national farmers union | union nationale des fermiers

Taking Stock of Abattoir Regulations:

How Provincial Rules Help or Hinder Regional Meat Production

A Report for National Farmers Union Livestock Committee
Prepared by Janice Levangie

November 2021

Contents

Introduction

This report reviews existing provincial regulations on slaughter, meat processing (cut/wrap), and marketing for each province. It highlights common points and differences among the regulations and identifies pieces of regulations (or how they are applied) that create barriers to local and regional meat production, as well as those pieces that support thriving local and regional food systems and local producers.

The National Farmers Union will use the results to support advocacy to reduce barriers to local and regional meat production, processing, and marketing.

Overview of regulatory framework by province

Each province has acts and regulations associated with the abattoir and meat processing sector. In some provinces, there are also guidelines or codes used, for example, by inspectors or auditors to help assess facilities' compliance with the regulations. These guidelines or codes are updated more frequently than regulations and acts, where change involves a lengthier process. When multiple government departments or agencies have responsibility for inspecting or ensuring compliance, as is the case in several provinces, it is more complex to understand who has responsibility for which aspects.

In general, provinces have overarching Acts regarding food safety which enable the more specific Regulations. Common rules for abattoir or meat processing operations include details such as requirements regarding built infrastructure (the building and materials), sanitation, exclusion of pests, storage of materials, temperatures, record keeping, inspections, licences, personnel, labeling, and legal sale of meat and meat products. Some provinces have longer and more detailed rules (prescriptive, for example Ontario) and others describe the desired outcomes (outcome-oriented regulations, for example, B.C.). See Appendix A for a table outlining the main acts and regulations that apply in each province. Note that there are additional acts, regulations and local by-laws that may apply tangentially.

Regulatory frameworks are based on food safety concerns and history in each province. However, where provinces have found ways to meet food safety concerns that impose fewer barriers on abattoir or meat processing facilities, their experience may apply to other provinces.

Barriers due to regulatory frameworks

Regulatory frameworks related to abattoirs and meat processing facilities are intended to ensure food safety, but also can cause undue barriers for provincially inspected facilities that cater to local and regional markets. This section examines the main barriers identified, and provides case studies highlighting provinces where the regulatory framework may cause undue barriers. Its shows where provinces would benefit from scale-sensitive regulations while still ensuring safe food. Other case studies highlight the possibilities for scale-appropriate or enabling regulatory frameworks. Uniform and centralized standards which are not scale-sensitive place disproportionate burdens on smaller processors, including large fines for non-compliance, costly traceability procedures, etc. (Barter 2014). The inequitable impact of regulations on smaller facilities is corroborated by a 2020 survey by NFU in Ontario. One of the survey's findings was that smaller abattoirs (killing at most 30-60 animals per week of a given species) find some regulations burdensome to their business, while larger facilities, (killing over 300 animals per week) did not express concerns about regulatory burden.

Barriers examined in this report were identified through previous work by local NFU committees or groups and through a review of research (mainly master's or PhD theses). These different sources had common themes identifying barriers caused by the regulatory framework in the provinces they looked at, although most of the

research and existing work was carried out in British Columbia and Ontario. Those two provinces have arguably the most complex regulatory frameworks related to abattoirs.

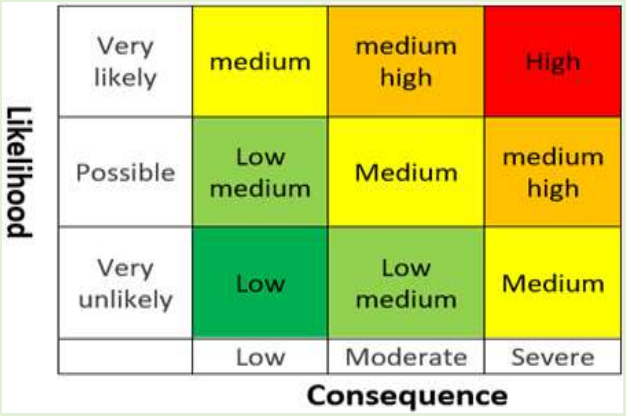
Risk

Risk involves considering both the likelihood of and the severity of consequences for a hazard (Manitoba, N.D.) (i.e., how likely is it that someone will get sick from contaminants such as pathogens on meat). In general, smaller abattoir operations have lower severity of consequences since they typically serve smaller geographical areas than large abattoirs that distribute meat across a province or across the country. There are also operational differences: smaller numbers of animals being processed, often at a slower rate, which could also reduce both the likelihood and severity of contamination. Therefore, the lower level of risk from smaller abattoirs justifies making some accommodation in the regulatory framework.

Risk Evaluation Matrix

A risk evaluation matrix is a tool that is often used in risk analysis to help prioritize areas of high likelihood and consequence (Manitoba, N.D.), i.e., areas shown in orange or red.

