

Non-metro employment: agriculture and food

Vol. 3, No. 9, 2015

Highlights

- Employment on farms and in food-related sectors (as defined for this FactSheet) represents about 15% of total employment in Ontario's non-metro census divisions.
- Non-metro employment on farms declined less than the national pattern from 2001 to 2014.
- Nearly all food-related sub-sectors declined faster or grew more slowly than the national pattern, when comparing the employment levels in 2001 and 2014.

Why look at employment in the agriculture and food-related sectors?

Agriculture and food sectors are viewed as an important exportable¹ sector in non-metro Ontario.

The objective of this FactSheet is to document the level and trend in employment in agriculture (i.e. on farms) and in selected² food-related sectors.

Findings³

Employment in agriculture and food-related sectors has varied in the range of 140K⁴ over the 2001 to 2014 period (Figure 1 and Row #29 in Table 1). This level is equivalent to 15% of the total employment (952K) in non-metro census divisions (CDs) in 2014 (Row #29 as a percent of Row #30).

In terms of employment in the sub-sectors listed in Table 1, the larger sectors were restaurants and drinking places (55K workers) (Row #25), agriculture (40K) (Row #1), food stores (32K) (Row #21) and food manufacturing (12K) (Row #3).

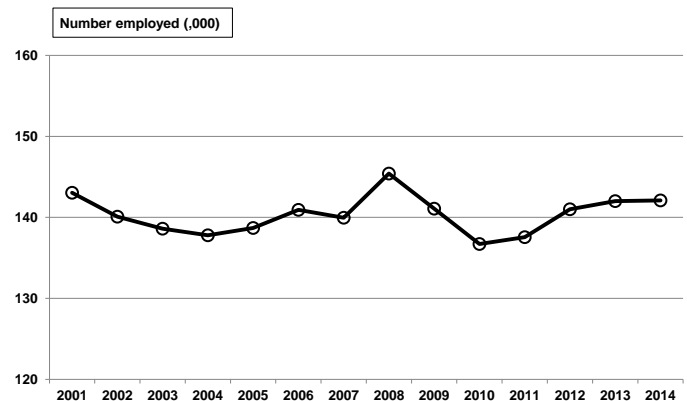
In total, the more "export-oriented" sectors of farming and food manufacturing accounted for 5.5% of total non-metro employment.

Each sub-sector noted in Table 1 experienced an employment decline during the employment downturn from 2008 to 2010. Some sub-sectors have grown (somewhat) since 2010. However, food

manufacturing has shown a decline in employment levels in non-metro CDs in each year since 2008.

Figure 1

Employment in AGRICULTURE and (selected) FOOD-RELATED sectors has varied between 137,000 and 145,000 from 2001 to 2014 in non-metro census divisions, Ontario



Source: Ontario Ministry of Agriculture, Food and Rural Affairs, ANALYST EMSI database.

Table 1 includes an employment "performance"⁵ indicator that compares the "expected" change in employment in each sector, based on national patterns, and the "actual" change in employment⁶. Sectors with positive value are leading national patterns while ones with negative values are lagging. An LQ>1 (as defined in Footnote #2 in Table 1) reveals a sector with a relatively greater share in the non-metro economy than its share in the provincial or national economy. Higher LQ's indicate "export" sectors that are likely contributing to the economic base of the non-metro economy.

¹ An "exportable" good or service is one that can be sold to those in other jurisdictions – either sent to the customer (e.g. a box of chocolates) or the client comes to your jurisdiction to consume the item (e.g. a farm tour).

² The "selected" food-related sectors included in this FactSheet are listed in Table 1.

³ For the level of employment for each subsector, see [Appendix Table](#): Employment in non-metro CDs by industry sector.

⁴ Where "K" indicates "thousand".

⁵ As defined in Footnote #1 in Table 1.

⁶ This shift-share analysis is a useful measure of the performance of a given sector in a given region in terms of employment change. Employment across all sectors in non-metro CDs grew by 78K from 2001 to 2004 but this growth was about ½ of expected growth, based on national patterns (last row of Table 1). However, the change in output per worker would provide a different indicator of the performance of a sector.

From 2001 to 2014, on-farm employment (Row #1) in non-metro CDs was expected to decline by 6K but employment declined by 5.5K which indicates a positive employment performance of 0.5K jobs.

For food manufacturing (Row #3), employment in non-metro CDs was expected to decline by 0.7K but the actual decline was 2.5K which indicates a negative performance of 1.8K jobs.

One of the food manufacturing sub-sectors that is less intensive in non-metro CDs is meat manufacturing (Row #9), with an LQ=0.9. Note that the actual non-metro change in employment (-0.1K) was the same as the expected change, which indicates that the job performance in non-metro meat manufacturing was equivalent to the Canada average.

