



Greenhouse Visitations

Conclusions/Recommendations

Greenhouses are an important sector in Southeast Alberta. It is estimated that there are 90 to 100 acres under greenhouse production in the region. Many of the businesses in the sector have been located in the region for generations, first attracted to the region by the sunny climate and low natural gas prices.

Through preliminary meetings with a few greenhouse operators, the Economic Development Alliance of Southeast Alberta identified that there were two main challenges facing these operators: energy and labour. Specifically, the costs associated with energy and the labour required for the operations combined with international competition provides challenges at the best of times. Now, in recessionary times, these operators' challenges are compounded. In order to get more specific information about the state of the greenhouse industry (and in particular the impact of energy and labour costs) in Southeast Alberta, the Economic Development Alliance of Southeast Alberta spearheaded a business visitation program to greenhouses in Redcliff, Medicine Hat and Cypress County.

Eleven greenhouse industry visitations were conducted during the month of November to Southeast Alberta Greenhouses and the Red Hat Co-op. In selecting the greenhouses to visit, diversity in location was a consideration (Redcliff, Medicine Hat, Cypress County) as well as a cross-section of small, medium and large greenhouses were targeted. In addition, diversity in terms of the type of energy utilized by the greenhouses was sought. Specific questions aimed at gathering information asked and are detailed in Appendix A.

Greenhouse Industry

Alberta's greenhouse industry consists of about 400 growers with a combined acreage of 293 acres. Crops grown include vegetables, bedding plants, cut flowers, potted ornamentals, foliage plants and tree seedlings. The value of the industry is \$140 million (2007) accounting for an investment of \$260 million. Other facts about the greenhouse industry (2007):

- About forty-two percent of the greenhouses are under 10,000 square feet and eighteen percent are over 40,000 square feet.
- About 1,450 full-time and 3,100 part-time individuals are employed in the industry. Medicine Hat and Edmonton are the two cities with the highest concentration of greenhouses.
- Just over half (52%) of the greenhouses are seasonal, while the remainder are full-time, concentrating on vegetables.
- Just under ninety percent (88%) of the greenhouses have forced air furnaces, thirty-one percent have hot water heating systems and fifteen percent have steam heating systems. About three percent of greenhouses were using coal.
- Greenhouse vegetable production has increased over the last decade and this trend is attributed to two packing facilities: Red Hat Co-op in Redcliff and Pik-N-Pak Produce Ltd. In the Village of Gull Lake about 10 km west of Lacombe.
- While there is no marketing board for greenhouse vegetables and no quota system in place, federal grade standards have to be followed for vegetables.

- Cucumber producers grow three crops per year as it is a relatively fast growing crop. Harvest is therefore in May, August and November. The three crop system produces better fruit although production costs are high.
- Tomatoes are seeded in November, planted by early January and then harvest starts 110 days from seeding and continues until late November.
- Peppers are the most difficult crop to grow. The crop is seeded in middle of October and harvest starts in the middle of March until November. If peppers are grown from seed, excellent environmental controls are required as peppers need precise day and night temperature to set flowers and fruit.
- Lettuce takes from nine to twelve weeks from seed to harvest. Crops are planted on a weekly basis and up to twelve crops per year can be grown.

The following table (2005) provides a comparative of Alberta versus Canada in relation to the greenhouse vegetable sector.

Benchmark	Alberta	Canada
Size of the vegetable greenhouse sector	105 acres	2,043 acres
Distribution of greenhouse vegetable by area		
Cucumber	65 acres	512 acres
Tomato	25 acres	1,098 acres
Pepper	12 acres	397 acres
Lettuce	3 acres	37 acres
Annual (wholesale value) sales	\$40*	\$694.9*
Growth of the vegetable greenhouse sector 2003 to 2004	14%	12.3%
Value of greenhouse exports 2004	\$1.1*	\$549.5*
Value of greenhouse imports	\$75.9*	\$573.0*
Investment in capital machinery and equipment	\$84*	\$1,634.5*
ACNielsen data, Alberta, fresh vegetables	\$331.8*	\$2,873.5*
Average economic unit for vegetable production	2 acres	1,634.5 acres
Vegetable greenhouses operations by size		
Less than 10,000 sq. ft.	5%	N/A
10,000 to 19,999 sq. ft.	8%	N/A
20,000 to 40,000 sq. ft.	17%	N/A
Greater than 40,000 sq. ft.	70%	N/A

* In millions of dollars

Source: Extrapolated from interviews conducted by AAPRD and various 2005 Statistics Canada and ACNielsen data reports.

Red Hat Co-operative Ltd.

Red Hat Co-operative Ltd is a marketing organization that was established in 1966 by local growers. The organization, located in Redcliff, started with 10 growers and expanded to about 45 growers today representing just under 100 acres of greenhouse production. Red Hat Co-op supplies greenhouse vegetables to wholesalers and grocery retailers throughout Canada (mainly western Canada) and parts of the United States. Growers produce Long English Cucumbers, Mini Cucumbers, Beefsteak Tomatoes, Tomatoes on the Vine, Cocktail Tomatoes and Sweet Bell Peppers (Red, Yellow, Orange). Red Hat centrally grades and packages all produce in a newly renovated 55,000 sq.ft. facility including a 19,000 sq.ft. cooler. Red Hat has implemented a Food Safety program that includes annual audits of both the greenhouses and the packaging facility.

