



Household Use of Chemical Fertilizers and Pesticides Indicator

Data Sources and Methods

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1. Introduction

This report is released under the Canadian Environmental Sustainability Indicators (CESI) initiative. Each indicator reported under CESI has an associated "data sources and methods" report to provide technical detail and other background to facilitate interpretation of each indicator or allow others to conduct further analysis using the CESI data and methods as a starting point.

This report addresses the underlying methods and data for the Household Use of Chemical Fertilizers and Pesticides indicator as published on the CESI website (www.ec.gc.ca/indicateurs-indicators/).

How the measure was calculated

Data for this measure comes from Statistics Canada's *Households and the Environment Survey* (HES) 1994, 2006, and 2007.

The HES 2006 was conducted from February 15 to April 15, 2006 using a representative sampling of Canadian households from each province. The HES 2006 surveyed 36 431 households and yielded a 78% response rate.

The data collected for this measure were based on the following questions:

- In 2005, were any chemical fertilizers applied to your lawn/garden? (Yes, No, Don't know/Refused)
- In 2005, were any weed killers, pesticides, or fungicides applied to your lawn/garden? Include fertilizer and pesticide mixes like "Weed and Feed." (Yes, No, Don't know/Refused)

Data for 1994 comes from the HES 1994. Data from 1994 compiled in the HES 2006 report was used.

The HES 2007 was conducted from October 1, 2007 to April 30, 2008 using a representative sampling of Canadian households from each province. The HES 2007 surveyed 29 980 households and yielded a 72% response rate.

The data collected for this measure were based on the following questions:

- In the last 12 months, were any chemical fertilizers applied to your lawn/garden/lawn or garden? (Yes, No, Don't know/Refused)
- In the last 12 months, were any chemical pesticides such as weed killers (herbicides), bug killers (insecticides), or fungicides applied to your lawn/garden/lawn or garden? Please include fertilizer and herbicide mixes such as 'Weed and Feed'.

Household estimates in the HES are produced using weights attached to each sampled household. The weight indicates the number of households in the population represented by the sampled unit.

3. Caveats and limitations

The coverage error of the Labour Force Survey of which the HES 2006 is a sub-sample and the coverage error of the Canadian Community Health Survey of which the HES 2007 is a sub-sample are estimated at less than 2%.

Excluded are households located in the Yukon, Northwest Territories and Nunavut, households located on First Nations reserves and military bases, and households consisting entirely of full-time members of the Canadian Armed Forces.

Estimates that did not meet an acceptable level of quality were either flagged for caution or suppressed.

4. Data source(s)

Statistics Canada. 2008. *Households and the Environment Survey 2006*. Ottawa, ON. Catalogue no. 11-526-X. Available at: www.statcan.gc.ca/pub/11-526-x/11-526-x2007001-eng.htm

Statistics Canada. 2009. *Households and the Environment Survey 2007*. Ottawa, ON. Catalogue no. 11 526-X. Available at: www.statcan.gc.ca/pub/11-526-x/11-526-x2009001-eng.htm