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Statistical Overview of the Canadian Greenhouse Vegetable Industry **2015**

Prepared by:
Market Analysis and Information Section
Horticulture and Cross Sectoral Division
Agriculture and Agri-Food Canada
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Author: Zixuan (Bonnie) Wang, Market Analysis and Information Section

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Overview

Canada's greenhouse industry produces tomatoes, cucumbers, lettuce, peppers and other greenhouse vegetables. Of these commodities, tomatoes are the main greenhouse vegetable crop grown in Canada.

The total harvested area of greenhouse vegetables in Canada was over 14 million square metres in 2015, which was up 3% from the previous year. There has been a steady increase in the harvested area of greenhouse vegetables in Canada over the last five years.

Ontario continued to lead the greenhouse vegetable sector in 2015, representing 69% of the total harvested area in Canada, followed by British Columbia and Quebec with 20% and 7%, respectively. Moreover, Ontario also produced 71% of Canada's greenhouse vegetables, with British Columbia (22%) and Quebec (4%) ranked second and third. The total production of greenhouse vegetables in Canada was over 600,000 metric tonnes.

The farm gate value (FGV)¹ of Canada's greenhouse vegetables in 2015 was around \$1.3 billion, which was 4% higher than in 2014 and 7% higher than in 2013. Tomatoes accounted for 40% (\$517 million) of the total greenhouse vegetable FGV, followed by peppers and cucumbers, which accounted for 33% (\$426 million) and 24% (\$308 million), respectively.

Canadian greenhouse vegetable farms use both seasonal and permanent employees. Seasonal employees are employees who work less than eight months during the year, while permanent employees work more than eight months during the year. The total number of employees of specialized greenhouse operations has been relatively stable over the past five years. In 2015, 10,515 people were employed in the greenhouse vegetable sector: 5,514 permanent employees and 5,000 seasonal employees. Ontario itself accounted for 61% of the total number of greenhouse operation employees in Canada.

The value of greenhouse vegetable exports is the highest of all fresh produce (fruits, vegetables and potatoes) in Canada, accounting for 41% of all fresh produce exports. The total value of Canada's greenhouse vegetable exports has fluctuated over the past five years. Except for a 2% drop in 2012 compared to 2011, Canada experienced 43% growth from \$579 million in 2012 to a five-year high of \$826 million in 2015. Peppers accounted for 40% of the total value of exports, followed by tomatoes with 38%. The United States has been Canada's main export destinations for greenhouse vegetables for the past five years. In 2015, the value of exports to the United States accounted for 99.7% of all Canadian greenhouse vegetable exports.

In 2015, Canada imported \$370 million of greenhouse vegetables (tomatoes, peppers, cucumbers and lettuce). The top two greenhouse vegetable import sources were Mexico, accounting for \$315 million and the United States, accounting for \$33 million. Tomatoes (53%) are the largest imported commodity, followed by peppers (35%), cucumbers (12%) and lettuce (0.2%).

¹ The "farm gate" value is the pricing point of production, excluding charges for transport or delivery.



1. Production

1.1. Number of greenhouse vegetable farms¹ by province

	2011	2012	2013	2014	2015
Atlantic provinces	45	50	50	45	40
Quebec	245	240	235	195	190
Ontario	235	235	230	230	228
Prairie provinces	80	85	85	80	75
British Columbia	130	135	135	130	125
Canada	735	745	735	680	658

Note:

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.

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 metres)