Context

NATURAL GAS

The price of natural gas significantly increased in the year 2000 and has been steadily increasing since, impacting production costs. With a breakeven point estimated by Alberta Agriculture in 2007 at \$5.00/Giga Joule (GJ), some Albertans were paying as high as \$13 GJ. The government came up with a FIAP (Farm Income Assistance Program) which was a one-time program for \$0.40 per square foot and instituted a natural gas rebate program. During the 2006 season, cucumbers, peppers and tomatoes all resulted in negative returns according to Alberta Agriculture. One of the challenges facing greenhouse operators is that over half of the natural gas is consumed during January to March when there is minimum cash flow.

In 2007, the gas reference price for Alberta ranged from \$6.27/GJ in January to \$5.85/GJ in December, with a high of \$6.92/GJ in March. In 2008, the gas reference price for Alberta ranged from \$6.19/GJ in January to \$6.36/GJ in December, with a high of \$9.84/GJ in July. In 2008, the gas reference price for Alberta ranged from \$5.77/GJ in January to \$2.48/GJ in September. High costs of energy in the past heavily impacted the industry, plunging it into crisis mode. In 2009, there was a reprieve in the natural gas prices, which seems to be so far continuing, assisting the industry somewhat. Appendix B details the historical natural gas prices.

LABOUR

Up until late 2008, the greenhouse industry was competing for labour with the oil and gas industry. In 2007 and 2008, Alberta had the highest employment rates in Canada. In 2009, the situation changed somewhat. The number of Albertans receiving regular Employment Insurance (EI) benefits in September was 71,910, a 25 percent increase over the previous month. To put the number into perspective, from September 2008 to September 2009, the number of Albertans receiving regular EI benefits more than tripled with an increase of 54,580 or 321.5 percent. Appendix C highlights the provincial and national employment rates as well as the trend in EI beneficiaries for the province since 2000.

The Temporary Foreign Worker (TFW) program is administered by two federal government departments: Human Resources and Social Development Canada (Service Canada) and Citizenship and Immigration Canada (CIC). The TFW program allows foreign workers to work temporarily in Canada and employers to deal with labour shortages. In order to hire foreign workers on a temporary basis, Service Canada's approval is required in the form of a Labour Market Opinion (LMO). The LMO assesses the impact of hiring foreign worker on the Canadian labour market. This means that proof must be provided that every effort was made to hire a Canadian citizen or a permanent citizen prior to applying for a TFW.

Changes have taken place since the beginning of the program. Effective April 2009, employers participating in the program were required to submit a new Labour Market Opinion (LMO) application. The application to extend a LMO was removed from circulation. In cases where employers anticipated that their human resource needs would continue beyond the period covered by the temporary foreign worker's work permit, employers were requested to apply for a new LMO four months prior to the expiry.

GREENHOUSE INDUSTRY 2009

In the summer of 2009, Mohyuddin Mirza from Alberta Agriculture and Rural Development toured greenhouses and reported the state of the industry in the May-August 2009 issue of "The Greenhouse Business". While he noted that the market demand for locally grown cucumbers, tomatoes and peppers continued to grow with more awareness from consumers on the

advantages of locally grown produce, growers were still not getting a better price from commercial wholesale channels. It seems that the price is still being determined by Mexico, USA and The Netherlands. Mirza noticed greenhouse grown peppers air flown from The Netherlands offered for \$14.25 to \$16.50/5 kg case. According to 2008 cost of production figures, variable costs of production for greenhouse peppers was \$19.02/5 kg box and \$2.53 for capital costs. This results in a total production cost of \$21.56/5 kg box. Mirza surmised that dumping was taking place and domestic growers were finding it difficult to be competitive.

Businesses Visited

A total of eleven businesses in the greenhouse industry were successfully interviewed.

- Aleman Greenhouse (Redcliff; 2 acres)
- County Growers (Outside of Medicine Hat; 1.5 acres)
- Hollander Greenhouse (Redcliff; 30,000 square feet)
- Holsom Growers (Outside of Medicine Hat; 1.2 acres)
- Majestic Growers (Redcliff; 8.5 acres)
- Mitzner Farms (Medicine Hat; 58,000 square feet)
- **Red Hat Co-op (Association)**
- Rolling Acres (Outside of Medicine Hat; 7.5 acres)
- Sunset Greenhouse (Redcliff; 5 acres)
- Sunshine Greenhouse (Redcliff; 5 acres)
- Tri Ventures/Stigter Holdings (Redcliff; 7 acres)

Business Description

1. All operators visited have experience in the greenhouse industry and in fact, some operators are related to each other. Some greenhouses have been in existence for quite some time (since 1965), while one in particular is brand new (Rolling Acres) and under glass (although the owner is experienced). Size varied from 30,000 square feet to 8.5 acres. Greenhouse operators grow tomatoes (regular and tomatoes on the vine), cucumbers (long English and mini), sweet peppers and lettuces (one grower).
2. Most growers have the one location, although many have taken advantage of others over the years going out of business and purchasing neighboring greenhouses as a means of expanding.
3. Many operators know each other through the community and through church. All were attracted to the area due to the sunshine and many cited advantages associated with energy costs as being initially attractive.
4. Most operators indicated that the greatest achievement is still being in business, in spite of the challenges. Some indicated expansion over the years as significant achievements.
5. Critical success factors include: growing quality product, increasing production per square footage, being careful with operations, being passionate about the business, hard work, experience, and good employees. A few indicated that keeping energy costs and labour efficient are critical to operations.
6. Depending on the age of the operator, future plans ranged from preparing the next generation in the family to take over the business or winding down to hoping to still be in business in five years. The majority of operators had succession plans in place. If succession plans were in place, the next generation is expected in many cases to expand and/or utilize technology and innovate. Therefore, existing operators are maintaining status quo and looking to the younger generation to make changes.

