International Agricultural Trade Research Consortium

Changing Consumer Demand and Its Impact on Canadian Agricultural Policy and Trade by

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Working Paper #03-2

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This paper was presented at the IATRC Annual Meeting, December 15-17, 2002, Monterey, California. The Theme Day focused on "Consumer-Driven Agriculture and Trade."

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Paper presented at the IATRC Meetings in Monterey, California, on December 15, 2002

The subject matter reflects the views of the authors and not those of Agriculture and Agri-food Canada.

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I. INTRODUCTION

Over the 1990's, there has been a revolution of sorts in the production of agriculture and agri-food products and the consumer demand for food. On the threshold of a new millenium, we are witnessing a renewed agriculture and agri-food industry and a more sophisticated and discriminating consumer. The changes that took place in the sector happened quickly and were influenced by several important developments: increased globalization of trade, several serious disease outbreaks in the U.K. and the emergence of biotechnology and genetically modified organisms.

First of all, several bilateral, regional and multilateral trade agreements were signed or are currently being negotiated by Canada and other major trading partners (eg. the Canada-US Free Trade Agreement (CUSTA) in 1989, the North American Free Trade Agreement (NAFTA) in 1994, the World Trade Organization's (WTO) Agreement on Agriculture and the Free Trade Agreement of the Americas (FTAA)). Trade agreements have facilitated the movement of goods and services across borders and have created new impetus to find approaches to harmonize import/export requirements across countries (eg. Mututal Recognition Agreements, Inspection Protocols, Memoranda of Understanding, etc.). More than ever before, growth in Canadian agri-food business has become dependent on access to off-shore markets and on an acute awareness of the needs and preferences of consumers and of regulated market access requirements.

The second event that led to significant changes in world food markets was a serious erosion of consumer confidence when two serious animal disease outbreaks hit the United Kingdom in 1999 and 2000 (ie. Bovine Spongiform Encephalopathy (BSE) and Foot and Mouth Disease (FMD)). These shocks struck at the very heart of consumers' faith in their governments' ability to guarantee a safe food supply, even though FMD is an animal disease that does not affect the safety of food. Confidence was lost, particularly for beef, and the British livestock industry was devastated. European consumers suddenly insisted on complete assurance that their food was safe. Governments and private firms had to respond with new regulations and requirements for increased information about how food products were produced, processed, and delivered. Innovative processes and systems that improved quality control and reduced risk became the norm, such as the Hazard Analysis and Critical Control Point (HACCP) system and international standards and certification programs, that helped the industry adjust to the new requirements arising from both consumer demands and industry requirements. Advances in information technology have

also aided the sector to meet the increased information requirements needed to advise consumers about their food's origins, production processes and characteristics through tracking and tracing. And while less shaken, North American consumers too, have become increasingly skeptical about their governments' abilities to guarantee safe food, in the wake of several small disease outbreaks (eg. E. Coli) affecting their food and water supply (ie Walkerton, Ontario).

A third development, which influenced how the agriculture and agri-food sector delivered its products, was the biotechnology revolution. This development empowered human beings by demonstrating their scientific prowess over the food supply. Plant breeding and hybridization had been used in agriculture for over 150 years. However, the step up to cloning, gene splicing, and genetically modifying agricultural commodities to produce "round-up ready" and other diverse super species that are capable of feeding the world, was a new stage in the history of the food industry. With increased awareness about biotechnology developments, yet uncertainty about how they impact the food we eat, consumers are demanding new information and assurances about characteristics that are not visible to the eye. Food traceability and tracking and labelling are essential so that consumers can know where the food they eat is coming from and its genetic makeup and make choices about whether they want to purchase these traits.

All of these developments have affected the way consumers in Canada and the Western world think about food. Consumers are now more sophisticated food buyers, desiring more variety and food choice year-round, improved nutrition, enhanced quality and increased assurances of safety while at the same time, they remain discerning about the prices they are willing to pay for these characteristics. In response, the agriculture and agri-food sector that supplies, processes, markets and distributes food products, has had to adjust to these changing consumer tastes and preferences, or face declining profits or market share. The industry has introduced new standards and processes that allow them to identify the origins of their inputs, the processes used to produce them and the resulting characteristics. New marketing relationships have been forged as well as increased supply chain integration and more information about their products. At the same time, governments have responded with new policies and regulations that guarantee reduced risk to consumers and the various players in the supply chain and maintain the trust of domestic and global consumers in the country's food delivery system.

