply	264	270	272
Feed and residual	120	109	120
Food, seed and industrial	74	74	75
Total domestic	195	183	195
Exports	3	3	3
Total use	198	186	198
Ending stocks	67	84	74
Avg. farm price (US\$ / bushel)	2.63	3.15	2.00-2.30

Source: World Agricultural Supply and Demand Estimates WASDE-476, November 10, 2009, USDA

Note: Figures have been rounded.

In Canada, oats production in 2009/10 is forecast by Agriculture and Agri-food Canada to decrease by about 32 percent from 2008-09 to 188 million bushels due to a lower harvested area and lower yields. Table 4.8 shows that supply is forecast to drop by 15 percent as higher existing inventories serve to partly offset the drop in production. Exports are expected to fall while ending stocks decline to 71 million bushels. Prices are predicted to decline by about 20 percent, partly due to lower coarse grain prices and an appreciating Canadian dollar against the United States dollar.

Table 4.8: Canadian Oats Supply and Disposition, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	5.41	4.34	3.85
Area harvested (million acres)	4.49	3.58	2.57
Yield per harvested acre (bushels)	68.0	77.4	73.2
Beginning stocks	37	62	99
Production	304	277	188
Imports	1	1	1
Total supply	342	340	288
Exports	182	158	130
Food & industrial use	5	3	6
Feed, wastage & dockage	84	72	70
Total use	98	83	87
Ending stocks	62	99	71
Average price (C\$ / bushel)	3.59	2.95	2.16 - 2.62

Source: Canada: Grains and Oilseeds Outlook: 2009-10, October 8, 2009, AAFC

Note: Figures have been rounded.

One quarter through the 2009/10 crop year, exports from Canada are currently at their lowest in five years for the date at 18.4 million bushels compared to 44.3 million bushels to the same date a year ago and 38.1 million bushels two years ago. Millers in the United States appear to be holding large inventories from the local harvest, which was completed by the end of July. In response to lower export sales, domestic use of oats is up strongly. The pace of grower deliveries for this crop year to date are currently about half of that of last year.

#### 4.4.1 Prices

Near term oat futures prices on the Chicago Mercantile Exchange have been on the rise the last three months and have stabilized in the US\$2.50 - US\$2.60 per bushel range. Current cash bids in central Alberta are in the \$1.85 - \$1.90 per bushel range. Weather conditions delayed the completion of the oats harvest in many Prairie regions. Late season harvested oats are less likely to be stored over winter given concerns of quality downgrades and will likely be delivered in the coming weeks. This may limit any additional near-term cash return upside potential in the immediate near term.

#### 4.4.2 Outlook for 2010

The oat market outlook is neutral to slightly negative. If the pace of movement to the United States does not pick up soon, the expected levels of 2009/10 ending inventories are going to rise. Milling oat demand appears soft at this time, reasonable on the domestic front, but exports to the United States are running seriously behind. Oat fundamentals are not overwhelmingly bullish.

#### 4.5 Canola

Canola is one of two cultivars of rapeseed. Rapeseed is the traditional name for the group of oilseed crops in the *Brassicaceae* family. It can be divided into two types – “industrial rapeseed” or canola. Visually, the seeds of the two types are identical. The distinguishing difference between industrial rapeseed and canola is their fatty acid profiles. Generally, industrial rapeseed refers to any rapeseed with a high content (at least 45 percent) of erucic

acid in the oil. Canola refers to the edible oil crop that is characterized by low erucic acid (less than 2 percent).

Industrial rapeseed is grown all over the world, but Canada is where most of the canola is produced. Canola is grown primarily in the Prairie region, with some acreage in Ontario. It is also produced in the European Union, the United States, Australia and South Africa. It is used to produce edible oil low in saturated fats for human consumption (cooking oil, margarine, salad dressing, coffee whiteners) and to produce high protein livestock feed. Canola is an important ingredient in many industrial settings as well including, among others, the manufacture of biodiesel, engine lubricants, plastics, soaps, fertilizers, inks and cosmetics.

According to the United States Department of Agriculture, canola/rapeseed is the third leading source of vegetable oil in the world, after soybean and oil palm, and the second leading source of protein meal, although only one-fifth of the production of soybean meal. The important foreign markets for canola seed produced in Canada are in Japan, Mexico, China and Pakistan, while the bulk of canola oil and meal goes to the United States and China, with smaller amounts shipped to Taiwan, Mexico, and several countries in Europe.

Table 4.9 ranks the eight largest regions of global canola/rapeseed supply with projections made by the United States Department of Agriculture for the 2009/10 crop year. Production is forecast to increase in the two top producing regions; by 12.1 percent within the European Union and by nine percent in China. In contrast, the expectation is that Canadian producers are going to reduce production by more than 100 million bushels.