7. Challenges experienced today that impact future plans include:
- Labour - poor work ethic among Canadian workers, lack of motivation for Canadian workers to work in greenhouses and changes in the Foreign Temporary Worker Program.
 - Energy - uncertainty in natural gas costs.
 - Input costs - costs associated with fertilizer and other inputs are increasing.
 - Market prices - decreasing market prices due to competition from B.C., Ontario, Mexico and other countries.

One operator indicated challenges in obtaining capital.

8. Opportunities on the horizon include increasing production per square footage (improving yield), putting in energy curtains to help reduce costs, diversifying product, and producing year round. One operator saw selling directly to the marketplace (through farmers markets, etc.) in urban areas as an opportunity for the future, while another saw value added processing as an opportunity for all growers.

Products/Services

With the existence of the Red Hat Co-op, operators do not view each other as competition. The operators are owners of the Red Hat Co-op and see competition being external (B.C., Ontario, Mexico and other countries). The Red Hat Co-op provides direction to growers in terms of what the market is demanding. The growers decide what to grow and the product grown is matched to orders received by the Red Hat Co-op. So, essentially, the growers are under contract with the Red Hat Co-op to grow a certain produce in specific quantities and types.

9. Overall, market demand is seen to be increasing. All operators recognize that consumers are increasingly interested in fresh, healthy food. While facing pressure from product from Mexico, many operators realize that the “buy local/regional” trend can gain steam with a “food scare” that has consumers questioning food safety of product coming from other countries.
10. Two main factors impact the introduction of new products by growers. First, production is synchronized with the contracts received by Red Hat Co-op. Therefore, the decision to introduce new products on a significant scale is made in concert with the Red Hat Co-op. Some operators are growing eggplant, peas, herbs and a few other select items for personal consumption or micro-scale (less than 1 percent of total production) farmers market sale. Second, product diversity is limited by what the greenhouse is set up for. It is not so easy to switch from one type of plant to another.
11. Formal research and development is not the norm in the industry. Research consists of learning about new things from sales people, consultants and associations. Some operators have travelled to other countries and toured other facilities and are aware of new techniques, technology and innovations. For the most part, however, innovation and new technology is not in the picture for most greenhouse operators. Much of the group seems to be risk averse and would want to introduce “tried and true” measures rather than be early adopters. Many are coping with slim profit margins by ensuring existing operations are efficient rather than investing in anything new (even if new investments may result in efficiencies).

Market

12. Most growers are unaware of where their product ends up. That is, many don't know how much of their specific product stays in the region. Red Hat Co-op indicates that 80

percent of the product stays in western Canada while the remainder is bound for the States.

13. All growers indicated that past and future sales and market share are not the critical concern. That is, they grow as much as or as little as the Red Hat Co-op needs them to grow. Red Hat Co-op has been doing a good job of requiring growers to produce to capacity. All growers noted that rather than sales, the price is a concern. Greenhouse produce is seen as a commodity and therefore, if there is excess supply in the marketplace (from Mexico and other places), the prices are depressed. If any produce is “thrown away”, it would only be in the case where the price does not justify introducing the product into the distribution chain (e.g. the end price does not justify a producer paying packaging fees). Being able to compete on the basis of price is a major operator concern.
14. Major competitors are located in British Columbia, Ontario, Mexico and The Netherlands. These competitors are seen as offering more variety, being larger, growing year round, brokering product or aligning themselves with greenhouses in Mexico to ensure year round supply, selling produce cheaper, paying lower wages (if international), and not requiring high heat input costs (using wood chips or having natural heat year round).
15. Year round supply is seen as being very important to central buyers. Growers and cooperatives in the marketplace are responding to this pressure through a variety of means. Some are brokering produce from other greenhouses (as is the case for Red Hat Co-op), while others are aligning themselves with greenhouses to the south. For example, BC Hot House Foods Inc. is responding to customer demand for year round supply, by aligning itself with greenhouse growers from Mexico.
16. Location was seen sometimes as a disadvantage, with greenhouses in British Columbia and Ontario seen to be surrounded by population mass and having access to population directly to the south. Ontario producers, for example are less than a day’s drive away from the majority of markets they serve, with the largest concentration of the province’s greenhouse producers in Leamington, Niagara peninsula and the Haldimand-Norfolk region. Southern Alberta does not have the mass of population, nor is there a significant mass directly south in Montana. Therefore, transportation costs are seen to come into play in a major fashion.
17. Fracturing of the larger greenhouse cooperatives in British Columbia was mentioned several times as having done damage to the industry. The greenhouses within British Columbia are seen to be competing against each other and pressuring the price down in the marketplace.
18. All growers utilize supplies such as fertilizer, seeds, seedlings, twine, poly replacement, etc. The Red Hat Co-op assists growers through a bulk purchasing program whereby growers can let the Red Hat Co-op personnel know what they need and the purchaser will source materials. This bulk arrangement has allowed growers to save money and acquire supplies from all over the world. The purchasing arrangement is geared towards giving growers a cost advantage and therefore the location of the supplier is not so much a priority. The growers are all happy with this arrangement.
19. For the most part, growers are able to take care of their own maintenance needs and therefore reliance on sub-trades is limited to assistance with boilers, furnaces, louvers, etc. While no one that specializes in these types of areas in the Medicine Hat area, assistance is available in Calgary and British Columbia. The Red Hat Co-op does not

