

Saskatchewan's Cow-Calf Production Sector

**The Historical Development Resulting in
Current Labour Shortages and Lack of Labour Mobility**

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I Introduction

I introduce this subject first on a personal level. I have owned and operated a mixed farming operation with my husband, Clayton, for twenty years. Clayton has been personally involved in family farming for his entire life. Our current crop rotation involves wheat, durum, oats, canola, peas, lentils and flax grown on approximately 3,000 acres. We also breed 125 head of beef cattle in a herd of predominately black, red Angus and tan mix, bred to black Angus bulls.

Due to my personal hands-on involvement in not only the day-to-day operation of both an arable and a livestock farming operation, coupled with my personal interest in the marketing of its commodities, and in the sustainability of its growth, I have identified several areas that overlap and interact to constrain livestock production, particularly in Saskatchewan, and in Canada in general.

When regulating the daily performance of a livestock facility, in particular that of a private cow-calf operation, the absence of or the inability to access one factor of production to an extent that is helpful to business expansion, rather than detrimental to it, can be catastrophic – not only to the overall maintenance of the business, but also to any potential for future expansion and realized gains. By this I refer specifically to the absence in the livestock sector – the personally owned cow-calf production sector – of the ability to access labour that is skilled to the handling and production of large livestock.

The factors of production include land, capital, entrepreneurship (innovation) and labour. The difficulty that is currently experienced in the Canadian livestock industry and, in particular, within the Saskatchewan cow-calf sector, is the deficiency in labour skilled to its use, the experience and skill level that has been lost in the domestic market, and its lack of replacement by foreign temporary and immigrant labour due to the inability of federal government policy to recognize this need and to keep up with the demand for it.

It is my belief that the cow-calf production sector on the Western Canadian Prairies has developed in such a historical way, that it has gained reputation as being that of requiring either unskilled labour or labour that can be mobilized easily from other sectors. In conjunction with this misconception, came historical rural-to-urban migration, and a resulting loss of skill that was developed over the course of generations and was not easily replaced due to a lack of concerted effort or a recognition of its need. Knowledge and skill were lost in a very distinct labour market in this country and no plan was ever developed to account for or to replace this loss.

Thesis Statement: Canada, and specifically Saskatchewan's, cow-calf production sector has developed in such a manner that:

- (1) There is commonly held public and government misconception that unskilled labour is sufficient to meet the sector's demands and needs;
- (2) There is severe shortage in the skilled labour needs demanded by the sector that can be fulfilled domestically;
- (3) The labour needs of the sector cannot adequately respond to mobility within the short-run or the medium-run; and
- (4) The Canadian immigration and foreign worker policies have not responded to or developed in a manner that is sufficient to the needs and demands of the sector.

The above-stated issues have negatively impacted the cow-calf production sector in its ability to develop and compete in domestic and international markets.

II Literature Review

Cattle first began to be imported to Canada in the eighteenth century in response to the dietary needs of the fur traders and in the hope that the addition of cattle would inspire agricultural settlements. This was, by far, an unsuccessful enterprise in its inception due to the incredibly harsh conditions of the Territories. Cattle were often left to fend for themselves for food as well as for water. There was little or no endeavour made to provide for a cultivated and dried food supply to winter the beef cattle through the harsh conditions. This meant that for a great period of Canada's early history, beef cattle production was virtually non-existent.

This early development of the cow-calf sector in Canada is diametrically different to the way in which similar industries during comparable periods developed in the United States. In the southern US (and even in the moderate mid-states), cattle have always been able to graze freely and independently throughout the year, negating the need for any type of development of large-scale winter feed production, feed storage, or bedding materials. Due to the necessities of these materials and their production for winter survival, the only cattle that were adequately provided for in Canada during this period, were a minimal number of dairy cows. On-farm hog and poultry production were much more common during the time. Hogs are well-equipped to forage for themselves, require little in terms of bedding materials, and are able to survive on a great deal of household waste products. Poultry requires little in terms of feed and can be housed safely with very little effort.

