Manitoba’s Pork Powerhouse: Is it Sustainable?

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Paper submitted to the Manitoba Clean Environment Commission with respect to its Investigation into Hog Production in Manitoba.

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I would like to submit the following paper to the Manitoba Clean Environment Commission with respect to its investigation into hog production in Manitoba. My thesis, based on more than five years of research into the growth of Manitoba’s intensive livestock industry, is that it is no longer sustainable. Manitoba’s emergence as a pork powerhouse has polarized many of our rural communities around social and environmental issues, with no obvious solutions in sight. I am concerned that this investigation of the hog industry, similar to previous investigations of the same industry, will stress harm reduction and mitigation of negative effects, rather than question the benefits of tolerating intensive hog production on such an enormous scale. It is the latter question that this Commission, and Manitoba’s citizens, should address.

There is a history of public inquiries examining the environmental impact of Manitoba’s hog industry. As early as 1979, the Manitoba Clean Environment Commission, after conducting hearings at a number of sites in the province, issued a report on intensive livestock operations (ILO’s). At that time, odour problems were the main driver of public debate. In 1994, the Manitoba Pork Study Committee investigated the industry, but the report largely subordinated environmental problems to economic development priorities. By the twenty-first century, however, a tectonic shift had occurred in public perceptions of the ecological effects of ILO’s. The Walkerton tragedy had made us forcefully aware that water contamination, and human health concerns generally, trumped odour as an overriding issue. There was a growing focus on the fact that livestock production contributes heavily to land and water degradation, greenhouse gas emissions, and, ultimately, global warming. Words like “sustainability” and “sustainable development” had become established in the official lexicon, and were liberally sprinkled in
government reports and policy documents.

The Manitoba Government responded to the changed situation by creating the Livestock Stewardship Initiative in 2000. The intent, outlined in a series of recommendationsiv, was to achieve a consensus among the various stakeholders in the livestock industry: producers, environmentalists, rural municipalities, affected citizens, and the provincial government itself, through its overlapping jurisdictions. The long term objective was to establish Manitoba’s hog industry on a sustainable basis. Perhaps the most immediate result was a greater level of provincial government regulation of the hog industry. This included the Lake Winnipeg Action Plan and the Water Protection Act in 2003, the 2004 amendments to the Livestock Manure and Mortalities Management Regulation, and the 2005 Planning Act, which created a more uniform approval process for ILO’s. In 2006, Manitoba Conservation published a report v based, in part, on the recommendations of the Clean Environment Commission regarding the expansion of the huge Maple Leaf pork slaughterhouse in Brandon. Most recently, in 2007, the Clean Environment Commission has begun a new investigation into hog production in Manitoba with public hearings scheduled at a number of sites in the province.

This flurry of regulatory, informational, and fact gathering activities, while laudatory, is unlikely to lead us to a sustainable hog industry in Manitoba, in either a social or an environmental sense. Conflicts over the social and environmental effects of the industry are deeply rooted, and will not go away just because the regulatory process is changed, or a new series of public hearings is scheduled. The environmental problems of air, water, and soil quality, as well as greenhouse gas
emissions, are extremely serious and inherent in intensive livestock production. Conflicts which may appear to be addressed in one political venue, or one inquiry, will likely re-emerge with equal or greater intensity in others.

The seriousness and intensity of the conflicts over ILO’s are due to four major factors.

1. The first and most obvious factor is the increase in the size and scale of the industry. Over the past 30 years, Manitoba had the greatest increase in hog production of any province in the country. Pig production grew seven-fold to over 7 million in 2005. The livestock sector increasingly dominates the farm economy, eclipsing grains and oilseeds. Manitoba vies with Quebec in having the most industrialized pork sector in Canada. This means the largest farms, the most vertical integration, the highest average number of pigs per farm, and the biggest and most concentrated meatpacking operations. The flip side of this growth has been a steep decline in the number of small hog producers remaining in business. Hog industry expansion has produced winners and losers. The winners have been the larger producers along with the corporate suppliers, integrators and processors with whom they are allied. The losers have been the literally thousands of smaller producers forced out of the market over the past twenty years. Rural communities have felt the pressures coming from both the beneficiaries and the losers.

