



Statistical Overview of the Canadian Greenhouse Vegetable Industry 2013

Prepared by:

Market Analysis and Information Section Horticulture and Cross Sectoral Division Agriculture and Agri-Food Canada January 2015















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Overview

Canada's greenhouse industry is composed of tomatoes, peppers, cucumbers and lettuce. Of these commodities, tomatoes are the primary greenhouse vegetables in Canada.

Worldwide, the main greenhouse vegetable production areas include: Spain, the Netherlands, Mexico, Canada and the United States. In 2013, the total greenhouse vegetable area in Canada was over 14 million square meters. This was a 7% increase since the previous year. Despite a slight decrease of 0.9% in 2010, there has been a steady increase in the harvested area of greenhouse vegetables in Canada over the last five years.

Ontario continues to be the leader in the greenhouse vegetable sector, representing 68% of the total harvested area in Canada. British Columbia and Quebec have the second and third largest area of harvested greenhouse vegetables in Canada with 21% and 7% respectively. The three provinces represent 96% of total harvested area in Canada. Although Ontario has the largest square meters of greenhouse vegetables harvested, Quebec has the largest number of reporting greenhouse vegetable operations.

In 2013, greenhouse farm gate value (FGV)¹ grew by approximately \$181 million to a five-year high of \$1.24 billion, up 17% from 2012. Tomatoes accounted for 42% (\$516 million) of total greenhouse vegetable FGV. Peppers and cucumbers hold the second and third largest FGV, accounting for 31% (\$389 million) and 25% (\$308 million) respectively.

Greenhouse vegetable farms use both seasonal and permanent employees. Seasonal employees are defined as employees who worked less than eight months during the year. The total number of employees in the greenhouse vegetable industry has been relatively stable over the last 5 years. In 2013, 10,761 persons were employed in the greenhouse vegetable sector, among which 5,021 were permanent employees and 5,740 were seasonal employees.

The value of greenhouse vegetable exports is amongst the highest of all fresh produce (fruits, vegetables and potatoes) in Canada, accounting for 45% of all fresh produce exports. The total value of Canadian greenhouse vegetable exports has fluctuated over the past five years. However, Canada experienced a growth of 25% from \$579 million in 2012 to a five-year high of \$724 million in 2013.

Canada is a net exporter of greenhouse vegetables. The United States and Japan have been Canada's top two export destinations for greenhouse vegetables for the past five years. Of the \$724 million in total exports, 99.8% (\$723 million) was sent to the United States and 0.2% (\$1.3 million) was sent to Japan in 2013. Tomatoes accounted for 44% of total exports, followed by peppers with 34%.

In 2013, Canada imported \$259 million of greenhouse vegetables (tomatoes, peppers, cucumbers and lettuce). The top two greenhouse vegetable import sources consist of Mexico, with \$229 million and the United States with, \$20 million. Tomatoes remain the largest imported commodity, followed by peppers, cucumbers and lettuce.

¹ Farm gate value represents production values, expressed as remuneration obtained at the "farm gate", and is concerned with gross returns to growers.



1. Production

1.1. Number of greenhouse vegetable farms¹ by province

	2009	2010	2011	2012	2013
Atlantic provinces	35	40	45	50	50
Quebec	235	240	245	240	235
Ontario	240	240	235	235	230
Prairie provinces	80	80	80	85	85
British Columbia	105	120	130	135	135
Canada	695	720	735	745	735

Notes:

Due to confidentiality reasons, provincial breakdowns for Atlantic and Prairie provinces are not shown.

Source: Statistics Canada (CANSIM Table 001-0047)

1.2. Harvested area of greenhouse vegetables by province (square meters)

	2009	2010	2011	2012	2013
Newfoundland and Labrador	1,960	2,708	1,509	2,522	2,647
Prince Edward Island	Х	X	242	X	1,236
Nova Scotia	2,547	53,141	52,850	51,554	67,311
New Brunswick	3,326	Х	Х	Х	Х
Quebec	771,294	640,553	650,696	813,802	1,059,405
Ontario	8,008,184	7,711,213	8,260,638	8,946,414	9,536,949
Manitoba	5,670	7,724	7,786	6,778	6,595
Saskatchewan	7,241	9,653	9,289	4,575	15,250
Alberta	334,451	482,583	506,093	520,013	541,095
British Columbia	2,749,139	2,736,957	2,805,537	2,890,257	2,973,639
Canada	12,002,508	11,908,517	12,616,282	13,342,785	14,246,566

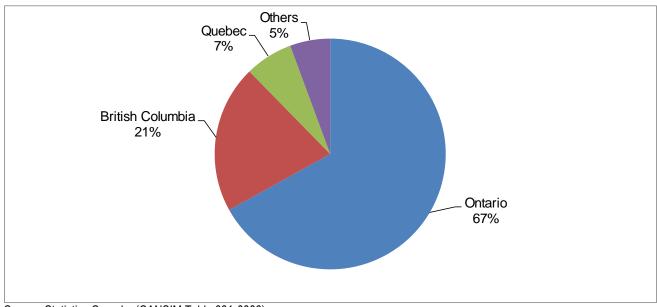
X: Suppressed to meet the confidentiality requirements of the Statistics Act.