In Canada, environmental conditions were such that all available factors of production – land, capital, innovation, and especially labour – had to be conserved and used wisely only for the sustenance of human life. Therefore, to “waste” land or labour on the production of beef cattle was

deemed unnecessary when hogs and chickens could provide the necessary protein without such significant outlays. This was seen as a better use of what were scarce factors at the time. It is also interesting to note that the development of arable grain land in the Western Canadian Prairies was as a direct result of this “best use” of labour as well. This was due to the fact that because the land required such huge outlays of labour in order to clear, break, cultivate, and maintain it, to then utilize both the land and labour additionally for the production of hay and straw in winter feeding months, amounted to essentially “twice” the amount of work without a corresponding gain to human survival and well-being.

It needs to be remembered that the “huge investment of labour could only be repaid if the resulting fields were cropped intensively. Pasture and forage are relatively extensive land uses (they generate low returns per unit of land area).” Thus, “Canadian Cattle producers could not compete with the lower priced cattle from the superb grazing lands of the American Midwest” (MacLachlan, 1996, p. 4). Up until the mid 1800's, cattle production did not develop with any regularity in Canada. At the time, wheat production was actually profitable relative to its investment into land, capital, and labour, so that there was little motivation for livestock diversification. Coupled to that, is the fact that American beef was imported at a much cheaper price and that market disruption and low Canadian cattle prices were often the results of this inexpensive glut of American beef being dumped into the arena.

It is my belief that this underdeveloped market of the time has also led to a continued exacerbation of land that is not used to its best purpose or for its most useful intent – i.e. “forcing” land to be used for grain production when it would be better suited now for livestock production. This is not only a production discrepancy, but one that is perpetuated by developed cultural norms.

It is also interesting though to consider that “the most distinctive trait of cattle husbandry in seventeenth and eighteenth century Eastern Canada was benign neglect” and that “this minimalist attitude of the eighteenth century colonials towards animal husbandry persists to the present day among calf producers” (MacLachlan, 1996, p.3). This attitude still holds true for cow-calf producers because we still breed for self-reliance, survival, and herding and maternal instincts. That says much for not only the breeding and husbandry knowledge that is required by all members of a production team, but also for the handling skill and knowledge needed – animal survival and herding instincts can be inherently difficult and wild aspects to manage safely with such large animals.

Beginning in 1860, the cattle numbers in the American West went from virtually zero to well over 300,000 head in Montana and the Dakota Territory alone. This attracted British risk capital that began to view North American ranching as a new type of “gold rush.” The holdings in the American West became larger and were dominated by a small number of privately controlled large corporation-like ranches. This cycle peaked in the early 1880s and was instrumental in driving up the price of land considerably. As these land prices on the American Plains rose, ranchers there finally began to show interest in the relatively understocked Canadian Prairies. The Americans began to control a great deal of the grazing leases on the Canadian Prairies, but they brought with them the Anglo-Texan system of ranching which included deficient breeds, complacency regarding winter cattle husbandry, and less intense labour methods. This system of cattle husbandry held and maintained market gains until the catastrophic winter of 1886-87 decimated the herds.

Cattle again boomed in Western Canada from 1902 to 1906 when American ranchers were retreating from an influx of arable land farmers. “The number of cattle in the North West Territories more than doubled from 700,000 in 1901 to 1.5 million in 1906 in the new provinces of Alberta and

Saskatchewan” (MacLachlan, 1996, p. 18) and again, their poor quality cattle were destroyed by the abnormally harsh winter of 1906-07. It has to always be respected that, not only is livestock production of a cyclical nature in Western Canada due to the market and policy fluctuations that are inherent everywhere, but also as a response to harsh and inhospitable conditions, the likes of which are seen in few other areas of the world. This too, plays a key role in how the labour and skill requirements of the cow-calf sector developed in Western Canada – it is necessary to have in-depth breeding knowledge in order to produce genetical satisfactory animals that will not only survive, but also thrive, in abnormally harsh environments.