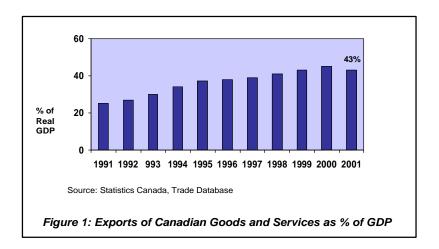
The purpose of this paper is to discuss how consumers in Canada, like those in the United States and Europe have changed over the last ten years and the impact this is having on how agricultural commodities are being produced, transformed, distributed and traded. It will also be important to discuss how governments in Canada and elsewhere have reacted and how policies are being adopted to help the agriculture and agri-food sector adjust to the new realities of a more demanding and sophisticated consumer, at home and abroad.

The first section of the paper will situate Canada in the world in terms of the importance of trade in agriculture and agri-food products. The second part will discuss the changes that have occurred in global and Canadian consumers' preferences for food and food

characteristics. It will be important to try to explain why these changes have occurred, based on the underlying factors determining the demand for food. The third section will present a discussion of how the agriculture and agri-food industry has adapted itself in this increasingly global marketplace as a result of increasingly sophisticated and discriminating consumers, both at home and abroad. In particular, the requirements of large corporate buyers in Canada will be described, as well as a discussion of the evolution of marketing relationships and products that have sprung up in an attempt to deal with the new realities of the consumer today. The paper will conclude with a discussion of the changes in policy focus in Canada, compared to the US and Europe, as governments adjust to the new reality and increasing demands of global consumers for greater assurances of food safety and quality and other characteristics that consumers want.

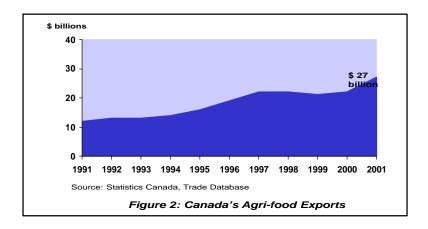
II. CANADA-DEPENDENT ON TRADE

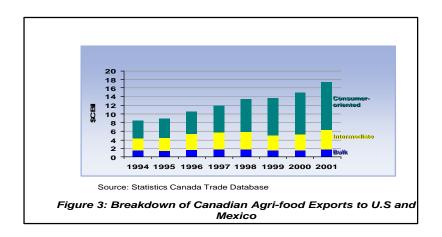
Canada is a country that is very dependent on trade. Our history is based on being "a hewer of wood and drawer of water". Canada developed as a nation, because it was able to trade its many commodities derived from its rich and plentiful natural resources, such as lumber, fur and fish in the early years of its nationhood, and wheat, copper, uranium and oil and natural gas, more recently. With only a small domestic market of approximately 31.4 million people, currently inhabiting primarily a 200 mile band north of the Canada-U.S border, Canada's economic success depends on being able to trade with other countries of the world. Figure 1 shows just how important total exports are for this country, with 40% of our \$955Cdn billion real national GDP in 2001 represented by exports.



The agriculture and agri-food sector, as an important contributor to Canada's economic activity, also depends extensively on trade. Agriculture and agrifood exports were \$27Cdn billion in 2001, accounting for 3.8% of total world agrifood exports (Figure 2). Imports were \$20Cdn billion, resulting in a positive trade balance. And while Canada has historically depended on bulk raw commodities to trade, increasingly, the share of exports are consumer-oriented or value-added processed. (Figure 3). Value-added exports are important since they add to the economic activity and employment growth domestically.

However, Canada must compete with many other nations that trade in value-added food products. Faced with the prospect of increased global competition, many Canadian food and beverage processing companies have made significant investment in their capital and efficiency in order to become more competitive in world export markets. Canadian agrifood exports have expanded to now represent almost 4% of world agrifood exports in 2001. However, with the prospect of a more competitive global marketplace and changing world consumer demands, it will continue to be important for Canadian agriculture and agrifood processing companies to adapt to developments in consumer markets abroad as well as at home in order to remain profitable.