For restaurants and drinking places (Row #25), an employment growth of 15K was expected but the actual growth of 4K indicates a negative performance of 11K jobs.

Summary

Employment in agriculture and in food-related sectors (as defined for this report) now represents about 15% of total employment within Ontario's non-metro CDs.

Most agriculture and food-related sub-sectors in non-metro CDs declined more rapidly or grew more slowly than the national patterns of change. Thus, the employment "performance" in these sectors was generally less than national patterns would have predicted.

Table 1

Non-metro employment AGRICULTURE and FOOD-RELATED sectors, employment change & performance relative to national patterns, Ontario, 2001 to 2014																								
Row #	NAICS Code	Level	Industry sector (displayed for each category of NAICS = North American Industry Classification System)	Estimated number employed (,000)												Expected change (based on national patterns) (1), 2001 to 2014 (,000)	Actual change, 2001 to 2014 (,000)	"Performance" = Actual minus Expected (,000)	Intensity(2) (LQ) relative to:					
				2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012				2013	2014	Ontario		Canada	
1	111-112	2	Farms	45.4	41.1	39.5	39.4	40.4	43.0	42.3	41.3	40.4	39.9	41.9	43.2	42.0	39.9	-6.0	-5.5	0.5	3.3	3.4	2.2	2.4
2	1150	3	.. Support activities for farms	1.8	1.3	1.2	0.9	0.9	0.8	0.9	0.8	0.8	1.0	1.1	1.0	1.2	1.2	0.1	-0.6	-0.7	3.3	2.7	2.8	2.0
3	311	2	Food manufacturing	14.5	14.6	15.0	14.9	14.6	14.5	14.4	14.8	13.7	12.9	12.6	12.4	12.1	12.0	-0.7	-2.5	-1.8	1.2	1.1	1.1	1.0
4	3111	3	.. Animal food manufacturing	1.3	1.5	1.5	1.3	1.4	1.4	1.5	1.7	1.6	1.5	1.3	1.3	1.3	1.3	-0.2	0.0	0.2	2.2	2.5	2.0	2.6
5	3112	3	.. Grain & oilseed milling	1.0	0.9	1.0	0.9	1.0	1.1	1.1	1.2	1.0	1.2	1.2	1.1	1.1	1.2	-0.1	0.2	0.2	1.3	1.8	2.0	2.7
6	3113	3	.. Sugar & confectionery product manufacturing	1.0	0.9	0.9	0.8	0.9	0.9	0.8	0.6	0.5	0.5	0.4	0.4	0.4	0.4	-0.1	-0.5	-0.4	0.9	0.7	1.4	0.8
7	3114	3	.. Fruit & vegetable preserving & specialty food manufacturing	3.0	3.0	2.9	3.0	2.7	2.4	2.7	2.6	2.2	2.0	1.8	1.5	1.3	1.2	-0.5	-1.8	-1.3	1.7	1.1	2.3	1.3
8	3115	3	.. Dairy product manufacturing	2.7	2.8	2.8	2.9	2.8	2.9	2.8	3.3	3.0	2.7	2.9	3.2	2.9	2.7	0.2	0.0	-0.2	2.4	2.5	2.3	2.3
9	3116	3	.. Meat product manufacturing	2.4	2.0	2.4	2.3	2.2	2.1	2.2	2.2	2.4	2.3	2.3	2.2	2.3	2.3	-0.1	-0.1	0.0	0.9	0.9	0.7	0.8
10	3117	3	.. Seafood product preparation & packaging	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-0.1	-0.1	0.0	2.1	2.4	0.1	0.2
11	3118	3	.. Bakeries & tortilla manufacturing	1.6	1.8	1.9	1.8	1.7	1.6	1.5	1.4	1.2	1.0	1.1	1.0	1.0	1.1	0.0	-0.5	-0.5	0.5	0.4	0.6	0.4
12	3119	3	.. Other food manufacturing	1.3	1.3	1.5	1.6	1.6	1.7	1.5	1.6	1.6	1.4	1.4	1.5	1.6	1.6	0.4	0.2	-0.2	1.0	1.0	1.1	1.1
13	312	2	Beverage & tobacco product manufacturing	1.0	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	0.9	1.1	1.0	1.1	-0.1	0.0	0.1	0.5	0.6	0.5	0.7
14	3331	3	.. Agricultural, construction & mining machinery manufacturing	2.2	2.6	2.7	3.1	3.0	2.9	2.5	2.2	1.8	2.0	2.3	2.5	2.3	2.3	1.1	0.1	-1.0	1.8	2.1	1.7	1.3