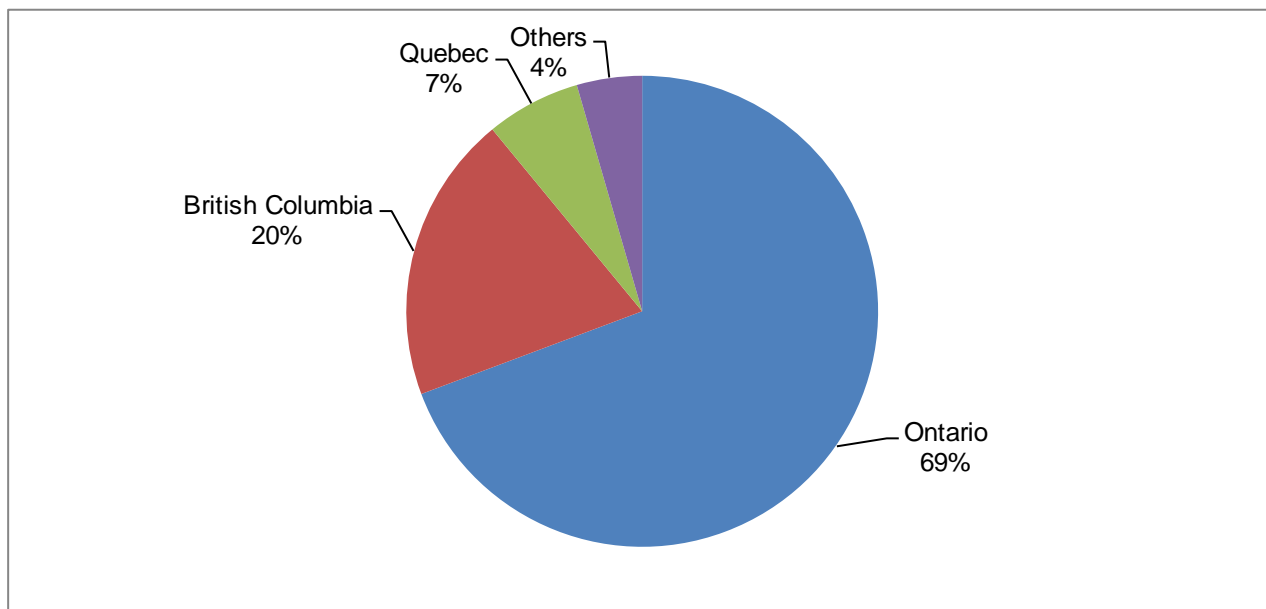
	2011	2012	2013	2014	2015
Newfoundland and Labrador	1,509	2,522	3,018	3,235	2,330
Prince Edward Island	242	x	1,236	1,398	x
Nova Scotia	52,850	51,554	63,959	67,577	72,898
New Brunswick	x	x	x	x	2,934
Quebec	650,696	813,802	974,967	909,517	932,767
Ontario	8,260,638	8,946,414	9,536,949	9,648,343	9,973,043
Manitoba	7,786	6,778	6,595	835	5,245
Saskatchewan	9,289	4,575	15,250	12,978	11,445
Alberta	506,093	520,013	541,095	530,301	506,884
British Columbia	2,805,537	2,890,257	2,953,999	3,014,961	2,844,344
Canada	12,616,282	13,342,785	14,159,519	14,234,970	14,393,898

x: Too unreliable to be published or suppressed to meet the confidentiality requirements of the *Statistics Act*.