- have a formal arrangement with any sub-trades to assist growers as a group since all growers have unique requirements and equipment.
20. At least one greenhouse utilizes coal as a source of energy. Coal is sourced from Sheerness Mines (Prairie Mines and Royalties) which requires a two week lead time for delivery. Anticipating needs two weeks ahead seems to be a challenge on the grower end and reliable delivery from the supplier is dependent on the weather conditions. Given that coal would be required most when weather takes a turn for the worse, the grower is challenged if the delivery does not arrive.
 21. There were mixed opinions as to whether the costs to operate were competitive in the region compared to where competitors were located. Some felt that the temperatures were extreme in southern Alberta (cold in the winter and too hot in the summer) and combined with escalating energy costs, the region provided a disadvantage. Others noted that the higher humidity in British Columbia and Ontario was more of a hassle, requiring growers to vent their greenhouses and possibly see additional pests in the greenhouse environment. The smaller size of operations in the region compared to competitors in the other provinces was also cited as a disadvantage, with the belief being that larger operations can produce cheaper.
 22. Top organizations and publications trusted for information were predominantly the Alberta Greenhouse Growers Association, Canadian Horticultural Association, Greenhouse Growers Magazine (Ontario), Canadian Greenhouse Growers Association, and Greenhouse Canada. A lot of the greenhouses also rely on a greenhouse consultant located in Lacombe that makes periodic visits to greenhouses that have contracted him. There is a high level of trust amongst those who utilize this consultant.
 23. None of the greenhouse operators did their own marketing. They rely completely on the Red Hat Co-op for this and are quite happy with the efforts of the organization. All are pleased with the Red Hat branding efforts and are positive about the “fresh, local, quality” campaign. While all growers believe that consumers are increasingly concerned about the produce that they consume, only a few minimally (1% to 5% of produce grown) supply consumers through the farmers’ market. Most are pleased with the “buy local” effort that is spearheaded by the Red Hat Co-op. Many are disappointed that the central buying situation predominant in large scale retail sometimes results in either locally grown produce being shipped to a central distribution warehouse and then back into area stores or produce from other areas ending up in local stores. All growers acknowledge that the Red Hat Co-op is making every effort to counter this, but market realities prevail.
 24. There is a mixture of seasonal and year-round greenhouses. Many of the seasonal greenhouses operate from May to October. Some of the year round operators question winter operations due to energy costs.
 25. None of the greenhouses have excess capacity.

Workforce

26. Operations range from owners strictly being the only “employees” to having up to 20 employees. The main position in greenhouses is the worker (prunes plants, picks produce, etc.). Most greenhouses employ full-time workers, with a few employing seasonal or part-time workers when needed.
27. All but three greenhouses utilize the Temporary Foreign Worker Program (TFW) and/or the Seasonal Agricultural Worker Program (SAW). The three that did not indicated:

- The greenhouse operation is too small and can't fulfill the requirements of program. The operators would love to utilize the program and can use the assistance. The lack of accessibility to this program by the operator or even a group of small operators in the same situation (work share) is seen as being a huge disadvantage impacting competitiveness.
- Another greenhouse operator tried to use the program once but paperwork glitches resulted in the greenhouse not getting any workers, leaving operators with no workers at the beginning of the growing season. Since the negative experience, the operators have opted to not utilize the program.
- One greenhouse located in Medicine Hat has made a conscious decision to utilize only Canadian workers and has experienced success with the workers. He has experienced no retention or training issues with these long-term workers.

28. Those that utilize the TFW program are extremely happy with the workers. All indicate that the workers are wonderful with a great work ethic. Many credit the TFW with productivity and efficiency increases (by as much as 50%) in their operations. All operators that utilize the TFW program indicate that changing regulations and bureaucracy is frustrating or challenging. Specific comments are:

- We have to get a Labour Market Opinion for 6 months - they stay for 4 months - then they have only 2 months for paper work. The Consulate is too slow to make the process work. We need to make it easier for TFW to come back and forth. It would be ideal to have something in place so we know they can come back before they leave. There are too many restrictions. We have to advertise in the local paper for two weeks, which is expensive. Locals want the jobs because of the wage offered, but aren't willing to stay in the job once they find out what the job is.
- The government has to recognize that we are farmers. We have been making a huge outlay of dollars; we are competing against Mexico. Ontario steps up to the plate with help and the province helps the industry by having a central agency help hire foreign greenhouse workers.
- Recruitment is a problem in the sense that we like the TFW program, but it's getting harder and harder to use.
- The TFW program has been frustrating. It has been cumbersome. Out of frustration, [we] tried to get help with the process out of B.C. (and agent) but the government doesn't want a second person involved. We can deal with the rules, but not if they keep changing.
- There is pressure put to justify use of foreign workers. The process is difficult. The Labour Market Opinion used to last one year and now it's six months. The time lag in the application process is too long to make it all work.
- A couple of years ago, we had 60 T4s. There was so much turnover amongst the Canadian workers. We appreciated the Foreign Temporary Worker program. Recently the rules changed and it's frustrating. We used to only have to advertise the jobs for 2 days and list the wage as \$10. Now, we have to advertise in the newspaper for 14 days, which is expensive. We also have to list the job rate at \$11.26 per hour, which attracts a lot of applicants, but they don't want to work in a greenhouse. They start and then quit right away. The result is that we miss out on the Temporary Foreign Worker program and face a labour shortage. There is also a wage differential between what is required to be paid to Mexican workers and what is required to be paid to Thai workers. This makes advertising difficult and confusing to applicants. Recently, we had two refusals on the Labour Market Opinions. It took a lot of paperwork. The process needs to be streamlined. It has become so cumbersome, we have had to hire a company out of Calgary (Erindale Services) to assist us with the

process. They charge \$1,000 per person coming in, which just adds to our costs. We have only 6 months to get employees. Also, we advertise in the Fall to get the Labour Market Opinion, but we don't need workers until January so it's not aligned to our needs. Also, we used to be able to keep the workers for 2 years and now the rules have changed to 1 year.

