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Tragedy of the commons examples in canada

In February, a provincial news release about changes to agricultural crown advised that “The Manitoba government has launched a consultation focused on agricultural Crown lands, to ensure upcoming policy changes reflect the views of the livestock industry while improving fairness and transparency in the system [. . .]”. How will these changes affect the Community Pastures Program, part of what was the federal government’s Prairie Farm Rehabilitation Administration initiative? Referred to as “Canada’s greatest success story” – the program started in 1935 to deal with the devastation the Dust Bowl brought to the southern prairies. It included initiatives to deal with erosion, water access, irrigation and grass management through the Community Pastures Programs. These pastures are found in Alberta, Saskatchewan and Manitoba and cover over 2 million acres in total. This program gave farmers and ranchers access to valuable public land which benefitted from the cattle’s natural grazing behaviour. Pasture managers were trained in soil and water conservation and native plant management and understood the crucial role these processes play in protecting the endangered species that live on these ancient ecosystems. As reported in the Globb and Mail: As rare and ecologically important as coastal old-growth forest, the PFRA grasslands are listed by the World Commission on Protected Areas (WCPA) as lands that Canada has made a commitment to protect. The Harper government axed the program in 2012, and control of the pastures was ceded to Saskatchewan and Manitoba (Alberta’s were always under provincial control). Although Saskatchewan’s Agricultural Minister claimed in 2013 that there would be a requirement that the pastures would have to remain whole (no cultivation; no drainage), many were worried about a lack of regulation and enforcement of these stipulations. Manitoba’s 400,000 acres fell under the control of the provincial government which continued renting them out to patrons under the management of a non-profit organization – the Association of Manitoba Community Pastures (AMCP). Trained pasture managers stayed on staff with the AMCP. The NDP government of the day agreed to support the program, understanding that the pastures help the province fight climate change and protect biodiversity. It pledged over a million dollars to the project. In order to understand the current government’s commitment to ‘modernize’ the program, we have to unpack a couple of the purported improvements highlighted in the consultation backgrounder. The first one concerns “facilitating interprovincial trade, and complying with the principles of the New West Trade Partnership Agreement and the Canadian Free Trade Agreement” (CFTA). Manitoba signed on to the New West Trade Partnership Agreement soon after the Pallister government took power. Although the agreement ostensibly lowers trade barriers between the provinces, critics argue that such barriers are few and far-between and that its primary purpose is to streamline industry, labour and environmental regulations to the lowest possible denominator. The CFTA came into effect in July, 2017, also with the promise to harmonize regulations across the country, and with international trade agreements like the Comprehensive Economic Trade Agreement (CETA) with the European Union. Agreements like CETA are notoriously pro-business to the detriment of environmental protection and the interests of dairy and poultry producers. In the case of the community pastures, regulatory harmonization is a real problem. Saskatchewan recently completely abandoned its community pasture program, stating that “We don’t believe that looking after privately owned cattle is a core function of government”. This statement from Saskatchewan’s Agriculture Minister demonstrates a lack of understanding of the full purpose of the program, adding to what seems to be a long running disregard for the prairie ecosystem. A blog by prairie naturalist Trevor Harriet explains that “the Saskatchewan party has sold 1.1M acres of crown lands in the prairie ecozone”. It is not clear how the pastures will be regulated once the province has fully withdrawn. Talking to Manitoba cattle producers who support the current program revealed that concerns go beyond the loss of environmental stewardship. The stated goal of “removing the previous requirement that applicants had to be Manitoba residents” opens up the possibility that cattle will be shipped in from other provinces, then shipped home for processing, leaving no economic value added for Manitoba. Changes will also remove the advantage currently given to younger Manitoba producers who need access to crown lands to build their herds. The modified application process will favour the wealthiest producers who can put in the highest bid, allowing out-of-province producers with deep pockets to elbow out younger producers of more modest means. There are concerns that the desire to “modernize” the program will result in more intensive cattle production that is controlled by big business, and that small producers will fall victim to corporate farming the same way other agricultural producers have. Finally, these changes fly in the face of economic reasoning. Cattle over-production is causing prices to fall, but the province is ushering in changes so cattle production can expand. And such expansion could put pressure on less agriculturally productive areas such as marsh and/or scrub land that needs to be protected so it can continue providing important environmental services. Many worry that changes to the Community Pastures Program will be a variation of a familiar theme: the tragedy of the commons. That becomes clear in reading the March 2018 report by the International Institute for Sustainable Development, which concluded that: Community Pastures were a policy response in a time of crisis. The pastures provide patrons with tangible benefits to their operations, yet the sustainable management practices used have provided benefits to the wider society. Some of these benefits are only now becoming valued by society through policy. carbon sequestration, for example, was until recently a benefit without clear value, yet in the near future the mitigation potential of pastures and other uncultivated landscapes could reach a broader audience and inform understanding of the complete value of these places (28). Climate change and species extinction represent the greatest crises facing us today. Hopefully Manitoba’s government will show more leadership than Saskatchewan’s, and protect these lands for future generations. First posited in 1968 by American ecologist Garret Hardin, the Tragedy of the Commons describes a situation where shared environmental resources are overused and exploited, and eventually depleted, posing risks to everyone involved. Hardin argues that to prevent this, there should be some restrictions to the amount of usage, for example, property rights must be affixed. — What is the Tragedy of the Commons? The definition of the Tragedy of the Commons is an economic and environmental science problem where individuals have access to a shared resource and act in their own