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



1.3. Harvested area of greenhouse vegetables by province – percent share, 2015



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

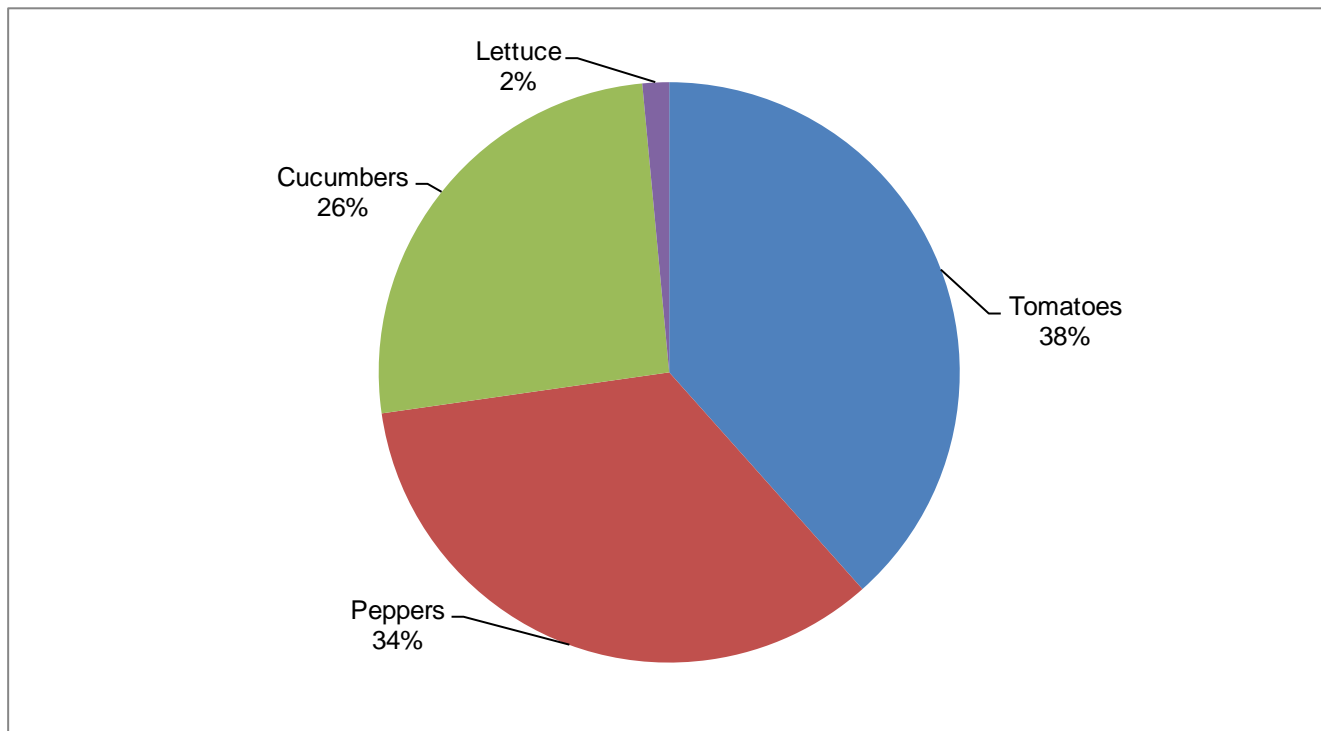
1.4. Harvested area of greenhouse vegetables by commodity (square metres)

	2011	2012	2013	2014	2015
Tomatoes	5,321,281	5,313,632	5,626,969	5,540,991	5,530,341
Peppers	3,887,737	4,546,257	4,887,414	4,951,039	4,940,123
Cucumbers	3,089,805	3,273,983	3,462,182	3,544,037	3,710,078
Lettuce	317,459	208,913	182,954	198,903	213,356
Total	12,616,282	13,342,785	14,159,519	14,234,970	14,393,898

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



1.5. Harvested area of greenhouse vegetables by commodity – percent share, 2015



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

1.6. Greenhouse vegetable¹ production by province (metric tonnes)

	2011	2012	2013	2014	2015
Newfoundland and Labrador	7	9	16	25	7
Prince Edward Island	0	x	x	66	x
Nova Scotia	347	1,943	2,763	2,668	2,714
New Brunswick	x	x	27	24	24
Quebec	22,468	22,777	21,764	20,495	2,432
Ontario	348,487	385,363	408,398	420,341	415,558
Manitoba	190	162	178	24	152
Saskatchewan	92	86	210	162	154
Alberta	21,025	23,115	20,769	22,357	20,866
British Columbia	112,095	115,073	130,325	124,256	119,789
Canada	509,126	551,714	585,617	590,986	581,677

Notes:

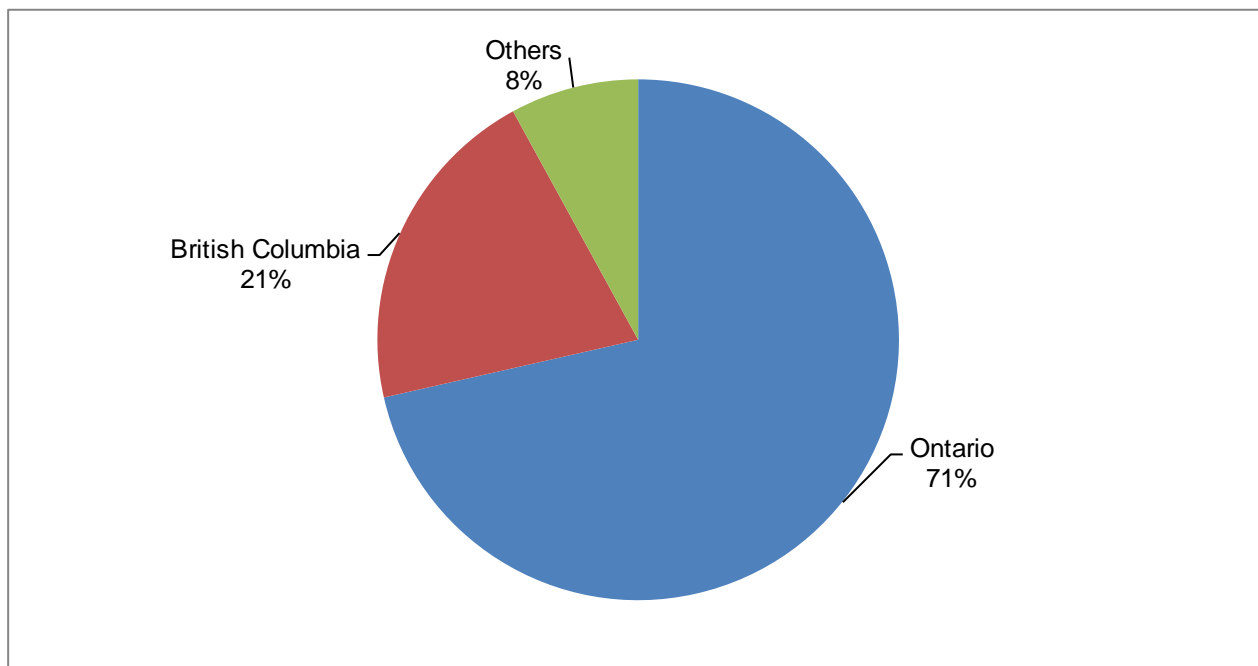
1. Does not include lettuce.

x: Too unreliable to be published or suppressed to meet the confidentiality requirements of the *Statistics Act*.

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



1.7. Greenhouse vegetable production by province – percent share, 2015



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

1.8. Greenhouse vegetable production by commodity (metric tonnes)

	2011	2012	2013	2014	2015
Tomatoes	266,481	272,992	282,809	280,332	266,845
Cucumbers	152,453	166,731	174,534	180,360	180,194
Peppers	90,192	111,991	128,274	130,294	134,638
Lettuce ¹	15,643	15,304	17,467	18,387	20,699
Total	524,769	567,018	603,084	609,373	602,376

Note:

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).

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



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

	2011	2012	2013	2014	2015
Newfoundland and Labrador	19	22	83	83	50
Prince Edward Island	6	x	15	211	x
Nova Scotia	1,039	4,699	7,302	7,503	7,118
New Brunswick	x	x	111	90	101
Quebec	71,981	80,913	86,011	86,678	36,420
Ontario	687,296	678,383	767,501	803,226	820,299
Manitoba	724	651	703	87	609
Saskatchewan	847	398	1,194	873	979
Alberta	42,379	50,545	52,275	52,114	50,897
British Columbia	259,239	231,049	299,792	290,743	302,543
Canada	1,095,624	1,055,981	1,222,150	1,249,671	1,287,236

Note:

x: Too unreliable to be published or suppressed to meet the confidentiality requirements of the *Statistics Act*.

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

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

	2011	2012	2013	2014	2015
Tomatoes	484,934	437,649	516,656	507,098	516,928
Peppers	299,612	313,357	377,329	398,699	426,118
Cucumbers	284,522	281,791	299,170	312,127	308,199
Lettuce	26,555	23,184	28,994	31,748	35,991
Total	1,095,624	1,055,981	1,222,150	1,249,671	1,287,236

