
Final Report
**An Elite Survey of US Agri-Food
and Agri-Biotech Industry
Representatives regarding
Investment Decisions**

***Prepared for
Investment Partnerships Canada
and
Agriculture & Agri-Food Canada***

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LES ÉTUDES DE MARCHÉ CRÉATEC +

206, Avenue des Pins East - Montreal (Quebec) H2W 1P1

Tel.: (514) 844-1127 - Fax: (514) 288-3194

Email: info@createc.ca / Web Site: www.createc.ca

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1. INTRODUCTION

- Créatec in collaboration with Earncliffe Research & Communications and Randal Goodfellow is pleased to present the following qualitative research report to Investment Partnerships Canada (IPC) and Agriculture and Agri-food Canada (AAFC). Over the course of the study period, key business executives in the US agri-food sector were interviewed in order to understand the criteria they use to make investment decisions or to pursue strategic business opportunities.
- The companies were chosen from the food processing and life science (biotech / bio-products) industries, and included multinational food products manufacturers, meat processors, nutritional/dietary product developers, snack food manufacturers and distributors, research institutes, flour mills, food ingredient (protein, enzyme, yeast, starch, lactic acid, esters, flavours) producers, confectionery companies, edible oil (vegetable, soy, canola) producers, bio-based solvent manufacturers, flavour houses, ethanol and bio-diesel manufacturers as well as companies that develop biodegradable packaging.
- The objectives of the research were two-fold – (1) to aid AAFC in their continuing efforts to gain recognition of Canada's capacity to supply safe, high quality food produced in an environmentally responsible manner and identify investment and market growth opportunities; and (2) to aid IPC in developing its branding and marketing activities to promote Canada as a destination of choice among international investors.
- Specifically, the research sought to determine:
 - Future investment intentions
 - How location decisions are made
 - What are the key criteria in selection
 - Assessment of Canada based on those criteria
 - Barriers to investing in Canada
 - Perceptions of leading alternatives investment locations
 - Perceptions of how Canada is changing
 - Information priorities regarding Canada
 - Sources of investment information/advice
 - Preferences regarding communications

2. METHODOLOGY

- The project included interviews with 90 senior US agri-food and agri-biotech industry representatives. The interviews were largely drawn from the Midwest states of Illinois and Minnesota, although interviewing was not strictly limited to those areas. Previous research has demonstrated that investment perceptions are tied largely to the particular sector, rather than bound by geography. At the onset of the project, it was therefore assumed that companies in agri-food whether they be from Illinois or Oregon would project the same traits. The sample was roughly distributed into streams – two-thirds of the sample was drawn from the food-processing industry and the remaining one-third from the life sciences sector (biotech/bio-products). The “senior” executives interviewed consisted of president and CEO level or senior vice presidents responsible for business development or strategic investments.
- The interviews took place between February 19 and April 14. Createc+ was responsible for the overall management of the project, Randal Goodfellow of Goodfellow Agricola was responsible for 30 interviews from the bio-products sector and Earnscliffe Research & Communications was responsible for conducting the remaining 60 interviews, largely from the food processing and nutraceuticals sector. Twenty-five per cent of the interviews were conducted in person and the remaining 75% were conducted by telephone.
- The interview guide was designed by Createc + with input from Investment Partnerships Canada, Agriculture and Agri-food Canada, Earnscliffe Research and Communications and Randal Goodfellow.
- Recruiting for the interviews proved to be particularly difficult. In projects like this one where there is no business or monetary incentive, it can be challenging to schedule interviews. (Generally, incentives for senior US executives are an expensive proposition, between \$150 US and \$200 US per person,, and would unlikely not be big enough to facilitate participation.) Senior executives do not give freely of their time, particularly to a foreign government looking to find out information on their business and which results in no measurable benefit to the interviewee. Many are not interested in discussing what they deem to be proprietary information. Others felt the researchers should be dealing with individuals in their Canadian operations. In many cases, we were able to bank on Canada’s good reputation as a country and trading partner and were therefore able to appeal to potential interviewees on this level. In other cases, recent political issues (anti-Americanism in Canada, Canada not supporting US in its war against Iraq) were cited as reasons why the respondent would not agree to an interview. In the end, the recruiter contacted 450-500 companies in order to obtain the full complement of 90 completed interviews.
- Results of the survey are reported in aggregate format. **As there was a high degree of similarity between the traditional agri-food sector and the newly emerging bio-based sector, it should be assumed that the findings apply to both sectors. Any differences between these two sectors will be specifically noted.**

3. CONTEXT

- In a rapidly changing and expanding global economy, investment in knowledge-based sectors has become critical to growth. The Government of Canada's has put a strong emphasis on fostering innovation in order to spur the increases in productivity so important to continued and sustained economic growth. Innovation leads to the creation of high value-added jobs, which in turn increase personal income and wealth, contributing to the country's ability to support its social objectives and to improve its citizens' quality of life.
- A key part of the innovation strategy is to attract more Foreign Direct Investment (FDI) into this country. Canada has always required substantial FDI because of its relatively small population base and the resultant limited savings and investment capital pool. For instance, Industry Canada estimates that one in ten Canadian jobs depend directly on FDI. Almost half of the trade flows between Canada and the United States are carried out on an intra-firm basis.
- Canada's stock of FDI has grown substantially in recent years – from \$90 billion in 1985 to \$217 billion in 1998. However, that increase masks a much more worrying trend line. Between 1985 and 1998, Canada's share of North America's inward FDI declined from 25.6% to 13.6%. And more than 90% of this decline is due to the reduction in Canada's share of US outward FDI – in fact, Canada's share has dropped almost by half.
- The US remains Canada's largest investment and trade market with over 85% of its exports destined to the US. This is particularly the case for the Canadian agri-food sector, which is a complex, integrated \$130-billion chain. The sector generates more than 8% of Canada's Gross Domestic Product (GDP), is the second largest producer of primary products and the third largest manufacturing sector in the country. It is the third largest exporter of agri-food products in the world, generates one of every seven jobs in Canada and contributes \$5 to \$7 billion to Canada's trade surplus every year. The key driver of increased trade is through expanded investment by major agri-food firms as a result of awarding product mandates to serve multiple markets.
- Food processing ranks as the number one industry in seven out of the ten provinces. International agri-food companies are drawn to Canada because of the huge NAFTA market (400 million people, US\$580 billion in agri-food sales) and because of abundant and high quality resources, a superb and cost-effective R&D environment and documented manufacturing cost advantages. They also like operating in Canada because its world-class food and animal inspection system is globally admired. The Canadian regulatory environment ensures product quality for consumers and enhances the reputation of Canadian-based agri-food companies.

- The agri-food and life sciences sector has all the characteristics experts have identified as being important to make it a leading-edge technology sector. It has shown rapid growth in output and employment, spends a large share of its revenues on R&D, requires large numbers of extremely highly skilled workers, is a key technology enabler for a huge variety of sectors and has attracted market recognition as the industry of the future.
- In the Midwest US states, agri-food and bio-tech firms are positioning themselves to develop and exploit new technologies as the life science/genomic revolution blurs the lines between food, pharma and industrial materials and demands major changes in the industry.
- Central US is home to many of the world largest agri-food multinational enterprises (MNEs), most with substantial, well-established subsidiaries in Canada. Product mandating is one of the keys to growth in this established sector. MNEs serving global markets make investment decisions based on cost competitiveness, distribution advantages and business climate compatibility.
- For the agri-food sector, a focus on investment retention is not enough. It must keep building new opportunities in both existing and new markets. In the key North American market, in particular, this means aggressively pursuing new cross-border product mandates, investments and technologies. As well, Canada's increasing ability to expand and apply knowledge of life sciences provides enormous opportunities in the production of a wide array of new food and non-food agri-based products. These products offer potential benefits to improve human health, have a positive effect on the environment, and decrease our dependence on non-renewable resources.
- A research assignment carried out by Earncliffe and its partner Wirthlin for IPC in 2001 in the biotech and information and communications technology (ICT) sectors in Boston and Dallas found that global branding and marketing strategies were not sufficient to cause companies to change their investing habits. In order to increase the likelihood of a company choosing Canada as a location for either a green-field investment or expansion of its current operations, a sector specific strategy was required. It is therefore important to undertake sector specific research in order to understand the rationale for investment decisions in that specific sector and to develop effective branding and marketing products and activities. The present project was therefore modeled after that project.

4. EXECUTIVE SUMMARY

Despite the economic slowdown in the US and the lingering effects of 9/11, the agri-food and agri-biotech companies surveyed for this project remain bullish. It must be noted that these are not the heady days of the late nineties in any respect. However, business executives remain optimistic about their companies' future. It is a measured optimism – companies have in many cases shed operations in order to focus on core competencies. And they believe that that growth will only come through carefully-weighted investment decisions.

The size of a company does have a bearing on its appetite for risk, as one might expect. Larger multinationals operate in a cutthroat business environment and are constantly seeking out new business opportunities in order to get the edge on competitors. Most have specific annual budgets and targets for expansion. Most of the mid-sized companies interviewed indicated that while they are open to new opportunities, these must be reviewed diligently to ensure that the "fit" with core competencies is right.

The decision to seek out business opportunities most often develops as a result of a business imperative, usually related to production capacity nearing 100 per cent. Decisions to invest elsewhere are heavily – almost exclusively – influenced by return-on-investment, given the marginal profits generated in many of the traditional agri-food sub-sectors. Most executives also note that their preferred type of business investment is a merger or acquisition, rather than a greenfield investment.