Table 4.9: Major Canola/Rapeseed Producers (million bushels)

Region	2009/10 Projections	2008/09	2007/08
EU-27	952	849	825
China	593	544	475
Canada	461	568	431
India	319	314	245
Ukraine	85	130	49
Australia	77	76	48
Russia	31	34	28
United States	31	29	29

Source: United States Department of Agriculture, Foreign Agricultural Service, 2009.

Note: Figures have been rounded.

Table 4.10 characterizes the most recent estimates by Agriculture and Agri-food Canada regarding the supply and disposition of canola for the 2009/10 crop year. Production is estimated at 461 million bushels, down 19 percent, due to a slightly smaller area and significantly lower yields. The reduction in acreage is the first since 2002. Total supply is down by 15 percent to 519 million bushels. Domestic crush is forecast to increase, as three new large crushing plants (Cargill at Clavet, SK; Louis Dreyfus Canada at Yorktown, SK; James Richardson International at Yorkton, SK) begin operation during 2009/10. Exports are forecast to decline by 24 percent from the 2008-09 record due to reduced supply and increased domestic demand for oil. Ending stocks are forecast to decline by 55 percent, to 34 million bushels, with the stock-to-use ratio at 7 percent, well below the 10-year average of 18 percent.

Table 4.10: Canadian Canola Supply and Disposition, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	15.73	16.16	15.82
Area harvested (million acres)	15.51	16.05	15.29
Yield per harvested acre (bushels)	27.3	34.8	29.6
Beginning stocks	80	66	75
Production	431	568	461
Imports	8	5	7
Total supply	519	639	543
Exports	254	355	270
Food & industrial use	186	192	225
Feed, wastage & dockage	11	15	13
Total use	199	209	239
Ending stocks	66	75	34
Average price (C\$ / bushel)	12.54	10.59	9.64 - 10.77

Source: Canada: Grains and Oilseeds Outlook: 2009-10, October 8, 2009, AAFC

Note: Figures have been rounded.

#### 4.5.1 Prices

Canola prices are expected to decrease slightly in 2009/10 to about \$10 per bushel before transportation and handling charges. While the United States Department of Agriculture expects world canola/rapeseed carryover to fall from 287 million bushels last year to 245 million bushels this year, the rising and volatile price of C\$ in terms of US\$ will reduce returns from export sales in the United States as will border issues between the central governments of Canada, the United States and China.

#### 4.5.2 Outlook for 2010

Canola has been a consistently profitable crop for growers and processor-exporters during recent years. In fact, the Canola Council of Canada has set an ambitious annual production target of 674 million bushels (15 million tonnes) by 2015 to be realized by a 35 percent increase in yields and 30 percent increase in acreage. (In 2008/09 canola acreage in Western Canada was at or near what a four year rotation allows. The large number of additional acres would come from growers adopting a three year rotation with higher risk of disease development, spread and resistance breakdown in place of the recommended four years). This optimism for continued industry expansion in the medium term must be somewhat tempered, at least in the near term. The outlook for 2010 is somewhat cloudy because of government interventionism and the effects of supply/demand conditions in competing oilseed markets.

The ability of the Canadian crushing industry to meet forecasted canola crush estimates even with new canola crushing plants coming on stream appears doubtful unless there is resolution on issue of salmonella contamination of canola meal going to the United States. In August and September the United States Federal Drug Administration has stopped canola meal shipments from five Canadian plants at the border over concerns about salmonella bacteria. The amount of canola processed by crushers from 1 August through mid-October was down 6 percent, or 2.25 million bushels, from the same period a year earlier.

The Canadian Food Inspection Agency announced that it received a notice from China on 20 October 2009 that effective 15 November 2009 a phyto-sanitary certificate is required for canola shipments to China certifying that the shipments are free from blackleg (*Leptosphaeria maculans*). The Canadian Inspection Agency has indicated that it will not be able to issue a certificate as blackleg is a common plant disease of canola in Canada and there is agreed to testing method. The Chinese government has granted no extension to the 15 November deadline. China is an important market for Canadian canola: In 2008/09 China was Canada's top canola seed market, importing 129 million bushels valued at \$1.3 billion. The Australian government also has been notified that canola shipments from Australia to China must be certified free from blackleg effective as of 15 October 2009.

Finally, many analysts foresee a record soybean crop on the horizon in the Southern Hemisphere. It will take a major weather disaster to reduce the South American crop and have an impact on prices. However, if crude oil prices continue to rise, so too will the price of oilseeds, including canola.

#### 4.6 Flaxseed

Flaxseed is processed into a variety of diverse food products ranging from bakery products to nutritional supplements. It is rich in omega-3 fatty acids, especially alpha-linolenic acid, which appears to be beneficial for heart disease, inflammatory bowel disease, arthritis and a variety of other health conditions. While various parts of the plant can be used to make linen, dye, paper, medicines, fishing nets, hair gels and soap, it is better known as an ingredient in paints, fiber and cattle feed. Flaxseed oil (more commonly known as linseed oil) is one of the oldest commercial oils and has been used for centuries as a drying oil in paints and varnishes.

