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International Livestock Congress-Calgary

BEEF 2006: STRATEGIC THINKING FOR A CHANGING INDUSTRY

Report presented to Ms. Diane Rushforth Dr. Kevin Wade Dr. Leroy Phillips

Faculty of Agricultural and Environmental Sciences McGill University July 30th, 2006 On July 11th 2006, something wonderful happened to me; I got on a plane taking off for Calgary. At this point, I was all thrilled because going out west had always been one of my craziest dreams but what I didn't know then was that this trip would also be determining for my career and personal life. The student program of the International Livestock Congress allowed me to meet several other students for all parts of North America, Brazil and New-Zealand along with some important people from the beef industry. Through the program I also had the chance to visit the *Cargill* slaughterhouse and two feedlots which really provided me with a new perspective of the industry as we do not see anything close to this anywhere in Québec. In this report, I will briefly describe what I've seen and heard while attending the different activities of the student program and the official International Livestock Congress, adding to this my personal thoughts along with the effects it had on my career planning.

On July 13th, first thing in the morning, we were heading to the *Cargill* slaughterhouse in High River. I was looking forward to this visit because my classmates and I had tried so hard to obtain one last semester while we were doing our Beef Cattle Production course and actually never got it since directors of such operations usually don't want the public to be aware of what's happening within these walls. I felt special having the privilege to witness this whole process of meat transformation and packaging. Of course it was breathtaking and, let's say it, a little disgusting to see that many animals hanging by their hind legs, having their hoofs cut off, their skin taken off and so on, but it was also very interesting. First, we got to see the cutting and packaging room were the carcasses get split into several different cuts which are then laid onto a moving track that runs in front of many employees who slice some of the fat off the meat cuts and ultimately get to the employees who are in charge of wrapping the meat and packing it into the boxes. We had to start the visit backwards, i.e. starting with the end of the process since it is

the cleanest room in the building. We then moved to the preceding room where the meat gets graded. The carcasses run in front of the graders who, in just a few seconds, judge if it is either AA, AAA or Prime and print their decision on the carcasses. I was amazed to see how fast it was but I guess they get to see enough meat in one day to be able to recognize the different classes very easily. We then crossed a huge room where hundreds of carcasses are hung for the meat to age and gain tenderness and we got to the final room where the cattle come in right after their shooting, warm and moving still, get all cleaned off and removed of all of their unusable body parts. I have to admit that the skin removal was by far the most amazing step of the whole process even though it was disgusting. The visit ended in the laboratory of the slaughterhouse where they analyze meat samples regularly to ensure food safety. This visit really got me to see beef cattle production in another way. Of course I knew cattle were raised for the purpose of meat production and that they all get killed in a slaughterhouse ultimately but witnessing this whole process and especially realizing how many cattle get killed and processed in one single day at only one single plant (3800 a day!) was just a revelation for me. This visit reinforced this feeling I had about the crucial importance of animal welfare in commercial productions. If we are to put our animals through such an experience at the end of their lives we should at least ensure that during the short period of time where they are alive, they are well being taken care of. That's the way I see it.

After the highly interesting visit of the *Cargill* plant, we also had a presentation on the cattle identification and the age verification. This presentation was given by the communications manager of the Canadian Cattle Identification Agency, Ms. Megan Gauley. This presentation was particularly interesting as Ms.Gauley sat down at the table and discussed with us which had the effect of making the information look more accessible and encouraged us to ask questions or

add our comments. As a Québec resident, where dairy represents the main agricultural production, I didn't really realized all the effects the BSE crisis had on the beef industry and I was even less aware of all the work that had to be put in so that an eventual second crisis wouldn't hurt as much as the first one. Of course, I had heard about cattle identification and the concept of traceability but hearing it from western people who really depends on the beef market provided me with a new point of view of the situation. The Canadian Cattle Identification Agency (CCIA) is led by a board of directors who comes from different sectors of the cattle industry and this is probably the reason why they worked so hard in establishing this project: they were directly concerned. What they did is they assigned each animal with a unique number on an ear tag which corresponded to a collection of data in the CCIA system. Nowadays, they are moving towards a more sophisticated ear tag that has been approved to meet all requirements in the Canadian National Standards for RFID technology. (Radio Frequency Identification) In fact, this special ear tag contains an encoded chip and antenna that can be read by a specially designed reader. This chip reveals information on the animal as of where it was born with its date of birth (not yet mandatory) as well as its movements from the herd of origin to the slaughterhouse. This tag has a very good retention, facilitates the reading task because it can be read at a distance and all cattle will be required to bear one as of September 1st 2006. As I mentioned, age verification is not yet mandatory but will be as of April 2007. This presentation left me with the feeling that our beef industry in Canada is within good hands and that everything is put into place to ensure that we're eating quality meat.