Canadian cow-calf producers who stayed in business following these two periods of large die-offs, did so by altering the lineage of their cattle blood lines with Hereford breeding stock from Britain. The additional cost that was invested in the upgrade to livestock quality was capital that needed to be offset by better winter-feeding and husbandry. These changes also necessitated a change to knowledge and skill level. “The ranchers who stayed in business after 1906 had actually developed many of the traits of stock farming: cultivating, cutting and curing hay; caring for livestock to the extent of insect control and confinement of cattle in winter” (MacLachlan, 1996, p. 19). This was direct evidence of cattle production that was disregarding the land-intensive nature of the Anglo-Texas cattle tradition and instead switching to a more labour-intense system that would support animal survival in harsh conditions.

Many early immigrant Saskatchewan settlers were drawn to the practice of mixed-farming – that of both arable grain land cropping and cow-calf production – in order to off-set the possibility of market and/or natural catastrophes destroying their entire livelihoods. This is often still the rationale that is used by current Prairie farmers for maintaining both ends of the agricultural

spectrum. Mixed farming is inherently more difficult and labour-intensive than a single agricultural practice would be. It carries with it a great deal of more physical labour and risk of injury, but should intuitively provide for less financial and/or capital risk. Both industries are cyclical in nature and both react to one another in an inverse manner – therefore, it is intuitive to think that one sector “should” counter-act the risk of the other.

However, in the early 1900s, Canadian government policy was encouraging grain cropping at the expense of cow-calf production through such programs as the distribution of free seed. Settlers had little incentive at the time to increase their livestock inventory at the expense of their grain land. “Grain growing required less continuous labour, gave quicker returns and offered the tantalizing prospect of windfall profits should bumper crops coincide with strong markets” (MacLachlan, 1996, p. 24). There were smaller programs and incentives enacted by both the federal and territorial governments during the early part of the 20th century to induce mixed-farming and an increase in livestock production on the Prairies. These included Hereford bulls being delivered to rural areas by CP Rail for a third of their price on a credit basis as well as training provisions in animal husbandry for homesteaders. Despite these efforts, there was still evidenced a gradual decline in ranching and its replacement by specialized grain farming. This was a trend that lasted until WWII. Cattle and beef prices nose-dived during the drought of the 1930s and many of the established cow-calf producers were forced off of the land. This led to larger sections of pasture lands forming during the resurgence of agriculture in the 1940s and 1950s.

Throughout this era of the initialization and development of cow-calf production in Western Canada, the industry has been shaped and encouraged to some degree by government intervention. However, there has always been a pervasive aspect of the insular family and the generational transfer

of the knowledge and skills that are specifically applicable to this industry. For those who have been committed to cow-calf production on the Canadian Prairies, or to mixed farming, the art of animal husbandry was quite simply passed down through the generations of family farmers. We have learned to “handle” animals that are often well in excess of 2,000 pounds. These animals have unique herding and maternal instincts that add to the extremely dangerous nature of their care and they often require maintenance and treatment that involves direct intervention into their environment. These are very specifically just a few of the examples where skill-level and knowledge are necessary to the jobs performed, integral to animal health and to human safety, and are distinct to this area of agriculture.

Due to the nature of Canadian immigration policy and its historical development, provision has never been made for the inclusion or differentiation of the labour skills and knowledge required for large animal handling and livestock production in Canada and particularly in under-populated and remote rural areas of the Western Prairies. It is my belief that because cow-calf production developed on the Canadian Prairies through an almost exclusive generational transfer of skill and knowledge, that it did so in what can be described as a virtual “bubble” of isolation. The federal government, over the course of decades and generations, in essence, “forgot” what it once knew of the skill and knowledge level required in cow-calf production.

