



# Prince Edward Island Food Self-Sufficiency | 2018

The Strategic Policy and Evaluation Division at the Prince Edward Island Department of Agriculture and Land has completed an integrated food self-sufficiency analysis model for PEI.<sup>1</sup>

The analysis provides information on the degree to which PEI is potentially able to meet its population's food consumption and animal feed needs from its own production (as opposed to importing).

## KEY FINDINGS

The results of the model show that, based on data from 2018<sup>2</sup>, PEI-production of grains and oilseeds, potatoes, vegetables, maple syrup, milk, eggs, meat and seafood exceeds consumption needs (i.e., PEI is fully self-sufficient for these commodities).

The production of fruits and honey does not fully meet consumption needs (i.e., PEI production is less than its consumption needs).

## RESULTS

The results of the PEI Integrated Food Self-Sufficiency Model showed that, overall, PEI is self-sufficient in all items contained in the model, with the exception fruits and honey.

**TABLE 1**

Self-Sufficiency by Commodity Type

FOOD COMMODITY	SELF-SUFFICIENCY RATIO
Grains and oilseeds	308%
Vegetables	141%
Fruits	46%
Potatoes	13,664%
Maple syrup	126%
Milk	385%
Eggs	119%
Meat	154%
Seafood	3,971%
Honey	60%

Note 100% indicates full self-sufficiency 0% indicates that PEI relies on imports to meet all domestic consumption needs.

## METHODOLOGICAL NOTES

“A self-sufficient country [or province] produces as much or more food than it consumes, even if some of the actual food items consumed by its population are different from those that it produces domestically.”<sup>3</sup> As such, it is not a measure of how much local product is actually consumed in PEI, but rather a measure of the province’s potential to meet consumption requirements.

The per capita food consumption statistics are based on national-level data (not available on provincial basis).

Three sub-models were used to measure food self-sufficiency using:

1. A food and animal feed consumption model to calculate PEI’s consumption of food and feed.
2. A food and feed production model to calculate PEI’s food production.
3. An integrated self-sufficiency model estimate using the outputs of sub-models 1 and 2.

The PEI food consumption estimate was developed using per capita consumption multiplied by the total PEI population (2018). Livestock numbers and feed consumption averages were used to estimate PEI live-stock feed consumption. Statistics Canada estimates of PEI production of various commodities were then inputted. Production was divided by consumption to receive self-sufficiency ratios.

## References

<sup>1</sup> The model was adapted from a model used by New Brunswick (2010).

<sup>2</sup> Data retrieved from CANSIM tables (Statistics Canada)

<sup>3</sup> Clapp, J. (2015). The State of Agricultural Commodity Markets IN DEPTH. Food and Agriculture Organization of the United Nations. Rome: FAO. Retrieved from <http://www.fao.org/3/a-i5222e.pdf>.

Note: Self-sufficiency ration at a detailed level available upon request

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