

## Summary and Overview

Canada's economy grew by just 1.7 percent in 2003, having been hit by a SARS outbreak in Toronto, forest fires in British Columbia, a bovine spongiform encephalopathy (BSE event) in Alberta, a black-out in Ontario, continued drought on the prairies, and a sluggish U.S. economy. From this sub-par performance, growth should increase to around 2.8 percent in 2004, although the economy is still struggling with trade disputes and the aftermath of the BSE event. In 2005, growth of around 3.2 percent is expected. Inflation was around 2.8 percent in 2003, but is forecast to stay under 2 percent in 2004 and 2005 — although increasing energy prices may alter this outlook. Retail food prices increased by ~ 2.6 percent in 2003 and increases will remain modest for the next 2 years.

Canada's agri-food sector has been undergoing considerable stress. The BSE event, the only recently ended drought on the prairies, and trade measures taken by other countries have all hit the sector's bottom line. If the weather remains favourable and outcomes of trade mediation are successful, production and trade prospects should also improve.

The Canadian agri-food value chain is extremely responsive; KPMG recently assessed it as the most efficient and competitive in the world. Its efficiency is partly attributable to the sector itself and partly attributable to Canada's highly developed transportation, logistics, telecommunications and other supporting infrastructure. This infrastructure continues to help shape not only the Canadian economy and agri-food sector, but Canada's very character.

## Macroeconomic Situation and Outlook

Canada's economy struggled in 2003, growing by just 1.7 percent. This poor performance was due, in part, to an appreciating Canadian dollar, the effects of the SARS outbreak in Toronto, forest fires in British Columbia, a "Mad Cow" event in Alberta, and a black-out in Ontario, among other things. The year 2004 will be a slight improvement, but trade actions by major partners, adverse weather on the prairies, and the aftermath of the "Mad Cow" event will still limit growth in the Canadian economy to about 2.8 percent. In 2005, growth of around 3.2 percent is expected. Inflation was around 2.8 percent in 2003, but is forecast to stay under 2 percent in 2004 and 2005 unless rising energy prices are sustained for an extended period.

## Food Prices and Consumption

Prices for food from stores increased by roughly 2.6 percent in 2003. Due to border closures relating to the BSE event, retail beef prices dropped around 15 percent. Canadians appeared to understand that the cow in question was not destined for the food chain, with beef consumption actually rising by around 7 percent in 2003.

In 2004 and 2005, the CPI for food will increase by between

1.7 and 2.3 percent. Fresh fruit and vegetable prices will increase by 3 to 4 percent in 2004, as will edible oil prices. Cereal and bakery, eggs and dairy product prices will be relatively static. As Canada exports 50 to 60 percent of beef production, beef prices will remain under pressure until trade in live cattle with the United States resumes and border closures in other markets are dealt with. Domestic pork prices will also come under pressure due in part to the extra beef available on the domestic market and the threat of countervailing duties by the United States. Poultry prices are like to increase by 3 to 5 percent due to a short term drop in available supplies as regulatory authorities control for an outbreak of avian flu in British Columbia. Prices for food services and restaurant meals were static in 2003 due to a downturn in restaurant patronage in major cities. Restaurant meal and food service prices are likely to increase by 3 percent in 2004, strengthening further in 2005.

## Food Processing and Distribution

After solid performances in 2001 and 2002, Canadian food processing and manufacturing sales fell 3 percent in 2003. This was partly due to the closure of export markets arising from the Alberta BSE event and partly due to lower wholesale prices, particularly for red meat products. The appreciating Canadian dollar also hampered overseas sales of Canadian processed food products. However, food processing and manufacturing production is expected to increase by 1.5 percent in 2004, while sales are expected to increase by over 4 percent, to reach around C\$ 69 billion. This may be a reflection of Canada's relatively favourable business environment.<sup>2</sup>

The Canadian retail grocery industry increased its sales by 5.7 percent in 2003 to C\$65.6 billion. Chain supermarkets and major banner convenience stores increased their sales by around 8 percent to C\$39.7 billion in 2003. Sales by franchised independents and voluntary groups grew by over 6 percent to C\$25.9 billion (Tutunjian 2004 a, b). In 2004, sales are forecast to increase to around C\$68.8 billion, a gain of 4.9 percent.

The Canadian Restaurant and Food services Association reports that commercial food service sales fell in 2003. These recent declines occurred as: low interest rates encouraged consumers to focus spending on big-ticket items; the number of foreign visitors to Canada dropped; SARS dampened restaurant patronage in Toronto, and smoking bans affected operators in several municipalities. However, food service operators can look forward to a brighter 2004. The Canadian Food and Restaurant Association forecast expects the commercial food service industry to recover throughout 2004 and 2005 as tourism and global economies continue to improve.