The level of this isolation in regard to skill development and its resulting lack of qualified labour in the industry was compounded by rural-to-urban migration in Western Canada and low family birth rates that are no longer of replacement levels. Canadian farm families now have less children than ever before and the majority of those children leave the family farm for education, economic, and professional pursuits elsewhere. Thereby, the knowledge and skill required to work with large herd animals, developed and nurtured over many decades, is lost and not easily reacquired.

During the late nineteenth and early twentieth centuries, the Canadian government began its development of national immigration policy. Initially, the unofficial strategy was set to promote immigration for developing industries such as the transcontinental railway and manufacturing industries. These approaches were also designed to encourage immigrants to settle in the relatively under-populated areas of Western Canada. However, because such promotions created a huge and uncontrollable influx of migrants from the United States and Europe, in 1910 an official Immigration Act was created. This formal development of policy saw an official focus placed upon distinctions that clarified most importantly the immigrant's country of origin.

“In the Prairie Provinces, farms and farm operators continued to show a steady growth until a check to immigration was imposed by the War in 1914” (Haythorne, 1941, p. 191). Then, during and immediately following Canada's economic crash of the 1930s, immigration was virtually halted as Canada attempted to preserve its markets rather than to expand them. Throughout this bleak period, “the depressed state of agriculture...caused many farm operators, unable to hire extra help, to keep their sons on farm for as long as possible” (Haythorne, 1941, p. 193). Following World War II, immigration policy began to open up again and concern itself with growth. In the 1970s and 1980s, focus was shifted from the earlier concern of countries of origin, to encompass a greater attention upon the immigrant's skills and competencies. Policy became much more restrictive in its requirement of having employment contracts in place prior to immigration. This requirement was found to be overly-restrictive and detrimental to economic growth and therefore, it was rescinded following the recession of the 1980s. As a result, immigration rates skyrocketed between 1985 and 1987, but still shortages of skilled labour in specific industries have persisted and been exacerbated by the very definition of “skilled” labour in some of these sectors.

I will argue, through analysis, that much of this skilled labour shortage in the cow-calf production sector is due to the historical development of the industry's labour, the Canadian government's failure to recognize the skill and knowledge requirements of the industry, and the lack of immigration policy to deal specifically with this skilled labour shortage. The culmination of these factors has led to an inability of the sector to expand adequately in line with the demand for the product that can be supplied.

III Analysis

I propose to break down my formal analysis of this topic in accordance with my previously-stated thesis assertions.

“Canada's cow-calf production sector has developed in such a manner that:

(1) There is commonly held public and government misconception that unskilled labour is sufficient to meet the sector's demands and needs.”

As evidenced in my literature review, the historical development of the livestock industry, particularly on the Canadian Prairies, was slow in its inception and not comparable to the development of the industry to the South. Due to the nature of this development, the Western Canadian sector was relatively insular and isolated in the transfer of its specialized skills and knowledge. Therefore, cow-calf production has been “more often a family enterprise than one having employer-employee relationships” (Haythorne, 1941, p. 181) and these family enterprises have relied more heavily upon family workers rather than on hired labour. The labour market did not ever develop in a corresponding way within this industry as it did in other markets of production.

It is obvious that with greater reliance upon family labour, the skill and knowledge of the sector was passed through generational family transfer rather than through industry transfer as is usually the norm. Then, as this labour's ability was passed through family lines, and those lines were then depleted due to rural-to-urban migration, low replacement birth rates, and greater shifts from livestock to arable agriculture, the specialized skills and knowledge were increasingly lost. The loss of these skills and exact job knowledge have created labour gaps in the industry.

Because of the isolation "bubble" that the knowledge and skill transfer developed in, the general public and the Canadian government either "forgot" that the cow-calf production sector requires skilled labour or else, particularly in the case of recent decades, they didn't ever know of the existence of the need. As such, there is common misconception that just about any physically strong and able-bodied individual can handle and work with large livestock. This is a fallacy and unskilled workers are, in fact, not sufficient to the labour requirements of cow-calf production. It is no longer "enough to say that the farm supplies its own labour" (Haythorne, 1941, p. 212), but rather, it needs to become a common standard that the industry is able to "pull" to itself qualified skilled labour to satisfy its needs.