Producers in Canada grow about one-third of global supply of flax and are responsible for 80 percent of the quantity of flaxseed exports. The most important export destinations for flaxseed produced in Canada in terms of volume are Belgium and the United States, followed distantly by the Netherlands and Japan. Other geographic regions in which large amounts of flaxseed are produced include China (25 percent) and India (9 percent), the United States (8 percent) and Ethiopia (3 percent).

Table 4.11 shows the most recent Canadian flaxseed market forecast from Agriculture and Agri-food Canada for 2009/10 in the context of the two previous crop years. As of 8 October 2009, flaxseed disposition and price projections were dubious due to the suspension of imports to the EU from Canadian producers following the discovery of genetically modified material in a shipment. Agriculture and Agri-food Canada based their projections on the presumption that the issue will be completely resolved in the near term. For 2009/10, production is estimated at 38 million bushels, an increase of 12 percent from last year. Exports are forecast to decline sharply from 2008/09, since the normal winter closure of the Seaway until March 2010 will hamper resumption of normal trade with the EU. Ending stocks on 31 July 2010 are projected rise sharply as a result. Prices are forecast to average sharply lower than last year as a result of the burdensome stock levels, with no significant recovery from current low levels expected until the spring of 2010.

Table 4.11: Canadian Flax Supply and Disposition, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	1.30	1.56	1.72
Area harvested (million acres)	1.29	1.54	1.71
Yield per harvested acre (bushels)	19.3	22.0	22.3
Beginning stocks	15	7	9
Production	25	34	38
Imports	0	0	0
Total supply	40	41	47
Exports	27	24	18
Food & industrial use	n/a	n/a	n/a
Feed, wastage & dockage	n/a	n/a	n/a
Total use	7	8	8
Ending stocks	7	9	22
Average price (C\$ / bushel)	15.52	12.70	8.26 - 10.80

Source: Canada: Grains and Oilseeds Outlook: 2009-10, October 8, 2009, AAFC

Note: Figures have been rounded.

#### 4.6.1 Prices

Since flaxseed futures were delisted from the Winnipeg Commodity Exchange in 2004, there is no standard pricing reference for the crop in Canada. Nevertheless, marketing conditions changed dramatically on 8 September 2009, when the European Commission issued a Rapid Alert notification, confirming the presence of CDC Triffid flax, a glyphosate tolerant genetically modified variety that was never commercially released, in some Canadian flax samples. The European government subsequently banned flax imports from Canadian producers. Cash prices in the central Prairie region dropped by as much as \$2.50 per bushel from the \$8.25 to \$8.90 per bushel range. Later, grain companies stopped buying flax at any price because of the lack of forward orders from reliable, traditional European importers. While central authorities in Canada and in the European Union together with Flax Council of Canada, Canadian flax exporters and DG Sanco of the European Commission, developed a protocol in November 2009 to enable resumption of trade, it is restrictive and burdensome. The episode underscores the perils and pitfalls of unexpected market intervention of foreign authorities to export oriented commodity supply chains in Canada.

#### 4.6.2 Outlook for 2010

Buyers and sellers of flaxseed Canada are responding to the sudden disruption of shipments to Europe in September. Cumulative exports are just 2.2 million bushels so far in the season compared to 6.5 million bushels a year ago and 6.6 million two years ago. It appears that only way to retain the European market for prairie flax is to make sure that no trace of the offending genetically modified flax ever turns up again in shipment destined for Europe. Starting 1 December 2009, many flaxseed handling firms will not accept deliveries from producers unless a sample has been tested and found free of Triffid. The cost of testing will not be trivial and it will be transferred back to growers by way of lower prices. About 70 percent of Canadian flax exports are directed at satisfying consumers in Europe. In sum, the outlook for Canadian flax cannot be characterized as very positive.



While off-farm flaxseed sales have resumed, it is likely that exports to Europe will be down for 2009/10 compared to previous years. Restrictions on imports of Canadian flaxseed by European authorities may create an opportunity to re-export Canadian flax out of the United States. No doubt European border inspectors are aware of this situation and if they find traces of genetically modified material in the shipments from the United States then North American flaxseed exports will be curtailed. Export data from the United States reveals that no flaxseed has been exported from the United States to the European Union so far this crop year.

The United States Department of Agriculture is forecasting American farm flax prices to fall from an average of US\$13 US per bushel last crop year to between US\$6.70 to US\$8.70 US per bushel in 2009/10. As recently as September flax price forecast had been between US\$7 to US\$10 US per bushel.

## 5.0 Grains & Oilseeds – Eastern Canada

The two largest grain and oilseed crops in Eastern Canada in terms of 2008 farm cash receipts are corn and soybeans. Eastern Canada, which includes Ontario and all provinces east, had \$1.49 billion in farm cash receipts for corn and \$1.06 billion for soybeans. Total Canadian farm cash receipts for these two commodities combined represented \$2.67 billion and ranked third and fourth behind all wheat and canola among grains and oilseeds. Most of the Canadian production of corn and soybeans occurs in Ontario and Quebec and therefore these will be the two commodities discussed in this section. The figures below relate to the crop year which is from September to August.