Source: Statistics Canada. (CANSIM Table 001-0006)

^{1.} Number of farms represents the number of specialized greenhouse vegetable and fruit operations and includes all other types of enclosed protection used for growing plants, such as rigid insulation, mine shafts, barns and shelters.



1.3. Harvested area of greenhouse vegetables by province – percent share, 2013



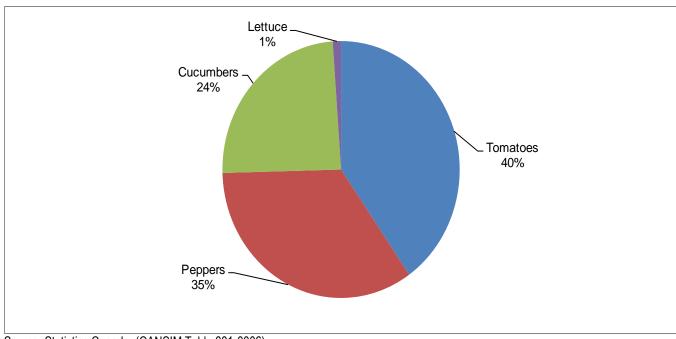
Source: Statistics Canada. (CANSIM Table 001-0006)

1.4. Harvested area of greenhouse vegetables by commodity (square meters)

	2009	2010	2011	2012	2013
Tomatoes	4,952,311	4,937,170	5,321,281	5,313,632	5,736,378
Peppers	3,537,868	3,787,568	3,887,737	4,546,257	4,887,414
Cucumbers	3,281,416	2,935,202	3,089,805	3,273,983	3,462,689
Lettuce	230,913	248,577	317,459	208,913	160,085
Total	12,002,508	11,908,517	12,616,282	13,342,785	14,246,566
Source: Statistics Canada.	(CANSIM Table 001-0006)	-	-		



1.5. Harvested area of greenhouse vegetables by commodity – percent share, 2013



Source: Statistics Canada. (CANSIM Table 001-0006)

1.6. Greenhouse vegetable¹ production by province (metric tonnes)

	2009	2010	2011	2012	2013
Newfoundland and Labrador	9.08	10.48	7.04	8.73	12.01
Prince Edward Island	X	X	0.31	X	Х
Nova Scotia	2.05	1,541.89	347.04	1,943.04	2,762.54
New Brunswick	56.25	X	Х	X	24.82
Quebec	20,352.45	24,482.21	22,467.61	22,777.16	23,230.81
Ontario	212,631.74	217,483.92	348,486.61	385,362.99	410,346.20
Manitoba	86.37	145.17	189.56	161.91	177.89
Saskatchewan	73.53	86.80	91.91	86.19	210.28
Alberta	7,102.91	7,720.87	21,024.85	23,114.96	20,134.21
British Columbia	87,428.40	91,892.18	112,094.75	115,072.61	129,520.83
Canada	330,085.39	343,663.52	509,125.54	551,714.00	587,581.91

Notes:

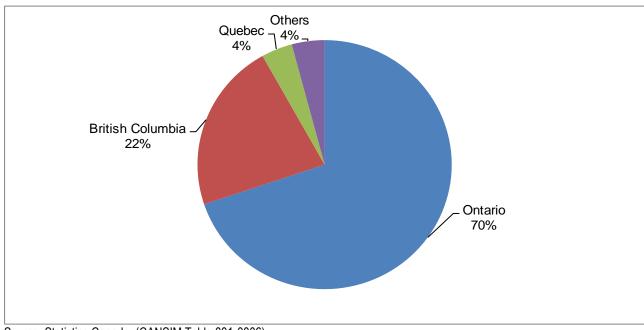
Source: Statistics Canada. (CANSIM Table 001-0006)

^{1.} Does not include lettuce.

X: Suppressed to meet the confidentiality requirements of the Statistics Act.