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



2. Labour

2.1. Total number of employees of specialized greenhouse vegetable operations

		2011	2012	2013	2014	2015
Atlantic provinces	Seasonal employees ¹	105	125	140	96	93
	Permanent employees ²	60	70	73	52	58
	Total employees	165	195	213	148	152
Quebec	Seasonal employees ¹	655	890	596	496	467
	Permanent employees ²	910	1,055	720	698	800
	Total employees	1,565	1,945	1,316	1,194	1,267
Ontario	Seasonal employees ¹	3,475	3,856	3,564	3,708	3,380
	Permanent employees ²	2,790	2,765	2,610	2,977	3,006
	Total employees	6,265	6,621	6,174	6,685	6,386
Prairie provinces	Seasonal employees ¹	240	190	104	96	120
	Permanent employees ²	360	470	438	399	385
	Total employees	600	660	542	495	505
British Columbia	Seasonal employees ¹	1,025	1,180	1,156	1,058	940
	Permanent employees ²	1,330	1,360	1,180	1,387	1,265
	Total employees	2,355	2,540	2,336	2,445	2,205
Canada	Seasonal employees ¹	5,500	6,241	5,560	5,454	5,000
	Permanent employees ²	5,450	5,720	5,021	5,513	5,514
	Total employees	10,950	11,961	10,581	10,967	10,515

Notes:

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

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

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

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



3. Trade

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

	2011	2012	2013	2014	2015
Exports	590,438	578,802	724,057	730,092	827,500
Imports	234,721	222,591	259,074	309,934	369,896
Trade Balance (Exports - Imports)	355,717	356,211	464,983	420,158	457,604

Source: Statistics Canada. (CATSNET, May 2016)

3.2. Exports

3.2.1. Canada's greenhouse vegetable exports by commodity (thousands of Canadian dollars)

	2011	2012	2013	2014	2015
Tomatoes	292,709	265,396	315,472	297,925	311,310
Peppers	185,036	204,582	248,240	269,723	329,947
Cucumbers and gherkins	112,693	108,824	160,346	162,443	186,242
Total	590,438	578,802	724,057	730,092	827,500

Source: Statistics Canada. (CATSNET, May 2016)

3.2.2. Canada's greenhouse vegetable exports by commodity (metric tonnes)

	2011	2012	2013	2014	2015
Tomatoes	135,967	131,845	126,869	133,944	125,327
Peppers	54,528	65,377	73,858	76,684	82,317
Cucumbers and gherkins	56,737	60,241	77,938	77,477	93,631
Total	247,233	257,463	278,666	288,105	301,275

Source: Statistics Canada. (CATSNET, May 2016)



3.2.3. Canada's greenhouse vegetable exports by province (thousands of Canadian dollars)

	2011	2012	2013	2014	2015
Prince Edward Island	0	4	0	3	0
Nova Scotia	20	19	13	9	3
New Brunswick	0	0	1	2	3
Quebec	3,184	3,446	5,267	3,233	5,766
Ontario	447,577	448,388	583,889	579,985	654,262
Manitoba	5	1	0	0	0
Alberta	703	546	187	278	378
British Columbia	138,949	126,389	134,699	146,581	167,087
Total	590,438	578,802	724,057	730,092	827,500

Source: Statistics Canada. (CATSNET, May 2016)

3.2.4. Canada's greenhouse vegetable exports by province (metric tonnes)

	2011	2012	2013	2014	2015
Prince Edward Island	0	1	0	1	0
Nova Scotia	5	6	4	3	1
New Brunswick	0	0	0	1	1
Quebec	2,561	3,025	3,786	2,416	4,370
Ontario	186,028	197,008	217,267	232,563	247,821
Manitoba	8	0	0	0	0
Alberta	552	657	115	227	206
British Columbia	58,077	56,764	57,494	52,895	48,876
Total	247,233	257,463	278,666	288,105	301,275

Source: Statistics Canada. (CATSNET, May 2016)