### 5.1 Corn

The U.S. is the world's largest corn producer and represented 39 percent of total world production in the 2008/09 crop year. It is also the world's largest corn exporter with about 59 percent of total world exports during the same period. Table 5.1 shows the U.S. corn supply and use estimates for the 2007 to 2009 crop years as published by USDA. The estimates for the 2009/10 crop year show increases in total supply and total use resulting in ending stocks which are similar to the previous two years. Total supply is up due to higher production than in 2008 while total use is up due to increases in feed for livestock, food, seed and industrial use and ethanol for fuel requirements. The amount of corn required for ethanol production continues to increase annually and is forecast to represent 29 percent of total supply. Feed for livestock will take about 37 percent of total supply which is up slightly from the 2008 crop year. The USDA forecast for the average farm price for 2009/10 ranges from US\$3.25-US\$3.85 per bushel which is down from US\$4.06 in 2008/09.

Table 5.1: U.S. Corn Supply and Use, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	93.5	86.0	86.4
Area harvested (million acres)	86.5	78.6	79.3
Yield per harvested acre (bushels)	150.7	153.9	162.9
Beginning stocks	1,304	1,624	1,674
Production	13,038	12,101	12,921
Imports	20	14	10
Total supply	14,362	13,739	14,605
Feed and residual	5,913	5,254	5,400
Food, seed and industrial	4,387	4,953	5,480
Ethanol for fuel	3,049	3,677	4,200
Exports	2,437	1,858	2,100
Total use	12,737	12,065	12,980
Ending stocks	1,624	1,674	1,625
Avg. farm price (US\$ / bushel)	4.20	4.06	3.25-3.85

Source: *World Agricultural Supply and Demand Estimates WASDE-476, November 10, 2009, USDA*

Note: *Figures have been rounded.*

Table 5.2 shows the Canadian corn supply and use estimates for the 2007 to 2009 crop years as published by AAFC. The Canadian estimates for the 2009/10 crop year show decreases in total supply while total use is up slightly compared to 2008/09. Total supply is down because of

decreased production the last two years. Total use is up due to increases in food and industrial use (which includes ethanol production) and livestock feed requirements. The amount of corn required for food and industrial use is forecast to represent 32 percent of total supply. Feed for livestock will take about 56 percent of total supply. This is a significant decrease (104 million bushels) compared to two years ago in 2007/08 when feed used 63 percent of total supply. The reductions occurring in the Canadian livestock industry the past couple of years are showing up in reduced demand for corn. The AAFC forecast for the average farm price for Chatham, Ontario for 2009/10 ranges from \$3.30-\$4.06 per bushel which is down from \$4.24 in 2008/09.

Table 5.2: Canadian Corn Supply and Disposition, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	3.44	2.98	3.04
Area harvested (million acres)	3.38	2.89	2.92
Yield per harvested acre (bushels)	135.6	144.3	131.3
Beginning stocks	53	57	73
Production	459	417	383
Imports	125	68	79
Total supply	637	542	535
Exports	36	13	12
Food & industrial use	141	162	169
Feed, wastage & dockage	402	293	298
Total use	543	456	468
Ending stocks	57	73	55
Average price (C\$ / bushel)	4.57	4.24	3.30-4.06

Source: Canada: Grains and Oilseeds Outlook: 2009-10, October 8, 2009, AAFC

Note: Figures have been rounded.

### 5.1.1 Prices

Corn prices in Canada are based off U.S. prices and a local "basis" which is added to the U.S. price to adjust it to a Canadian price by accounting for the U.S./Canada exchange rate, transportation, handling and local supply and demand conditions. The local basis for Chatham, Ontario tends to be quite variable. The five year average (2004 to 2008 crop years) Chatham old crop basis is \$0.07/bushel with a range from -\$1.09 to +\$3.45/bushel. The basis in the 2008 crop year averaged approximately \$0.31/bushel over the Chicago nearby futures price.

### 5.1.2 Outlook for 2010

World corn production for 2009/10 is forecast to be 789.73 million metric tons which is down slightly from both 2008/09 and 2007/08. The corn market is forecast to see lower prices in the 2009/10 crop year as compared to 2008/09. The USDA is forecasting a U.S. average farm price of US\$3.25-\$3.85/bushel. AAFC is estimating the Chatham Ontario corn price to average from \$3.30-\$4.06/bushel.