For those companies seeking out investment opportunities, the "business friendliness" of a jurisdiction is considered an important attribute. This does not necessarily mean "incentives" – but rather an understanding of the burden that too many unnecessary regulations can place on the viability of an operation as well as a willingness to make things happen.

While many companies spoke of the benefits that the North American Free Trade Agreement (NAFTA) brought to bear, many still were not fully aware of the potential of the Canadian market. The tendency is still to view Canada as a small market that can adequately be handled from the US. While most executives indicated they felt fondly about Canada and had travelled here for pleasure, few were able to speak knowledgeably of the positives – or the negatives – as they related to the business climate.

The point worth mentioning is that no significant negatives surfaced when executives spoke of Canada – apart from the heightened border security in the aftermath of 9/11 and some sectoral sensitivities involving the Canadian regulatory system. It is seen as a country with a strong and able workforce, good transportation links and high product quality. Most consider Canada and the US to have similar business practices and ethics.

Knowledge of Canada's research capabilities was limited, however many in the traditional agri-food sector admitted that their businesses weren't research-intensive. Of those who knew of Canada's expertise, a small handful of universities were seen as world-class. Still fewer executives were aware of the research and development tax credits available to those companies that perform research in Canada. The fact that this major competitive advantage existed in Canada came as a surprise to many – and elicited significant amount of interest at the same time.

Most indicated that they would be interested in hearing more about Canada's competitive advantages – although the information that is desired should be highly targeted to a particular sector. Most executives noted that general information about a country or jurisdiction is not sufficient – that specific business opportunities need to be outlined. Participants in this survey consume trade magazines and journals regularly and attend industry trade shows, largely to keep up with the evolution of the industry and to network with other industry players.

Overall, Canada is viewed positively but does not routinely enter on these executives' radar screens. While this may be discouraging news for the Canadian government, it also says that there are no significant negatives that it must overcome, apart from some concerns about Canadian regulations among nutraceutical and dietary supplement company executives. It was also clear that these companies prefer hearing about specific business opportunities involving Canada rather than a general sales pitch on the attributes of Canada.

5. DETAILED FINDINGS

5.1 INVESTMENT PERSPECTIVES

- Several different types of companies were interviewed:
 - *Small companies:* These companies are not unlike Canadian small companies. Most do not have enough cash and are simply trying to make money in an otherwise difficult economic period. These companies have not necessarily set targets for increasing investment – in fact, many do not feel the need to expand as they believe they have the proper formula for success. Any expansion plans would likely involve increasing sales volume or distributor relationships. Small bio-products firms are also likely to lack capital, therefore they are not looking to expand but rather are looking for possible technology licensing opportunities for a market place opportunity.
 - *Large Multinational companies (MNEs):* These companies have operations in the US and around the world. Most are in multiple businesses related to the agriculture or food business but have a decentralized chain of command – division heads make investment recommendations to the executive board. Many have Canadian subsidiaries that are given a defined role in decision-making. Most are aggressively pursuing business opportunities worldwide.
 - *Large US companies:* These companies are primarily owned and operated in the US, but have not expanded globally. These companies tend to look to other markets within the US for expansion.
 - *Family-run companies:* These can be big or small, mainly privately held but some are also publicly held. They tend to be somewhat more cautious about investment decisions but this is more of a factor of whether they are big or small. They are also likely to try to stick to core competencies and don't venture out into products or businesses that take them away from their core knowledge. Their research and investment directions were still very much driven by their founder's vision.
 - *Companies owned by venture capital (VC) firms:* There was evidence that a growing number of companies in the agri-food sector are owned by venture capital firms. This clearly puts these companies on an aggressive growth track and on the search for new opportunities. The VC firms rely on the company's management to scout around in their area of expertise for new business ventures and in turn, the company benefits from the venture firm's network of business contacts. Decisions on strategic investment opportunities are ultimately made by the venture firm.

- The main difference between companies from the agri-food sector and the bio-products sector is that the former is a more mature industry with established relationships and the latter is an emerging industry eager to develop and partner to make commercially viable products. While the Canadian government cannot ignore the traditional agri-food industry given its size and importance, it is a more difficult sector to reach and sway because of its maturity. Bio-products, on the other hand, is a much smaller industry but it provides an opportunity to get in on the ground level.
- The majority of companies interviewed for this project consider themselves to be on a growth track and are therefore always on the lookout for opportunities. These opportunities could range from building or expanding production facilities, joint ventures with synergistic companies, acquisitions, as well as expanding export markets and distribution of their products. It also includes developing new partnerships for sourcing raw materials.
- For these companies, growth is something that happens after much strategic thinking, planning and research. It is likely that events over the past three years – the collapse of the high-tech bubble, 9/11 and the soft US economy – have made companies ever so aware of external realities. Despite this, companies are bullish, but they are carefully so.
- MNEs probably have the most sophisticated process for planning business investments. They develop brand strategies and geographic strategies that are reviewed yearly at planning sessions. Larger companies are either organized into “country” divisions or “product” divisions. Generally it is up to each division to seek out opportunities and make recommendations to the company’s executive board. Many companies allow their various divisions to make capital expenditures up to a certain threshold. If the investment exceeds that threshold, the decision is made by a combination of the President, the executive committee and the board of directors. Companies with Canadian subsidiaries generally allow their Canadian executives to determine their own investment needs and rely on them to champion opportunities with the parent company.
- Many companies, big and small, boast that their management structure is small and centralized. This allows them to be more nimble when it comes to investment decisions. And despite the size of the US food processing industry, most company executives invariably indicate that their particular area of agri-business is small, that they know the players, and they hear about any emerging opportunities.
- Most company executives pointed to common reasons that trigger investment discussions:
 - need access to raw materials;
 - need to get under trade barriers;
 - see a market expansion opportunity (i.e. to buy a competitor); and
 - production is at capacity.
- Capacity seems to be the driving issue. If companies are not at capacity at existing plants, then there’s no need to look elsewhere. A number of the companies interviewed have gone through a consolidation process in recent years so many already have more than enough capacity. Greater automation in factories has also meant that capacity requirements are not as great.

- For many companies, however, the cost of capital expansion is too great to consider any move whatsoever. For many, the margin of profit is so slim that to transport a product more than 300 miles away will make it unprofitable – and if the company's operations are capital intensive, it is unlikely they would become more than a regional player in their industry. As one executive noted, "sometimes it's easy to just stay where you are. The cost of change can be too great." Joint ventures or acquisitions often help overcome this issue as they provide companies with a base of operations in another region or country and an existing customer and distribution base.
- Another impediment to investing in another country involves brand recognition. Considerable effort must be made in a jurisdiction to raise brand awareness. For this reason, many companies are unwilling to make the effort, particularly if they are already operating on a low profit margin in a highly competitive business. Many companies choose to manufacture their products under private grocery chain labels to avoid branding issues.
- Very few companies talked about green-field investments. The cost of doing so was perceived as being prohibitive. Only the large MNEs talk about building plants – but strict criteria must be met (i.e. operation must turn a profit in year two) before consideration will be given.
- Approximately half of the companies interviewed have some sort of business connection to Canada. Many of the larger companies have Canadian subsidiaries. A number of companies have manufacturing sites in Canada, while others have a Canadian division that resulted from a joint venture arrangement or acquisition. Most of the remaining companies have distributors or co-packers in Canada, a sales force in Canada or source some of their raw materials from Canada.
- For a good number of companies, it is inconceivable that they would consider pursuing any significant business opportunities in Canada since they don't feel that they have exhausted all the opportunities that the US has to offer. This is particularly so with smaller companies – the larger companies have a more global attitude.
- Agri-food companies that have entered the Canadian market in some form as well as those that intend to enter it some day describe a similar path for entry into Canada, or any foreign market for that matter. They would first test the waters by shipping product into Canada to see if there is a market for the product. If it was determined that a sound market did exist, the company might formalize an arrangement with a distributor or co-packer in Canada. By doing this, a company without any formal knowledge of Canada could take advantage of its new partner's existing distribution relationships. This also allows a company to build brand awareness in a country. The next step would be to hire a sales staff in the country and subsequently set up a warehouse in Canada where the company would store its goods. It could also enter into an agreement with a contract manufacturer in Canada to see if the sales volume is there. Only once this is well established might a company decide to set up operations in Canada in order to better service the customer, but this would only be done if they are at production capacity in their US plants.

- For many companies, having business relations with Canada has opened their eyes to new opportunities in the country. Many had been previously unaware of what the country has to offer. One company executive noted that "by being in Canada, we found cheaper sources of materials we didn't know about – it was a surprise to us." Through traveling to Canada and networking with Canadians, many executives are considering further expansion of their business relations with Canada.
- NAFTA was raised voluntarily by a significant number of executives interviewed. It was universally credited with reducing tariffs and making it easier to do business with Canada. On the flip-side, the elimination of tariff walls has made it such that a company need not set up manufacturing plants in Canada as it can simply ship tariff-free from the US.
- Canada was given high marks as a place to invest as it is considered to be very similar to the US in business culture, tastes and eating habits. Other attractive sites include Ireland, Puerto Rico, Singapore and Australia – all mainly for tax reasons. Mexico is not seen as a great place for investment simply because of its perceived lax regulations and lack of quality control. Most of those interviewed indicated that they prefer to deal with countries that have tough regulations and high standards of quality control. Europe is often viewed as a good location to invest as exporting to Europe is increasingly difficult due to both tariff and non-tariff barriers. If the company has a global focus, it will most likely have manufacturing operations in Europe.