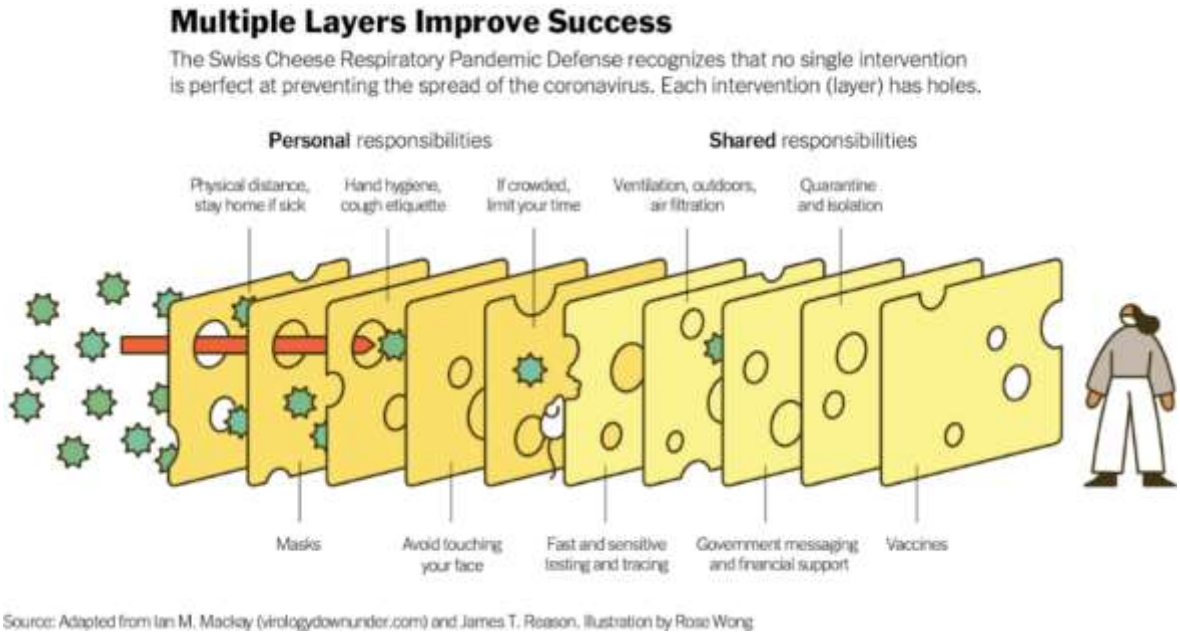
Abattoir operators or meat processors may use similar tools to identify focus areas. A risk matrix along with the multiple barrier approach can help identify which areas need more barriers to adequately reduce risk.



Multiple barriers to reduce risk:

The multiple barrier approach to reducing risk is used in fields such as drinking water treatment. Essentially, if there is more than one layer of protection in place to reduce the likelihood of a hazard, if one protection fails, there are still further steps that reduce the overall likelihood of the negative consequence happening. Think of wearing masks, physical distancing, washing hands frequently, and getting vaccinated to reduce illnesses from COVID. A common visualization is the 'Swiss cheese' model, below (Roberts, 2020). With food safety, the final barrier is in the hands of consumers - to cook meat properly. We perceive the risk of eating raw meat differently than the risk of drinking a glass of water from the tap, and while both need to be as safe as possible, we expect to cook hamburger, but assume tap water is safe to drink.

At some point, adding another barrier won't have much impact in reducing overall risk. Although judgement is needed when balancing costs and benefits, it is worth considering whether all abattoirs and meat processing facilities require all the same multiple barriers.



Built infrastructure

Rules related to built infrastructure (the building and materials) for abattoir or meat processing operations tend to cover items such as surfaces, flooring, walls, catch basins, rails, racks, hooks, tables, and lighting. Some provinces have extensive requirements which relate to areas where meat is processed, such as coving and leak proof joints between walls and floors, or floors to be made of shock-resistant material. Also some regulations include requirements for aspects that do not directly relate to meat quality, such as requirements to keep inedible, condemned or waste material in a separate room at a specified temperature, (10°C or less). Another example cited by several sources was the requirement for separate rooms such as a staff changing or dressing room, or washroom and separate office for inspectors. These more prescriptive requirements can be expensive, and when applied to small facilities in the same way as large facilities, can reduce the competitiveness of smaller facilities. Several provinces specify offices are required for inspectors only if facilities are at a certain size.

Facilities for inspectors

"It seems ridiculous to some of the abattoirs who are only operating a couple days a week, or seasonally, that they are required to build a separate washroom that can only be used by the CFIA inspector. These types of requirements add enormous costs with absolutely no benefit to the abattoir owner or to the quality and safety of the product". (Woodward, 2011)

On the prescriptive side, slaughterhouses in Quebec are required to have "a room with a floor area of at least 8 m^2 and … an adjoining lavatory, exclusively reserved for the inspector; if more than one inspector is employed, this area must be increased by 4 m^2 for each additional inspector..." In B.C., there is a requirement for a private office for inspectors, with specifics on space, lighting and ventilation.

In Nova Scotia, a furnished office for the exclusive use of the inspector is required if inspection services are needed for three or more days in a week, while in Newfoundland, an adequate office for the inspector is required when the facility becomes the full-time work site for the inspector.

Inspections

Provinces approach inspections in different ways, both for inspecting facilities and inspection of animals before and after slaughter. In several provinces, inspections of abattoir and meat processing facilities fall under multiple government agencies, such as the departments of Health and Agriculture. Each agency has different inspection frequencies for facilities, and Ontario has facility audits as well as inspections. However, all provinces require inspections of the physical facility if it is licenced.