### 5.2 Soybeans

The U.S. is also the world's largest soybean producer and represented 38 percent of total world production in the 2008/09 crop year. It is also the world's largest soybean exporter with about 45 percent of total world exports during the same period. Table 5.3 shows the U.S. soybean supply and use estimates for the 2007 to 2009 crop years as published by USDA. The estimates

for the 2009/10 crop year show increases in total supply and total use resulting in ending stocks which are higher than the previous two years. Total supply is up due to higher production than in 2008 and 2007 while total use is up due to increases in exports and crushings. The amount of soybeans required for domestic crushing is forecast to represent 53 percent of total supply. Exports will take about 41 percent of total supply. The USDA forecast for the average farm price for 2009/10 ranges from US\$8.20-\$10.20 per bushel which is down from \$9.97 in 2008/09.

Table 5.3: U.S. Soybeans Supply and Use, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	64.7	75.7	77.5
Area harvested (million acres)	64.1	74.7	76.6
Yield per harvested acre (bushels)	41.7	39.7	43.3
Beginning stocks	574	205	138
Production	2,677	2,967	3,319
Imports	10	13	8
Total supply	3,261	3,185	3,465
Crushings	1,803	1,662	1,695
Exports	1,159	1,283	1,325
Seed	93	95	94
Residual	0	6	81
Total use	3,056	3,047	3,195
Ending stocks	205	138	270
Avg. farm price (US\$ / bushel)	10.10	9.97	8.20-10.20

Source: World Agricultural Supply and Demand Estimates WASDE-476, November 10, 2009, USDA

Note: Figures have been rounded.

Table 5.4 shows the Canadian soybean supply and use estimates for the 2007 to 2009 crop years as published by AAFC. The Canadian estimates for the 2009/10 crop year show increases in total supply and total use compared to 2008/09. Total supply is up because of increased production the last two years. Total use is up due to slight increases in exports, food and industrial use and livestock feed requirements. The amount of soybeans required for food and industrial use is forecast to represent 33 percent of total supply. Feed for livestock will take about 9 percent of total supply while exports account for 47 percent. The AAFC forecast for the average farm price for Chatham, Ontario for 2009/10 ranges from \$9.53-\$10.89 per bushel which is down from \$11.24 in 2008/09.

Table 5.4: Canadian Soybeans Supply and Disposition, 2007/08 to 2009/10 (million bushels)

Item	2007/08	2008/09	2009/10 Projections
Area planted (million acres)	2.92	2.97	3.48
Area harvested (million acres)	2.90	2.95	3.45
Yield per harvested acre (bushels)	34.2	41.5	38.4
Beginning stocks	18	4	8
Production	99	123	132
Imports	12	13	10
Total supply	129	140	150
Exports	62	69	70
Food & industrial use	50	47	50
Feed, wastage & dockage	8	11	14
Total use	62	63	69
Ending stocks	4	8	12
Average price (C\$ / bushel)	11.76	11.24	9.53-10.89

Source: Canada: Grains and Oilseeds Outlook: 2009-10, October 8, 2009, AAFC

Note: Figures have been rounded.

#### 5.2.1 Prices

Soybean prices in Canada are determined similar to corn with a local basis amount added to a U.S. price. Similar to corn, the local basis for Chatham, Ontario soybeans tends to be quite variable. The five year average (2004 to 2008 crop years) Chatham old crop basis is \$0.32/bushel with a range from -\$2.03 to +\$3.27/bushel. The basis in the 2008 crop year averaged approximately \$1.32/bushel over the Chicago nearby futures price.

#### 5.2.2 Outlook for 2010

World soybean production for 2009/10 is forecast to be 250.23 million metric tons which is up 19 percent from 2008/09 as a result of record production in the U.S. and Brazil. The soybean market is forecast to see lower prices in the 2009/10 crop year as compared to 2008/09. The USDA is forecasting a U.S. average farm price of US\$8.20-\$10.20/bushel. AAFC is estimating the Chatham Ontario corn price to average from \$9.53-\$10.89/bushel.

5.3 Issues that may impact the corn and soybean sectors in 2010 include:

- Exchange rate
- Increases and variability in farm input prices
- Safety net funding
- Need for harmonization of pesticide registration processes in Canada and U.S.

## 6.0 Horticulture

The horticulture sector in Canada includes field and greenhouse vegetables, tree and small fruits, ornamental products (floriculture, nursery, sod, and Christmas trees), and honey and maple products. In 2008, this sector represented \$5.78 billion in farm cash receipts. This was approximately 14 percent of total agricultural farm cash receipts (excluding program payments) and ranked second behind cattle and calves and slightly ahead of all wheat. Most of the production in the sector is concentrated in British Columbia, Ontario and Quebec with these three provinces representing 76 percent of horticultural farm cash receipts. The focus of this section will be on potatoes, greenhouse tomatoes and cucumbers, apples, blueberries and grapes.

### 6.1 Potatoes

Potatoes are the most important vegetable crop grown in Canada and represented 35 percent of all vegetable farm cash receipts in 2008 (\$987 million). The three largest provinces in terms of farm cash receipts from potatoes are Prince Edward Island, Manitoba and Alberta which accounted for 56 percent of Canada's total. Table 6.1 shows total Canadian production from 2006-2008 with seeded area also indicated for 2009. Seeded acreage in 2008 decreased from the levels seen in 2006 and 2007. 2009 seeded acreage is down slightly from 2008 levels. Average yields in 2007 and 2008 were down from 2006. Total production in 2008 was down 5 percent from 2007 and down 7 percent from 2006.