- Getting the Labour Market Opinion (LMO) is more difficult. Proving that we need the labour is difficult, because while there is lots of response to advertisements for greenhouse workers, once Canadian workers start, they don't like the job. They quit, but by then it's too late for us to use the Temporary Foreign Worker program.
29. The Greenhouse industry is seen to be healthy other than labour woes. The work ethic of Canadian workers is seen to be low when it comes to greenhouse workers. The nature of the job is that workers have to work in a hot, humid environment where fine manual dexterity is required (to prune plants and pick crop). While foreign workers enjoy this environment, Canadian workers do not like it. Therefore, retention of Canadian workers is a huge issue.
 30. Workers work 40 hours per week and pay wages as required by the TFW and SAW programs. This poses a challenge as well with the advertisement requirement for the TFW and SAW programs. Specifically, the required wage is advertised which would be higher than normally in the industry. However, with the employment programs, there are paybacks to the employer for housing. When Canadian workers apply for the position, the higher wage is the expectation, with no payback for housing. According to the 2009 Alberta Wage and Salary Survey, the average wage for a Nursery and Greenhouse Worker is \$10.10 to \$12.10 in the Medicine Hat- Lethbridge Labour Market. Median wages range from \$12.00 to \$14.00. Wages are as high as \$22.56. See Appendix D for details.
 31. While most operators do not see a change in their workforce in terms of the number of people employed, some indicated that future expansion will be curtailed by labour woes.
 32. Training is not an issue in general and even LESS so with foreign workers. The greenhouse worker position requires simple repetitive moves. Operators found that once foreign workers are taught what is required, they catch on very quickly and are eager to meet expectations. Language was not seen as a barrier since the requirements can be shown. Workers then help each other as required leaving less of a training burden on the operators.

Energy/Operations

33. Nine of the ten greenhouse operators utilize natural gas. One operator has a furnace in the greenhouse and uses electricity. Four of the nine operators utilize a combination of natural gas and electricity and one utilizes a combination of coal and natural gas.
34. All operators have noted that energy costs have escalated over the past few years and hope that they stabilize for the next while. Most are cautious that the costs could escalate again.
35. A few have explored alternative energy sources. Most believe that it would be expensive to implement and the payback period would be too long. They even point to scale and indicate that larger operations rationalize using alternative energy. Most indicate that there are no incentives and some operators know of large scale projects

in California and Ontario that they are “keeping an eye” on. Again, the “wait and see” approach is being utilized.

36. A few individuals alluded to a disparity between utility rates in Medicine Hat, Redcliff and Cypress County. However, conversations with the City of Medicine Hat utility department revealed that while a formal agreement no longer existed between Medicine Hat and Redcliff, all customers paid the same rates. Appendix E includes December utility rates.
37. Productivity is seen as being assisted with the use of TFW Program. Some operators understand the need to improve production yield.
38. None of the operators are utilizing robotics or plan on introducing them. Most felt that either it would be cost prohibitive or would not work in greenhouse operations. Again, the work is tedious and requires judgment (e.g. optimal pruning time and technique, best time to pick vegetables, etc.)
39. Overall comments about operations pointed to energy being the number one cost and labour being the second most predominant cost of operations.

Community Services

40. Interviewees were asked to rate a variety of community services on a scale of 1 to 7, with 1 being low and 7 being high in terms of satisfaction. The following ratings were received for key community services:

Community Service	Total Number of Respondents	High Rating	Average Rating	Low Rating
Police Protection	11	7	5.5	1
Fire Protection	11	7	6.2	4
Emergency Services	10	7	6.1	4
Health Care Services	10	7	5.7	3.5
Child Care Services	9	7	6.5	6
Schools K-12	5	7	6	5
Medicine Hat College	5	7	5.8	3
Universities or other colleges in the province	5	6	5.6	5
Public Transportation	4	6	3.5	1
Streets and Roads	11	7	5	2
Highways	11	7	5.5	4
Airline Service	8	5	3.4	1
Air Cargo	3	4	3	2
Trucking/Freight Services	9	7	5.6	4

In the cases of those services where all eleven business representatives did not respond, it was a matter of lack of knowledge about the service that prevented individuals from being able to rate. For example, only three operators had experience with air cargo and therefore they were the only ones to rate this service.

The high and low ratings are shown in the chart in order to show the “spread”. The difference between the highest and lowest rating shows the variance in opinions and should be considered in relation to the average rating. For example:

Community Service	Total Number of Respondents	High Rating	Average Rating	Low Rating
Health Care Services	10	7	5.7	3.5
Universities or other colleges in the province	5	6	5.6	5

While both community services had a similar average, there were clearly more people with above average satisfaction levels with Universities or other colleges in the Province than Health Care Services. The five respondents who rated the post-secondary institutions were all satisfied at above average levels as indicated by the lowest rating of 5, which is still well above average. However, some respondents were only moderately satisfied with Health Care Services as is evident by at least one respondent rating it 3.5.

Overall, only public transportation (or the lack of in some areas) and air cargo rated average or below average (when calculated over all respondent ratings). Lack of public transportation is seen as an obstacle to recruiting workers. Some operators thought that they could recruit workers from Medicine Hat to work in Redcliff if there was public transportation. The greatest degree of satisfaction was with Fire Protection, Education (at all levels), and Emergency Services.