Some provinces require inspection before and after each animal is slaughtered (ante- and post- mortem). Other provinces have tiered systems that inspect facilities only for smaller, local facilities. In Saskatchewan, ante-and post-inspections are voluntary under the Domestic Meat Inspection Program, and Newfoundland and Labrador, inspection of animals before and during slaughter is also voluntary. The table below provides further details on which provinces require ante- and post- mortem inspections, which provinces have multiple tiers of inspection or licence, and which allow some form of on-farm slaughter that is legal for sale but not considered inspected.

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL
Ante/post mortem inspections	Yes, (for regular facilities)	Yes (for regular facilities)	Optional	Yes	Yes	Yes (for regular facilities)	No	Yes	Yes	Optional
On-farm slaughter can be sold to single individual	Yes, w licence	Yes, w licence	Yes	Only poultry	No	No	No	Yes	No	No
Multiple tiers of inspection	Yes	Yes	Yes	No	No	Yes	No (no ante/post-mortem)	No	No	No

Tiers of inspection and associated markets

Aside from access to conventional federally- or provincially-inspected facilities for slaughter, half of the provinces regulations allow for some sort of two-tiered system that reduces some of the regulatory burden to enable slaughter, processing and sale of meat on a more localized, smaller scale, while still protecting the public. The table above also highlights types of inspections across the country.

Less burdensome regulations could focus on eliminating regulatory requirements such as microbial control interventions or inspector office spaces that may only marginally reduce risk. In provinces with only one level or tier of provincial inspection, changing regulations to enable smaller facilities to operate with a less burdensome, more scale-appropriate regulations would facilitate a range of small and medium sized abattoirs that can support diverse and more sustainable livestock farming.

On-farm slaughter in Alberta

On-Farm Slaughter Operations (OFSO) are licenced and allow for uninspected slaughter and processing of animals purchased by individual consumers and their households only. A live animal can be sold directly to an individual customer and the producer can slaughter and process that animal for the individual customer on the licenced land. The OFSO licensee can also offer their land for the slaughter of animals that are not theirs.

These operations are uninspected and all of the meat is considered uninspected and not for sale (Dittrich, 2021, personal communication).

"Initial limits will apply to consumers and will accommodate the volume of meat an average Alberta family would consume in a year. Limits are 6 cattle, 6 pigs, 6 goats/sheep and 150 poultry per year". (Government of Alberta, 2020)

Below are some options for multiple tiers of inspection that may provide a balance for risk and access to appropriately scaled slaughter and meat processing (and in brackets, provinces which allow this):

- Separate, scaled-down regulatory requirements for smaller, localized abattoirs (such as inspections of facilities but not ante-and post-mortems) (Quebec, British Columbia).
- Permit producers to conduct limited licenced on-farm slaughter, with requirements for training, an approved food safety plan and premises inspection, (resale and gifts allowed) (British Columbia)
- Permit farmers to conduct on-farm slaughter for legal but uninspected farm-gate sale of their animal to one customer with on-farm cut and wrap (no re-sale, gifting etc.) (Nova Scotia)
- Permit farmers to sell a live animal to a customer and assist them with conducting legal on-farm slaughter and on-farm cut and wrap, (uninspected, no re-sale, gifting etc.) (Alberta)
- Permit someone other than the farmer (such as a mobile butcher or slaughter unit) to slaughter on-farm for legal but uninspected sale to one customer (no re-sale, gifting etc). (Alberta)
- Provide access to a mobile slaughter unit that produces legal inspected slaughter on-farm for sale to one or more customers for sale through retail outlets (resale and gifts allowed)
- Permit farmers to access meat processing (cut and wrap) for on-farm slaughtered uninspected meat for sale to one customer (Nova Scotia, Alberta

Emergency slaughter inspections

Requirements for ante-mortem inspections at abattoirs in situations of injured livestock, or those animals at high risk of harming themselves or others during transport, were cited by NFU members as problematic in some cases. Euthanizing an injured animal on-farm rather than transporting them to an inspected abattoir is more humane and would reduce suffering. In most cases, the meat from animals requiring 'emergency slaughter' is safe for human consumption. However, the meat from that animal cannot be sold if producers are not given any option to slaughter these animals on-farm while meeting requirements for ante-mortem inspections. In other cases, injured animals may be transported when they shouldn't be (Alberta Beef).

Some provinces lack a clear mechanism to manage emergency slaughter, and approval to sell or donate meat derived from on-farm slaughter, while others have mechanisms which may not be financially feasible depending on the value of the animal. Alberta Beef Producers state that it is too costly to pay for a vet to come to the farm to do an ante-mortem inspection in emergency situations. British Columbia, Alberta and Ontario have detailed instructions for vet inspections in case of emergency slaughter. Saskatchewan, Manitoba, Quebec, New Brunswick do not specify steps to take in case of an emergency requiring slaughter of an animal on-farm. Nova Scotia and Newfoundland and Labrador indicate that inspection services may be provided in case of emergency by a veterinary inspector, and Prince Edward Island has a "Special Circumstances Slaughter Report" which must be filled out allowing emergency slaughtered animals to be considered inspected if they are processed in an inspected facility within 2 hours of slaughter. Alberta has recently updated their regulations on ante-mortem inspections in case of emergency, as outlined in the box below.