Table 6.1: Canadian Potato Production, 2006-2009

Item	2006	2007	2008	2009
Area seeded (acres)	401,900	400,200	380,700	378,400
Area harvested (acres)	391,000	396,200	374,100	n.a.
Average yield (cwt/acre)	287.1	278.2	278.4	n.a.
Production (million cwt)	112.241	110.219	104.157	n.a.

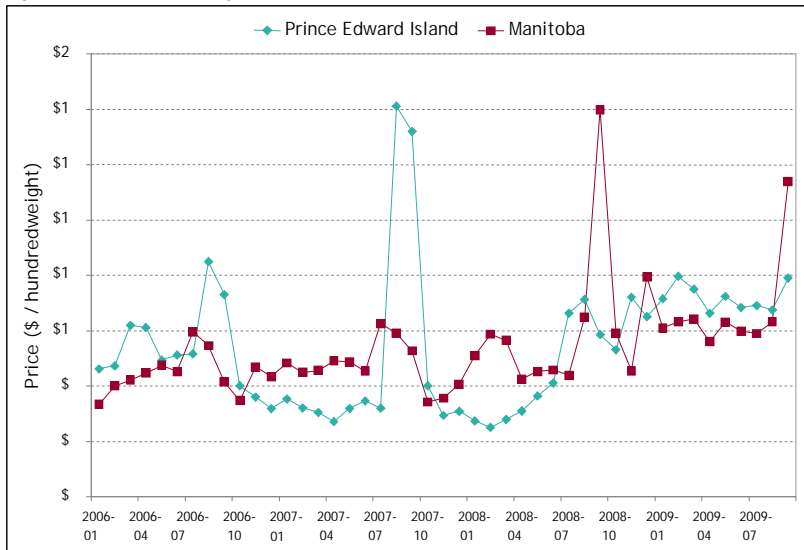
Source: Statistics Canada CANSIM table 10014

Note: cwt - hundredweight; n.a. - not available

Figures have been rounded.

Figure 6.1 shows monthly commercial prices received for potatoes from January 2006 to September 2009 in Prince Edward Island and Manitoba. PEI prices averaged \$9.46/cwt over the period while Manitoba prices averaged \$9.42. The prices in PEI ranged from \$6.51 to \$18.12 while Manitoba's prices showed slightly less variability. Manitoba's prices were in the \$8 to \$10 range a lot of the time while PEI prices spent most of their time in the \$7 to \$11 range.

Figure 6.1: Monthly Canadian Commercial Prices, Potatoes, 2006-2009



Source: Statistics Canada CANSIM table 20043  
 Note: Figures have been rounded.

### 6.1.1 Outlook for 2010

The 2009 potato crop in the U.S. is estimated to be 417.6 million cwt which is up less than 1 percent from last year but down 6 percent from 2007. Average yield per acre has seen a steady increase over the long term increasing from 358 cwt/acre in 2001 to a forecasted 399 cwt/acre in 2009. U.S. domestic consumption on a per capita basis has declined sharply the past 4-5 years however average total domestic use during the 2000-2008 period is up 7 percent from the previous decade average due to an increasing population during this time. U.S. production during this time has risen 3 percent with the remainder of the increased demand met through imports. In 2008, imports represented a record high of 14 percent of U.S. consumption. Fresh market imports (mainly from Canada) represent about 11 million cwt annually which is 10 percent of U.S. consumption. Approximately 34 million cwt of frozen french fries (again mostly from Canada) are imported each year accounting for 22 percent of U.S. consumption. The potato industry in Canada and the U.S. has experienced higher raw potato prices for the most part in 2009 compared to 2008. With the lower U.S. and Canadian production in 2008 and 2009, the increased total consumption in the U.S. should support prices in 2010.

### 6.2 Greenhouse vegetables

Greenhouse vegetables represented 28 percent of all vegetable farm cash receipts in 2008 (\$800 million). The major crops produced are tomatoes, peppers, cucumbers and lettuce. The two largest provinces in terms of farm cash receipts are Ontario and British Columbia which accounted for 86 percent of Canada's total. Table 6.2 shows total Canadian greenhouse production of tomatoes and cucumbers from 2006-2008. Total production of tomatoes in 2008 was up 1 percent from 2007 while cucumbers were up 7 percent.