We got back on the bus and took off to have lunch on the ranch of the president of Western Feedlots, Mr. Dave. This man is just so friendly and easy to talk to that I don't even know his last name and kept calling him Mr. Dave throughout the rest of the program. He received us on

his beautiful ranch which, I have to admit, has an incredible barn! We first had little presentations on the «State of the Industry» by Andrea Brocklebank from the Canadian Cattlemen's Association; the «Market Situation and Update» by a woman from CanFax; and, of course, an introduction to Western Feedlots given by Mr.Dave himself and a description of the different daily activities taking place on the feedlot by the veterinarian of Western Feedlots. The first two presentations were a nice review of what I have studied in my Beef Cattle Production class last semester but, as I have said several times already, hearing it from people who live in a province where beef cattle represents the main agricultural production was very interesting for me. The repercussions and consequences of imports and exports to and from different countries really gets its importance there, in western Canada.

As a student in animal science currently working as an agronomist in dairy and equine productions, I like to be out on the field with the producers and especially with the animals themselves. This being said, you will understand that the visit to Western Feedlots was my favourite activity of the program. I must have taken nearly seventy pictures of the cattle! I had the chance to visit a few feedlots in Québec where I thought 2,000 heads was impressive... So, one would understand my excitement on a feedlot of approximately 10,000 heads! In fact, Western Feedlots is own by a group of producers and it is divided into three different sites. All together these three sites hold 32,000 heads. I had never seen anything like this before. Seeing all of these cattle was quite something but what was even more amazing to me was the fact that this feedlot has its own feed mill where they mix their cattle's ration. They also have the biggest trench silo I have ever seen. The visit inside the building where they have their cattle squeeze for vaccination and hormone implantation made me realized all of the technology behind such an operation. This building is equipped with a computer that can tell, using the cow's identification

number on its tag, what vaccine or hormone it had received. This kind of technology is required to manage such a huge herd and especially when it comes to health management. Having that much cattle kept close from one another implies a greater chance of spreading a virus or a disease when you get a sick animal. Therefore, special efforts are made to ensure that a good health management is maintained. This feedlot tour was really interesting for me as I also want to start a small cow calf operation on my land after I finish my degree. The cattle on Western Feedlots are well taken care of but I couldn't help but notice the difference between the cow calf operation's conditions and the ones we find on a feedlot. On a feedlot, the cattle are in small pens where no grass grow at all. Well, such conditions are found in every feedlots even the ones we have in Québec but it just seems more obvious when you see it with 10,000 heads. I do understand that these conditions are necessary for optimal growth in a short period of time and I don't talk about it here to criticize Western Feedlots. In fact, I think they're doing a marvellous job keeping all of these cattle in great health condition but what I really want to say regarding these conditions I witnessed is that it made me realized how important it is to provide the cows and their calves with a good pasture while they are on the cow-calf operation. Anyways, that's what this visit inspired me with for my own cow-calf that I plan to start in a little less than a year. I will try to give my calves the best life possible before they take off for the feedlots.

On July 14th, we went to the Stampede park for the official International Livestock Congress. This congress was a great occasion for us, the students, to meet important people from the industry and I was particularly happy to see that the table I was sitting at was just beside the one reserved for Landmark Mills. In fact, ever since I got to Calgary I had been trying to find out what the name of the company I am working with in Québec was in western Canada and just the night before someone told me that Shur-Gain was working under the name of Landmark Mills in

this part of the country. So, having a table right beside them gave me a good opportunity to discuss with them and it was interesting to see the difference between being an agronomist in the west and being an agronomist in Québec. Dairy producers are our most important clients while in Alberta it is the beef producers that take most of the market. We also don't get to work and make up rations with the same primary ingredients. In Québec, we mostly work with corn and soybean while in the west they work with barley and canola. It was a very interesting discussion I had with my colleagues from the west.

So, coming back to the congress itself and the conferences we had the chance to hear. The first conference of the day was given by the vice-president of the Canadian Agri-Food Trade Alliance, Ms. Alanna Koch. Ms. Koch's presentation provided us with an overview of the industry and showed us how our «future is global». In fact, there is a surprising 90% of the Canadian farms that participate in the international market. She introduced us with the Doha Round which will eliminate export subsidies and reduce the trade distorting domestic support. This agreement should be signed by December 31st of this year. This agreement will be necessary to prevent Japan's tariffs of going from 38.5% to 50%, as well as the one from Korea from 30% to 40% and this will be the same everywhere else. This really shows how our agricultural economy really depends on the international trade negotiations going on right now.