Video ante-mortem inspections in Alberta

Ante-mortem inspections in Alberta are required for meat to be considered 'inspected' and allowed to be sold within Alberta, and previously required to be done in-person by a Meat and Dairy Inspection Section (MDIS) inspector or an Appointed Inspector.

A 2019 pilot study supported the use of video technology for ante-mortem inspections. Further testing and verification of the technology is ongoing, and the legislation regarding use of video technology for ante-mortem inspections will come into effect in January 2022.

Video ante-mortem inspections will take place when an abattoir is unable to receive animals for processing, and an MDIS inspector or a mobile butcher may perform the video for ante-mortem inspection. The carcass is required to be transported to a licenced abattoir within two hours to complete the slaughter and post-mortem inspections, and then the meat can be sold within Alberta. Media reports and government sources highlighted the benefits of video ante-mortem inspections including:

- *Reducing wait times for in-person inspections, therefore reducing the suffering of an injured animal*
- *Cost savings for on-farm inspections*
- *Improved welfare for hard to transport animals such as bison*
- *Reducing waste of an otherwise healthy animal that is euthanized*

(Lewis, 2020; Government of Alberta, 2020) Emergency Slaughter Inspection)

Inconsistency

Inconsistencies between inspectors were reported by several sources as posing difficulties for abattoir operators. Also noted was the feeling that inspectors made unreasonable demands (examples: signature on wrong line, an animal being dirty on a rainy spring day; a speck of blood on the wall far above the floor.) "At times, the line between a recommendation and a requirement, or between an acceptable usage of a material and an unacceptable one, are unclear and open to interpretation (p. 125, Barter, 2014).

It was also reported that new demands were made by inspectors at each inspection (continuous improvement) even when items from the last inspection had been properly dealt with. It was also difficult to predict when costs to comply with regulatory requirements would occur, making financial planning and management difficult (Barter, 2014). Although theoretically, having additional guidelines or standardized procedures for inspections may improve consistency between inspectors, anecdotally that has not been the case (e.g., in Ontario, the Meat Plant Guidelines provide very extensive detail on acceptable procedures, but inconsistency between inspectors is still noted).

Wastewater and waste disposal

Although it was outside of the scope of this report to fully investigate all the environmental regulations relating to abattoir wastewater and solid waste disposal, this was an area that posed challenges to operators. In most cases, provincial abattoir-related regulations simply state that wastewater and solid waste material must be handled and disposed of in accordance with applicable environmental regulations. Most provinces have separate regulations regarding wastewater and waste disposal, usually general environmental protection regulations.

Solid wastes, including offal and food processing wastes are often required to be kept in separate, cool storage until disposal. Many provinces allow for burial, composting and incineration of non-Specified Risk Material (SRM) solid wastes. Disposal of SRM is subject to federally regulated disposal requirements (Saskatchewan, 2008), and if any other wastes come into contact with SRM wastes, they are also considered to be SRM.

For smaller facilities, both a regulatory framework and technical support to facilitate appropriate wastewater treatment would be beneficial. Generally, those operators who commented about wastewater stated that the requirements were burdensome and fines for not meeting standards were very high (personal communication), which would have a disproportionate impact on smaller facilities. In British Columbia, the requirements are different for facilities that process less than 5 tonnes of meat (under a Farmgate or Farmgate Plus license) than large facilities (under an abattoir license). However, abattoir operators have noted that waste disposal and treatment options are unclear (personal communication), and further coordination between the various agencies would be beneficial.

Record keeping

Recordkeeping has been cited as a challenge especially by operators in Ontario (Barter, 2014; NFU Ontario). Recordkeeping and documentation may not be scaled appropriately for small plants (Barter, 2014). Facilities have needed to employ extra staff to complete the required documentation and ensure compliance with regulations (NFU Ontario; Barter, 2014). Most provinces require records for each animal slaughtered, including the name and contact information of the owner of the animal, date it was purchased and slaughtered, and information for traceability. Other provinces specify much more detailed and frequent record-keeping (see box).

Record keeping in Ontario's abattoirs

Ontario's Meat Plant Guidelines required records include:

- *Daily temperatures of all refrigerated rooms, coolers and freezers*
- *Monitoring of water treatment equipment at least daily*
- *Daily pre-operational inspections*
- *Maintenance activities for premises, equipment and utensils*
- *Results of monitoring of processes and control procedures including any deviations*
- *Documentation of application of microbial control interventions for each carcass*

It may be helpful to prioritize requirements for records most related to high consequence, high frequency risk events in small facilities, but avoid overly frequent, onerous, or duplicate record requirements for different agencies, especially in areas with lower overall risk.

Carcass Treatment

The intention of carcass treatment is to further reduce potential for pathogens on the surface of carcasses. The requirement for carcass treatment varies across the provinces, however Ontario is the most prescriptive. Ontario's detailed requirements for microbial control interventions may be an example of regulations that are not scaled appropriately for the risk in smaller abattoirs. The perspective of the BEUC (The European Consumer Organization) is that if good hygiene practices take place 'from farm to fork' then chemical decontamination of meat at the abattoir is not needed (BEUC, 2015). The agency further states "We do not believe chemical meat washes will deliver any "extra safety net" (BEUC, 2015). Only steam pasteurization, lactic acid and recycled hot water are approved carcass treatments in the European Union (Government of Canada).