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

		2011	2012	2013	2014	2015
United States	Peppers	184,973	204,535	248,221	269,675	329,693
	Tomatoes	292,094	264,822	314,052	297,079	309,363
	Cucumbers and gherkins	112,675	108,823	160,337	162,322	186,202
	Total	589,742	578,181	722,610	729,077	825,258
Japan	Tomatoes	583	561	1,265	632	1,539
	Cucumbers and gherkins	7	0	0	2	17
	Total	590	561	1,265	635	1,556
Hong Kong	Peppers	0	0	0	6	174
	Tomatoes	1	2	6	47	136
	Cucumbers and gherkins	0	0	0	6	6
	Total	1	2	6	58	316
Taiwan	Tomatoes	19	2	137	161	261
	Cucumbers and gherkins	10	0	0	4	0
	Peppers	0	1	0	0	0
	Total	28	2	137	165	261
Germany	Peppers	58	38	0	25	67
	Total	58	38	0	25	67
Other countries	Cucumbers and gherkins	1	1	8	109	17
	Peppers	6	8	19	17	12
	Tomatoes	12	9	12	7	12
	Total	19	18	40	132	41
Total	Peppers	185,036	204,582	248,240	269,723	329,947
	Tomatoes	292,709	265,396	315,472	297,925	311,310
	Cucumbers and gherkins	112,693	108,824	160,346	162,443	186,242
	Total	590,438	578,802	724,057	730,092	827,500

Source: Statistics Canada. (CATSNET, May 2016)



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

		2011	2012	2013	2014	2015
United States	Peppers	54,499	65,357	73,853	76,667	82,243
	Tomatoes	135,808	131,647	126,423	133,691	124,689
	Cucumbers and gherkins	56,732	60,241	77,935	77,432	93,615
	Total	247,039	257,245	278,210	287,790	300,547
Japan	Tomatoes	150	194	397	183	505
	Cucumbers and gherkins	3	0	0	1	6
	Total	153	194	397	184	511
Hong Kong	Peppers	0	0	0	2	52
	Tomatoes	0	1	2	14	45
	Cucumbers and gherkins	0	0	0	2	2
	Total	0	1	2	18	99
Taiwan	Tomatoes	5	1	44	53	84
	Cucumbers and gherkins	2	0	0	1	0
	Peppers	0	0	0	0	0
	Total	7	1	44	54	84
Germany	Peppers	28	17	0	11	20
	Total	28	17	0	11	20
Other countries	Cucumbers and gherkins	0	0	3	41	7
	Peppers	2	2	5	4	3
	Tomatoes	4	3	4	2	4
	Total	6	5	12	47	13
Total	Peppers	54,528	65,377	73,858	76,684	82,317
	Tomatoes	135,967	131,845	126,869	133,944	125,327
	Cucumbers and gherkins	56,737	60,241	77,938	77,477	93,631
	Total	247,233	257,463	278,666	288,105	301,275

Source: Statistics Canada. (CATSNET, May 2016)



3.3. Imports

3.3.1. Canada's greenhouse vegetable imports by commodity (thousands of Canadian dollars)

	2011	2012	2013	2014	2015
Tomatoes	132,775	123,064	138,271	159,233	194,993
Peppers	75,034	77,577	91,886	108,055	129,741
Cucumbers and gherkins	26,469	21,598	28,076	41,971	44,368
Lettuce	443	353	841	674	793
Total	234,721	222,591	259,074	309,934	369,896

Source: Statistics Canada. (CATSNET, May 2016)

3.3.2. Canada's greenhouse vegetable imports by commodity (metric tonnes)

	2011	2012	2013	2014	2015
Tomatoes	58,311	57,006	64,215	64,192	70,723
Peppers	27,490	30,764	35,074	37,998	38,086
Cucumbers and gherkins	16,121	15,696	18,936	27,157	25,068
Lettuce	273	258	418	247	284
Total	102,195	103,724	118,643	129,593	134,161

Source: Statistics Canada. (CATSNET, May 2016)