III. GLOBAL CONSUMERS

Events in the past five years, such as the BSE outbreak in Europe, the Foot and Mouth Disease disaster in the UK and biosecurity concerns in North America (ie. anthrax scares), have seriously shaken consumers' confidence in the safety and quality of the food supply and the role government plays in ensuring it. In North America, we have had our

own serious incidences with E Coli in the water supply in Walkerton, Ontario, listeria in cheese and Salmonella in meat packing plants and major fast-food restaurants. Recent opinion polls in Canada, the U.S. and the European Community, show just how important food safety, nutrition, biotechnology and food quality are becoming to world consumers. By understanding consumer attitudes, Canadian producers, distributers and retailers will be ready to adapt to the winds of change in the delivery of safe and high quality food products throughout Canada and the world.

Several recent surveys by Eurobarometer for the European Commission¹ have shed light on consumers' attitudes in Europe on various issues related to food safety and quality, from genetically-modified organisms, to organic food, to consumer safety and information. It is clear from these surveys that:

- -consumers' number one concern is food safety
- -they want information about genetically-modified food products
- -they increasingly have nutrition concerns (ie low-fat, nutrient supplements)
- -they are unhappy with the presence of pesticides in their food
- -they are looking for less processed food products

While North American consumers have many of the same attitudes as their European counterparts, there are significant differences. For example, while most Canadian consumers are in favour of labelling non-GMO products², the percentage of respondents who have strong concerns about them is much lower in Canada and the United States than in certain countries in Europe. In addition, in the hectic pace of North American society, convenience in food delivery is more important to these consumers than to those in Europe. A comparison of attitudes of Canadians with citizens of other countries towards various food issues will confirm these findings below.

Environics International recently conducted a poll of consumers' attitudes in eleven world countries, both developed and developing, on various issues involving food safety and quality and other related issues³. The poll was conducted between May and August, 2002 and surveyed consumers in Australia, Brazil, Canada, China, France, Germany, Great Britain, Italy, Japan, Mexico, and the United States. The differences in attitudes towards the various food issues are evident by country. For example, figure 4 shows just how important food safety is for consumers of various countries of the world. In Canada, food safety was the food issue of greatest concern, with 44% of those polled listing it as most important. This was also the case in the United States, where 42% of consumers expressed food safety as the greatest concern. In other countries such as Australia, nutritional value of food was more important (34% versus 31% for food safety). In Germany, nutritional value

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¹ Eurobarometer, various issues can be found at the website: http://europa.eu.int/comm/public opinion/archives/special.htm

² Leger Marketing, "How Canadians Perceive Genetically Modified Organisms", July 13, 2001 found at website: www.cric.com.

³ Environics International, Food Issues Monitor, November, 2002.

was hardly a concern (only 6% found it most important) while food safety was a serious concern for 67% of those surveyed. In the United Kingdom, as well, a large percentage of consumers expressed food safety as the number one concern (47%). In contrast, potential food shortages was the number one concern for 34% of Brazilian consumers, followed by price concerns (28%).

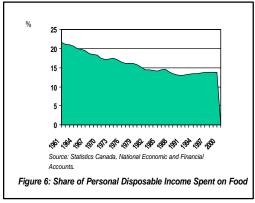
	Food Safety	Nutritional Value	Prices	Taste and	Potential
				Appearance F	Food Shortage
Australia	31	34	21	7	6
Brazil	21	14	28	3	34
Canada	44	32	11	6	6
Germany	67	6	13	10	2
Great Britain	47	26	12	10	3
Japan	71	5	8	5	6
Mexico	14	35	19	8	22
USA	42	29	15	7	3

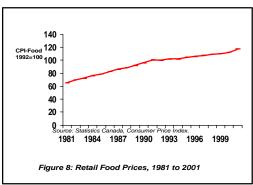
Other major issues related to food that concerned consumers were the presence of chemical pesticides, bacterial contamination, disease, hormones, antibiotics and GMO's (Figure 5). The greatest differences between countries included attitudes towards GMO's, preservatives and nutrition. There were some country differences of course, with Canada and the US showing similar tendencies. For example, in Canada and the United States, strong concern over GMO's was listed by 77% and 66% of respondents respectively. Fewer | Japanese consumers were seriously concerned about GMO's (65%). However, in Mexico, this was a major concern of many respondents (80%). The concern over disease was less of a concern for 64% of German respondents, whereas, over 90% of consumers in Brazil and Mexico expressed disease as a strong concern. All of these concerns suggest that in order to compete in world markets, Canadian agriculture and agri-food suppliers must be able to guarantee domestic and global consumers food products that have the characteristics and specifications that they desire. This includes information about preservatives, nutritional value, antibiotics, GMO's and product quality and safety. In other words, to position themselves for trade as well as domestic commerce, Canadian agri-food exporters must make use of processes and technologies that will allow them to track and trace their food products and determine areas of greatest risk and critical paths.