interest, at the expense of other individuals. This can result in overconsumption, underinvestment, and depletion of resources. Garrett Hardin, an evolutionary biologist, wrote a paper called “The Tragedy of the Commons” in the journal Science in 1968. In summary of the Hardin paper, the Tragedy of the Commons addressed the growing concern of overpopulation, and Hardin used an example of sheep grazing land when describing the adverse effects of overpopulation. In this case, grazing lands held as private property will see their use limited by the prudence of the land holder in order to preserve the value of the land and health of the herd. Grazing lands held in common will become over-saturated with livestock because the food the animals consume is shared among all herdsmen. Hardin argues that individual short-term interest– to take as much of a resource as possible – is in opposition to societal good. If everyone was to act on this individual interest, the situation would worsen for society as a whole– demand for a shared resource would overshadow the supply, and the resource would eventually become entirely unavailable. Conversely, exercising restraint would yield benefits for all in the long-term, as the shared resource would remain available. Tragedy of the Commons Examples Arguably the best examples of Tragedy of the Commons occur in situations that lead to environmental degradation. Among many things, pollution is caused by wastewater. As the number of households and companies increase and dump their waste into the water, the water loses its ability to clean itself. This results in water that is toxic to wildlife and the people that live around and rely on it. Overfishing Another example of the Tragedy of the Commons lies in overfishing. In Canada, the Grand Banks fishery off the coast of Newfoundland was a means of livelihood for regional fishermen. Abundant in cod, the fishery allowed fishermen to catch as many cod as they desired without negatively impacting their population. Then, in the 1960s, advancements in technology allowed fishermen to catch vast quantities of cod, far more than before. However, with each passing season, the amount of cod deteriorated and by the 1990s, the fishing industry in the region collapsed because there wasn’t enough fish to go around. This situation where individual fishermen took advantage of opportunities to benefit themselves in the short term, even when their actions were clearly detrimental to society in the long term, encapsulates the self-preserving mindset behind the Tragedy of the Commons. These fishermen thought logically, but not collectively, which led to their downfall. COVID-19 The Tragedy of the Commons can also be applied to the COVID-19 pandemic. In its early days, people were generally wary of mixing with anyone outside their immediate family, leaving their homes less and working from home. However, another result of the pandemic was that people began to stock up on food and utilities. People likely assumed that everyone else would stock up as well and so the only solution was to preempt this scenario and stockpile food before the next person could. Again, people were thinking logically, but not collectively, and herein lies the relevance of the Tragedy of the Commons. Individuals took advantage of opportunities that benefited themselves, but spread out the harmful effects of their consumption across society. Retailers responded by imposing restrictions on the number of items one could buy, but it was too late. Entire grocery aisles were empty, wiped clean. You might also like: Carbon Tax: A Shared Global Responsibility For Carbon Emissions What About the Environment? Shared resources that mitigate the impacts of the climate crisis are abused constantly. No single authority can pass laws that protect the entire ocean. Each country can only manage and protect the ocean resources along its coastlines, leaving the shared common space beyond any particular jurisdiction vulnerable to pollution. This has led to obscene amounts of ocean pollution, as seen in garbage patches that accumulate in the centre of circular currents, for example. This will affect everyone as these pollutants cycle through the marine food chain, and then humans as we consume fish. Another problem facing the oceans are dead zones, areas in lakes and oceans where no marine life can live because of the lack of oxygen caused by excessive pollution and fertiliser runoff. The atmosphere is another resource being used and abused, as are forests. Unregulated and illegal logging pose great risks to forests’ ability to store carbon. In some parts of the world, vast expanses of rainforests aren’t governed in a way that allows effective management for resource extraction. Timber producers are driven to take as much timber as possible as cheaply as possible, without considering the wider impacts of doing so. Poor governance exacerbates the problem of the Tragedy of the Commons. Who is Meant to Fix It? Ideally, governments at the local, state, national and international levels would define and manage shared resources. However, there are problems with this. Management inside clear boundaries is quite straightforward, but more problematic are resources shared across jurisdictions. For example, at the international level, states are not bound by a common authority and may view restrictions on resource extraction as a threat to their sovereignty. Additionally, more difficulties arise when resources cannot be divided, such as in whale treaties when the fishing of the whales’ food source is separately regulated. Economist Scott Barrett at Columbia University in New York says that international law “has no teeth, so treaties are essentially voluntary. “Even when countries decide to take part in collective conservation efforts, they can simply pull out again when they want to,” as Canada did in 2011 when it pulled out of the Kyoto Protocol and when America withdrew from the Paris Agreement in late 2019 – though they rejoined shortly in the following year by the Biden Administration. As the global population increases and demand for resources follows, the downsides of the Commons become more apparent. Some may argue that this will test the role and practicality of nation-states, leading to a redefinition of international governance. Further, it may lead some to question the role of supranational governments, such as the UN or the World Trade Organization; as resources become more limited, some may argue that managing the commons may not have a solution at all. What Can Be Done? A potential solution to this is to affix property rights to public spaces. For example, charging a toll to use a freeway or implementing a tax for dumping wastewater would reduce the number of users to those who act in the best interests of others, not only themselves. Other solutions could include government intervention or developing strategies to trigger collective behaviour, such as assigning small groups in a community a plot of land to look after. Overall, regulating consumption and use can reduce over-consumption and government investment in conservation and renewal of the resource can help prevent its depletion. Featured image by: Matteo da Mayda

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