Table 6.2: Canadian Greenhouse Production of Tomatoes and Cucumbers, 2006-2008

Item	2006	2007	2008
Tomatoes			
Area harvested (acres)	n.a.	1,147	1,152
Production (million pounds)	449.98	450.11	456.19
Cucumbers			
Area harvested (acres)	n.a.	688	683
Production (million dozens)	30.39	27.04	29.20

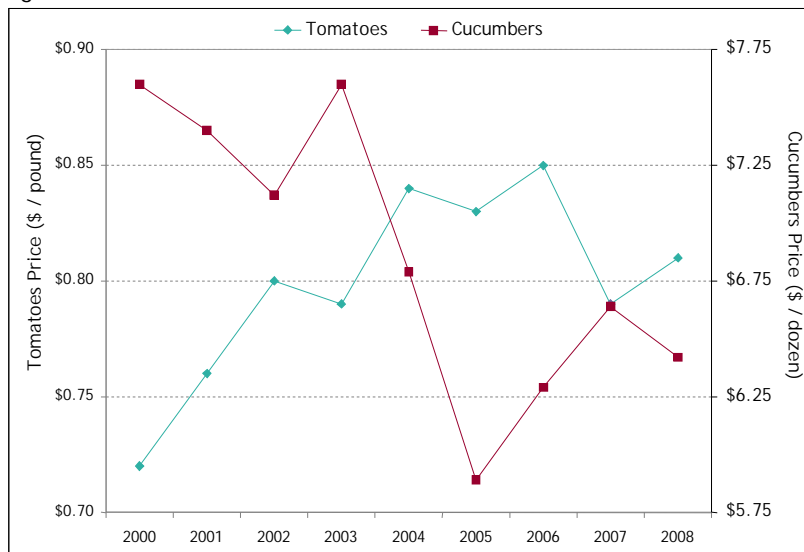
Source: Statistics Canada CANSIM table 10006

Note: n.a. - not available.

1 metric tonne = 170 dozen greenhouse cucumbers and 1 imperial ton = 154 dozen cucumbers

Figure 6.2 shows annual Canadian prices received for greenhouse tomatoes and cucumbers from 2000 to 2008. Tomato prices are in \$/pound and correspond to the units on the left axis while cucumber prices are in \$/dozen and correspond to the units on the right axis. The trend in tomato prices had seen an increase over the 2000 to 2006 period but prices dropped in 2007 with a small rebound in 2008. Prices averaged \$0.80/pound over the period with a range from \$0.72 to \$0.85. Cucumber prices averaged \$6.86/dozen over the period and appeared to be more variable than tomato prices. Prices for cucumbers ranged from \$5.89 to \$7.60. The trend in cucumber prices saw a decline from 2000 to 2005 with an increase in 2006 and 2007 followed by a slight decline in 2008.

Figure 6.2: Annual Canadian Prices, Greenhouse Tomatoes and Cucumbers, 2000-2008



Source: Statistics Canada CANSIM table 10006

### 6.2.1 Outlook for 2010

Greenhouse produced tomatoes have made significant inroads into the U.S. market during the past decade. Imports from Canada peaked in 2005 but have since slipped due to competition from Mexico. Canada's market share of U.S. imports of greenhouse tomatoes has decreased by half and now is approximately 27 percent while Mexico's market share is 71 percent. The U.S. has seen a steady increase in consumption of processed tomatoes since the late 1980's with processed tomatoes accounting for 75 percent of total domestic tomato consumption. The 2009

processed tomato crop in the U.S. is projected to be record large. This has put downward pressure on wholesale tomato product prices as a result but U.S. prices are expected to remain above the three year average in 2010 due to strong export demand and low beginning world stocks.

Cucumber prices in the U.S. in 2009 have generally been slightly higher than in 2008. In the third quarter of 2009, prices were 14 percent higher than a year ago. However, 2009 fourth quarter prices are forecast to be 20 percent lower than the same time period in 2008. Harvested acreage in 2009 was 5,900 acres which is a 20 percent increase over 2008 but down 31 percent from 2007.

### 6.3 Fruit

The three largest fruits in Canada in terms of total cultivated area are blueberries, apples and grapes. These three combined represent 83 percent of all cultivated fruit area and 61 percent of farm cash receipts of all fruits produced in Canada in 2008 (\$743 million). Apples are the most important in terms of 2008 farm cash receipts (\$169 million) with blueberries next at \$159 million followed by grapes at \$113 million. Apples are also the largest in terms of production volume. The three largest provinces in terms of all fruits farm cash receipts are British Columbia, Ontario and Quebec which accounted for 87 percent of Canada's total.

Table 6.3 shows total Canadian marketed production and cultivated area of blueberries, apples and grapes from 2006-2008. Figures for cultivated area for 2009 are also included. Total marketed production of blueberries in 2008 was up 22 percent from 2007 with cultivated acres up 3 percent. 2009 cultivated acres are up 4 percent over 2008 implying that marketed production should be up as well in 2009. Total marketed production of apples in 2008 was down 12 percent from 2007 with cultivated acres down 6 percent. 2009 cultivated acres are down 5 percent over 2008 implying that marketed production should be down as well in 2009. Total marketed production of grapes in 2008 was up 7 percent from 2007 with cultivated acres down 9 percent. 2009 cultivated acres are up 8 percent over 2008 implying that marketed production should be up as well in 2009.