1.7. Greenhouse vegetable production by province - percent share, 2013



Source: Statistics Canada. (CANSIM Table 001-0006)

1.8. Greenhouse vegetable production by commodity (metric tonnes)

	2009	2010	2011	2012	2013
Tomatoes	242,547	251,131	266,481	272,992	286,221
Cucumbers	F	F	152,453	166,731	173,268
Peppers	87,538	92,533	90,192	111,991	128,092
Lettuce ¹	10,580	12,775	15,643	15,304	17,468
Total	340,665	356,439	524,769	567,018	605,050

Notes

Source: Statistics Canada. (CANSIM Table 001-0006)

^{1.} Lettuce production has been converted using Statistics Canada's conversion rate: 1 dozen heads of lettuce is equivalent to 15 pounds (where 1 pound = 0.4536 kg).

F: Too unreliable to be published.



1.9. Farm gate value of greenhouse vegetables by province (thousands of Canadian dollars)

	2009	2010	2011	2012	2013
Newfoundland and Labrador	19	34	19	22	74
Prince Edward Island	Х	Х	6	X	15
Nova Scotia	Х	4,888	1,039	4,699	7,302
New Brunswick	145	Х	Х	Х	115
Quebec	78,410	72,891	71,981	80,913	84,711
Ontario	597,176	651,205	687,296	678,383	782,954
Manitoba	374	548	724	651	703
Saskatchewan	639	793	847	398	1,194
Alberta	32,232	40,733	42,379	50,545	52,975
British Columbia	243,294	247,377	259,239	231,049	299,792
Canada	962,233	1,042,738	1,095,624	1,055,981	1,236,993

Note:

Source: Statistics Canada. (CANSIM Table 001-0006)

1.10. Farm gate value of greenhouse vegetables by commodity (thousands of Canadian dollars)

	2009	2010	2011	2012	2013	
Tomatoes	458,681	476,765	484,934	437,649	515,509	
Peppers	235,162	278,123	299,612	313,357	389,333	
Cucumbers	246,485	264,584	284,522	281,791	308,147	
Lettuce	21,905	23,265	26,555	23,184	24,004	
Total	962,233	1,042,738	1,095,624	1,055,981	1,236,993	
Source: Statistique Canada. (CANSIM Table 001-0006)						

X: Suppressed to meet the confidentiality requirements of the Statistics Act.



2. Labour

2.1. Total number of employees of specialized greenhouse vegetable operations

		2009	2010	2011	2012	2013
Atlantic provinces	Seasonal employees ¹	100	125	105	125	140
	Permanent employees ²	40	55	60	70	73
	Total employees	140	180	165	195	213
Quebec	Seasonal employees ¹	590	695	655	890	776
	Permanent employees ²	725	855	910	1,055	720
	Total employees	1,315	1,550	1,565	1,945	1,496
Ontario	Seasonal employees ¹	2,940	2,970	3,475	3,856	3,564
	Permanent employees ²	2,670	2,580	2,790	2,765	2,610
	Total employees	5,610	5,550	6,265	6,621	6,174
Prairie provinces	Seasonal employees ¹	260	265	240	190	104
	Permanent employees ²	370	360	360	470	438
	Total employees	630	625	600	660	542
British Columbia	Seasonal employees ¹	1,090	1,205	1,025	1,180	1,156
	Permanent employees ²	935	1,070	1,330	1,360	1,180
	Total employees	2,025	2,275	2,355	2,540	2,336
Canada	Seasonal employees ¹	4,980	5,260	5,500	6,241	5,740
	Permanent employees ²	4,740	4,920	5,450	5,720	5,021
	Total employees	9,720	10,180	10,950	11,961	10,761

Notes:

Due to confidentiality reasons, provincial breakdowns for Atlantic and Prairie provinces are not shown.

Source: Statistics Canada. (CANSIM Table 001-0055)

^{1.} Seasonal employees who worked less than 8 months during the year.

^{2.} Permanent employees who worked more than 8 months during the year.



3. Trade

3.1. Canadian greenhouse vegetable trade balance (thousands of Canadian dollars)

	2009	2010	2011	2012	2013		
Exports	544,163	617,971	590,438	578,802	724,057		
Imports	198,361	221,211	234,721	222,588	259,079		
Trade Balance (Exports - Imports)	345,803	396,760	355,717	356,213	464,978		
Source: Statistics Canada. (CATSNET, October 2014)							

3.2. Exports

3.2.1. Greenhouse vegetable exports by commodity – value (thousands of Canadian dollars)

	2009	2010	2011	2012	2013	
Tomatoes	281,083	304,683	292,709	265,396	315,472	
Peppers	169,563	219,238	185,036	204,582	248,240	
Cucumbers and gherkins	93,517	94,051	112,693	108,824	160,346	
Total	544,163	617,971	590,438	578,802	724,057	
Source: Statistics Canada. (CATSNET, October 2014)						