A related problem has been the horizontal migration of the hog industry from its core in southeastern Manitoba to new agricultural regions in search of fresh fields on which to raise pigs and spread manure. The southeastern and south-central regions are highly saturated in terms of hog density. Much of the expansion has shifted to the western part of the province within easy
shipping distance of the Brandon plant. Although many areas in Western Manitoba remain primarily agricultural, grain and cattle, rather than hogs, have been the leading products. The introduction of intensive hog operations into communities where, until recently, other farming practices have predominated is potentially an important source of social conflict.

2. Intensive hog operations produce negative externalities (social and environmental costs) which have become increasingly visible to the general public. Until recently, the greatest source of public opposition to large hog barns was the powerful and offensive odours they generated. The modern concentrated hog industry could place the pigs out of sight in confinement structures, but not out of mind. The millions of gallons of raw sewage, equivalent to a small city, produced by big hog barns and stored in tanks or pits, and spread on fields, made their presence felt, and lowered the quality of life, in many rural municipalities. In the past, most hog barn opponents cited odour as the primary concern. No longer. Although odour remains an important factor in mobilizing opposition, today, and especially post-Walkerton, water quality, the environment, and human health issues are paramount. This shift in public attitudes from more subjective concerns about odour to direct and focused fears about water, the environment, and health, has been confirmed in a number of public opinion surveys.\textsuperscript{xii} These new concerns, in response to clear evidence of the threat to the eco-system, have proven very difficult for politicians to ignore. Communities wishing to protect their health and quality of life have every reason to be worried about the potential threat from ILO’s.

3. The history of the hog industry in Manitoba, as in most other provinces, has largely been one
of weak or inadequate regulation, more attuned to promoting economic expansion than to protecting the public interest. A guiding principle of public policy towards the hog industry has been the notion of the right to farm\textsuperscript{xii}, which upholds the right of the property owner to manage property in the way he/she sees fit and, not be subject to nuisance lawsuits or burdensome regulation. The Farm Practices Protection Act which protects farm-owners from lawsuits, but does establish mediation in disputes about odours and other nuisances, is a legacy of this policy. In addition, the tendency to prefer voluntary guidelines over enforceable legislation, and the reluctance to vigorously enforce regulations that are enacted, are also legacies of the right to farm principle. Right to farm has proven wholly inadequate for the governance of an industry of the size and scale of Manitoba’s pork sector. An approach based on laissez faire and deregulation will not work. Political conflicts have only intensified due to the rapid and largely unregulated expansion of this industry in many communities across the province.

4. Finally, the geographic spread of hog barns throughout rural Manitoba, combined with inadequate provincial regulation, has led to the offloading of much of the responsibility for livestock industry governance onto the rural municipalities. Manitoba, like many other provinces, established a dual track regulatory system in which provincial responsibility for environmental regulation was shared with the municipalities who were authorized, under the Planning Act, to develop plans, pass bylaws, hold land use hearings, and issue permits. In practice, this has meant that the extremely contentious issue of what hog barns would be built and where was usually decided at the municipal level. Conditional land use hearings often featured high stakes showdowns between hog barn promoters and opponents. Many rural
municipalities were faced with a highly polarized political process in which the two sides ceaselessly maneuvered for tactical advantage. Community solidarity has suffered from conflicts which have pitted neighbour against neighbour, farmer against farmer, and even family member against family member. Bill 33 has been an attempt to better balance the responsibility for the hog barn siting and assessment process, but the rural municipalities continue to bear the brunt of political and social conflicts generated by the expansion of the intensive livestock sector.