5.2 DECISION CRITERIA

- By far, the number one criterion that companies use to conclude strategic investments is cost. Return on investment (ROI), particularly in this economy, is scrupulously studied before decisions are concluded. This is true for big companies and small companies, whether they are actively planning investments or not. MNEs have sophisticated ROI calculations involving a Weighted Average of Cost of Capital (WACC) calculation. This calculation is different from country to country and is based on risk.
- Cost considerations for the development of a product include the cost for raw materials, labour and transportation. ROI calculations also include operational costs such as the cost of water and energy as well as the price a company pays to emit waste products, such as municipal wastewater permits. Taxation structures in a particular jurisdiction also come into play.
- Transportation infrastructure is an important criterion for virtually all companies. Access to good roads, rail and shipping is important. Proximity to a major airport is also seen as a benefit so that senior executives can get in and out quickly.
- The issue of currency was raised by a significant number of senior executives. Most indicated that fluctuation of a currency is very costly as it makes it much more difficult to plan ahead. Most of the MNEs interviewed indicated it was their preference to have production in the same currency as sales. To produce everything in the US and export it elsewhere is too expensive a proposition if you are a global company.

- The issue of whether it's best to be close to raw materials or close to market is an important debate for some companies. Where a company sits on the supply chain (i.e. processor of a raw material as an input to another company's business or the producer of a consumer good) is often a determining factor. As a rule of thumb, if a company has a consumer product, it prefers to be close to a large market. If it is a processor of a raw material, it prefers to be closer to the source. This does not always transpire as there are a lot more variables that come into play.
- If freight is a very large cost, some companies would rather manufacture the product closer to the ultimate consumer and bring in the raw materials by rail. It is cheaper to ship by rail over long distances than by truck. Some of the larger companies can make a business case to have plants spread out across the US near major population centres if they have a bulky, heavy product. These companies may also have Canadian production facilities in order to manufacture for the Canadian market.
- The deregulation of the transportation industry in the US has had positive effects for manufacturers. Manufacturers can now afford to locate closer to market and have raw materials shipped in rather than having to locate next to the raw material.
- Being closer to market also means being able to service your clients more efficiently. Most companies who have a consumer product want to be located only a day or two drive from market. Major retail grocery stores do not carry the overhead they once did. Computer software technology has made it possible for grocery stores to automatically order product when stock is low, often two to three times a week instead of every two weeks. This means that less money is tied up in inventory and that product can be liquidated before the grocery store has to pay a supplier for it. It is therefore essential that a company be close to its distributor.
- A company also wants to be closer to market if it produces perishable items (frozen foods, bread).
- For a large number of companies, their products are lightweight and not expensive to ship. Economists will advise that it's more cost-effective to ship a value-added product a long distance than to do so with a raw material. A number of companies noted that the trend is to move back to where the raw materials are (i.e. pasta companies).
- As far as Canada is concerned, many companies who don't have a bulky product feel that they can best serve the Canadian market by shipping from their current US locations. The business case does not support building a separate Canadian plant. To avoid border hassles, a company will often contract a Canadian company to manufacture its product.

- There are mixed views about government incentives. The larger the company, the more the expectation that a jurisdiction will provide incentives for the company to set up business there. A MNE knows it can extract commitments from governments such as tax breaks, assistance in training, access roads, land and buildings. As one executive for a multinational firm interviewed for this project noted, incentives can be worth as much as \$25 million on a \$250 million plant. Another confectionery company executive noted that many US states will provide an incentive that will balance out the high sugar prices in the US and make it attractive for these companies to stay in the US rather than move elsewhere where they can access world sugar prices. Most people indicated however that incentives are more common in the US than elsewhere. Some small companies mentioned that they would not want to model a business plan based on a tax break – if it was rescinded, they might not be able to prosper without it.
- For most companies though, a business-friendly attitude is preferred. As one executive mused, “how does a government approach business? Is it inspired to bring it in or does it see it as simply a money-maker?” Many of the small to medium-sized companies noted that incentives aren’t as important as getting regulations out of the way. The mark of a business-friendly jurisdiction is not that they will bend rules, but that they will speed up any necessary approvals. For instance, one company interviewed spoke of setting up an office in Chicago. The City of Chicago assigned a few city officials and inspectors full-time to the project, located them at the office site, and they worked feverishly to get all the approvals (environmental, water, energy) done in a timely fashion. They compared this to the year it took them to get a sprinkler permit in Seattle.
- Regulations and border issues between different countries are definitely a cost consideration for most companies. The larger agri-food firms see these types of regulations as a cost of doing business on a global scale, but many smaller companies indicate that they may just give up if they encounter too many hassles, believing that it’s too time consuming and costly for them. The annoyance that many companies have is that regulations are not always consistent, transparent or logical. Most indicated that they don’t mind a tough regulatory system, and in many cases *welcome* it, but too much red tape and delays cost them money. As one executive put it, “I appreciate good and proper quality control, but it can be a concern if it’s too much.”
- A number of respondents noted that because of strict EU import restrictions, it makes economic sense for them to locate manufacturing facilities in Europe. With respect to Canada, there is little difficulty shipping across the Canada-US border so sometimes it’s easier and less costly to service Canada from the US.

- The balance of investment criteria are distant considerations:
 - Clusters are not deemed necessary, even for those companies that do a large amount of research (i.e. bio-products). This may be because they have little experience with clusters in this sector in the US. Or it may be something that is more useful to nascent companies rather than mature industries such as agri-food. Participants noted that they can be useful for networking purposes and to be able to tap into a pool of trained personnel. There were two clusters that were evident during this survey – the “candy” cluster in Chicago and the cluster of flavour houses in New Jersey. Clusters also usually mean that there are good transportation routes and infrastructure, criteria that can be important to some businesses. Other companies like to cluster around a raw material processing source, like a flour mill or a molasses plant. Some companies, from both the agri-food and bio-products side, noted that they locate where they do to be close to larger MNEs to whom they sell their products. The significant drawback cited with clusters is that competitors often will poach employees from them.
 - Physical access to researchers and universities may or may not be necessary to the companies interviewed. Many food companies do not undertake a significant amount of R&D. Others who do indicate that they go to numerous sources for R&D therefore co-location is not necessary. Many feel that their own in-house researchers are sufficient. Some grains processing companies are located in university towns (i.e. Ames, Iowa) and do a significant amount of work with the local university. Some companies were spun out of universities and keep those connections tight.
 - Companies on an aggressive growth track indicate that they are always trying to improve product formulations and processes. They are interested in doing work with universities, particularly since they are too small to have their own R&D division and they recognize that R&D is costly. The universities that receive the most mentions include Iowa State University (food and veterinary science); University of Iowa (pharmaceuticals, medicine, pediatrics); University of Minnesota; Kansas State University; University of Nebraska (allergens); North Dakota State University and Oregon State University. The University of Guelph was also mentioned often for their excellence in food science. The University of Saskatchewan was also mentioned a number of times for its ag-biotech expertise.
 - Access to skilled labour is sometimes important, but most companies are willing to train the right people.
 - Financial stability of a country is important and is a factor when companies are looking globally at investment opportunities.

5.3 OTHER FACTORS

- The company executives interviewed had mixed views on whether 9/11 has had an impact on their business:
 - Some said that it had had no effect at all, that business is business. Global companies are still global in mission and focus.

- Others indicated that while it hasn't thrown them off their business or investment plans, they did feel an impact – some impacts for a brief period and some impacts that are ongoing.
- The bio-products industry was more likely to say that 9/11 had had "no effect" on their business as opposed to the traditional agri-food industry. This is likely due to the reliance on the part of the agri-food industry on a strong consumer economy as well as smooth cross-border flows for export products.
- Most felt that the food service industry had been adversely affected, given that people weren't flying or eating out for the period following the attacks. But many companies noted that people still have to eat, so it was a temporary blip. This was true even for non-staple food items as candy and chocolate. As one confectionery industry representative noted, "people cut discretionary products in times of a bad economy. But a box of chocolates is still within reach." Others noted that there is a tendency for consumers to reach for comfort food and nutritious foods in times of economic turbulence.
- Many noted that the resulting economic slow-down and the war are having more impact on their business than 9/11 did itself, with lingering effects on securities, markets and capital resources, making it somewhat more difficult to do business.
- Many others still have felt the effects of homeland security. There is more paperwork to do for both interstate and international business transactions. There are more delays and hassles at the border, particularly the Canadian border. Regulations that were not enforced previously are now being enforced, such as plant inspections. And the US Food and Drug Administration (FDA) has promised to bring in "pre-clearance" regulations this fall that would force companies to register incoming or outgoing international shipments. This regulation is seen as "unworkable" to some but others say that as long as it is applied evenly to businesses in every sector, then it's a fact of life in the post 9/11 era.
- A few mentioned that their business had been adversely affected. One bulk food distributor said that the bottom has fallen out of the bulk food market since consumers want to know that the food is safe. By packaging food, you can see whether it's been tampered with or not. Others mentioned that insurance premiums had rocketed. For one interviewee, there had been an increase of 104% in his company's insurance premiums. One executive noted that since people are now inclined to fly less, it makes it all the more important to have strong people at their local operations.
- The US Farm Bill is generally seen to have had little effect on agri-business writ large. Of those who were aware of the bill (many were not), most said that it largely benefited farmers directly rather than the agri-food industry. Most had not done any sort of calculations to understand its effect on their business. For the confectionery industry, they are only too well aware of the support given to sugar-beet farmers, increasing the price of sugar in the US to 2-3 times the world price. Others mentioned that the subsidies ensure that there is a steady supply in certain commodities, such as rice. On the bio-products side, many felt it in theory should help the bio-based economy through procurement opportunities, but it has yet to produce any results given that it has 'no teeth'.