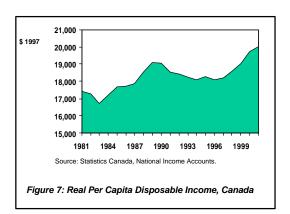
	Food Safety	Chemical Pesticides	Disease	Bacterial Contamination	Antibiotics/ Hormones	GMO
Australia	83	86	84	88	82	72
Brazil	95	95	96	97	93	87
Canada	89	89	86	90	82	75
Germany	76	81	81	73	83	73
Japan	94	82	87	88	75	73
Mexico	93	87	97	96	88	81
USA	91	87	87	92	80	67
	e: Environics		-		80	O/

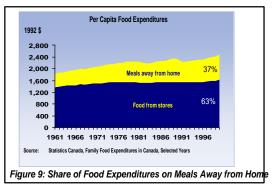
IV. FACTORS AFFECTING CHANGING CONSUMER DEMANDS AT HOME

While consumers' attitudes towards various food issues are very important in the analysis of changing consumer demands, the economic factors underlying consumer demand are also still key to understanding their developments. These include the influence of prices, income and population demographics. In Canada, as in other industrialized countries, food as a share of personal disposable income has fallen over time, as standards of living having increased in line with industrialization. Spending on food now represents around 13.9% of income in Canada, having fallen from over 18% in 1970 (Figure 6). Over the period 1981 to 2000, real per capita disposable income (1997=100) has risen from \$C 17,416 per person to \$C 20,005 in Canada (Figure 7). At the same time the price of food has increased by 17.1%, when measured by the Consumer Price Index for food (1992=100) (Figure 8). Food away from home is more influenced by income than food-at-home expenditures, the share of food at home expenditures on meals away from home has increased much more than the share of food at home expenditures (Figure 9).



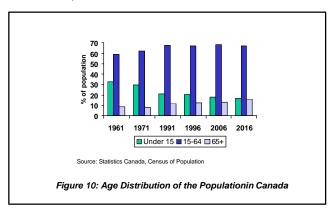




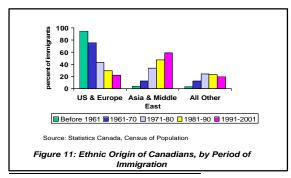


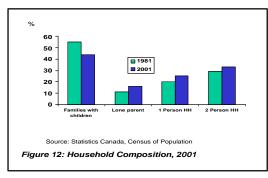
The demand for food has also been affected by changing demographics in Canadian society, such as the aging of the population and its increasing ethnic diversity. In addition, changing household composition has had a major impact given that the household is the main economic unit determining food demand. Figure 10 shows how the Canadian population distribution has changed since the early 1980's, as the "pig has moved through

the python", or the baby boomers age and move into retirement. Whereas in 1981, Canadians over age 65 years represented 10% of the population, in 2001, they represented 13% and this is projected to rise to 21 % by the year 2026. The median age has risen from 25.4 years in 1966 to 37.6 years in 2001 and projections show that this will rise even more by 2020. David Foote⁴ wrote how the aging population will influence economic performance including stock market activity. There is no question it has and will influence changing consumer demand for food as well. An aging population implies increased nutritional concerns and smaller servings. If more seniors are also retiring with greater wealth, (as seniors have enjoyed larger increases in income over the 1981 to 1994 period compared to their younger counterparts)⁵, perhaps they will purchase more ready-prepared food and meals in restaurants, as well.



Ethnic diversity has increased over time as more Canadians travel abroad and experienced ethnic cuisine in other countries, and as the world has become more linked through freer trade and improved information technology (the internet). In addition, the ethnic composition of Canadian society has changed as an ever-increasing number of immigrants have arrived from non-traditional (non-West European) source countries such as Asia, Eastern Europe and the Middle East (Figure 11). Canadians from Asia and the Middle East, for example, represented 58% of immigrants arriving in Canada over the 1990 to 2001 period compared to just 3%, before 1961⁶.



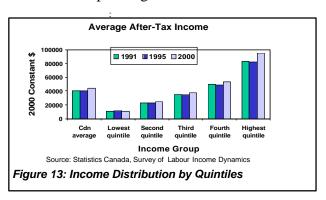


⁴ Foot, D. "Boom, Bust and Echo: How to Profit from the Coming Demographic Shift", Macfarlane Walter and Ross, May 1996.