Additional Supports

The final component of the visitation was aimed at soliciting feedback from the operators on the region, doing business in it and how the EDA of Southeast Alberta could assist them. The questions and responses (edited and summarized) are below:

41. What is the most positive aspect of being located here?
 - Family (several respondents)
 - Sunshine (five operators)
 - Strong community and Red Hat Co-op is great.
 - Freedom
 - All the amenities of a big city but in a great small town.

42. What do you dislike the most about the community or doing business here?
 - City council does not support local business at the expense of saving money (by utilizing contractors outside of town).
 - Lack of service within the City of Medicine Hat.
 - At times the community is too small - there are more opportunities in bigger centres.
 - Red tape at City Hall.
 - Lack of population to directly consume the product.

43. Have any city/county regulations, laws or procedures made it more difficult for you to do business here?
 - Construction development permits - there are too many regulations
 - Building permit process is tenuous. (two operators)

44. Is there anything the community, Province or Federal Government might be able to do to help your company?
 - Need government intervention to reduce natural gas prices.
 - Make it easier for us to utilize the TFW program.
 - Make the TFW program flexible so smaller greenhouses can utilize it.

- Streamline TFW program. Become more realistic and work with us. Why does it take 8 to 10 weeks to process the application?
- There aren't enough concessions for farmers.
- There used to be Alberta Grown labels on everything - now it's gone - we need to get these programs back that encourage local consumption.
- Growers are complacent with the Red Hat Co-op here - growers must take ownership of problems/innovations.
- Someone needs to look at the dumping of product into the Canadian market.
- The County has been very accommodating as we built this place and the neighbours have been great.
- They don't protect their agriculture. Tighten regulations on imports - we are bringing in things grown without the same tight regulations as here.
- AGRO Stability Program - income loss program is a slow process to re-coup. Need to change this.

45. How can the Economic Development Alliance of Southeast Alberta assist you?

- Help with labour problems.
- Can anything be done so exports (price dumping) do not flood the market?
- If natural gas goes above threshold benchmark prices, there should be some assistance. Also the TFW program needs to be improved.
- Stay in contact with Red Hat Co-op.
- We need expertise in importing, exporting, and marketing.
- Help streamline the TFW program so we can be more efficient in what to do. (2 operators).
- We need a value added processing plant for culls. Let's be innovative. Europe has vending machine for mini cucumbers, tomatoes, etc. We need to think of something like that.
- Find alternative uses for vegetables. Find something value added for vegetables like salsa.
- Look at possibilities for ready meals.
- Carbon Credits ... we use a ton of CO₂ but don't get rewards or credits. Perhaps carbon offset credits would be good.

ADDITIONAL COMMENTS

- A year and a half ago, the Ontario government gave growers \$30 million to make up for high currency through granting programs. Why can't Alberta government help us?
- The utilities are frustrating. City of Medicine Hat and Red Cliff have an advantage as far as utilities are concerned. Those of us located in the Cypress County do not get that advantage. We pay 5.4 per GJ but then there are additional costs for delivery. It is too expensive.
- There is now a small group that buy gas on the open market ... 50% of our needs are locked in and the other half is floating to spread the risk.
- Help the industry. When we had the mad cow crisis, the government helped the cattlemen. Why can't we get help? Why can't the Alberta government do the same as Ontario government? We can't afford natural gas prices.

**APPENDIX A
Greenhouse Visitation**

	DATE	
	COMPANY NAME	
	CONTACT NAME	
	APPOINTMENT CONTACT	
	PHONE	
	Description of Company	COMMENTS:
1.	Please tell me a little about your company. Please describe it. What products your company grows and sells.	
2.	How long has your company been operating in the area?	
3.	Why did you originally locate here?	
4.	Does your company have locations else where? Where?	
5.	What would you say your company's greatest achievement is?	
6.	What do you feel your critical success factors are?	
7.	Where do you see your company in five years?	
8.	What challenges are you experiencing today that may impact you getting there?	
9.	Are there opportunities that you may be able to seize in the next few years?	

	Products/Services	COMMENTS:
10.	Do you see demand for your products increasing, decreasing or being stable over the next year?	
11	Have you introduced/grown new products in the last five years?	
12.	Are you anticipating the introduction of new products in the next two years?	
13.	Are you anticipating the introduction of new innovations or technologies in the next year? What is it?	
14.	As a percentage of sales, how much will your company spend on R & D in the next year (to the end of 2010)?	
15.	As a percentage of sales, how much will your company spend on new technologies in the next year (to the end of 2010)?	
16.	Do you currently export your product/service?	
	◦ Where? What percentage?	
17.	What major materials are used in growing your product?	
	◦ Where are they sourced from?	
	◦ Would you be interested in sourcing these from within Western Canada?	
18.	Is there a supplier or a sub-trade that you would like to have located within South East Alberta? - If so, who (details)?	
19.	Additional Comments pertaining to products/services:	

	Market	COMMENTS:
20.	Is your company's primary market:	
	◦ Local (south east Alberta)	
	◦ Provincial	
	◦ National	
	◦ International	
21.	Within the last year , have your company sales been increasing, stable or decreasing?	
22.	Do you anticipate your company sales to be increasing, stable or decreasing within the next year ?	
23.	Within the last year , has your company's market share been increasing, stable or decreasing?	
24.	Do you anticipate your company market share to be increasing, stable or decreasing within the next year ?	
25.	Who are your three major competitors and where are they located?	
26.	What three things stick out about your competitors? (Three critical factors)?	
27.	Are the costs of operating here competitive to other places or to competitors?	
28.	How do you receive information about your industry? <ul style="list-style-type: none"> - industry newsletter/magazine? - E-mails from Associations? - Memberships in industry associations? 	