- Labeling and certification issues plague food product retailers. Most see labeling as an unpleasant part of doing business in a global economy. Most noted that every country has its own requirements for labeling so if you want to do business in that country, it's part of the cost equation. Country-of-origin labelling has not been a major issue to date for food retailers – and there seemed to be little awareness of new COOL requirements that the US federal government has promised. Bilingual labeling can be a hassle, but people can generally understand and accept this as a part of doing business in Canada. Some noted that they also do Spanish labeling for Mexico or areas in the US with large Hispanic populations – not because they have to but because it makes good business sense. This seems to be more of a burden for small companies trying to do business in a foreign jurisdiction. Regarding genetically-modified (GM) foods, most felt it wasn't an issue at all in the US. Where it is a concern is in Europe. For a company to do business in Europe, it has to ensure that its products are GM-free.

5.4 GENERAL OBSERVATIONS OF CANADA

- Canada enjoys a solid reputation among the senior executives interviewed. It consistently receives ratings in the seven to eight out of ten range. These ratings are based, however, on more of a warm, fuzzy feeling that the respondents have toward Canada, developed through a mix of business and personal experience.
- Of the positive attributes cited, Canada is seen to have a favourable business climate, with a quality labour force, a good transportation system, product quality on par with the US, with low labour and health care costs and similar taste in food. It is seen as a close, easily accessible but largely untapped market. European companies see it as a pleasant mix of European quality of life and US business acumen.
- Canada's regulatory environment is considered to be similar to that of the US. As one executive noted, "the Canadian system is good, if sometimes tough to work with. The CFIA is tough, but it needs to be."
- Canada is generally viewed as a "socialist" country and that the cost of doing business in Canada is based on paying for social programs. Most point to our system of Medicare in this context. Some noted that Medicare is probably a good thing as it lowers costs to the employer – they don't have to pay for employee drug plans here as they do in the US. Of those who have familiarity with the provinces, Ontario and Alberta are seen to be the most business friendly, with a question mark about British Columbia. Quebec is seen to be the most "socialist" and least business-friendly. The issue of Quebec separation was referred to often. (*N.B. interviews were conducted prior to the Quebec election on April 14.*)
- Many companies see Canada not only as a consumer market but also as a manufacturing base for re-export into the US. Agri-food companies, particularly those in the confectionery industry or those who make food products with high sugar content (cake mixes), are aware of the competitive advantage that Canada offers when it comes to sugar prices. While many have relocated to Canada to benefit from this, others are still weighing the costs and benefits of doing so. The capital intensity of most of these businesses is such that it often does not make sense to them to build a plant in Canada, but rather wait until a joint venture or acquisition opportunity arises.

- Relatively little is known about Canada's agriculture or agri-food industry. There is a general awareness that Canada is a commodity-exporting nation. Of those who are knowledgeable, Canada is known for its canola and oats. Many in the food industry are aware of the Loblaws grocery chain, which is seen as "one of the most sophisticated retailers in the world". A small number of people referenced Canada's expertise in greenhouses and hydroponics, saying that Canada has cornered the market in greenhouse tomatoes.
- Even less is known about Canada's bio-products industry – ranging from surprise that we have one to a faint 'buzz' they have heard in industry circles about it. Of those who are aware of our bio-product and biotech companies, most are very impressed, even excited, about the research being done in Canada. One company executive noted that there are a cluster of biotech firms in Vancouver working on innovative technologies and devices.
- Others are more acquainted with the research that is being done at Canadian universities. A small number of them have done collaborative or contract research with Canadian universities or research institutions. In this context, the University of Guelph was most often cited for its expertise in food sciences. Several executives outlined the joint research projects they had undertaken with University of Guelph scientists, including product formulation and research; experimental drying of harvested crops that have active ingredients; nutrition and functional foods including antioxidants and functional oils; testing of plant varieties; and clinical trials. The University of Saskatchewan was mentioned several times, with the University of Toronto, McGill University, the University of British Columbia and the University of Manitoba's functional food centre rounding out the list.
- Virtually nobody in the traditional agri-food industry had heard of any Canadian government tax incentives for R&D performed in Canada. There was slightly more awareness among respondents from the bio-products industry, but the level would still not be considered 'high'. Many felt it was a well-kept secret that the government should advertise better. This tax incentive was clearly of interest to companies who perform a significant amount of research. Bio-product companies indicated their interest in hearing more about key research direction of the government and to learn more about the low cost of doing business in Canada. Bigger laboratories that work in the areas of ag-biotech and nutraceuticals said that they would be enticed to come to Canada if they knew of deals to do with the small biotech firms, but that they didn't know where to begin. Some also indicated that it would be useful for the government to further determine how companies could share in intellectual property and risk for these joint projects – it would be a "differentiating" factor.

5.5 NEGATIVES ABOUT CANADA

- Typical concerns about the border and lack of regulatory harmonization topped the list of "negatives" about Canada.
- Most companies have noticed increased vigilance on both sides of the border since 9/11. Those companies that ship traditional packaged agri-food products tend to get hassled less than those companies that ship bulk ingredients or less traditional products such as nutritional supplements. Unexpected delays at the border for some companies are causing concern about the viability of cross-border business. Most expect it will discourage smaller companies from attempting to do cross border trade.
- The regulatory burden was cited as a significant issue for a number of the executives interviewed. As noted earlier, tough regulations in the agri-food industry are generally welcomed, but not if they are not transparent or applied unevenly. The lack of harmonization of regulations between Canada and the US is also a concern, particularly to emerging areas of interest to the Canadian government such as functional foods, nutraceuticals and dietary supplements:
 - The Canadian government does not currently have proper rules that regulate the dietary supplement industry, although some interviewees noted that they believe the government is presently working on guidelines. The US, on the other hand, has legislation that regulates this industry – the Dietary Supplement Health and Education Act. The lack of harmonized rules is a cause for concern for companies who are interested in pursuing business opportunities in Canada but are uncertain about the new guidelines.
 - The lack of proper rules governing this industry segment means that Canada has stricter regulations regarding fortified foods than both the US and the EU – and the EU is generally seen as the most protectionist jurisdiction in the world for the food industry. For example, there is no category for anti-oxidants in Canada so producers cannot make claims that foods containing anti-oxidants have functional properties. As well, dietary fibre is considered a food, not a functional property.
 - Certain products, such as amino acids, are restricted in Canada. Amino acids are growing part of the dietary supplement industry in the US. There are numerous other ingredients that are not available in Canada. This limits the scope of business that dietary supplement companies can do in Canada.
 - Canada has formal efficacy requirements for its dietary supplements and are assigned a Drug Identification Number (DIN) or, under the new guidelines, a Product Information Number (PIN). The US has no such requirements. One nutraceutical company executive noted that his company sells over 1,500 products in the US but only 150 in Canada, due to the fact that each and every product must be approved individually for sale. They simply cannot submit all of their products to be approved – it is time-consuming and expensive. Another company noted that it's still a debate whether they will move some of their products into Canada, stating "if the FDA doesn't approve our product, why should the Canadian government have to?"

- The irony, noted one nutraceutical executive, is that Canadian science in this area is world-class yet it has a very poor regulatory system for these products.
- In many ways, however, the EU is still a much more difficult jurisdiction for regulations in this area. New CODEX regulations that will be effective EU-wide will require that vitamins can only be sold by pharmacists and by prescriptions. Company executives noted that the natural products industry will be "savaged" and pointed to the powerful brand name drug industry as the reason behind the changes.
- Another regulatory burden involves food labeling. A number of the executives interviewed noted that Canada keeps changing its laws, something that is very costly to companies, particularly smaller companies. It was noted that the same thing happens in the US, so Canada is not alone in this area. Bilingual labeling was seen by most to be a hassle, but one that they would deal with in this global economy.
- A complaint from the meat processing industry involves the exporting of meat to Canada. CFIA regulations in this industry require pre-clearance of the product before it enters Canada, even though the FDA has already approved it. According to one industry representative, Canada is the only country to require pre-clearance. It was suggested that Canada and the US sign mutual recognition agreements to lighten this costly regulatory burden. Another suggestion was to allow CFIA inspectors to drop in at US plants or FDA inspectors in Canadian plants.
- An issue raised by a biotechnology company representative involves Canada's patent laws related to plants. This was an issue raised at BIO 2002 in Toronto with respect to plant breeders rights. Another biotechnology company recommended that Canada set up a strong regulatory system that would ensure the identity preservation and separation of industrial and food crops.
- A number of bio-product companies complained that Canada's environmental regulations are not strict enough on company emissions. If they were tougher, like those in the US, there could be a market in Canada for bio-alternatives – products made from natural sources that replace more hazardous chemicals. One company executive noted that his company exports its product, a bio-solvent, to overseas operations of US companies that find it easier to use one solvent company-wide than to source solvents from local markets. The US government has in essence created a home-grown export market for this bio-solvent company.
- Canada's small population is seen as a negative to many companies. It is seen as a "small market" even though it is roughly the size of California's market. In their estimation, if Canada were bigger these US companies would "do things". As well, Canada's population is not growing as rapidly as other locations in the US, such as the US Southeast. The majority of companies with consumer products are attracted by these demographic trends. Most importantly, however, is that most companies believe they can adequately service the Canadian market from their present operations, given that the population is largely based within 50 miles of the border in Central Canada.
- The exchange rate on the Canadian dollar was seen as an issue of concern. Many executives noted that stability is good for business but that fluctuations cost money. Several noted that the Canadian dollar had been rising lately, which makes it difficult to plan. Many stated that while the low dollar might be good for manufacturers who

are exporting products from Canada, it is bad for US retailers as it makes US products more expensive to buy in Canada.