Table 6.3: Canadian Production of Blueberries, Apples and Grapes, 2006-2009

Item	2006	2007	2008	2009
<b>Blueberries</b>				
Area cultivated (acres)	148,315	152,340	156,665	162,590
Marketed production (tons)	88,904	85,495	104,225	n.a.
<b>Apples</b>				
Area cultivated (acres)	53,495	53,485	50,175	47,630
Marketed production (tons)	443,981	492,035	433,690	n.a.
<b>Grapes</b>				
Area cultivated (acres)	29,140	28,130	25,600	27,665
Marketed production (tons)	87,815	83,470	89,243	n.a.

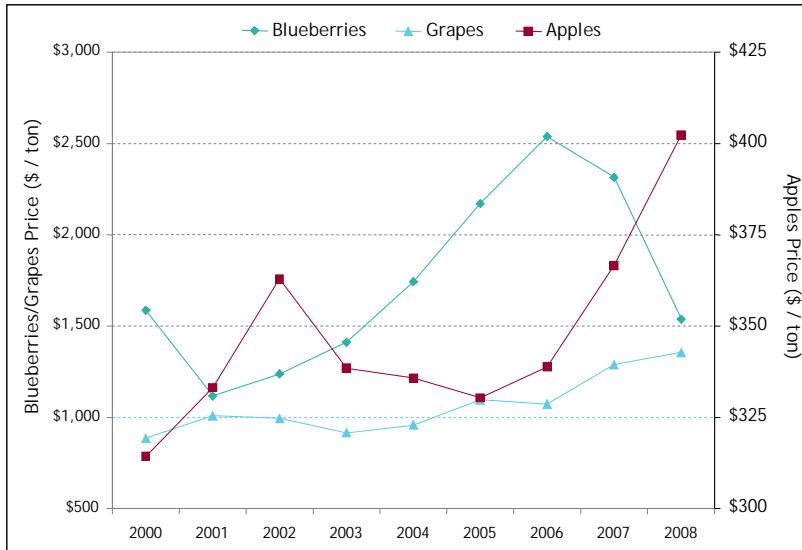
Source: Statistics Canada CANSIM table 10009

Note: n.a. - not available.

Figure 6.3 shows annual Canadian prices received for blueberries, apples and grapes from 2000 to 2008. Prices for blueberries and grapes are in \$/ton and correspond to the units on the left axis while apple prices are also in \$/ton but correspond to the units on the right axis. The trend in blueberry prices had seen a significant increase over the 2000 to 2006 period but

prices have since declined in 2007 with a larger decline in 2008. Prices averaged \$1,740/ton over the period with a range from \$1,117 to \$2,539. Grape prices averaged \$1,064/ton over the period and ranged from \$886 to \$1,356. The trend in grape prices has seen a steady increase over the time period. Apples ranged from \$314 to \$402 with an average of \$347/ton. The trend in apple prices saw an increase from 2000 to 2002, a relatively stable price period from 2003 to 2006 followed by price increases in 2007 and 2008.

Figure 6.3: Annual Canadian Prices, Blueberries, Apples and Grapes, 2000-2008



Source: Statistics Canada CANSIM table 10009

Note: Calculated as farm value divided by marketed production.

### 6.3.1 Outlook for 2010

The 2009 apple crop in the U.S. is estimated to be 10.1 billion pounds (5.05 million tons) which is up 4 percent from last year and the largest crop in four years. Growing conditions were mostly favourable in many regions with good quality and fruit size. Washington, Michigan, New York and Pennsylvania all are expected to have large crops in 2009. The larger apple crop will likely put downward pressure on domestic U.S. apple prices which will also put downward pressure on Canadian apple prices.

The 2009 grape crop in the U.S. is estimated at 14.1 billion pounds (7.05 million tons) which is 4 percent smaller than the 2008 crop. California's grape crop is 12.5 billion pounds which is down 4 percent from last year but average sized compared to historical data. Production of table and raisin grape crops are forecast to be down but wine grape production is projected to be 8 percent larger than a year ago. There has been downward pressure on producer prices for fresh market grapes because many of California's table varieties were ahead on crop maturity compared to a year ago.

U.S. blueberry prices in 2008 experienced a slight decline after a steady price increase from 2002 to 2007. U.S. acreage and production have seen steady increases from 2003 to 2008. The health benefits of blueberries have bolstered demand and consumption in recent years which has supported prices. Strong export demand for Canadian blueberries should continue to add support to prices in 2010.

6.4 Issues that may impact the horticulture sector in 2010 include:

- Exchange rate
- Competition from imports
- Rising farm input costs
- Dependency on export markets
- Access to reliable labour
- Food safety issues
- Safety net funding
- Need for harmonization of pesticide registration processes in Canada and U.S.
- Relatively flat domestic consumption on a per capita basis
- Planting Flexibility Pilot Program in the U.S. for processing vegetables

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