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Information system for a farm commodity supply chain: Feasibility study on the poultry supply chain

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Outline

- Background
- Research Initiative
 - Information requirement
 - Feasibility study goals
- Outputs
- Future work



Background

- Farm Products Council of Canada (FPCC) is the federal oversight body for supply management of farm products
 - Advise the Minister of Agriculture and Agri-food on all matters relating to the operation of the agencies under the Farm Product Agencies Act (FPAA)
 - Reviewing the operations of these agencies
- FPCC's regulatory role could potentially be reinforced and benefit from enhanced availability and greater verification of data specific to each supply chain



Research Initiative

- Feasibility study to ascertain:
 - What publicly available statistical information can be used to flesh out our picture of an industry's value chain?
- Focus on the poultry supply chain
- Why: largest industry with the largest population
 - Chicken Farmers of Canada considered to be the most forthcoming of the agencies in terms of data management



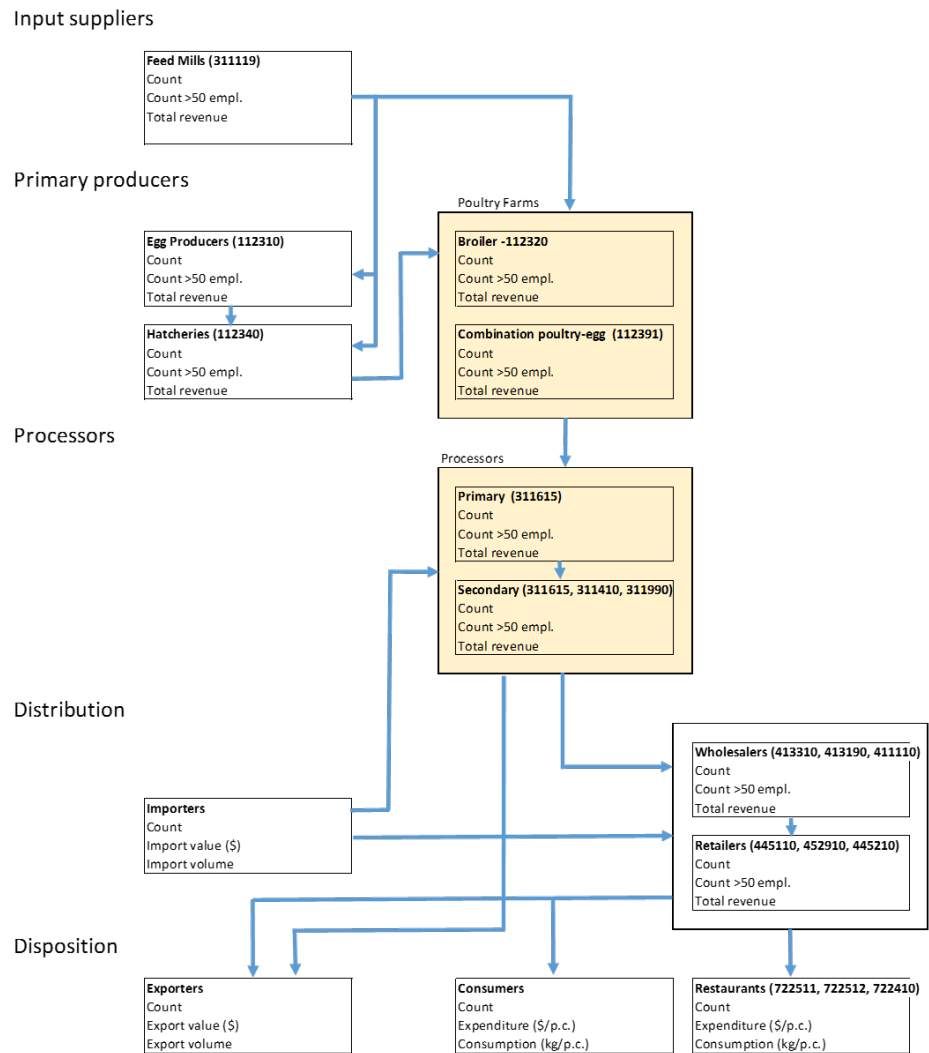
Feasibility study goals

- Conceptualize and design a possible database structure related to the value chain
- Identify and appraise feasibility of various StatsCan databases on poultry value chain
- Work to extend and refine StatsCan data to provide a foundation for future analysis of the supply-managed industries

Output 1: Outline of Structure of Poultry Supply Chain

- StatsCan provided:
 - A theoretical discussion of key statistical elements of a supply chain
 - A brief text and graphical representation of the chicken value chain nodes and flows
- Initial statistical profile of the value chain and building certain early-stage databases

Output 1: Outline of Structure of Poultry Supply Chain



Output 2: Statistical Profile of Poultry Farm

- Poultry farm performance indicators
 - Data from CEAG 2011 (custom tabulation)
 - Examples (Broiler and other meat-type chicken production):
 - 87.3% of operations had hens and chickens on census day
 - average 44,971 birds per farm
 - average valuation was \$3.17/bird
 - Profit margin for 2010: 16.3%



Output 3: Other Stakeholders

- An attempt to identify and gauge the economic contribution of key players and stakeholders with the chicken value chain
- Listing based on publically-available sources
- Divided into importers, feed manufacturers, hatcheries, and processors
 - Sources: AAFC, Global Affairs, Provincial agencies, Industry Associations

Output 4: Preliminary Financial Profile of Supply Chain

- Preliminary Figures:
 - Tax data holdings on Business Registry: business classified by North American Industry Classification System; net income derived for each record
 - BR data is insufficiently robust for full study, frame selection can result either in over or under coverage
- Financial Performance Database
 - NAICS 112320, Broiler and Other Meat-type chicken production
 - Actual tax data tabulations: e.g. standardised data products generated from T1 tax files; or similar corporate statistical tables, based on T2 tax returns



Overview of Results

- Statistical outline of the poultry value chain
- Database and key indicators compiled as valuable foundation for future research, and operationally useful for Farm Products Council of Canada
- StatsCan's foundation for future supply-chain research established



Future work

- Feasibility study pointed to significant data gaps. In the long term, a more extensive study may be needed to fill gaps in terms of production costs, quota values
- Deepened study on data sources for analysis and depiction of the chicken industry value chain
- Extend feasibility study to other supply managed commodities



Questions/contacts

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