- A few executives were aware of the trade dispute between Canada and the US over wheat. Most expressed disappointment that the US would pursue such trade actions but they understood the pressure on the administration by the farm lobby. They noted that they buy Canadian wheat because of its quality, not the price. However, price will become a factor if tariffs take effect. A few noted that NAFTA has helped smooth out any issues they may have had with the Canadian Wheat Board.
- Canada is also suffering presently from the political environment surrounding its relationship with the US. There has been widespread coverage of anti-American comments coming from Canada and the fact that Canada is not supporting the US in its war on Iraq. It was raised spontaneously in many interviews – participants were surprised and somewhat hurt. Most don't think there will be lasting repercussions – and they do distinguish Canada from France – but it is still something that will affect cross-border business relations in the short term.
- One respondent made an observation of the Canadian dairy industry, saying it was not as competitive as the efficient dairy operations in California and New Mexico. The Canadian industry, much like the dairy industry in Wisconsin and Iowa, has been slow to change its technology and processes.
- The balance of concerns centred around high corporate taxation levels in Canada (still seen as too high) and the high level of unionization in Canada (also seen as an impediment by many).

6. SECTOR-SPECIFIC FINDINGS

The executives interviewed for this study came from a broad range of sectors within agriculture, agri-food and bio-products. In the areas of nutraceuticals, ethanol/bio-diesel, confectionery and bio-products, there were large enough samples to make some observations and draw some conclusions about those particular sectors.

6.1 NUTRACEUTICALS – FUNCTIONAL FOODS – DIETARY SUPPLEMENTS – INGREDIENTS

- A significant number of companies interviewed fell into the area of nutraceuticals, functional foods, dietary supplements and ingredients. Most described themselves as companies involved in “nutrition”.
- Most indicated that their primary focus was sports nutrition or human nutrition. Ingredient companies produced a variety of compounds including proteins (animal and dairy-based), yeast, starches, soy, dietary fibre and herbal components – many of which are components of these nutritional supplements.
- The term “nutraceuticals” is sometimes seen as a pejorative term. “Functional foods” seems to be the *de rigueur* term right now. Some worry that these terms are becoming meaningless to consumers and that consumers don’t see the value for the extra expense. Some noted that the trend towards sports drinks and nutritional bars was hot in the ‘90s and that it has peaked a bit, although it is still considered a growth area, experiencing high single-digit growth.
- Medical or “ethical” nutrition is still very much a growth area. These products include pediatric and elderly nutrition, diet supplements, nutrition for specific illnesses such as diabetes, and supplements that slow muscle-wasting through old age, cancer and AIDS. Many of the larger pharmaceutical companies are getting into this area in a bigger way, including Ross Labs (Abbott), Bristol-Myers Squibb, Mead Johnson, Novartis and Baxter. Many noted that since only a handful of big companies are involved, it’s easy to keep up to speed on happenings in the industry.
- While little was known about the nutraceuticals industry in Canada – only a couple of people mentioned the research being done in this area in Canada – many noted that the Canadian government has supported its farmers better than the US when it comes to alternative crops. Similar diversification hasn’t taken place in the US, largely attributed to the strong farm lobbies that insist on keeping outdated government support structures for their industry.
- A number of people noted that Canada has real expertise in oats and alfalfa and that Canada has gotten into niche crops that are important to the dietary supplement industry such as echinacea, fenugreek, wild blueberries and flax seed.

- Most of these companies noted that they don't need to locate anywhere geographically, so finding alternative sites for investment is not high on their priority list. They import most of their source materials from around the world. A number of executives noted that since their formulas are often proprietary, it becomes difficult to maintain confidentiality if production is in more than one location.
- It was in this sector where concerns about the regulatory burden that Canada places on these products was most pronounced. [A detailed accounting of these concerns is outlined earlier in section 4.6, "Negatives about Canada".]
- Virtually all of these companies insist on a strong regulatory regime and claim that they shy away from countries with lax standards. In fact, many of the vitamin companies complained that there were no regulations surrounding their products in many jurisdictions. They feel that if they are regulated properly, it will put them on a more level playing-field with the pharmaceutical industry. As one company executive explained, "Big pharma doesn't want us to be regulated so they can say we're unregulated."
- Complaints involve the differences in regulations between the US and Canada. Canada has formal efficacy requirements for its dietary supplements which the US doesn't have. Most indicate that the US philosophy is that if the product doesn't work, then the consumer won't buy it. Some pointed to a product called "Joint Juice" which was recently developed by an orthopedic surgeon in California and is now the leading drink for people experiencing joint pain or osteo-arthritis, as well as a product by Baxter called "Pulse", a vitamin water. As one executive remarked, "why would a large company like that get into it if it were hooley?"
- Other complaints involved the lack of regulations for dietary supplements or functional foods in Canada which meant that companies are unable to make health claims on their products. A number of people noted that Canada is working on regulations, but most fear they will be draconian.
- In practical terms, the differences between the regulatory structures between Canada and the US mean that it can be too time-consuming and expensive for smaller companies to enter Canada. As one executive noted, "it boils down to economics - you have to make enough money to make it worthwhile."
- A number of people noted the irony that Canada's research and science is excellent, but that its regulatory structure just hasn't kept pace.
- The regulatory burden is felt most acutely by manufacturers of finished products. Those who make ingredients for these products do not have the same concerns, although they do notice a tightening of procedures at the border.

6.2 ETHANOL AND BIO-DIESEL

- The production of ethanol and bio-diesel has exploded in the US. This is due to a number of factors:
 - low corn prices in last five to six years have encouraged farmers to seek out value added opportunities;

- federal incentives for alternative energy production such as the US farm bill, small producer tax credits and US Department of Agriculture (USDA) value added loans and grants, as well as the US Clean Air Act of 1990, have pushed farmers to get into ethanol production; and
 - ethanol can be used as a replacement for MTBE, a harmful fuel additive that is banned by a number of US states.
- The trend toward more ethanol and bio-diesel is very much a farmer-driven phenomenon. ADM and Cargill have not entered this market in a big way as they feel conflicted – they benefit from low corn prices and don't want to see the commodity price rise.
 - Producers lament that a vicious circle has developed. Farmers were looking to find value added opportunities for their crops and got into ethanol production, but this in turn increased the demand and raised the price for ethanol and bio-diesel, making it more difficult to produce profitably.
 - A number of people noted that the same conditions for success are available in Canada. As one respondent noted, "if the Canadian government takes leadership on this issue, you will see the same phenomenal growth there." They added that if the government made an effort to create a domestic demand and a new market in Canada for ethanol, there would be financing opportunities available to the industry. If the government only gives out subsidies, without trying to create a domestic demand, the resulting ethanol would be exported to the US. As one official noted, "we don't want Canada just to export its ethanol and displace our own production."
 - If the conditions are right and the products are feasible, a few people noted that technology providers would gladly go to Canada. It was noted that only roughly six companies in the US that have a track record for financing ethanol plants and helping with process engineering – ICM, Fagen Inc, Broin and Associates, Delta T, Vogel Bush and Katzen. Canadian farmers could work with these companies in order to build plants.
 - Others noted that Canada could lessen agriculture trade issues if it were to create more of a domestic market for its own wheat. They believed that there would be less friction with North Dakota farmers in this area.
 - Iogen was seen as leader of new cellulosic technology. One respondent noted that wheat straw will be the next potential market, but that the technology isn't quite there yet to deal with the drying and storage of wheat straw. Others indicated that American farmers will stick with the "tried and true" grain-based ethanol production as they know and understand corn and wheat and they are generally averse to risk.
 - Bio-diesel is a new product that farmers are getting into, although manufacturing bio-diesel from high grade oils such as soy are too expensive to use for fuels. Bio-diesel can also be produced from low-grade oil such as used French fry oil, although its properties make it such that it cannot be used in low temperatures. The market in Canada therefore is limited because Canada has too cold a climate to use it year round – but it could be used seasonally.