Microbial control interventions

Requirements for microbial control intervention or carcass treatment (possibly referred to as "hygienic slaughter" by some operators in Ontario). This may involve biological or chemical processes, often applied to the surface of a carcass by spraying or other treatments for carcasses to further reduce microbial loading (Ontario, 2018). Ontario is the only province that very clearly states in the Meat Plant Guidelines that a 'microbial control intervention' must be implemented and monitored. It provides a table of suggested interventions, including hot water, steam pasteurization, steam vacuuming, peroxyacetic acid, acetic acid, lactic acid, citric acid, sodium hypochlorite, dry ageing, or "any other microbial control intervention that is sufficient to reduce or eliminate microbial loads that pose a risk to human health". A Government of Ontario website states "Combined with control measures already in place in abattoirs, the use of a microbial control intervention is an additional precaution to make slaughter and processing even safer" (Ontario, 2021).

Other provinces are not as prescriptive or do not include any such requirements. British Columbia's Provincial Abattoirs Code of Practice states that carcasses can be treated with an approved antimicrobial agent, such as lactic acid, but does not state it is a requirement. Alberta requires thoroughly rinsing the carcass of red meat animals and poultry before chilling, Quebec requires pressurized washing appliances for all carcasses, while Nova Scotia and Newfoundland specify certain livestock carcasses to be washed prior to chilling.

Mobile abattoirs

Mobile abattoirs have the potential to improve access to inspected slaughter facilities across a geographical area, as they are usually (but not always) able to move between sites. Animal welfare is also improved by slaughtering animals either on site or significantly reducing transportation distances (Caldwell et al., 2014). Mobile Abattoirs are currently in use in British Columbia, Alberta and the Yukon (Caldwell et al, 2014). They have also been operational in Quebec with varying levels of success (see box below). There is interest in other provinces, with studies considering mobile abattoirs in Ontario (Pinkney, 2014), Newfoundland and Labrador (Babb and Kennedy, 2012), and interest by producers in New Brunswick (Sweetland, personal communication) but none have been operational in those provinces. Caldwell et al (2014) found mobile abattoirs are quite capable of complying with regulations.

In Alberta, a slightly different option also exists in the Mobile Butcher's Licence, which allows a mobile butcher to slaughter an individual's animal on their own land (Caldwell et al, 2014). The meat is uninspected, and not for sale (only for consumption by the animal's owner and family).

Mobile abattoir wins and losses

In Quebec's Abitibi-Témiscamingue region, a provincially inspected mobile abattoir operated between 2005 and 2008, although it never operated at full capacity. It was housed in a trailer that connected with two separate docking stations. Each docking station included a platform for the trailer, a slaughter room, and an enclosure for livestock. Livestock were slaughtered in the facility, and carcasses refrigerated in the trailer before being transported to Val-d'Or for processing and packaging. During initial operation, approximately 25 producers were using the facility, but the numbers declined over time. The large geographical size of the region and the requirement for a certain number of producers to come to the docking station at the same time were cited as factors contributing to its failure. However, another privately operated mobile slaughter facility processing poultry is operating in the Montérégie region, in the southwestern part of Quebec. This region is just a fifth the size of Abitibi-Témiscamingue geographically and has a larger population with higher socioeconomic profile, and arguably more established market for local food (Caldwell et al., 2014).

In the Yukon, Canada's first mobile abattoir was introduced in 2006. It is contained within a fifth wheel trailer and animals can be slaughtered, cooled and transported in the unit. Producers were less receptive than anticipated, potentially due to the costs for the service ($1.30 /km fee for transportation to the farm, $70 cleaning fee plus $30-100/head slaughter fee. The unit has been subsidized by the government, and additional cold storage and processing infrastructure have been identified as limitations (Caldwell et al, 2014)

In British Columbia, several mobile abattoirs serve remote, rural and island communities. There are varying levels of mobility ranging from travel on farm to stationary docking facilities (Caldwell et al., 2014). Some of these abattoirs are under shared or cooperative ownership, while others were privately owned. (See Caldwell et al for a discussion of cooperative, shared and privately owned mobile abattoirs).

One of the biggest challenges for mobile abattoirs was the requirement to coordinate with further processing and cold storage facilities. Consumer demand was also identified as key to success (Caldwell et al., 2014).

Example of Community impacts of a local abattoir: Killarney Meats

Killarney Turtle Mountain is a rural municipality in Manitoba with a population of approximately 3,200, with 2,500 in the town of Killarney. The town is a hub for surrounding rural areas, providing a range of services and amenities, including schools, medical services, financial services, grocery and hardware as well as other retail. The municipality's website indicates that agriculture is both an economic and cultural cornerstone, and that "the town and surrounding rural area continue to prosper and grow as an agribusiness centre" (Killarney.ca).

Killarney Meats is a provincially inspected custom abattoir and meat processing facility for cattle, pigs, lambs, and wild game located in Killarney. Their main customer base are direct marketers who sell their products in larger centres such as Winnipeg. Aside from the five larger regular customers, they also have numerous small orders. Their facility processes 8 or 9 cattle and 6-10 pigs each week (Langen, 2020), and includes a retail meat shop on site. Although numbers fluctuate during the year, over the last three years, approximately 800-900 head combined of beef, hogs and sheep were processed. The facility supports five full-time and two part-time employees. Killarney Meats is owned by two families: former staff who purchased the shop when it was up for sale in 2010. Three of the families employed have small children, and one of the owners brought his family to Killarney from the Philippines after becoming owner, adding to the diversity of the community.