	Market	COMMENTS:
	<ul style="list-style-type: none"> - Seminars or conferences? - Other? 	
29.	Can you name the top two organizations or publications that you trust for information? (seeking advice on where to advertise)	
30.	What types of media do you use to market your organization?	
31.	Do you capitalize on any niche consumer interests such as the 100 mile diet or “buy local”?	
32.	What are your thoughts on the “Alberta Grown - Fresh Local Quality” brand for the region?	
33.	Is your business seasonal or are there ebbs and flows? Is there a downtime? Is there a time of year that you close down?	
34.	Are there times of the year you have excess capacity available? IF YES, would you be interested in utilizing this capacity with other companies? What types?	
35.	Additional comments about market:	

	Workforce	COMMENTS:
36.	How many employees do you have? <ul style="list-style-type: none"> - Full-time - Part-time - Seasonal - Casual 	

	Workforce	COMMENTS:
37.	Do you or have you used the Temporary Foreign Worker Program?	
38.	How many Temporary Foreign Workers do you have? <ul style="list-style-type: none"> - Full-time - Part-time - Seasonal - Casual 	
39.	How many different positions do you have?	
40.	What is the average wage you pay for the various positions?	
41.	What is the average number of hours worked per week? Per year?	
42.	How has your workforce changed over the past year ? Has it increased, decreased or remained stable? By how many or what percentage?	
43.	What are your expectations for the workforce next year ? Will it increase, decrease or remain the same? By how many or what percentage?	
44.	Is your company experiencing recruitment problems with any employee positions?	
45.	If YES, what problems/positions?	
46.	How many unfilled positions do you have currently?	
47.	Is your company experiencing retention problems?	
48.	If YES, what problems/positions?	

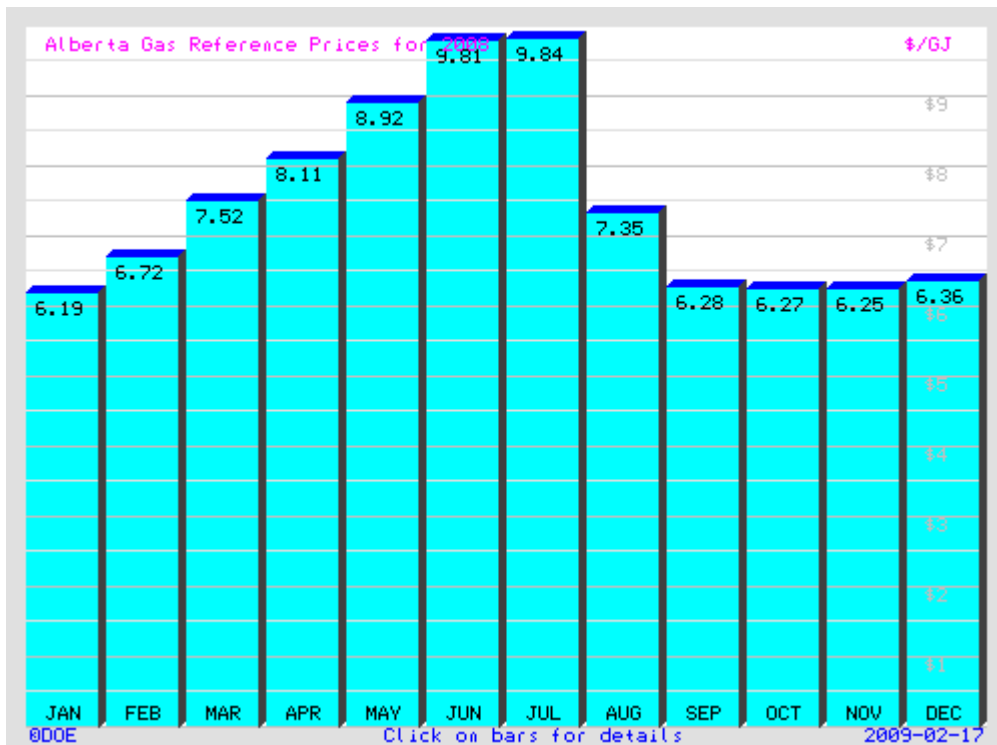
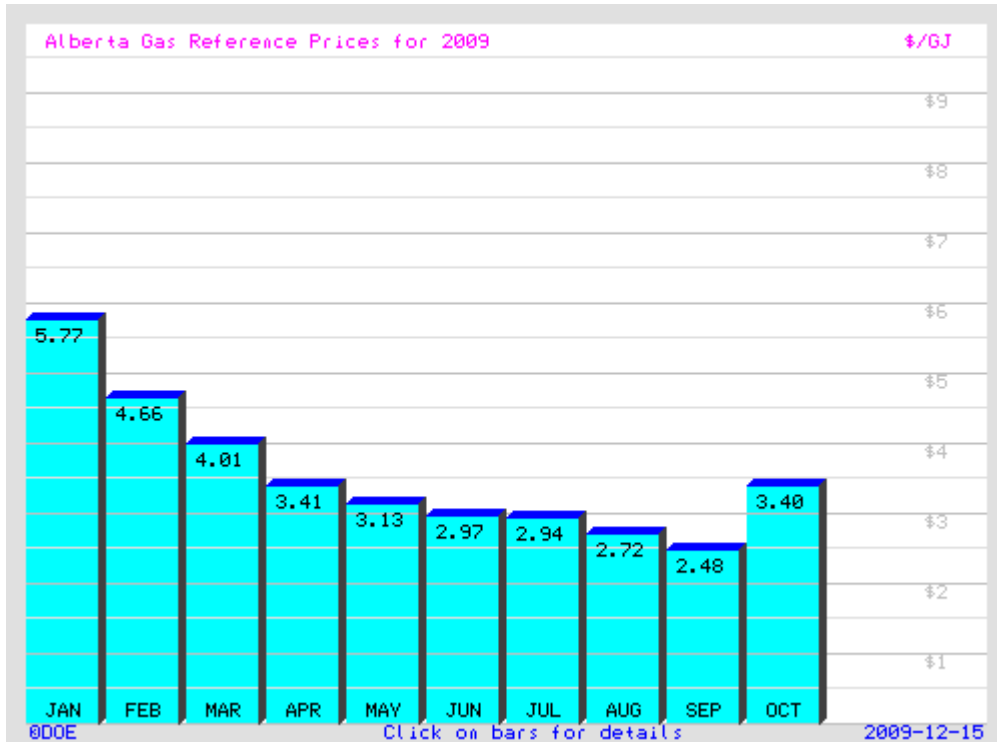
	Workforce	COMMENTS:
49.	Are you experiencing any training issues within your company?	
50.	Can you identify any training needs for foreign employees that differ from domestic?	
51.	Do you know of any programs that exist that can help address these needs? What organization provides these?	
52.	Where do you feel you are spending the most time: <ul style="list-style-type: none"> - Attracting employees - Training new employees - Developing existing employees' skills - Retaining experienced employees 	
53.	Additional comments about Workforce:	