6.3 CONFECTIONERY INDUSTRY

- Chicago is home to a number of major US candy and confectionery companies, including Tootsie Roll, Wrigley's, Brach's and Archibald Candy. Historically, sugar came in through the port of Chicago where there was also abundant and cheap labour.
- There is a high level of awareness among industry players that the US has artificially high sugar prices because of the support the US government gives to its sugar beet farmers. There is also a high level awareness that they could access world sugar prices, at a half or a third of the prices in the US, if they were to move to Canada or Mexico or elsewhere. All of those interviewed were aware of other companies that have moved out of the US.
- Some companies have been successful at getting around this issue. One company interviewed, for example, blends sugar in Canada with gelatin and re-exports it back to the US. As a gel, there is no tariff barrier – the quota is on unmixed sugar.
- This is an issue to not only the confectionery industry but also to some more traditional agri-food companies who have products with high sugar levels (cake mixes) as well as some ingredient companies (yeast manufacturers need access to sugar suppliers, molasses manufacturers).
- Many companies lament that "the cost of change is too great". They indicate that it is a capital-intensive industry and it is very expensive to build plants elsewhere, even if labour and raw material costs are better elsewhere. When the opportunity presents itself, it is easier to take over vacated plants and retrofit them rather than to build from the ground up.
- Access to sugar and corn syrup is key for this industry. Regarding Canada, while sugar is cheaper, corn syrup is more expensive. Logistics are also seen to be more expensive.
- Another issue for the industry in the US is that they are not allowed to use cocoa butter extenders there because of the strong cocoa lobby. These extenders make it easier to handle chocolate, but because of the lobby, it cannot be called "chocolate" if cocoa-butter extenders are used, but the same product can be called "chocolate" in Canada and in Europe.
- There were no impediments cited by these confectionery companies to doing business in Canada.

6.4 BIO-PRODUCTS INDUSTRY

- The industry members interviewed were relatively diverse, some being large multinationals who have experience in handling and processing agricultural crops all the way to others who are just in the start up phase and are just beginning to manufacture and distribute consumer products. However, there appears to be some common threads through their thinking.

- Those who are aware of the Canadian bio-products industry believe that it is fairly strong and that the Canadian government is very supportive. In some ways, they add, Canada seems to be more committed to the bio-based economy (BBE) than the US. Most would say Canada is on par with the US in this area.
- The bio-based economy is seen as a growth area, although many of the companies in this sector are still very small and industry is in its infancy. A number of the smaller companies noted that R&D can be very expensive.
- Quite a number of the more traditional agri-food companies noted that they were either getting into, or considering getting into, the BBE in some way, shape or form. It is seen as a way to add value to existing product-lines or crops.
- Many in the industry lamented that the current Bush administration is not as excited by the bio-based economy as the previous Clinton administration. The BBE captured the imagination of the previous administration, whereas the current administration sees the BBE as a way to offset America's dependence on foreign oil. This forces the industry to position its technologies under the umbrella of energy conservation and alternative energy technology. They also note that 9/11 and the war on terrorism has diverted money away from the BBE. A number expressed that the 2002 Farm Bill contained provisions to stimulate the bio-based economy (grants, loans, government procurement policy, etc.) but has not yet had much impact. Others who are directly involved in the implementation process indicated that things would become more visible shortly.
- Companies often compare the Canadian bio-products industry to that of Australia. Both have growing industries and are innovative. Australia, however, is often seen as pursuing business opportunities in the US more aggressively than Canada. It appears to be obtaining good pick up of its pitch.
- Many also added that when Canada "decides to act", it will be able to do so quickly, and mobilize quicker than the US. A number of people noted that Canada has better organizational skills than the US, that our history of working in "communities" has allowed us to organize ourselves much better than the US, which has prospered through independence and entrepreneurship.
- A good majority of respondents claimed not to know much about Canada in general and would not utter an opinion or expressed that they did not feel qualified to comment on the size or quality of the bio-economy in Canada. However, many later indicated that they are aware of or have relationships with a small number of individual companies or have worked with Canadian universities, all of which are described as excellent.
- About half of the respondents were aware of various research activities being undertaken in Canada. They describe the research as high-quality and affordable. A significant amount of respondents spoke of contact with researchers in Canada, particularly with the ag-biotech cluster in Saskatoon.
- A number of interviewees talked about the work of Iogen, which is seen as a global industry leader. A number of people also noted the work being done in Canada on the fuel cell and in the area of alternative energy. There was a relatively significant amount of interest in Canada's forestry sector and the potential opportunities that it holds.

- Canada's R&D tax credit system however is not well understood, even among those who are heavily involved in research. The corporate seniority of the level of people interviewed might have been a factor, as most indicated that the R&D tax credit would be something that their research or accounting/administration people might be aware of. Still, it is not something for which Canada is well known. Most people express interest when it is mentioned however.
- Canada is seen to have superior environmental stewardship than the US. In a couple of cases, Canadian farmers are given credit for having better environmental practices than their US counterparts, with Ontario Environmental Farm Plans being cited.
- On a very positive note, virtually nobody interviewed could outline any significant impediments to doing business in Canada, beyond typical border issues – and even those mentioned were not specific to bio-products.
- A number of companies did mention that if Canada were to tighten up its environmental regulations and clamp down on individual company green-house gas (GHG) emissions, this would drive demand for green products such as plant-based insulations and other construction materials, soy-based solvents, and other "green chemicals" that replace more hazardous chemicals.

7. INFORMATION DISSEMINATION

- Virtually all respondents indicated that their company attends industry trade shows. Most view them as a prime opportunity to network and to see what the latest technologies are for their industry. Others felt that there were so many shows, it is hard to focus on one or two.
- Some indicated that they had traveled to Canada on occasion to attend trade shows, while others said that they weren't aware what trade shows took place in Canada.
- Some indicated that food and health care shows in Canada would be of interest to them, while others felt that business analyst shows showcasing opportunities in Canada would be interesting.
- A plethora of shows were mentioned: FMI (Food Marketing Institute); Supply Side East; Supply Side West; National Association for the Specialty Food Trade shows; Natural Products Expo; American Association of Cereal Chemists AGM; IDDBA's Dairy Deli Bake Conference; National Restaurant Association; Canadian/International Food and Beverage Show (in Toronto); InterBev; International Pizza Expo; Institute of Food Technologists; American Baking Association's Baking Expo; Dairy Show; SIAL (The Global Food Marketplace); International Food and Drink Expo; Private Label Manufacturers' Show; and the Canadian Health Food Show. Others mentioned that they attended grocery shows, machinery shows and annual meetings of health organizations (cancer, diabetes, etc.).
- The bio-product industry tends to focus more on end-use trade shows, such as trade shows involving urethane, plastics, textiles and construction materials, rather than on primary product trade shows (soy, corn). This is because they want to be seen as replacement technologies for more hazardous chemicals or less sustainable building products.
- Company executives also indicated that they receive a lot of their industry information from trade journals. A few of those mentioned include: Nutraceutical Executive; Insider; National Food Merchandiser; Nutraceuticals World; Food Technology; Food Product Design; Prepared Food; Functional Foods and Nutraceuticals; Beverage Industry; Food Processing, Technology; Dairy Food; and Alive (a Canadian magazine). Other journals mentioned include health and medical journals.
- A significant number of the MNEs and larger US companies interviewed hire consultants to study site logistics or undertake financial studies in order to advise companies on their investment plans. Others hire consultants to undertake process design or research studies. Contracting out these studies is a cost efficient way for many companies to get expert advice that they do not have in-house.

- Very large and very small companies are not approached by investment banks – the MNEs do not need access to capital and the smaller companies do not have enough money to leverage for an investment deal. Medium-sized companies largely appear to be the prime target for investment banks. Some companies find them useful; some do not.
- A few company executives noted that Canadian agri-food or bio-product companies are not well served by Canadian investment banks or venture capital firms. These banks or VCs are too small and don't command the attention that their US counterparts do.
- Only the larger companies are contacted by foreign governments. A few company executives noted that officials at the Canadian consulate in Chicago had met with them. Another company mentioned that it is in discussions with the Ontario government. But the overwhelming majority did not recall ever hearing anything from the Canadian government.

8. RECOMMENDATIONS

- The Canadian government should promote more aggressively the R&D tax credits available to agri-food, functional food and bio-product companies. Most companies expressed surprise that such a program would be open to US companies. Those who do considerable R&D were intrigued and asked for more information.
- Canadian research institutions and universities appear to be one of our strongest cards. Universities heavily involved in food science and ag-biotech, mainly the University of Guelph and the University of Saskatchewan, should be better promoted by the federal government to small and medium-sized firms. Companies are interested in forming partnerships and contracting out research. This will also serve as a way to introduce these companies to the Canadian marketplace. Company executives noted that once they found their way into Canada, they became aware of many more opportunities than if they had stayed close to home.
- Another way to get US companies to expand into Canada or generate cross-border relationships is to introduce them to Canadian contract manufacturing capabilities. Any way to speed up the chain of events, as described on page 7, that lead to establishing a presence in Canada would be useful.
- Company executives complain that every single state, province or country claims that it has "skilled workforces", "low cost locations" and "good education". Many feel that these marketing terms are overused. They are not swayed by general-purpose investment materials. What company executives want is specific information about taxation and regulations that affect their business in a particular jurisdiction, about labour and workers' compensation rules, what access there is to raw materials, utilities and infrastructure and to what lengths the host government will go to secure their business (incentives, R&D tax credits, site approvals sped-up, etc.). They want to know about specific business opportunities, research related to their company, specifics on the low cost of doing business as well as introductions to key people in their industry.
- Developing investment leads and encouraging companies to consider Canada as part of their investment plans takes time. A single corporate call will not convince a company to move to Canada. In fact, as we heard from one company interviewed, a sloppy or superficial effort to understand a particular company can quickly turn it off from considering Canada. Canadian consulates in the US should target a smaller list of companies for their investment calls. Canadian investment officers should make every effort to familiarize themselves with these companies through ongoing meetings over time. They should be in a position to help these companies form their intentions as they relate to investment and ensure Canada is included in their future investment decisions. Perhaps more locally-engaged staff could be hired as investment officers – people who already have a solid business connection to the community.