Having access to this abattoir was cited as key to the success of one farmer who uses the abattoir's services regularly. The farmer indicated that because of the proximity and nature of the abattoir, she is able to diversify her farm.

Other benefits from the abattoir include:

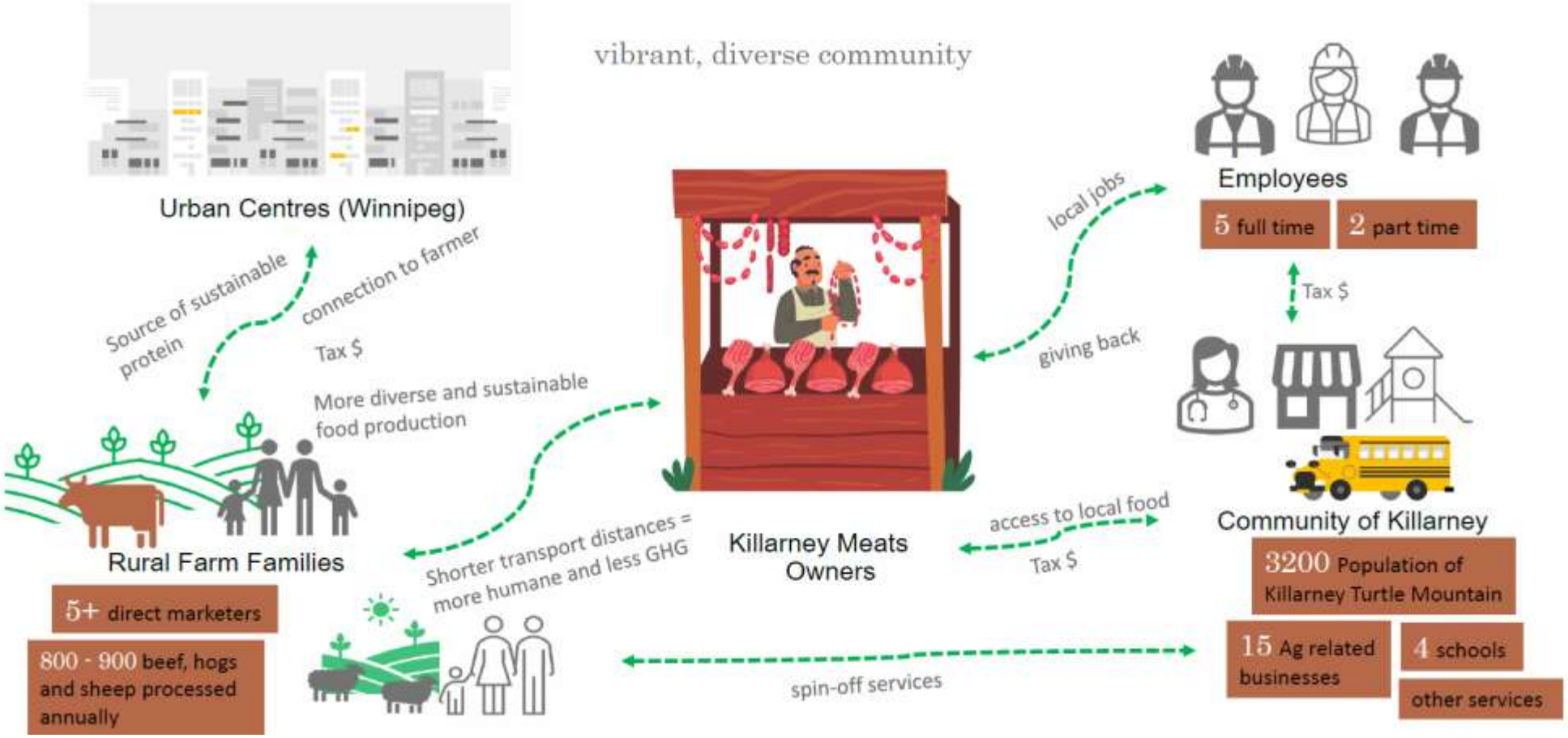
- Meaningful employment for employees
- Farmers of varying size and types of operation can use the abattoir services, for both custom slaughter and meat processing. There is a large diversity of clients served, from those who bring an animal in once a year to those who direct market in Brandon and Winnipeg and bring in animals 2 or 3 times a month. Clients come from up to 150 km to access the abattoir.
- Meat counter provides access to local meats to Killarney, as well as samplers of the types of products such as sausages.
- Investment in the community of Killarney – the business is community minded, donates to local food bank and sponsors local community events.
- Horizontally integrated model, mutually supportive between customers and business.
- Pathway to residency for one of owners and their family.

Spin-off or indirect impacts are harder to quantify but would include goods and services related to livestock production. Although the surrounding area has more grain and oilseed farms (619 reported in the Agricultural Region 1) than livestock farms (296 beef farms, 16 hog farms, 2 poultry, 3 sheep and goat, and 22 farmers raising a combination of livestock) (Statistics Canada, Farms classified by farm type), there are a number of businesses catering to livestock services. "There is a well-known auction mart, a veterinary clinic and abattoir to accommodate the needs of numerous livestock producers" (Killarney, Local Business), and the municipal website also lists over 15 businesses related to agriculture, not including those catering to grain farmers specifically.