The second conference was given by the vice-president and the chief economist of the Conference Board of Canada, Mr. Glen Hodgson. With this conference we stayed in the same area of how international market influences our agricultural economy here in Canada. However, this time we were more talking about the global economics and its influence on agricultural businesses. Well, for now, the economic outlook lets us know that we are well positioned for

growth. Even though our labour force is aging, our southern neighbours are experiencing problems such as high energy prices and account deficit which makes the US dollar lose value and therefore give stronger power to yen, euro and Canadian dollar. According to Mr.Hodgson, the risk of oil prices and Canadian dollar value going up is more probable than it going down which will produce export growth and will keep the inflation under control. Manufacturing employment in Canada will therefore go up as well along with the real disposable income and the spending power. To resume, we can say that the leading forces in global economy are mainly the aging labour force, the emerging markets, the US imbalances and oil prices. All of these put together, let us presume that the future is looking good for agriculture in Canada and that Alberta will be a «land of opportunity»!

On his side, Mr.Dennis B.McGivern, the vice-president of Informa Economics in Tennessee, talked to us about the effects of changes in the exchange rate on the Canadian beef industry. In fact, the exchange rate is really important for our industry as Canadian prices are determined by US prices. However, this doesn't affect labour or farmland prices and it has a small impact on fertilizer, electricity and diesel prices. Our dollar appreciation since 2003 is mainly due to a widening spread of interests. However, this appreciation represents, in the short-run, losses for the industry and especially in the cow-calf sector. In the long run, the whole burden of appreciation will be carried by the cow-calf producers only whereas the feedlot producers will be back to acceptable margin since they will have to pay less for their feeder cattle. One good news is that there is no statistical relationship between exchange rate and cattle imports and exports. We still export a lot of beef even with our strong dollar. This is a curious fact because, usually, an appreciation of a currency comes with decreased exports and decreased prices so I guess we

should keep our fingers crossed on this. An appreciating dollar, as Mr.McGivern says, will also force us to become more competitive to stay in business and this might just be good.

We then got to hear Mr. Brant Randles who is the president of Louis Dreyfus Canada Ltd. This company is the major exporter and marketer of Canadian grains and oilseeds and it has its headquarters in Calgary. According to Mr.Randles, the reason why the price of grain goes up is because of the 10% economic growth in China along with the higher interest in ethanol and biofuel. These situations cause a greater demand for grain which in turns results in higher prices. The constantly rising prices of gasoline cause a greater interest in ethanol and a projected 35% of US corn will supposedly go for ethanol production. Therefore, the next ten years should be a great time to be a prairie farmer so let's just hope they were right on this!

During the lunch break, I had the chance to chat with a cow-calf producer from Alberta and I was more than happy to hear him say that, as a Simmental breeder, he was now getting a herd of Hereford cattle to do a crossbreed and get exactly what the market demands. According to him, Simmental-Hereford is the ultimate breed! The reason why I was so happy to hear him say such a thing is because I was planning on doing Simmental-Hereford calves on my cow-calf operation with half of my cows being Simmental and bred to a Hereford bull and the other half of my cows being Hereford and bred to a Simmental bull. Hearing that kind of information from someone who had been in the industry for more than 30 years is surely trustable information. After lunchtime, Mr.Doug Horner the Minister of Agriculture Food and Rural Development of Alberta gave a presentation that was a little review for us, the students, as it talked about the age verification program as well as the traceability in partnership with the Canadian Cattlemen's

Association. The bottom line was clear: the cost of not having a traceability system in a country is higher than putting one into place.

We then had a very interesting conference on the «rural human resource challenge» given by the funny executive director of the Urban Futures Institute in Vancouver, Mr.David Baxter. Mr.Baxter talked to us about a rising problem in Canada, the fact that more and more people are moving towards the city and desert the country. The fact that less farmers are present in the industry decreases the supply where, in the city, there is an increasing competition for work. A lot of people have something to say against immigration in Canada but in this case it is what keeps us going. In fact, if it wasn't for immigration, our labour force would start to shrink by 2010. Mr.Baxter proposes a solution: we first need to understand that there is a shortage or that there will be one in the future and increase our participation, our population and our productivity. Participation can be improved by working longer or engaging people who are not already in the work force. (not really recommended) On its side, productivity can only be achieved by mechanization. As for population increase, it can be attained with immigration but Mr.Baxter really insisted on the fact that we need to reproduce ourselves! Mr.Baxter also gave a little overview of the demographics of farming with its surprising 2.4% of Canada's population being farmers, mostly under the age of 25 or over the age of 40. This is why immigration matters so much since 73% of immigrants are under the age of 20 and will be able to work for a relatively long period of time. Apparently, the same situation would be happening in the United States.