⁵ Statistics Canada, A Portrait of Seniors in Canada, Catalog. No. 89-519-XPE, January 2003.

 $^{^6}$ Statistics Canada, 2001 Census: analysis series, Canada's ethnocultural portrait: The changing mosaic , Catalog. No. 96F003XIE2001008.

Household and family composition is another factor that influences the demand for food. Whereas the traditional family was composed of two adults and several children, this has changed so that now there are an increasing number of single person and single parent households (See Figure 12). The household as an economic unit exhibits economies of scale in spending as it increases in size and composition. A single person household will require the greatest per capita spending on food. As each additional individual is added, there are returns to scale of sorts, such that the second individual requires less spending per capita and subsequent individuals, require even less. Children of course, consume less food, and add less to household spending as each child is added.



Over the 1981 to 2001 period, the number of traditional two adult families has continued to increase, as baby boomers grew up and form households. At the same time, the increase in dual earner families arising from higher female participation rates in the labour force have meant that households have had more income to spend. However, the share of single adult households has grown even more over this period, due to increased divorce and separation rates, preferences to remain single, and a growing aging widowed population. This combined with the important link between single parent households and poverty, has had and will continue to have major implications for the demand for food in Canada. The rising number of single parent households is probably the main reason for the growing disparity between the income distribution of low income (bottom 20%) and high income (top 20%) households in Canada (Figure 13). While an increase in dual-earning families implies greater spending on meals away from home, more expensive ethnic dishes and prepared convenience foods, more single parent low income families has implications for cost and price concerns for a certain segment of society. In other words, the market is becoming increasingly segmented and differentiated. How the agri-food sector responds to these changing demands for food factors will determine how well it can succeed in the future.

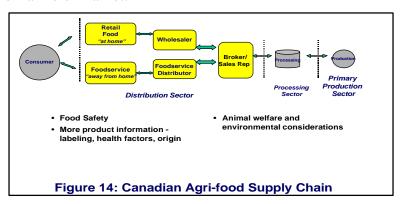
V. AGRICULTURE AND AGRI-FOOD INDUSTRY RESPONSE

The Canadian agriculture and agri-food sector is an important sector in the Canadian economy producing \$76 billion worth of goods and services and employing one in eight

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⁷ "Poverty in Canada: Developing a Policy Framework", HRDC, October 2000.

working Canadians. It is composed of a complex of players from small farming operations to large multinational farm input suppliers to world class food manufacturers to highly competitive food retailers (Figure 14). All work together to produce the goods and services that Canadian and global consumers are asking for when they visit the grocery store, dine in a fast-food or full service restaurant, or prepare meals for their families at home. In the old days, the marketing relationships between farmers and processors, wholesalers and retailers, was a fairly straightforward one. The farmer would produce a commodity, such as wheat or cattle, sell it to the grain elevator or feed lot, which would in turn deliver it to a miller or packer who would prepare it for the retail market, and distribute it to the grocery store, butcher or farmers' market.



Today the relationships between farmers and processors, wholesalers and retailers has become much less straightforward and more intertwined. Fast food restaurants such as Wendy's are contracting directly with farmers or investing in farms in order to ensure that the chickens they buy have not been raised in cages that are too constraining. Major processors are contracting with hog producers to ensure that the pork they produce is of the exact quality, age and specification they demand, with the exact characteristics they require. Some of the specifications might include:

- -no drug residues,
- -stringent quality requirements such as size, acceptable hardness and colour score.
 - -specific production methods
 - -no tattoo markings or defects

In return, the producer receives a contract that covers the cost of production, and assures a more predictable cash flow. They also might receive technical assistance in the form of state of the art feed and nutrition programs and animal genetics. Signature Pork, produced by Maple Leaf Foods in Canada, is an example of the high quality product that results when these marketing relationships are forged. Other marketing arrangements, such as vertical integration, coordination, strategic alliances, contracting, have all contributed to a more sophisticated and complex institution that is the agriculture and agri-food sector in Canada.