**Community Polarization**

The social and political conflicts associated with the expansion of the hog sector will now be examined in more detail. In 1982, at the start of Manitoba’s hog boom, few of the province’s towns, villages and rural municipalities practised development planning. In that year 33 of 201 municipalities reported full or partial development plans while only eight reported zoning bylaws, the most powerful tool for regulating land use. Today, reflecting in large part the imperatives of ILO expansion, over 80% of municipalities are involved in some form of development planning. Not only were Manitoba’s rural communities lacking the legal authority to control the hog industry, they also lacked the cultural authority. There is virtually no history of local regulation of agricultural land use in Manitoba. Producers were expected to engage in good stewardship. In 1979, the Manitoba Clean Environment Commission commented, “In the past the intensity of livestock production operations was usually limited by the ability of the land to produce feed and forage”. Few normative mechanisms existed to control the behaviour of factory farms which not only produced huge concentrations of manure,
but which also reaped an economic benefit from spreading it as close as possible to its point of origin. With the decline of traditional mixed farming, big livestock operations became the major investment opportunity in the local economy. Allied industries such as feed mills, construction and trucking all hoped to benefit. Local governments saw a means of reversing declines in population, employment and tax revenues.

Social conflicts associated with the construction of large hog barns erupted in the Interlake during the 1990's. The region, which lies directly north of Winnipeg, was smoothed out by glaciers and is low lying, flat, and flood prone. Water tables are high and the land surface is varied ranging from hard clay to marshland. The population is largely rural, and fishing, mixed farming, and tourism remain important pillars of the regional economy. Although hogs and cattle have long been raised in the Interlake, intensive factory farming played little role in the region’s economy until the early 1990's. The bulk of Manitoba’s hog industry has been concentrated in the southeast and southcentral sections of the province. Intensive livestock operations require extensive amounts of land which can adequately absorb the nutrients from manure. Residential developments, restrictive municipal bylaws and environmental opposition eventually led to a scarcity of land available for manure spreading in the ILO saturated areas and hog barn promoters looked elsewhere. The Interlake beckoned with its supply of relatively inexpensive land and fresh water.

In 1993, Puratone, one of Manitoba’s largest corporate hog producers, proposed a 2000 sow barn expandable to a 4000 sow three site operation in the Interlake municipality of Armstrong. The
site was adjacent to two other municipalities, Bifrost and Gimli. Furthermore, the site was beside a creek which flowed through Bifrost and Gimli to drain into Lake Winnipeg, six miles away. Interviews with provincial government officials and community activists involved in assessing the proposal revealed significant concerns. Since the storage system would have the capacity to hold 4 million gallons of untreated hog waste, water quality was the primary issue. Although three jurisdictions were affected, only one, Armstrong, had the authority to decide thus effectively splitting the opposition. At the time, Armstrong had no bylaws to control land use. No bylaws mean no requirement for a public meeting for a conditional land use application. Instead, informational meetings were conducted by representatives of the company and provincial government officials to convince local people that they would benefit. Higher prices for feed grain, loads of manure for fertilizer, and higher municipal revenues were promised as rewards.

Town council approved the proposal. However, grassroots opposition quickly mobilized. Opposition groups such as the Bifrost Ratepayers Association and Interlake Citizens for a Clean Environment were formed and picketing got underway outside the municipal office. The media started to cover the protests. Tempers flared during one protest and the RCMP was called in to restore calm. Under public pressure the council reversed itself and rejected the hog barn application. The company wrote to the municipality and threatened to sue, arguing that without bylaws they had no legal basis to deny the permit. Construction commenced but the controversy was not ended. The partially completed structure mysteriously burned to the ground. Another time the barn sight was shot up and a security guard beaten. It was eventually completed but
problems continued. The irrigation gun equipment jammed, and flooded fields with manure. One local resident commented that “the sewage looked like lakes from the air”. Gimli, which has a large lakefront and recreational industry, imposed restrictions on livestock operations and manure spreading but Bifrost and Armstrong continued to encourage hog barns.