Working with and handling large livestock that have innate maternal and herding instincts and doing so under harsh and sometimes catastrophic conditions, requires specialized skills that are not no longer in great supply on the Canadian Prairies. The recognition of this labour skill-set needs to be publicly acknowledged and it then needs to start being supplied from immigrant and temporary foreign worker populations that have maintained the skills through formal training when we did not.

“Canada’s cow-calf production sector has developed in such a manner that:

(2) There is severe shortage in the skilled labour needs demanded by the sector that can be fulfilled domestically.”

“It’s hard to find young Canadians that want to work in rural Alberta” (CBC, 2013, para. 3). This statement is highly relevant to rural Saskatchewan as well. Domestically, in the rural Canadian Prairie labour market, the skill level is almost not even applicable to the issue any longer. Skilled and unskilled alike, all labour is currently in very short supply. “In Western Canada we have seen a consistent pull on our labour force from rural communities to resource-rich areas” (German, 2014, para. 3). The pull from urban areas has always been strong within the agricultural sector in general, but couple that with the current pull of the resource-rich areas, and we now have an issue of huge significance.

It is always in the best interest of all Canadian industry to access labour from the domestic market. However, when the skill-level shows a distinct gap in that labour market, then the workers realistically need to come from elsewhere. “Elsewhere,” in this case, refers to foreign and international markets that have retained their skill and knowledge to the sector through planned and enacted training and programs. “History and experience have both demonstrated clearly that there are insufficient domestic candidates to satisfy the urgent requirement for the high demand skills required by the industry” and that the “industry continues to require access to foreign origin workers to fill those positions that cannot be staffed by continuous aggressive recruitment initiatives in Canada” (Canadian Meat Council, 2015, para. 22).

In Canada, we now bear witness to the fact that “there is no relatively stable group of agricultural wage-earners as that there is, say, of carpenters and machinists” (Hayerthorne, 1941, p. 213). We, in the industry, as well as the federal and provincial governments, have allowed the

domestic labour market of the cow-calf sector to develop in such a way that, if not wholly non-existent, then it is certainly lacking in the most crucial ways possible. The domestic Canadian labour market simply cannot fulfill the need for the skilled and knowledgeable workers that are required in this sector.

“Canada’s cow-calf production sector has developed in such a manner that:

(3) The labour needs of the sector cannot adequately respond to mobility within the short-run or the medium-run.”

“Labour mobility refers to the ability of workers to move freely between jurisdictions and occupations in order to work. When labour mobility is high, workers face few barriers in moving to find employment. When labour mobility is low, workers are prohibited or discouraged from doing so” (Mertins-Kirkwood, 2014, p. 4). In the case of the cow-calf production sector, labour mobility is not only applicable to worker jurisdiction, but is also relevant within the context of how quickly workers can be trained in skill and knowledge specific to this particular industry.

It is typical in Canada that both the federal and provincial governments are the policymakers that govern the mobility of labour in all sectors. It is also characteristic that these governments impose the barriers on labour mobility in order to encourage local development and to protect the domestic labour markets themselves. It is their duty “to ensure that migrant workers are only hired when legitimate labour shortages exist” (Mertins-Kirkwood, 2014, p. 2). As well, “each province is responsible for setting out occupational standards to define what work ‘counts’ as a given profession in that province” (Mertins-Kirkwood, 2014, p. 6). It has been established by various legitimate parameters that there is a definitive labour shortage in Western Canada. However, I believe that in the case of all Canadian livestock production, the government policymakers are not taking into account the necessary and required skill factors of these labour shortages.