The sector has increasingly felt the pressure to introduce innovative processes and new technologies that will allow stakeholders the ability to track and trace the origins, the inputs included, the genetic makeup and the production techniques used to produce the product in question. For example, as of July 1, 2002, all Canadian cattle leaving the herd of origin and any point beyond must bear an official Canadian Cattle Identification Agency (CCIA) tag. This re-identification of the Canadian cattle herd is an effort to trace the animals back to the farm where they were bred in order to assure food safety and quality.8 The Ontario soybean industry has introduced identity preservation systems that allow Ontario producers to produce exclusively for the high quality premium Japanese market for white hilum soybeans ⁹. Segregation of product in the dried pea market has meant that Canadian producers have been able to find markets for their non-GMO product in Europe and South America. In this information age, stakeholders in the agriculture and agri-food sector have risen to the occasion and improved the information that is available to consumers related to their products. They have done this by segregating, introducing Identity Preservation, and marketing. Other changes that the sector has made to adjust to the changing consumer and market demands are described in the section below.

Changing Corporate Buyer Requirements

A recent survey conducted by JRG Consulting Group in Canada shows just how demanding corporate buyers and consumers have become¹⁰. The survey, conducted in the spring of 2002, interviewed 24 large food companies and 3 industry associations. The goal of the survey was to determine:

- what requirements food manufacturers (and retailers) place on their suppliers (primary producers, processors etc.) in the food supply chain,
- how this has changed over the past 5 to 10 years,
- what forces are responsible for the more demanding requirements imposed on suppliers, and
- whether food manufacturers were expecting these requirements to become even more stringent over the next 5 years.

Several requirements in the food supply chain were identified. These included:

- food safety considerations
- product quality and standards considerations
- logistics quality considerations
- service and transactional quality
- product attributes
- product traceability and recall considerations

⁸ Information regarding the cattle tagging program can be found at www.canadaid.com.

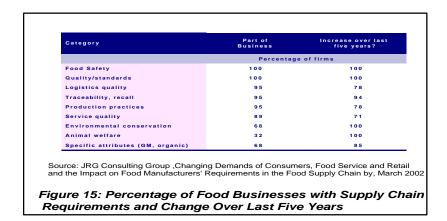
⁹ Brinkman, G. and J. Heigh. 2001. "An Assessment of the Market Implications for the Introduction of Genetically Modified White Hilum Soybeans", Faculty of Agricultural Economics, University of Guelph, November, 2001.

¹⁰ JRG Consulting Group, "Changing Demands of Consumers, Food Service and Retail and the Impact on Food Manufacturers' Requirements in the Food Supply Chain", Report prepared for Market and Industry Services Branch, AAFC, March 2002.

- production practices and related considerations
- environmental considerations
- animal welfare considerations

Several of these considerations are somewhat intertwined, such as product recall and traceability, which might all be part of a food safety program. For many firms, food safety and product quality were considered synonymous.

Figure 15 shows some of the results of the survey. All the respondents indicated that requirements in the supply chain are more demanding now than they were 5 years ago. Food safety and product quality were mentioned as the reasons for the more demanding requirements. All food companies surveyed mentioned that food safety and product quality were a part of business-a requirement that these firms could not pass up. Logistics quality, service and transactional quality, product traceability and recall, and production practices were also important requirements considered essential as part of business for 90% of these large corporate buyers. Specific product attributes and environmental considerations were important requirements for 60% of those firms surveyed and animal welfare considerations were only crucial for 30% of respondents.



Over the last five years, several requirements have become more important for the firms surveyed (Figure 15). These included 1) food safety considerations, 2) product quality and standards considerations, 3) specific product attributes (non GMO), 4) product traceability and recall considerations and 5) environmental and 6)animal welfare considerations. Other requirements that were important for some firms included logistics quality considerations (86% of firms), service and transactional considerations (62%) and production practices and related considerations (86%).

In order to explain why these requirements were important for doing business, the survey asked firms whether the requirement was imposed by their customers, self-imposed or imposed by government (regulation). Figure 16 shows the results of this question. While it is clear there are regulatory requirements that must be met by these food manufacturers, such as for food safety standards, animal welfare and environmental considerations (eg.

water treatment), there are other requirements that have been imposed by the customers of food manufacturers themselves. The main ones imposed by the customer included product quality (80%), specific product attributes (non GMO, organics) (89%), animal welfare considerations (75%) and food safety considerations (73%). Self-imposed requirements included specific product attributes (100%) and product quality and standards (100%) for all food manufacturers surveyed. These also happen to be areas where firms can profit from marketing these characteristics of their products. In the case of regulatory requirements, many firms argued that their response exceeded that which was required by government regulations.