Controversy spread to other regions of the province as the industry grew. In 2000 a record 52 proposals for new or expanded ILOs totalling 35,642 AU and worth over $200 million were put forward.\textsuperscript{xvi} The previous record was 40 proposals of 21,596 AU in 1998. Since most hogs are produced in southeastern and southcentral Manitoba where land use and water quality concerns are slowing further growth,\textsuperscript{xvii} much of the expansion has now shifted to southwestern Manitoba, a heavily agricultural area where grain and cattle, rather than hog farming, are dominant. In 2000, for example, the southwest region received 20 of the 52 proposals totalling 8692 AU.\textsuperscript{xviii} In 1995 it received only one proposal for 112 AU. Many of these proposals, especially those by corporate operators, have been vigorously contested. Plans by Premium Pork, an Ontario based corporate producer and one of Canada’s largest, to build up to 10 big farrowing and feeder barns in the southwestern communities of Hamiota, Shoal Lake and Strathclair aroused strong opposition from local cattle and grain farmers. Perhaps the most bitter divisions occurred over the company’s proposal for two 2500 sow barns in the municipality of Rossburn. The approval was granted, then rescinded, in a series of unruly meetings in which the RCMP, and later private security guards, provided public safety. Afterwards, local clergy appealed for calm.
Canmark Family Farms, controlled by Danish investors, received a provincial waiver from foreign-ownership restrictions on farmland, and had been trying to construct hog factories in communities without land use bylaws. In Shell River, along Manitoba’s border with Saskatchewan, their plan to construct a 3000 sow farrowing barn plus feeder barns and feed mills has been resisted by a group called Citizens Against Factory Farming, which succeeded in getting the town to approve a temporary moratorium on factory farms pending the approval of bylaws. One town has introduced restrictions on liquid manure storage facilities which go far beyond provincial regulations, while another town approved a plebiscite limiting confined livestock operations to 400 head. Although more proposals are accepted than rejected, opposition is growing. In 2000, about a third of the 23 hog barn proposals in southeastern Manitoba were rejected, withdrawn or tabled. In the southwestern region, nine of 20 proposals were approved while the rest were either rejected, tabled, or pending.\textsuperscript{xix}

The delegation of responsibility for decisions on siting hog barns to the rural municipalities has polarized the local decision making process. Not only was there local pressure in favour of development but, equally important, grassroots opposition quickly mobilized. Grassroots activism has grown rapidly in the regulatory vacuum in which factory farms have multiplied, unconstrained by existing legal and political institutions. The intensity of hog barn disputes is indicative of the uncertain and often contradictory outcomes of a major environmental issue which is fought out community by community. These conflicts are often constructed as zero sum, directly pitting economic beneficiaries against environmental victims, and polarizing rural communities.\textsuperscript{xx} According to interviews, many producers believe that hog barns offer the only
reasonable chance of surviving economically under highly competitive conditions. Opponents, on the other hand, believe that they will suffer the environmental impact of other people’s success. Conflict is further intensified by the new focus on water quality--and, by implication, human health--rather than odour, as the greatest perceived environmental impact of factory farms.

A woman from southeastern Manitoba where hog barns are numerous stated, “I have nothing against pig farms in general but remember-- our children have to drink the water”. An activist from Western Manitoba reflected the view common among hog barn opponents that provincial environmental standards are weak: “Who cares if a hog factory meets so-called provincial standards -- I still don’t want them in our community”. One observer of the industry commented, “Rural municipalities shouldn’t be left on their own to okay hog operations as they often don’t have the resources to analyse complicated environmental and technical data”.