- The federal and provincial governments, in partnership with targeted segments of the agri-food industry, should better market major food, dietary supplement or bio-product trade shows in Canada to US companies.
- The Canadian government should consider ways to help small biotech and bio-product companies promote themselves to bigger US companies (bio-product firms, research laboratories, pharmaceutical companies), venture capital firms or investment banks. These companies are too small to tell their own story, but without the assistance, they will never become well known enough to attract the capital they need to grow.
- A cautionary note about some of the marketing terms commonly used by the federal government: 1) most people initially understood "skilled labour" to mean a sales and marketing workforce; and 2) "R&D" to many firms means product formulation development or consumer and market research.
- Iogen is seen as an industry leader in the production of renewable fuels through cellulosic materials. Perhaps the government could better leverage this success story and help it "tell the tale" of the interesting research happening in Canada and the welcoming attitude of the federal government. This may come as a breath of fresh air to companies in the US bio-products sector as the current US administration is not as enthusiastic about the industry as the previous administration was.
- Canada is comparatively advanced in terms of clustering and may have knowledge or expertise to offer in this area. Clustering is not top-of-mind in the US agriculture industry, although the Midwest is moving towards incubation and could benefit from Canada's expertise in this area.
- Once the new guidelines for the dietary supplement industry are in place, the government should consider a series of industry meetings or seminars in the US to explain the new regulations – what they mean and what they *don't* mean. This could be a way of opening the door to discussions with this growing segment of agri-business.
- Any effort to meet Kyoto targets or to enforce stricter environmental standards – such as through the requirement of ethanol blends in gasoline or the tightening up emissions from individual business and plants – will help create demand for a bio-product.
- On the agri-food side, not one trade show or trade journal will reach the majority of the US players. The Government of Canada will need to take a hard look at the type of companies it would like to attract to Canada then target the various trade journals and trade shows in that particular sector. On the bio-products side, a much smaller industry, it is important to target the outcome and end use product trade journals and trade shows devoted to urethane, plastics and construction materials. It is not recommended to do it through the source materials route (i.e. primary producers' magazines and conferences). They get their information from market facing information sources.

APPENDIX 1 – QUOTATIONS

INVESTING (GENERAL)

"We don't invest in growth for growth's sake. We look for logical extensions of our expertise." – MNE

"Having confidence in regulatory systems such as the FDA, USDA and CFIA is important and often critical to marketing our product." – ingredients manufacturer

"We're a global company. We do business with anyone, although it helps to have a similar culture." – edible oils manufacturer

"All of our formulas are proprietary. It would be difficult therefore to maintain confidentiality of such formulas if production was in more than one location." – nutritional supplement company

"We would choose other locations in the US first, but Canada would definitely be the first choice among other countries." – sweetener manufacturer

"Every jurisdiction says they have skilled workforces, education, low costs, economic development, low electricity costs – it's nice but it doesn't trigger you." – ingredients manufacturer

"Investment decisions are heavily influenced by cost-benefit estimates." – medical nutritional supplement company

"Return on investment is key. A new joint venture or facility has to be profitable almost immediately, in 6 months. We're too small to wait for 2 years for a profit return." – flavour company

"An industry cluster would not help us. It's more important for us to be close to raw materials." – edible oils manufacturer

"We will continue to entertain opportunities that make product sense and economic sense." – food processing company

"At present we probably don't expect to invest elsewhere. We're a family-owned business and our philosophy is, the closer you keep to your business, the more control you have. If we invest elsewhere, the direction of the company can change." – edible and industrial oil manufacturer

"It is intangible things that are important to determining new locations for investment. Such as how does a government approach business? Is it inspired to bring it in or does it see it as simply a money-maker?" – confectionery company

"We're not looking to expand just anywhere – there has to be a strategic purpose or fit." – food processing company

"We aren't big enough to set up elsewhere. Location doesn't make a difference to us – we don't have to be next to our market. It's easy to do it from here." – bio-solvent manufacturer

"We have to look at the cost/benefit equation. It doesn't make sense to build a new plant to overcome transportation costs." – sweetener manufacturer

"We look at expansion from an opportunistic rather than a geographic standpoint. If it looks like good ROI, with a good corporate culture and good fit with the long-term thinking of the company, we'll go there." – nutrition specialty company

"We would want to establish our brand awareness and equity in a country and establish a foothold first to see if it makes sense to move there. Right now, it makes more sense for us to manufacture here and export to Canada and Mexico." – food manufacturing company

"Big pharma doesn't want us to be regulated so they can say we're unregulated." – vitamin company

"Sometimes it's easy to just stay where you are. The cost of change can be too great." – confectionery company

OBSERVATIONS OF CANADA

"Canada is a very attractive country to us." – food processing company

"In Canada, people live within 50 miles of the border so it makes no sense to set up shop there." – MNE

"We work with supplement companies in Canada but they don't have access to as many ingredients." – dietary supplement manufacturer

[Comparing Canada to the US] "There's not much of a difference between the people and the culture and the ability to produce goods." – ingredients manufacturer

"Canada has a very ethical business climate. People are honest. They are easy to do business with." – flavour company

[On the regulatory obstacles] "We sell about 1,500 products in the US. We only sell about 150 in Canada. We don't sell much there because it's a painful bureaucratic thing for us to do... It boils down to economics – you have to make enough money to make it worthwhile." – dietary supplement company

"Canada is definitely a targeted as a growth market... It has the regulations we require – Mexico does not." – juice manufacturer

"Regulatory system is a total mess both within the US and Canada. Regulations are somewhat standardized, but they are difficult to work within. They are not always changing, but they are unclear, not transparent, and some are without logic. It takes a fair amount of paperwork to export products to Canada – adding a layer of cost that can drive decisions against the client." – nutrition specialty company

"Some provinces are too socialistic and are not open to business." – ingredients manufacturer

"Business incentives are not as important as getting regulations and red tape out of the way." – dietary supplement company

"Bio-products are the future. It would be useful if someone organized an "introductory tour" that would bring Canadian companies down and make some contacts." – biotechnology company

"Being in Canada, we found cheaper sources of materials we didn't know about. It was a surprise to us." dietary supplement company with operations in Canada

"Canada is considered a good place for investment due to the large amount and access to raw materials, particularly corn and canola." – plant breeding company

"We had a very discouraging and unjustified experience with CFIA in 1999. This discourages us from investing in Canada because it makes such investing risky." – nutritional supplements company

"Canada must maintain a proactive regulatory environment, particularly for industrial corps, identity preservation and segregation of industrial good crops." – bio-product company

"The US tax rate is less than Canada. It rubs you the wrong way." – confectionery company

"We jump more regulatory hoops in Europe than in Canada." – nutraceutical company

"The size of the Canadian market is limited, but it serves as a foothold in the NA market for us, as a European company... Canada offers an easier place to invest than the US. Management styles are halfway between Europe and the US." – European food ingredient company

"Bilingual labeling can be a hassle at the retail end. But it's the way of the world, a fact of life." – horticulture company

"Business is laid back, not as aggressive as they should be." – flavour company

"Canada compares similarly to the US, except wages are higher as are taxes." – nutritional supplements company

"As a country, Canada is more innovative – it has to be. You're way ahead of Minnesota. You've taken away nutraceutical markets from us. The quality and consistency of alfalfa and oats is good. Alfalfa dehydration in Canada is great. Canadians got into hydroponic tomatoes in a big way and secured investment from the Netherlands. Canada got into markets earlier than the US and now have solid markets... On ethanol and bio-diesel, we have stolen ideas from Canada." – research institute

"If the Canadian government takes leadership on this issue [ethanol], you will see the same phenomenal growth there" – ethanol manufacturer

"Canadian contract manufacturers are good about making themselves known to us." – flavour company

"If the regulatory climate was there, it would force the demand for green products." – bio-solvent manufacturer

"Our Canadian customers take the longer term view and are slower to change. US customers are fickle. It's harder to get Canadians to try new things." – edible oils manufacturer

"We're first cousins, US and Canada. We speak the same language, we have the same tastes. we both like hockey and baseball." – flavour company

"Canada is becoming more attractive over the years because of all the confectionery companies moving there." – confectionery company

"It's a real problem getting skilled trained horticulture labour. It's a shrinking market in the US and Canada and there just aren't enough people coming out of the university programs." – horticulture company

"The Canadian [regulatory] system is good, if sometimes tough to work with. The CFIA is tough, but it needs to be." – confectionery company

"Unionization in Canada can be a problem. All it takes is one disgruntled employee to tamper with our product and it can be dangerous to the consumer." – juice manufacturer

"Trade challenges [against Canadian wheat] do affect us, and disappoint us. The farmers have a strong lobby, especially in North Dakota. We think it's unfair and we'll fight it through the North American Millers' Association. We buy Canadian wheat because of its quality." – milling company

"Canada is a small market, but its industry's ability to organize itself is good. In the US, they don't organize well." – confectionery company

APPENDIX 2 – SOLICITATION LETTERS

February x, 2003

«Prefix» «Firstname» «Lastname»
«Title»
«Company»
«Address_1»
«Address_2»
«City», «Province»
«Postal_Code»

Dear «Prefix» «Lastname»:

The Government of Canada has commissioned a reputable Canadian research firm to undertake a study of the process by which leading companies in the US Agri-food and life science sectors make decisions for corporate investments. In particular, we are interested in gaining a richer understanding of the experiences and opinions of key decision-makers when they consider strategic investment locations.