	% of companies
satisfy demands from buyers	65
o brand product	36
To reduce company liability	34
To expand market share	22
To maintain market share	17
To capture price premiums	15

When asked about the requirements they imposed on their suppliers (ie producers and intermediate manufacturers), many of the food manufacturers responded that they demanded the same requirements of their suppliers. For example, 80% of food manufacturers imposed food safety considerations/requirements on their suppliers and 87% imposed product quality and standard considerations. Only 33% of manufacturers demanded environmental considerations.

There are many factors in play that lead food manufacturers and other stakeholders in the agri-food supply chain to demand specific requirements of their suppliers and of themselves. Complying with regulations is of course a number one reason for food manufacturers to impose certain requirements on themselves or on their suppliers. For example, meatpacking plants must make use of standards and processes that comply with food inspection guidelines or face fines or closure. Concerns over liability are another reason firms impose specific requirements on themselves or their suppliers, since food manufacturers may face lawsuits if their product is not safe (eg. if it contains unwanted bacteria or pathogens) or if it does not meet the specifications they claim it has (eg. GMO ingredients when specified non-GMO). The impact of not complying or responding to buyer requirements is the potential to lose market share and/or experience reduced revenues. This would arise from breaches of contract with retailers/processors, recalls and returns or even bankruptcy if there is any doubt in consumers' minds about their products' safety, quality or specification. In the end, it is ultimately the consumer who counts (the consumer is sovereign) in that he/she ultimately will choose and pay for the products that meet his/her specifications.

It is clear therefore, that changing consumer demands are placing increasing pressure on players in the agriculture and agri-food sector. There may be other reasons why the supply chain is becoming increasingly integrated, consolidated, concentrated and intertwined. However, the sector is responding by introducing new processes and technologies that allow it to track product from "farm to fork", providing information on that product (such as whether the animal feed contains growth hormones), guaranteeing the safety of that product and delivering the specifications that consumers want. All this while at the same time, remaining competitive and becoming more efficient in the delivery of agriculture and agri-food products

There is a role for government as a result of these changes. Governments must consider regulations that are not too burdensome but yet help the sector address consumers' need for information and assurances of food safety and quality. For example, whether the government imposes mandatory or voluntary labelling to provide information to consumers depends on the objective of providing this information. Mandatory Labelling is considered effective if there is asymmetric information, however, it is less effective if there are social benefits associated with the food production and consumption. How the Canadian government is responding is discussed below.

VI. CANADA'S NEW AGRICULTURAL POLICY FRAMEWORK AND POLICY FOCUS

In Canada, the federal government, together with the provinces, recently developed and launched a new Agricultural Policy Framework with the purpose of "moving the sector beyond crisis management and making it the world leader in food safety and quality, innovation and environmentally-responsible production. The proposed policy direction recognizes the increased challenges that Canadian producers and processors face as they work to adapt to rapid advances in technology and compete against other countries in an increasingly complex global food market. ¹² A total of \$Cdn 5.2 billion will be allocated over the next five years to develop programs and establish initiatives that will help:

- ensure the safety and quality of the Canadian food supply,
- promote environmentally-responsible primary production,
- provide better risk management tools for farmers and
- introduce renewal programming to help farmers adjust to the new realities of the marketplace.

As part of the strategy to compete in global markets, the challenge for Canada is to stay ahead by moving to "brand" Canada as the world leader in meeting the demands of a fast-changing global market for food. Canadian agriculture and agri-food sector stakeholders must respond to the opportunities abroad by introducing products with specific attributes

¹¹ See Golan, E., F. Kuchler and L. Mitchell, "Economics of Food Labelling," USDA, ERS, Report No. 793, December 2000 for a good discussion of the role of government in food labelling.

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¹² A complete description of the new Agricultural Policy Framework and challenges facing the Canadian agriculture and agri-food sector can be found at the following website: www.agr.gc.ca/puttingcanadafirst/

that meet the requirements of corporate buyers and consumers while at the same time remaining competitive.