Given some assumptions about the prices achievable by direct marketing of meat compared to sending livestock to a sales barn or major processor, we can estimate the extra revenue staying in Killarney because the abattoir gives producers an opportunity to direct market their livestock. These estimates are shown in the table below:

	Estimated direct market ($)	**Estimated sales barn or major processor ($)**	**Extra per head revenue direct marketed ($)**	**# head processed at Killarney Meats (2020)**	**total extra revenue staying in community ($)**
Beef **(1100 lb steer)**	2440-3050	1650 – 2200	200 – 1400	386	**77,200-540,000**
Pigs **(100 kg)**	627	194	400	336	**134,000**
Sheep **(light=72 lb heavy=102 lb)**	300-426	193-240	107-186	82	**8,800-15,000**
				Total:	**375,000-458,000**

Benefits from a local abattoir



For further research

Several themes emerged that were outside the scope of this project but where further investigation may identify possibilities to reduce barriers to local and regional meat production in the context of abattoirs:

- What can improve abattoirs and meat processing facilities' access to skilled, reliable labour?
- A comparison of the number of foodborne illness outbreaks in small - medium sized facilities or on-farm slaughter versus large abattoir facilities.
- Does the current risk from BSE still justify the SRM management requirements for provincially inspected abattoir facilities?

Further research on one or more of these themes may further the goals of the NFU livestock committee in supporting accessibility of local and regional abattoirs.

References

Alberta Beef. *Alberta beef producers recommended changes to the meat inspection regulations and the ability to sell meat from livestock slaughtered on the farm*. Accessed May 2021 from https://www.albertabeef.org/files/site-content/yDXJybHPZ7JQJ4uFOeW87MWcI9UcWKadJMMOhdUP.pdf

Babb, A., and Kennedy, E. 2012. *Mobile Slaughter Unit Feasibility Study. Newfoundland and Labrador*. Accessed online May 13, 2021 from https://www.gov.nl.ca/ffa/files/agrifoods-animals-livestock-pdf-slaughter-unit.pdf

Barter, H. 2013. *Mobile Abattoirs: Lessons from Quebec*. Sustain Ontario. Accessed May 13, 2021 from https://sustainontario.com/2013/04/21/mobile-abattoirs-lessons-from-quebec/

Barter, H. 2014. *Slaughterhouse Rules: Declining Abattoirs and the Politics of Food Safety Regulation in Ontario*. Masters Thesis, University of Toronto.

BEUC. 2015. Factsheet: *Meat decontamination*. Accessed June 2021 from https://www.beuc.eu/publications/beuc-x-2015-015_meat_decontamination_treatments_factsheet.pdf

Caldwell, W.; Pinkney, D.; Robson, D.; and Chalel, I;. 2014. *Mobile Processing: Opportunities in the Local Meat Sector*. A Report by the University of Guelph, School of Environmental Design and Rural Development. Accessed June 2021 from: http://www.waynecaldwell.ca/Projects/mobilefoodprocessingfacilities/Mobile%20Processing%20Report%20FINAL.pdf

Dittrich, D. Personal Communication. 2021. Provincial Meat and Dairy Inspection, Agriculture and Forestry Alberta.

Government of Canada. *European Union (EU) – Export requirements for meat and poultry products*. Accessed June 2021 from https://inspection.canada.ca/exporting-food-plants-or-animals/food-exports/requirements/eu-meat-and-poultry-products/eng/1367938786477/1367938835254

Government of Alberta. 2020, July. *Frequently asked questions: Meat Inspection Regulation*. Accessed June 2021 from: https://www.alberta.ca/assets/documents/af-meat-inspection-regulation-factsheet.pdf

Government of Alberta. 2020, July. *Meat Inspection Regulation Amendments*: Video Ante-Mortem Inspection. Accessed May 2021 from: https://open.alberta.ca/dataset/fbf7a40f-c04e-4db7-9b3f-9dab4b174ab9/resource/852fde6c-550e-4725-b00b-6ce0ad88a28d/download/af-video-ante-mortem-inspection-factsheet.pdf

Government of British Columbia. 2021, October. *Meat Inspection and Licensing*. Accessed November 2021 from: https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/food-safety/meat-inspection-licensing

Killarney. *Local business: Agriculture. Killarney Turtle Mountain*. Accessed May 25, 2021 from http://www.killarney.ca/p/agriculture

Langen, K. 2020, May 13. *Local abattoir sees surging demand for butchering and bulk buys*. The Guide. Accessed May 17, 2021 from http://killarneyguide.ca/2020/05/13/local-abattoir-sees-surging-demand-for-butchering-and-bulk-buys/?fbclid=IwAR03J84P4--baJ5ynueNdYRr4J6vzi_hVyQbfqTZgtvN2ieTgYYju5WWdBE

Lewis, R. 2020, October 1. *New slaughter regulations are a step forward*. Alberta Farmer Express. Accessed May 2021 from: https://www.albertafarmexpress.ca/livestock/beef-911-new-slaughter-regulations-are-a-step-forward/

Manitoba, N.D. *Introduction to Risk Analysis*. Accessed May 2021 from: https://www.gov.mb.ca/agriculture/food-safety/at-the-food-processor/intro-to-risk-analysis.html