Within Canada's labour mobility regime, "numerous programs and treaties pursue contradictory goals and ultimately lead to a variety of negative social outcomes" (Mertins-Kirkwood, 2014, p. 1). I would state that social outcomes can, in this case, be equated to social development goals and that these goals "should" include local and sector development as well as worker safety. Worker safety, in this case, refers to the skill level and knowledge required by this labour force when handling large livestock in order to avoid all injury and even death. Animal health, welfare, and nutritional requirements are also a direct part of the social outcomes to adequate skilled labour mobility in this sector. By enacting barriers to labour mobility in the cow-calf sector, social development goals are not served and are, in fact, done a great disservice.

I would also argue that rather than "jurisdictional" rights being enacted to **regulate** labour mobility, what is actually needed is "sector" rights in order **compel** labour mobility. "New international treaties such as the Canada-European COMPREHENSIVE ECONOMIC AND TRADE AGREEMENT (CETA) will provide even greater unrestricted access to the Canadian labour market for certain categories of migrant workers. These programs and agreements deserve far more attention than they have received to date" (Mertins-Kirkwood, 2014, p. 2).

"Canada's cow-calf production sector has developed in such a manner that:

(4) The Canadian immigration and foreign worker policies have not responded to or developed in a manner that is sufficient to the needs and demands of the sector."

"The large agricultural expansion which took place during the early years of the (20th) century was fostered by immigration, which has not reached the same heights since" (Haythorne, 1941, p. 188). I have established in my previous literature review that in the late 19th century and early 20th century, the Canadian government went out of its way to first encourage all immigration in order to stimulate innovation and development in all industry, but in particular to rail and manufacturing.

They also attempted to cultivate immigration to the underdeveloped Western Canadian provinces. Later, and in order to stem a seemingly uncontrollable influx, official federal immigration policy focussed on country of origin. After policy that attempted to preserve markets and jobs following the 1930s, Canada then opened up its immigration policy to attract specific skills and abilities, rather than countries of origin. All of this policy affected the cow-calf production sector without addressing its specific current and future needs.

The lack of immigration policy development with a general agricultural perspective and a specific livestock focus, has resulted in exacerbating the labour gap of skilled workers to this industry. None of the immigration policies have developed at a pace that is comparable to the needs of the sector. Policy initiatives need to address the specific dynamics of this labour market and its lack of skilled workers. “This country’s immigration program fails to address the proven requirement for special or semi-skilled workers in high demand occupations in which opportunity and need far exceed availability. Canada requires an immigration program that permits access to foreigners who possess specialized knowledge and skills when there is a clear and chronic shortage of Canadians with the requisite knowledge and skills” (Canadian Meat Council, 2015, para. 23).

It has been obvious and apparent that Canadian policymakers have had little success in achieving sustainability in the matter of adequately closing the skill and labour gap that continues to plague the cow-calf production sector and its ability to develop. The short-term solutions that the Canadian government has enacted have usually been of knee-jerk response to market and economic cycles, changes, and instabilities. What policy needs to accomplish is to supplement this workforce with an influx of skilled temporary workers and permanent immigrants to begin a transition that will fill the industry’s knowledge gap with an eventual permanence.

“The above-stated issues have negatively impacted the cow-calf production sector in its ability to develop and compete in domestic and international markets.”

The following data table I have compiled bears some interesting correlations.

