THE MIGRATION OF THE CANADIAN CENSUS OF AGRICULTURE TO AN INTEGRATED BUSINESS PROGRAM WITHOUT CONTACT WITH RESPONDENTS

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Since 1956, the Canadian Census of Agriculture has used a collection model based on the complete enumeration of farms and on data reported by respondents. However, the context is rapidly changing.

Farms have become increasingly integrated and complex businesses. These businesses are best handled using Statistics Canada's business survey processing infrastructure, rather than the traditionally used social survey processes. Additionally, data requirements are becoming progressively more complex and include linkages beyond the primary production sector. Information from the Census of Agriculture must be integrated with that from other sectors of the economy (e.g., the environment, food manufacturing, energy, transport, international trade and prices) to measure program efficiencies and to identify broad issues affecting one or more sectors.

The ability to complete the census online has reduced the burden imposed on farm operators. Now, the increasing availability of administrative data and satellite imagery gives Statistics Canada the opportunity to eliminate all or almost all contact with agricultural producers by 2026. This would significantly reduce collection costs and preserve the detailed level and quality of information required by stakeholders.

This modern approach is being implemented as a response to changes in agricultural businesses and stakeholders.

The new model will be implemented by combining remote sensing and geospatial information, data from approximately 300 administrative sources already available, data from other harmonized business surveys, and data from the introduction of models. Other non-traditional alternative sources of information, such as web scraping or precision agriculture, will also be considered.

This new model will be deployed progressively with the 2021 Census of Agriculture. A proof of concept will be produced using the new model by predicting all the census variables (nearly 200 variables) for the whole population (close to 200,000 units). In addition, up to 10 questions will be replaced in the 2021 Census of Agriculture by alternative data, using an agile collection instrument that allows data to be "smartly replaced" when the alternative source is of sufficient quality.

The objective is to reduce the response burden by 100,000 hours by 2026.