Canada is not the only country adjusting to the changing consumer demands and increasingly segmented and competitive marketplace. Agricultural policy developments in Europe, the U.S., and Japan, for example, indicate that these governments are responding to similar concerns. For example, on the eve of Europe's mid-term review of the Common Agricultural Policy (CAP), the Commissioner for Agriculture, Rural Development and Fisheries of the European Commission, Franz Fischler argued that:

"The CAP is a policy area where consumers want to be fully involved and heard....Consumers want a sustainable agriculture that provides them with a choice of safe and nutritious food at reasonable prices; the kind of agriculture that respects the environment, and makes an effective contribution to rural development....We should not let ourselves be brought to a standstill but rather look at the future of a CAP that can live up to consumer' expectations." ¹³

Obviously, the European Commission is aware of the importance of consumers attitudes in adjusting the Common Agricultural Policy.

Similarly, in the United States, several important policy changes and programs have been introduced and revamped in an effort to respond to changing consumer demands and the impact on the agriculture and agri-food sector. Concerns over bioterrorism have resulted in the United States creating a new Homelands Security Department and revisions to its Food and Drug Administration's Bioterrorism Act of 2002. In addition, under the new Farm Bill provisions, signed into law in May, 2002, programs were introduced or embellished that increase the amount of land protected for environmental reasons, such as the Conservation Reserve Program (CRP), and the Wetlands (WRP) and Grasslands Reserve Programs (GLRP)¹⁴. The Environmental Quality Incentives Program (EQIP) will subsidize farmers to comply with regulations governing manure management and nutrient management, and the Conservation Security Program (CSP) will pay farmers for improving environmental practices on their working lands. last Farm bill. All respond to consumers' demands for improved environmental performance.

A third important policy change that was introduced under the Farm Bill was new "country of origin" labelling (COOL). While this policy was more in response to political forces than consumers' demands, it has significant spillovers for consumers regarding the information that will be available for the agri-food products that they purchase. It will impose significant costs on the sector and force them to introduce new processes, standards, technologies and systems to comply. The legislation is being introduced initially on a voluntary basis, after which time it will become mandatory in September, 2004.

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¹³ Franz Fischler, Speech on "Commission listens to consumer concerns on agriculture and food", September 2001, available on website: http://europa.eu.int/.

¹⁴ For more information about the U.S. Farm Bill, see the following website: http://: www. USDA.ERS.gov./farmbill/.

Products such as beef, lamb, pork, fish, perishable agricultural commodities and peanuts will be subject to record-keeping and identification of country of origin. Initial estimates put the cost to the sector of keeping records for this initiative at almost \$2 billion for the first year. This provides an indicator of the magnitude of costs that are being imposed on the sector in order to improve record keeping and information on food product characteristics¹⁵.

VII. SUMMARY

Several developments over the last ten years have changed the nature of food production and trade in Canada and the world and affected consumers' tastes and preferences and demand. Increased globalization as a result of liberalizing trade agreements that also introduced new trade disciplines, has been one important development. Another important event that emphasized the importance of being able to track food products and assure quality of the food supply was the Mad Cow disease (BSE) and Foot and Mouth Disease outbreaks in the U.K.. Increased information technology and new biotechnological developments that saw an increase in Genetically Modified Organisms were also important for changing the way consumers think about food and their demands for information about it.

Because Canada is so dependent on trade, it is crucial that agriculture and agri-food players that export, have their fingers on the pulse of global and domestic consumer market demands. As a result of increased globalization and the need to become more efficient and competitive, the Canadian agriculture and agri-food sector has already experienced substantial changes in its structure and marketing relationships over the 1990's. Increased vertical coordination, integration, contracting, and consolidation have meant that the sector is now in a prime position to be able to respond to the increasing demands of consumers for assurances of quality and safety and environmentally responsible production practices. Information that can be delivered through tracking and tracing systems, identity preservation, market segmentation and customized production all are made possible as a result of the newly restructured agriculture and agri-food sector in Canada. It is now a matter for government to provide the regulations and incentives to ensure that the food consumers are purchasing is safe, of high quality, nutritious and produced in an environmentally-responsible manner. The new Agricultural Policy Framework that has been introduced in Canada, and policy measures being taken in Europe and the United States are major steps in the direction of ensuring that the food global and domestic consumers are demanding and willing to pay for, will be provided.

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¹⁵ Discussion about the U.S. Country of Origin Labelling legislation and costs associated with it can be found at the USDA website: http://www.usda.gov.

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For information on Canada's new Agricultural Policy Framework (APF) see: www.agr.gc.ca/puttingcanadafirst.ca

For information on the Canadian Cattleman's Association's cattle tagging program see: http://canadaid.com.

For information on the US Farm Bill see: www.usda.gov.org/ers/farmbill/