Year	SK Cattle on Farms (thousand head)		SK Price per Head (dollars per cwt)		SK Ag Labour Force (thousands of persons)	
	Cows	Calves	Cattle	Calves	Labour Force	Employment
1976	1 160.0	1 006.0	29.17	28.65	96	95
1977	1 090.0	948.0	31.39	33.60	100	99
1978	978.0	850.0	52.30	66.00	103	102
1979	977.0	822.0	72.03	97.35	100	100
1980	983.0	832.0	68.81	82.68	90	89
1981	946.0	874.0	64.63	68.60	90	89
1982	893.0	852.0	61.75	69.20	89	88
1983	858.0	838.0	65.20	80.70	92	91
1984	833.0	810.0	67.55	84.65	94	93
1985	785.0	738.0	67.75	85.10	87	85
1986	761.0	724.0	72.00	101.55	91	90
1987	807.0	681.0	83.65	119.38	97	95
1988	825.0	704.0	82.06	113.25	83	82
1989	847.0	734.0	80.40	109.09	83	81
1990	870.0	742.0	83.33	111.76	89	87
1991	897.0	840.0	83.07	111.30	90	88
1992	960.0	890.0	84.83	111.78	80	78
1993	990.0	930.0	99.29	134.98	81	79
1994	1 035.0	960.0	97.69	122.96	71	70
1995	1 105.0	1 050.0	80.28	100.16	73	72
1996	1 135.0	1 120.0	68.90	83.39	73	71
1997	1 149.0	1 103.0	85.58	114.41	69	67
1998	1 139.0	1 096.0	90.78	123.87	73	71
1999	1 121.0	1 115.0	100.57	147.37	69	68
2000	1 180.0	1 028.0	113.65	171.50	63	62
2001	1 240.0	1 148.0	112.91	164.78	53	51
2002	1 270.0	1 167.0	102.62	134.66	52	51
2003	1 335.0	1 271.0	99.48	126.52	n.a.	47

(Compiled from Saskatchewan Agriculture, Food and Rural Revitalization. (2004, August). *Agricultural statistics 2003*. Regina: Policy Branch)

As I have highlighted in the table, during 1978 to 1979 is where the big jump takes place in prices. There were incremental and continuous gains in price every year prior to this period, but during 1978 and 1979 the price (particularly in calves) rose by two and three times the amount. This was the greatest year-to-year increase seen in history up to this point and it was not witnessed again until 2010 to 2011. As meeting documentation from the International Meat Consultation Group points out, this was a cyclical restocking of herds and the industry producers typically hold back female replacement heifers from their calf crops when restocking and expanding. “In order to drive production upward, producers must retain heifers for breeding purposes prior to and throughout the expansion period” (Norton, 2005, p. 33) “Expansion signals include large supplies of forage from pasture and range, favourable grain prices, and favourable cattle prices” (p. 33). As such, this cattle expansion of 1978 and 1979 was as a result of favourable cattle prices, in direct response to the depreciation of the Canadian dollar to the US dollar of the time, and due to the low grain prices and limited delivery quotas that made feeding the grain to the cattle more attractive rather than selling it.

As I previously mentioned, “the cattle industry is cyclical. Herd size expands and contracts during a 8- to 12-year period due to cattle’s biological cycle and market changes. The biological cycle, for example, forces a 3-year time lag between the time the producer receives a market signal to expand and the time when the calves produced by additional retained heifers are slaughtered as added beef. Each cattle cycle is composed of a period of herd expansion followed by a period of herd liquidation. USDA cites research that shows expansion generally lasts for about 6 to 7 years, and liquidation lasts for roughly 3 to 4 years, with a 1- to 2-year period of consolidating cattle numbers between the two stages.” (Norton, 2005, p. 33).

Then, as we work through the tabular data above it becomes clearly evident that, while the cattle numbers and prices have for the vast majority of years since 1979, continued to rise steadily and incrementally (with a few small exceptions), the labour force has lagged and decreased to half of its size. The labour numbers represent all of the agricultural labour in Saskatchewan (both arable and livestock) so that part of this loss can be attributed to the subsequent increase in technology during the intervening years. However, while there has been an astronomical leap forward in technological advances concerning arable agriculture in that 25 year period, the labour intensity of livestock production on the Canadian Prairies has remained relatively stable. Therefore, to see diminishing numbers of this magnitude on the labour side and to understand from a first-hand perspective that the work load has not decreased appreciably within cow-calf production, indicates (deservedly so) that the labour force in this industry is struggling severely.