Ironically, the hog industry has also grown disillusioned with a process which it views as uncertain, conflict-ridden, and subject to the vagaries of municipal politics. Conditional land use hearings require public meetings where industry representatives are often subject to criticism, sometimes strident and angry, when environmental or public health issues are in dispute. Many proposals have been defeated or delayed. A representative from Elite Swine, a dominant player in the supply chain, asserted that municipal land use hearings should “stick to facts... and guarantee that if proponents meet all guidelines then their permit should be issued”. The chairman of the Manitoba Pork Council, the leading industry lobby group, has complained,
“Local politics sometimes ignores the merits of an application and pays more attention to public pressure”. The industry, too, wants the province to impose uniform standards, just not as high as those advocated by their environmental opponents. The desire for greater provincial involvement is echoed by many municipal councillors themselves. “It’s just too complex, we need more help”, stated the mayor of one rural municipality which has experienced significant controversy over hog barn proposals. There is no easy solution, however. Efforts to impose more provincial standardization over the hog barn approval process, as in Alberta, have been opposed in many communities that fear local concerns and conditions will be ignored.

Conclusions

Over the past 30 years, Manitoba has indeed become a pork powerhouse. It is the third largest pork producer in Canada, and one of the largest in North America. The provincial government has aided the industry through regulatory and land use policies, and has presented its growth as a Manitoba success story. The Manitoba story is not unique, however. Other parts of North America, and the industrial world, have also experienced exponential growth in the hog sector. Three of the best known examples are Quebec, North Carolina, and the Netherlands. None of these areas would now consider their experience to be a success story. In all three cases, public attitudes shifted against the hog industry. Citizens became aware that the environmental and social costs of intensive pork production clearly outweighed the claimed economic benefits. They pressured their respective governments to slow down, or even reverse, the growth of the hog industry through tougher regulations, moratoria, and, in the case of the Netherlands, subsidies to take land out of swine raising. Manitobans, worried about nutrient overload and
eutrophication of Lake Winnipeg and the Red River Basin, should carefully consider these examples. Our goal should not be further growth of a regulated intensive hog industry, but rather its downsizing and decommissioning, in the interest of environmental sustainability.

If we do not begin to plan now for the eventual downsizing of the intensive hog industry, economics will do it for us, but in an environmentally unsustainable manner. Consider the history of Canadian resource industries. They have gone through cycles of boom and bust; rapid expansion and equally rapid collapse, with social and environmental ruin their bequest. The Canadian Shield is dotted with abandoned mine and mill operations, leaving behind holes in the ground, clear cut forests, and dump sites, their toxins contaminating the environment for decades. The East Coast cod fishery, at one time the richest in the world, is no more, turning thousands of men from that region into migratory Trailer Park Boys. Is it so hard to imagine a future Manitoba landscape desolate with abandoned hog barns and cess pits; the liquid manure, with all its nutrients and toxins, leaching into the soil and water? Is this the kind of future we envision for rural Manitoba, one that is based on an unsustainable industry that will fail to support stable communities with a decent quality of life? Or do we take the plunge in favour of sustainable agriculture, which promotes diversified production rather than industrial monocultures, and which acts as steward, rather than exploiter, of soil, water, and living plants and animals. This, rather than more regulations here, or more inquiries there, is the choice that Manitobans who care about their future ought to be considering.
The debate on hog density has to do with how many hogs and potentially how much manure are produced in a given area. While Manitoba has about 13 million acres under cultivation, more than half the hogs are produced in three agricultural zones comprising about 3
million acres.


xiv. Ibid.


xvii. Certain communities in southeastern Manitoba which are among the largest hog producers, such as St. Anne and La Broquerie, have seen significant declines in their farm population and increases in their non-farm population. This may be a factor in growing resistance to further hog barn expansion. However, the concentration of big livestock operations in these communities, in dairy and poultry as well as hogs, could be a factor causing the farm population to decline.

xviii. Technical Review Reports.

xix. Ibid.


xxi. A longstanding point of contention between environmentalists and the hog industry is the demand by environmentalists to lower the threshold level under which farms would come under provincial inspection and regulation from the current 400 AU to 300 AU. This would bring more farms under regulatory control and has been opposed by hog producers.

xxii. Manitoba Agriculture, Food and Rural Initiatives 2006 Pork in Manitoba.