Enclosed you will find an invitation to participate in an interview on this topic by the research firm. We are hopeful that you, or a senior official in your company responsible for strategic investments, will agree to participate in this study which will take approximately 30-40 minutes of your time. We also want to assure you that the responses of individual participants will not be sought by us, nor revealed to us by the research firm.

As a leader in the Agri-food sector, your input is particularly important to helping us identify the range of variables that influence decisions regarding strategic business investments.

Thank you very much for your consideration.

Sincerely,

Name
Title

EARNSCLIFFE

February x, 2003

«Prefix» «Firstname» «Lastname»
«Title»
«Company»
«Address_1»
«Address_2»
«City», «Province»
«Postal_Code»

Dear «Prefix» «Lastname»:

This letter is to ask you for your participation in a research program being undertaken jointly by Créatec + and Earnscliffe Research & Communications on behalf of the Government of Canada. Over the next three to four weeks, we will be conducting one-on-one interviews with a number of individuals like you to investigate the process by which leading companies in the US agri-food sector make decisions for corporate investments, such as strategic investment in certain regions.

We are writing to ask if you would be willing to be part of the sample for this study, which will include some 90 people in the agri-food sector in the US Midwest. If you agree to participate, we would interview you in person, at a time and place convenient to you. If that were to prove impossible to schedule, we would conduct the interview over the telephone.

In studies of this type, respondents are encouraged to be as candid as possible and are assured that their views will be reported on an anonymous basis, without attribution. We expect that each interview will take some 30-40 minutes to complete.

In the next couple of weeks, Kim de Belle will be in touch to see if you would agree to such an interview, or she can be reached at (610) 374-3667. We very much hope that you will find the time and be willing to share your thoughts. If you require any further information, please contact me directly.

Sincerely,

Bruce Anderson
Partner and Principal

APPENDIX 3 – INTERVIEW GUIDE

Interview Guide

RESPONDENT NAME: _____

TITLE: _____

COMPANY NAME: _____

CITY: _____

I. INTRODUCTION

- Thank you for agreeing to this interview. Anything you say will be kept confidential. All responses will be used in aggregate form only. Please be as candid as possible.
- As you may know, my questioning today focuses on corporate investment and strategic partnership/relationship development and research relationships. I am going to ask you some questions to help me understand your experiences and opinions regarding investment, such as expansion and/or operations opportunities. Please keep in mind that there are no right or wrong answers. During the course of the interview, I will be asking a lot of questions. I'm just trying to understand what you think, so please answer each question as completely as you can. I know your time is valuable so I will try and keep our discussion to 45 minutes.

1. Please describe what your company does and your role within the company.

1

- 2a → c
2. The BioBased Economy is described as one that is base upon using biological feedstocks such as the products and by-products from plants, animals, and microbes to produce bio-products such as bio-energy, bio-materials, and chemicals from biological sources. Others would describe this as the production of non-food, non-feed from agricultural materials or the production of non-timber, non-pulp and paper from forestry sources. Have you heard of the terms BioBased Economy and bio-products? Do you consider your company to be involved in the BioBased Economy and to be producing bio-products, if not do you see your company moving in this direction?
- 2c 2b

II. INVESTMENT DECISION-MAKING

- 3a → c
1. Please explain the process, both formal and informal, for how decisions are made to invest in new areas or regions? Please include your role in this process. PROBE: Where does the debate start? What causes it to start? Who gets involved? Who champions new projects/opportunities in your organization? When? Who are the primary influencers, internal and external, and relative weight of each? How does it evolve? What brings it to a conclusion? (include who generates the initiative and who executes?)
- 3b 3c 3d 3e 3f 3g 3h

2. Do you currently have operations in other states or countries? If yes, Where? What is the role of the regional subsidiary in this process? Do you have a Canadian subsidiary? If yes, what is its role in the investment decision-making process?

3. What are the most important criteria used to initiate, influence, and conclude these investment decisions? (PROBE the following list of criterion)

- a. Untapped locations/markets versus already-established presence

- b. Proximity/access to market

^{5c}
c. Size of market

^{5d}
d. Similar business culture

^{5e}
e. Low cost of doing business

^{5f}
f. Security and integrity of supply

^{5g}
g. Access to input materials

^{5h}
h. Confidence in supporting and regulatory systems

⁵ⁱ
i. Skilled labour pool (i.e. availability of post-secondary graduates in science)

JK

j. Industry clusters in agri-food or life sciences

51

k. Access to researchers / research clusters / centres of excellence / cost-effective R&D

6ab
2

4. Has the US Farm Bill had any impact on your investment plans? If yes, how?

6a

6b

7a-f
6

5. Do you have any expansion plans for the future? Expansion from a geographic perspective? Expansion from a new product market perspective? Internal to the US? External to the US? Please explain.

7a

7b

7c

7d

7e

7f

- 8a → d
6. Could you give me a list of the **three** locations that merit expansion consideration? Please explain the positive and negative attributes of all three locations. How did these locations come to your attention? What made you look seriously at these specific locations? 8d 8c 8a 8b

- 9ab
7. Have the events of September 11 changed how you make investment decisions? How? 9a 9b

III. CANADA-SPECIFIC QUESTIONS

- 10ab
1. What is your impression of the Canadian business climate? What two or three factors have most contributed to that overall impression? 10a 10b

2. What is your impression of the Canadian agri-food/bio-products industry?

11

3. What perception do you have of Canada in terms quality of product? Food Safety? Regulations? Variety? Size of companies? Agricultural/environmental stewardship? How does Canada compare to other countries? Do these qualities have an impact on your investment decision-making? If yes, how?

12a → c
a

12h

12i

12a

12b

12f

4. How would you characterize Canadian research capabilities and achievements in the bio-products sector? How innovative is Canadian research?

13ab

13a

13b

- 19a 19b
5. Do you do R&D in Canada? Are you aware of Canada's tax incentives for R&D? (Canada offers the most favourable tax treatment for R&D of any G-7 nation) Would these factors impact investment decisions? 14c 14d

- 15a 15c
6. Is Canada top of mind when it comes to considering strategic investment opportunities? Have you or your company ever considered, or are you currently considering, Canada as a strategic investment opportunity? (In terms of expansion, research relationships, joint undertaking with Canadian based or owned companies.) How likely is your company to do so in the next few years? 15c

- 16a 16b 16c
7. Have you done any collaborative or contract research with Canadian companies or research centres? Are you considering it for the future? If not, why? (lack of awareness?) 16a

8. What is the most important reason for why you would consider Canada a good place for investment/expansion/operations?

17

9. How would you rate Canada as a place to invest on a scale from 1 to 10 (one being very low, ten being very high)? Why would you give it this rating?

18ab

18a

18b

10. What, if any, are the impediments to doing business or investing in Canada? PROBE: regulations, lack of skilled labour/scientists, etc. How could they be rectified?

19abc

19a

19c

19b

11. I'm going to ask you about a number of Canada-US cross-border issues. Please describe your attitude toward each issue and if/how you expect the issue to be resolved.

a. US farm subsidies to producers

20ab

b. COOL (country of origin labelling)

21ab

c. Canadian Wheat Board (PROBE: USDA/USGAO investigations)

22ab

d. Supply management

23ab

12. Have you seen any significant changes in the Canadian agri-food/bio-products industry over the past number of years?

24

25a
13. What amount of contact do you or your company have with Canada? What sort of relationship/contact do you or your company have with Canadian colleagues or researchers in this industry? 25b With the Canadian or provincial governments? 25c With Canadian owned or based companies? With Canadian research institutions? 25d

25a-7c

26a
14. What type of information do you need to hear from Canada? Are there information gaps? Do you care to have more information on Canada? 26b 26c

26a-7c

27a
15. Have you heard of any activities that the Government of Canada is doing to advance the BioBased Economy in Canada? Do you have any awareness of bio-based companies in Canada? 27b

27a-7c

- 28a → d
16. What more do you think that the Canadian government should do to encourage investment by American or multinational companies in the agri-food and bio-products sector? ^{28a} How should it communicate with you? ^{28b} How should Canada promote its capabilities in the bio-products sector? ^{28c} What would attract your attention to the industry? ^{28d}

IV. GENERAL

- 29a → m
17. Aside from your own company, where ^{29a} do you currently get information that influences your decisions about where to invest? PROBE:

- Canadian provincial governments (please specify province) ^{29b}
- Foreign governments (please specify government) ^{29c}
- Consultants (please specify type/business practice) ^{29d}
- Venture capital firms ^{29e}
- Buy-side analysts in fund companies ^{29f}
- Site selectors hired by our company ^{29g}
- Business education leaders/academicians ^{29h}
- Influential media (columnists, business TV program hosts.) ²⁹ⁱ
- Specific media sources (include a list of specific/relevant ^{29j} publications/journals/ internet etc.) (National or Local media sources) ^{29k}
- Influential business leaders (profile on investment matters) ^{29l}
- Influential society leaders (profile in the community) ^{29m}