3.2.2. Greenhouse vegetable exports by commodity – volume (metric tonnes)

	2009	2010	2011	2012	2013
Tomatoes	123,672	138,272	135,967	131,845	126,869
Peppers	50,930	62,875	54,528	65,377	73,858
Cucumbers and gherkins	46,941	52,745	56,737	60,241	77,938
Total	221,543	253,893	247,233	257,463	278,666
Source: Statistics Canada. (CATSN	IET, October 2014)		-	-	



3.2.3. Greenhouse vegetable destinations by commodity – value (thousands of Canadian dollars)

		2009	2010	2011	2012	2013
United	Tomatoes	279,902	304,015	292,094	264,822	314,052
States	Peppers	169,523	219,190	184,973	204,535	248,221
	Cucumbers and gherkins	93,517	94,049	112,675	108,823	160,337
	Total	542,941	617,254	589,742	578,181	722,610
Japan	Tomatoes	1,141	632	583	561	1,265
	Cucumbers and gherkins	0	0	7	0	C
	Total	1,141	632	590	561	1,265
Taiwan	Tomatoes	0	4	19	2	137
	Cucumbers and gherkins	0	0	10	0	0
	Peppers	0	0	0	1	0
	Total	0	4	28	2	137
France	Peppers	2	9	5	8	15
	Tomatoes	11	10	11	7	4
	Cucumbers and gherkins	0	2	1	1	1
	Total	13	21	17	16	21
United	Cucumbers and gherkins	0	0	0	0	7
Kingdom	Total	0	0	0	0	7
Other	Tomatoes	29	21	2	4	14
countries	Peppers	39	39	58	38	4
	Total	68	60	60	42	18
Total	Tomatoes	281,083	304,683	292,709	265,396	315,472
	Peppers	169,563	219,238	185,036	204,582	248,240
	Cucumbers and gherkins	93,517	94,051	112,693	108,824	160,346
	Total	544,163	617,971	590,438	578,802	724,057

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3.2.4. Greenhouse vegetable destinations by commodity – volume (metric tonnes)

		2009	2010	2011	2012	2013
United	Tomatoes	123,147	138,105	135,808	131,647	126,423
States	Peppers	50,911	62,857	54,499	65,357	73,853
	Cucumbers and gherkins	46,941	52,744	56,732	60,241	77,935
	Total	220,999	253,706	247,039	257,245	278,210
Japan	Tomatoes	511	156	150	194	397
	Peppers	0	0	3	0	0
	Total	511	156	153	194	397
Taiwan	Tomatoes	0	1	5	1	44
	Cucumbers and gherkins	0	0	2	0	0
	Total	0	1	7	1	44
France	Peppers	0	2	1	2	4
	Tomatoes	4	3	3	2	1
	Cucumbers and gherkins	0	1	0	0	0
	Total	5	6	5	5	6
United	Cucumbers and gherkins	0	0	0	0	3
Kingdom	Total	0	0	0	0	3
Other	Tomatoes	9	8	1	1	4
countries	Peppers	19	16	28	17	1
	Total	29	24	29	18	6
Total	Tomatoes	123,672	138,272	135,967	131,845	126,869
	Peppers	50,930	62,875	54,528	65,377	73,858
	Cucumbers and gherkins	46,941	52,745	56,737	60,241	77,938
	Total	221,543	253,893	247,233	257,463	278,666



3.3. Imports

3.3.1. Greenhouse vegetable imports by commodity – value (thousands of Canadian dollars)

	2009	2010	2011	2012	2013		
Tomatoes	108,345	120,078	132,775	123,064	138,271		
Peppers	69,521	73,250	75,034	77,577	91,886		
Cucumbers and gherkins	19,629	27,238	26,469	21,595	28,081		
Lettuce	866	646	443	353	841		
Total	198,361	221,211	234,721	222,588	259,079		
Source: Statistics Canada. (CATSNET, October 2014)							

3.3.2. Greenhouse vegetable imports by commodity – volume (metric tonnes)

	2009	2010	2011	2012	2013				
Tomatoes	59,912	55,273	58,311	57,006	64,209				
Peppers	23,551	24,964	27,490	30,764	35,074				
Cucumbers and gherkins	13,441	17,288	16,121	15,694	18,937				
Lettuce	430	299	273	258	418				
Total	97,334	97,823	102,195	103,722	118,637				
Source: Statistics Canada. (CATSI	Source: Statistics Canada. (CATSNET, October 2014)								