Ontario, 2018, April. *Implementing Microbial Control Interventions on Beef and Veal in Provincially Licensed Plants*. Meat Inspection Program: Food Inspection Branch Infosheet. Ontario Ministry of Agriculture, Food and Rural Affairs. Accessed May 19, 2021 from http://www.omafra.gov.on.ca/english/food/inspection/meatinsp/infomicrobial.htm

Ontario. 2021, Feb 12. *Ministry of Agriculture, Food and Rural Affairs. Mandatory implementation of microbial control interventions on carcasses in provincially licensed abattoirs*. Accessed April 2021 from http://www.omafra.gov.on.ca/english/food/inspection/meatinsp/m-i-p-r/microbialcontrol.htm

Pinkney, D. 2014. *Mobile Abattoirs in the Context of Canadian Local Food System Development*: Niches and the Potential for Local Food System Resiliency. Masters Thesis.

Roberts, S. 2020, Dec 5. *The Swiss Cheese Model of Pandemic Defense*. The New York Times. Accessed May 2021 from https://www.nytimes.com/2020/12/05/health/coronavirus-swiss-cheese-infection-mackay.htm

Roy, W. and Mercier, J. 2019, April 3. *Un programme qui donne des ailes*. La Terre de Chez Nous Accessed May 12, 2021 from: https://www.laterre.ca/actualites/en-region/un-programme-qui-donne-des-ailes

Saskatchewan, 2008. *On-Premise Disposal and Treatment of Slaughterhouse Wastes*. Accessed June 2021 from http://www.saskh20.ca/PDF/EPB399A.pdf

Statistics Canada. *Table 32-10-0403-01 Farms Classified by Farm Type*. DOI: https://doi.org/10.25318/3210040301-eng

Sweetland, G. Personal Communication. June 2021.Director of Livestock Branch, New Brunswick Agriculture, Aquaculture and Fisheries.

Woodward, E.; 2011. *The Political Economy of meat regulation and the sustainability of alternative food networks*. Masters Thesis, Carleton University

Appendix: Main Acts and Regulations per province

Province	Legislation	Associated Regulation	Additional Codes/Guidelines
BC	Food Safety Act [SBC 2002] Chapter 28	Meat Inspection Regulation Reg. 349/2004 O.C.798/2004	Provincial Abattoirs Code of Practice (2018)
BC	Environmental Management Act [SBC 2003] Chapter 53	Environmental Management Act: Code of Practice for the Slaughter and Poultry Processing Industries B.C. Reg. 246/2007 M176/2007	
BC	Public Health Act (SBC 2008) Chapter 28	Food Premises Regulation B.C. Reg. 210/99	Guideline for Cutting and Wrapping of Uninspected Meat and Game in Approved Food Premises
BC (Proposed)		BC Small-Scale Meat Producers Association	
AB	Meat Inspection Act	Alberta Regulation Meat Inspection Regulation 42/2003	Meat Inspection Regulation: On-farm slaughter operation Technical Guide Nov 2020 Meat facility standards
SK	The Animal Products Act	The Meat Inspection (Saskatchewan) Regulations Chapter A-20.2 Reg 16	
SK	Public Health Act Amended 2019 Part V Regulations and Bylaws 46(1)(l)	The Food Safety Regulations Chapter P-37.1 Reg 12	Slaughter Plant Standards, October 2018 Government of Saskatchewan
MB	Public Health Act C.C.S.M. c. P210	Food and Food Handling Establishments Regulation: Regulation 339/88 R	Meat Hawkers Guideline
ON	Food Safety and Quality Act, 2001, S.0. 2001 c.20	Meat Regulation (O. Reg. 31/05)	Meat Plant Guidelines
ON	Health Protection and Promotion Act R.S.O. 1990, c. H.7.	Food Premises (O. Reg 493/17)	

Province	Legislation	Associated Regulation	Additional Codes/Guidelines
QC	Food Products Act / Règlement sur les aliments 1981, c.29, s. 1. c. 26, s. 1.	Regulation respecting food/Loi sur les produits alimentaires 1981 c. 29 a. 2000, c.26. a.1. (L.R.Q., c. P-29, s. 40	Guide Demande de Permis de Vente en Gros
QC	Chapter R-19.1 Act to regularize and provide for the development of local slaughterhouses		
NB	Public Health Act SNB 1998, c P-22.4	Abattoir Regulation, NB Reg 2009-140	
NB	Public Health Act SNB 1998, c P-22.4	Food Premises Regulation, NB Reg 2009-138	Abattoir Waste and Carcass Disposal Guidelines
NS	Meat Inspection Act 1996, c. 6, s. 1	Meat Inspection Regulations N.S. Reg. 46/90	https://novascotia.ca/sns/paal/agric/paal011.asp
NS	Health Protection Act S.N.S. 2004. c.4. O.I.C. 2005-458 Guide to the act	Food Safety Regulations N.S. Reg. 206/2005 amended March 2021	Nova Scotia Food Retail and Food Services Code
PEI	Public Health Act R.S.P.E.I. 1974. Cap P-30	Slaughter House Regulations	
NL	Meat Inspection Act RSNL 1990 Chapter M-2 (O.C. 96-302)	Meat Inspection Regulations 801/96	In-depth slaughterhouse inspection form