	Energy/Operational Costs	COMMENTS:
54.	What type of energy sources do you use? (Natural Gas, Solar, etc.)	
55.	What has been the energy cost trend over the last few years?	
56.	Comment on the energy costs pertaining to your business currently.	

	Energy/Operational Costs	COMMENTS:
57.	Have you explored alternative energy sources for your business?	
58.	What are your thoughts on energy costs moving forward?	
59.	<p>Would you be interested in using alternative energy sources such as solar, wind, geothermal, solar thermal, etc. in your operations?</p> <p>If yes, which interest you the most?</p> <p>If no, why not?</p>	
60.	<p>Do you currently employ robotics in your operations?</p> <p>If so, how.</p> <p>If not, are you interested in this area for your operations?</p>	
61.	<p>How would you describe the productivity of your business?</p> <p>That is, do you have any efficiency concerns in any part of your business?</p>	
62.	Comments on Energy/Operational Costs:	

	Community Services	COMMENTS:
63.	On a scale of 1 to 7, with 1 being low and 7 being high, please rate the following services provided by the community:	
	- Police Protection	
	- Fire Protection	
	- Emergency Services	
	- Health Care Services	
	- Child Care Services	
	- Schools K-12	
	- Medicine Hat College	
	- Universities or other colleges in the province	
	- Public transportation	
	- Streets and roads	
	- Highways	
	- Airline Service	
	- Air Cargo	
	- Trucking/Freight Services	
64.	What is the most positive aspect of being located here?	
65.	What do you dislike the most about the community or doing business here?	
66.	Have any city/county regulations, laws or procedures made it more difficult for you to do business here?	
67.	Is there anything the community, Province or Federal Government might be able to do to help your company?	
68.	How can the Economic Development Alliance of South East Alberta assist you?	
69.	Additional comments?	

**APPENDIX B
Natural Gas Prices (2009 & 2008)**



APPENDIX C

APPENDIX D
2009 Alberta Wage and Salary Survey
Nursery and Greenhouse Worker

8432 Nursery and Greenhouse Workers

Nursery and greenhouse workers plant, cultivate and harvest trees, shrubs, flowers and plants, and serve nursery and greenhouse customers. They are employed in indoor and outdoor nurseries and greenhouses.

Example Titles

forest nursery worker
greenhouse worker
horticulture worker
hothouse worker
hydroponics worker
nursery worker

Main duties

Nursery and greenhouse workers perform some or all of the following duties:

- Prepare soil; plant bulbs, seeds and cuttings; graft and bud plants; and transplant seedlings and rooted cuttings
- Spray trees, shrubs, flowers and plants to prevent disease and pests
- Position and regulate greenhouse and outdoor irrigation systems to water plants and fields
- Dig, cut and transplant trees, shrubs, flowers and plants and prepare them for sale
- Provide information to customers on gardening and the care of trees, shrubs, flowers, plants and lawns
- May operate tractors and other machinery and equipment to fertilize, cultivate, harvest and spray fields and plants
- Maintain inventory and order materials as required
- Clean working area.

Employment requirements

- Completion of secondary school may be required.
- Completion of college courses in horticulture or a related field may be required.
- On-the-job training is provided.
- A provincial licence to apply chemical fertilizers, fungicides, herbicides and pesticides may be required.

Additional information

- Progression to supervisory positions, such as greenhouse supervisor, is possible with experience.

Classified elsewhere

- General Farm Workers (8431)
- Harvesting Labourers (8611)
- Landscaping and Grounds Maintenance Labourers (8612)
- Nursery and Greenhouse Operators and Managers (8254)
- Silviculture and Forestry Workers (8422)
- Supervisors, Landscape and Horticulture (8256)

Hourly Wage Detail: (LETHBRIDGE – MEDICINE HAT REGION) (For full-time and part-time employees)

Wages*	Low (5 th percentile)	High (95 th percentile)	Average	Median	Data Reliability
Starting	\$9.00	\$20.49	\$10.10	\$12.00	
Overall	\$9.50	\$20.53	\$10.71	\$13.00	C
Top	\$11.00	\$22.56	\$12.10	\$14.00	

*All wage estimates are hourly except where otherwise indicated. Wages and salaries do not include overtime hours, tips, benefits, profit shares, bonuses (unrelated to production) and other forms of compensation.