Without the requisite labour force required for the labour-intensity of the nature of the work in the cow-calf sector, there are considerable constraints placed upon its growth. The availability of labour is a factor I identify as an impediment affecting cow-calf producers in Saskatchewan and their ability to develop and to sustain growth. “In the absence of sufficient workers, the sustainability of Canada’s livestock and meat sector is being jeopardized,” says Jim Laws, Canadian Meat Council Executive Director. “When Canadians are not available, we need to be able to recruit international workers to do the jobs that are needed. The entire supply chain...will benefit” (CAHRC, 2015, para. 8). As such, I would like to point out that the opportunity potential of the cow-calf production sector is staring us in the face, but that it requires added support for effective development. “Trade agreements and market access expansion only work well if the resources required to maximize the opportunity are available” (CCA, 2013, para. 7).

IV Conclusion

The Hecksher-Ohlin Theory states that not all factors of production will benefit in the long-run and that in the long-run the scarce factor will loose. In the case of Saskatchewan's cow-calf production sector, labour is obviously the scarce factor and it is very much intuitively correct that labour will loose with increased immigration. Although, I do believe it is also correct to state that because the labour factor of this industry is so depressed and underdeveloped, and due to the fact that as I have shown it is actually skilled-labour that is not easily mobile, a loss to the labour factor will quite probably not be felt in the short-run or the medium-run. Rather, this loss may be felt in the long-run, but even there it would not be as intense as one might suppose due to the continual rural-to-urban migration coupled with the reverse mobility of this labour – cow-calf production labour will be highly mobile to other industries, particularly resource extraction, manufacturing, and trades.

It is also intuitively obvious that capital and land owners will benefit from increased immigration that is specific to Saskatchewan's cow-calf production industry. Land that is currently being inefficiently utilized for arable farming can be shifted toward the livestock farming that it is better suited for. Capital, in the form of livestock numbers, can be increased and the potential here for Canada's export market is huge because, although we export a large percentage to the US for processing (the US also being a huge international exporter of beef), the markets of China and India are insatiable at the moment, given current supply shortages. In terms of surpluses, the consumer surplus will increase and therefore domestic consumers will realize a benefit to their choice and welfare. For producer surplus, I consider this to be a "wash" due to the fact that in very recent months the ceiling for cattle prices here in Canada has been reached – no one is willing to pay more

than current prices (or less) for beef. Therefore, the only way to increase producer benefit, without incurring cyclically-natured losses, is to increase supply – of which there is capital and land available for the said increase.

Canada is neither labour-abundant, nor is it a large economy in terms of cow-calf production. Therefore, additional immigration will not affect its indifference curve nor will it hurt its economy. Additional immigration will not depress the price of cattle exports. Within these suppositions it should be noted that I have included the assumption that there is virtually unlimited potential for Canada in this export market. This unrealized capacity and the accompanying inability to realize labour requirements, as it applies to Saskatchewan's cow-calf production sector, is actually skewing the perception of the industry's potential. I also assume that domestic import competition in this sector is a moot point due to the fact, as earlier stated, that the quality of Canada's beef production is sufficiently "branded" and recognizable and, as such, the need and/or desire to import beef to Canada is a non-issue. In fact, one externality and value-added process that may result of such a gain in labour to the cow-calf production industry, is further growth to the processing industry that would negate our need to ship quite as much of our product South to the US for processing.

In conclusion, I will end with the thought that in the cow-calf production sector, with its lack of realizable growth due to the severe shortage of required skilled labour, the misconception of the skill and mobility actually found in the industry, and ineffective policy pertaining to labour access through immigration and/or temporary foreign workers to the sector, we see a clear example once again of Canada's agricultural industry being defined by non-farmers. This not only leads to faulty and misconceived definitions of the industry's requirements, but it also leads to the unfair negative impact upon the development and competitive ability that this sector can achieve in both the domestic and international markets.

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