The next presentation was given by Professor Bernie Bindon from the University of New England. Professor Bindon gave a talk on the research to guarantee good quality Australian beef.

The industry is facing a rising problem: people are becoming more and more concerned about

their health and quit eating red meat for cholesterol and fat reasons. A science to guarantee good quality meat is therefore imperative. Researches were based on genetics, nutrition, pre and post-slaughter chilling, processing and even cooking of the meat. A great importance was lent to progeny testing to find outstanding sires in seven different breeds which had the overall outcome of breeding better cattle. The technology of Gene Star was also a great step in the search for better quality meat. Gene Star is a gene that codes for marbling in the meat from which I had already heard of in my Animal Breeding class last semester. Tenderness was also selected for with the flight time test which is the time a cow takes to get out of the chute. The shorter the flight time, the less stressed is the animal, the better weight gain it will have and the tender it will get. One last interesting fact, according to Professor Bindon, grain-fed beef would show a greater genetic expression and therefore be of a better quality as it will expressed better all of the quality traits we selected. So, is Australian beef better than Alberta beef? Well, let me tell you that at a conference taking place in Calgary, the poor Australian Professor couldn't really pronounce himself on the question!

The last presentation of the day was about the solutions to meet the global challenges we had been discussing all day and it was given by Professor David Hughes from the University of London. Professor Hughes had some very comforting data on the snacks, soft drinks and frozen-ready meals sales in 2005...it has decreased! This was good news. However, as I mentioned earlier, beef consumption is also going down as people worry for their health. In fact, most countries in the world are not red meat oriented. Worldwide, pork consumption comes first followed by chicken and fish while beef is way down the list. People that do eat beef are more and more demanding on several points. They want their food to be environmentally friendly, GMO free, animal welfare-friendly and so on. The striking number of 46 pounds per person per

year of beef eaten in Canada really proves that special efforts must be made in meat presentation to encourage people in eating Canadian beef. We can be confident, we're getting there.

On July 15th, our last day in the program, we had a breakfast-conference about the biofuels. Mr. Stewart Campbell gave a presentation that provided us with an overview of the biofuel industry which relies on the simple basis of «the X factor»: the more oil we produce, the less natural resources are available and this is why we have an urgent need to find alternatives to it. Ethanol seems to be a good option but there are a lot of other feedstocks besides corn that would be available for biorefining such as manure and milling by-products. In the short-run, we're more talking about fuel ethanol from cereal grain, ester biodiesel from canola as well as biodigestors from manure, crop and forest residues. There is a great faith that ethanol production will increase the acreage and the prices of crops as it was mentioned during the congress by Mr.Randles. This breakfast-conference was particularly interesting as it was more a discussion and we got to hear the opinion of several different people from several different domains of the industry. My own opinion on this is quite simple. I think it is important for us to develop this sector as I believe it will be our only way out, environment wise.

In conclusion, I have to say that this trip to Calgary was wonderful in every way. It was short but I believe it was long enough to transform me. It was a great experience at first because I got there a day earlier than I was supposed to so I could attend Kenny Chesney's concert so I was all by myself in a part of my country I had never been before. I found my way around Calgary and I got to meet different people who gave me a precious hand in finding my way between the different city trains and buses. The people I got to meet as well as everything I have seen and heard during these few days taught me something and made me see things differently and I do

believe I am now better suited to perform my job as an agronomist. I also got to make friends with the other students in the program and it was very interesting to see how beef production and agriculture in general worked in their part of the world. More importantly, I now have friends everywhere across North America so I am looking forward to travel in the future! I can't help but say a word about the Calgary Stampede that I got to visit as well. Ever since I was a kid I have been dreaming of attending this very special event and I finally got the chance to see it. They call it «the greatest outdoor show on earth» and that's exactly what it is. I had never seen anything like this before. I really enjoyed the tour we had behind the scenes of the Stampede and particularly the part where we got to walk across the arena. I have followed the team penning professional circuit in Québec for many years a little before I got to University and as I was there, with my feet in the sand of the Calgary Stampede arena, I made the promise I would be on horseback and competing the next time I would come to the Stampede. I am very thankful to the comity for this opportunity they gave me. It was a great experience and especially a dream coming true.