3.3.3. Greenhouse vegetable imports by commodity and country of origin – value (thousands of Canadian dollars)

		2009	2010	2011	2012	2013
Mexico	Tomatoes	84,705	103,982	115,521	104,166	122,513
	Peppers	42,741	54,371	59,335	68,908	84,192
	Cucumbers and gherkins	17,113	19,363	18,294	17,661	22,707
	Lettuce	2	0	7	2	2
	Total	144,561	177,716	193,157	190,738	229,414
United	Tomatoes	17,518	13,161	13,362	17,177	13,987
States	Cucumbers and gherkins	1,819	7,188	6,327	3,047	3,435
	Peppers	866	1,227	1,106	980	1,504
	Lettuce	794	611	412	307	800
	Total	20,997	22,188	21,207	21,511	19,725
Spain	Peppers	5,356	7,156	5,917	2,851	3,442
	Cucumbers and gherkins	7	21	1,008	433	1,720
	Tomatoes	1,077	381	0	0	0
	Total	6,440	7,558	6,924	3,284	5,162
Guatemala	Tomatoes	23	374	1,184	757	1,312
I	Peppers	0	2	27	55	181
	Cucumbers and gherkins	0	0	0	101	3
	Total	23	377	1,212	914	1,496
Belgium	Peppers	12	1,804	2,890	2,506	1,012
	Tomatoes	397	306	116	68	21
	Lettuce	40	0	0	0	0
	Total	449	2,109	3,006	2,574	1,034
Other	Peppers	20,546	8,689	5,760	2,277	1,555
countries	Tomatoes	4,626	1,873	2,592	895	438
	Cucumbers and gherkins	690	666	840	352	218
	Lettuce	30	34	25	44	38
	Total	25,892	11,263	9,216	3,568	2,249
Total	Tomatoes	108,345	120,078	132,775	123,064	138,271
	Peppers	69,521	73,250	75,034	77,577	91,886
	Cucumbers and gherkins	19,629	27,238	26,469	21,595	28,081
	Lettuce	866	646	443	353	841
	Total	198,361	221,211	234,721	222,588	259,079
Source: Statisti	cs Canada. (CATSNET, October 20	14)				



3.3.4. Greenhouse vegetable imports by commodity and country of origin – volume (metric tonnes)

		2009	2010	2011	2012	2013
Mexico	Tomatoes	50,452	49,886	51,529	48,551	56,931
	Peppers	14,794	19,324	22,311	27,656	32,565
	Cucumbers and gherkins	12,235	13,794	12,252	13,526	16,071
	Lettuce	1	0	2	2	1
	Total	77,481	83,003	86,095	89,734	105,568
United	Tomatoes	6,945	4,352	5,511	7,848	6,415
States	Cucumbers and gherkins	860	3,169	3,038	1,684	1,593
	Peppers	371	502	468	416	559
	Lettuce	401	273	251	229	394
	Total	8,578	8,296	9,267	10,177	8,961
Spain	Peppers	1,610	2,002	1,807	977	1,077
	Cucumbers and gherkins	25	35	451	261	1,162
	Tomatoes	418	124	0	0	0
	Total	2,053	2,161	2,258	1,238	2,240
Guatemala	Tomatoes	8	153	435	230	650
	Peppers	0	1	5	17	40
	Cucumbers and gherkins	0	0	0	39	3
	Total	8	154	441	286	693
Belgium	Peppers	4	619	844	855	272
	Tomatoes	110	67	20	10	3
	Lettuce	9	0	0	0	0
	Total	123	686	864	865	275
Other	Peppers	6,772	2,515	2,055	843	560
countries	Tomatoes	1,979	691	816	367	210
	Cucumbers and gherkins	321	290	380	184	108
	Lettuce	18	26	20	28	22
	Total	9,090	3,521	3,270	1,423	901
Total	Tomatoes	59,912	55,273	58,311	57,006	64,209
	Peppers	23,551	24,964	27,490	30,764	35,074
	Cucumbers and gherkins	13,441	17,288	16,121	15,694	18,937
	Lettuce	430	299	273	258	418
		97,334	97,823	102,195	103,722	118,637

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4. Key Resources

- Statistics Canada. CANSIM Table 001-0006
- Statistics Canada. CANSIM Table 001-0013
- Statistics Canada. CANSIM Table 001-0047
- Statistics Canada. CANSIM Table 001-0055
- Statistics Canada. CANSIM Table 002-0001
- Statistics Canada. CATSNET