15	411	2	Farm product merchant wholesalers	1.3	1.3	1.0	0.9	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.0	1.0	0.1	-0.3	-0.4	1.9	1.8	1.7	1.3
16	413	2	Food, beverage & tobacco merchant wholesalers	3.7	3.6	3.3	2.9	3.0	2.9	3.0	3.1	2.7	2.5	2.4	2.5	2.6	2.7	0.6	-1.0	-1.6	0.8	0.4	0.6	0.4
17	4131	3	.. Food merchant wholesalers	2.5	2.5	2.6	2.4	2.6	2.5	2.7	2.7	2.5	2.3	2.1	2.1	2.2	2.4	0.5	-0.1	-0.6	0.6	0.4	0.5	0.4
18	4132	3	.. Beverage merchant wholesalers	0.7	0.6	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.0	-0.4	-0.4	2.1	0.6	1.5	0.6
19	4171	3	.. Farm, lawn & garden machinery & equipment merchant wholesalers	2.8	2.7	2.6	2.5	2.5	2.5	2.4	2.5	2.6	2.6	2.6	2.7	2.8	2.9	0.3	0.0	-0.3	3.2	3.2	2.5	2.5
20	4183	3	.. Agricultural supplies merchant wholesalers	2.1	2.1	2.0	1.8	1.9	1.8	1.8	1.7	1.7	1.5	1.5	1.7	1.7	1.7	0.4	-0.4	-0.8	2.8	2.3	2.5	1.9
21	445	2	Food & beverage stores	27.2	29.0	30.2	30.4	31.5	30.6	29.4	31.9	31.5	30.4	28.5	29.1	30.5	31.7	5.4	4.6	-0.9	1.2	1.2	1.1	1.2
22	4451	3	.. Grocery stores	22.2	24.7	25.9	25.9	27.1	26.2	24.9	27.3	26.6	25.3	23.5	23.8	25.0	26.5	3.7	4.4	0.7	1.3	1.3	1.1	1.2
23	4452	3	.. Specialty food stores	3.0	2.5	2.3	2.4	2.4	2.4	2.5	2.5	2.8	3.0	3.0	3.1	3.2	3.0	0.6	0.0	-0.6	1.0	0.9	1.0	1.0
24	4453	3	.. Beer, wine & liquor stores	2.0	1.8	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.2	2.2	2.2	1.4	0.2	-1.2	1.3	1.2	1.4	1.0
25	722	2	Food services & drinking places	50.9	50.5	49.5	49.2	48.5	49.2	50.1	53.4	51.7	50.0	51.1	52.7	53.8	54.7	15.0	3.8	-11.1	1.1	1.0	1.1	1.0
26	7223	3	.. Special food services	2.9	2.8	2.9	2.6	2.4	2.4	2.6	3.1	2.7	2.5	2.7	2.6	2.5	2.9	1.0	0.0	-0.9	0.8	0.6	0.8	0.7
27	7224	3	.. Drinking places (alcoholic beverages)	2.2	2.0	1.9	1.8	1.6	1.6	1.5	1.4	1.3	1.2	1.2	1.2	1.3	1.3	-0.4	-1.0	-0.6	1.1	0.9	0.7	0.5
28	7225	3	.. Full-service restaurants & limited-service eating places	45.7	45.6	44.7	44.9	44.5	45.2	46.0	48.9	47.8	46.2	47.2	48.9	50.1	50.5	15.1	4.8	-10.3	1.2	1.1	1.1	1.0
29	Subtotal: Agriculture and food-related sectors			143.0	140.1	138.6	137.8	138.7	140.9	140.0	145.4	141.1	136.7	137.6	141.0	142.0	142.1							
30	Total: All sectors in non-metro Ontario			874.6	890.3	901.6	910.7	922.1	932.6	930.6	960.1	923.5	913.0	919.7	938.4	948.4	952.4	150.6	77.8	-72.8				

1. The expected change is estimated from a shift-share calculation that shows the change that would have occurred if non-metro employment had changed at the same rate as national employment and if the employment in the given sector had changed at the same rate as the national employment in the given sector.

2. A location quotient (LQ) indicates the relative intensity of a sector (in this case, in non-metro census divisions), relative to the provincial pattern and relative to the national pattern. It is calculated as the non-metro percent employed in a sector divided by the provincial (or national) percent employed in a sector.

Source: Ontario Ministry of Agriculture and Food, ANALYST EMSI database.

Rural Ontario Institute gratefully acknowledges the work of Ray Bollman in preparing this edition of [Focus on Rural Ontario](#). Questions on data sources can be directed to RayD.Bollman@sasktel.net. Any comments or discussions can be directed to NRagettie@RuralOntarioInstitute.ca.