3.3.3. Greenhouse vegetable import sources – value (thousands of Canadian dollars)

		2011	2012	2013	2014	2015
Mexico	Tomatoes	115,521	104,166	122,513	143,632	174,917
	Peppers	59,335	68,908	84,192	95,804	105,933
	Cucumbers and gherkins	18,294	17,664	22,702	33,664	33,762
	Lettuce	7	2	2	11	5
	Total	193,156	190,740	229,410	273,111	314,618
United States	Tomatoes	13,362	17,177	13,987	14,932	19,577
	Cucumbers and gherkins	6,327	3,047	3,434	6,423	8,134
	Peppers	1,106	980	1,504	2,423	4,776
	Lettuce	412	307	800	630	762
	Total	21,207	21,511	19,724	24,408	33,249
Spain	Peppers	5,917	2,851	3,442	5,674	14,807
	Cucumbers and gherkins	1,008	433	1,720	903	2,114
	Tomatoes	0	0	0	0	23
	Lettuce	0	0	1	0	0
	Total	6,924	3,284	5,162	6,578	16,943
Israel	Peppers	3,423	1,158	699	1,229	1,633
	Tomatoes	6	98	0	3	13
	Lettuce	0	0	0	0	0
	Cucumbers and gherkins	0	0	0	0	0
	Total	3,430	1,255	699	1,232	1,646
Guatemala	Peppers	27	55	181	267	667
	Tomatoes	1,184	757	1,312	445	146
	Lettuce	0	0	0	0	0
	Cucumbers and gherkins	0	101	3	0	0
	Total	1,212	914	1,495	713	813
Other countries	Tomatoes	2,701	866	459	221	317
	Peppers	5,226	3,625	1,868	2,657	1,925
	Cucumbers and gherkins	840	352	218	981	357
	Lettuce	25	44	38	33	26
	Total	8,792	4,887	2,584	3,892	2,626
Total	Tomatoes	132,775	123,064	138,271	159,233	194,993
	Peppers	75,034	77,577	91,886	108,055	129,741
	Cucumbers and gherkins	26,469	21,598	28,076	41,971	44,368
	Lettuce	443	353	841	674	793
	Total	234,721	222,591	259,074	309,934	369,896

Source: Statistics Canada. (CATSNET, May 2016)



3.3.4. Greenhouse vegetable import sources – volume (metric tonnes)

		2011	2012	2013	2014	2015
Mexico	Tomatoes	51,529	48,551	56,937	57,867	63,069
	Peppers	22,311	27,656	32,565	33,811	31,909
	Cucumbers and gherkins	12,252	13,528	16,071	23,326	20,588
	Lettuce	2	2	1	4	1
	Total	86,095	89,736	105,574	115,008	115,567
United States	Tomatoes	5,511	7,848	6,415	6,062	7,400
	Cucumbers and gherkins	3,038	1,684	1,592	2,897	3,151
	Peppers	468	416	559	921	1,317
	Lettuce	251	229	394	237	278
	Total	9,267	10,177	8,960	10,118	12,146
Spain	Peppers	1,807	977	1,077	1,565	3,722
	Cucumbers and gherkins	451	261	1,162	434	1,149
	Tomatoes	0	0	0	0	14
	Lettuce	0	0	0	0	0
	Total	2,258	1,238	2,240	2,000	4,885
Israel	Peppers	1,218	430	190	405	421
	Tomatoes	1	19	0	0	3
	Lettuce	0	0	0	0	0
	Cucumbers and gherkins	0	0	0	0	0
	Total	1,220	450	190	406	424
Guatemala	Peppers	5	17	40	59	107
	Tomatoes	435	230	650	180	59
	Lettuce	0	0	0	0	0
	Cucumbers and gherkins	0	39	3	0	0
	Total	441	286	693	239	166
Other countries	Tomatoes	834	357	213	82	179
	Peppers	1,681	1,268	642	1,235	610
	Cucumbers and gherkins	380	184	108	499	179
	Lettuce	20	28	22	6	4
	Total	2,914	1,838	986	1,822	973
Total	Tomatoes	58,311	57,006	64,215	64,192	70,723
	Peppers	27,490	30,764	35,074	37,998	38,086
	Cucumbers and gherkins	16,121	15,696	18,936	27,157	25,068
	Lettuce	273	258	418	247	284
	Total	102,195	103,724	118,643	129,593	134,161

Source: Statistics Canada. (CATSNET, May 2016)



4. Key Resources

- Statistics Canada. CANSIM Table 001-0006
- Statistics Canada. CANSIM Table 001-0047
- Statistics Canada. CANSIM Table 001-0055
- Statistics Canada. CATSNET