Total commercial food service sales will climb to \$35 billion in 2004. With the exception of limited-service restaurants, all sectors should see improved sales in 2004. Many of the factors that restrained demand in 2003 — such as severe weather, SARS, and a sluggish U.S.

economy – are expected to be less significant in 2004. Although most of the country will experience an improvement in food service sales in 2004, provinces in central Canada may see more moderate growth as the result of the high Canadian dollar. By 2005, however, a strengthening U.S. economy and rising interest rates will lift the American dollar and put downward pressure on the loonie, boosting economic activity and job growth and encouraging food service spending in Ontario and Quebec. As a result, total food service sales will climb to almost \$36 billion in 2005.

### Agricultural Income, Production and Trade

**PRODUCTION AND TRADE PROSPECTS.** The biggest story in Canada's agri-food sector remains the Alberta May 2003 BSE event and its aftermath. Under normal market conditions, Canada exports 50 to 60 percent of its beef production. However, trade embargoes arising from the BSE event caused many markets to close, resulting in a serious domestic oversupply and dramatic price drops on the Canadian market. Because of their greater degree of specialization, larger feedlots and larger cow-calf operations initially felt the worst effects. While trade in boxed beef and muscle cuts with the United States and Mexico has resumed, live cattle movements have not, nor has trade with a number of other important trading partners.

The initial effects of the BSE situation were felt first in the processing sector, then in the feedlot sector, eventually being passed down to cow-calf producers. In late August and early September 2003, when the U.S. partially opened its border to Canadian muscle cuts, margins improved but remained negative. Although still depressed, market-based feedlot margins improved progressively from September 2003 through February 2004, and have fluctuated since then.

For staple grains and oilseeds, 2004-05 production in Canada is forecast to increase to 61.4 million tonnes (Mt), up from 59.6Mt in 2003-04 (Lennox et al 2004).<sup>3</sup>

Timely rains have improved soil moisture conditions on the prairies, and breaking a 3 year drought. However, excess moisture and cooler temperatures – it never rains it pours – hampered seeding and crop development, with crop development as much as 3 weeks behind normal in some areas. The tentative forecasts are predicated on there being no early frost or heavy rains during the harvest season. Total supplies in Canada for 2004-05 are forecast to increase due to a combination of higher production and larger carry-in stocks. Exports should also increase slightly to about 26 Mt. Feed use is also expected to increase, assuming that the US border closure to Canadian live cattle due to BSE is resolved during the 2004-05 crop year.

With regard to pulses and special crops, although soil moisture is good in most areas, additional precipitation will be needed for later maturing crops. Nevertheless total pulse and special crops production is forecast to increase by 30% in the 2004-05 crop year, to 4.79 million tonnes (Mt) – provided there is no early frost to complicate matters. Total supply is expected to increase by only 21% to 5.29 Mt, because of lower carry-in stocks. Although exports and domestic use

are forecast to increase due to the higher supply, strong demand and lower prices for most crops will contribute to higher carry-out stocks (Oleson and Skrypetz, 2004).

In aggregate, Canada's agri-food exports fell almost 6 percent in 2003, while agri-food imports fell 1 percent. Much of this decline in trade can be attributed to disruptions arising from the BSE event, low grain and oilseed stocks, and an appreciating Canadian dollar. Canadian agri-food exports to NAFTA countries dropped 10 percent, while imports fell 4 percent. Canadian exports to PECC economies dropped 9 percent while imports from PECC economies fell 3 percent.

In 2003, the value of Canada's exports of bulk commodities actually increased by 2 percent. Intermediate product exports dropped 21 percent while consumer-oriented food product exports fell 2 percent. The make-up of Canada's agri-food imports remained relatively constant.

Exports should recover somewhat later in 2004 and throughout 2005 as trade restrictions related to BSE are gradually lifted and as stocks of grains and oilseeds are replenished. Industry analysts expect exports to climb by 10 to 15 percent in 2004 (Burn 2003). Bulk and intermediate product exports should increase in the short term as supply-side conditions improve. In the medium term, bulk exports will continue decline in importance. But new BSE trade measures, country of origin regulations, bioterrorism precautions and trade litigation complicate trade in beef, wheat, coarse grains, oilseeds and pork.

**FARM INCOME.** Total cash receipts fell to \$ 34.3 billion in 2003, in spite of the fact that direct payments reached \$ 5 billion. Realized net income for primary agriculture was actually negative in 2003, largely due to the BSE event and associated trade embargoes, and drought on the prairies. Prospects should improve in 2004 and 2005, but are dependant on a resumption of trade in livestock products and improving moisture conditions. As the majority of Canadian farm commodities are traded internationally, the value of the dollar also plays a role.

### Food and Agricultural Policy

Federal, provincial and territorial governments, and the agri-food industry continue to work on Canada's new agricultural policy framework. The new framework covers 5 areas: (a) food safety and quality; (b) the environment; (c) science and innovation; (d) business risk management, and; (e) renewal. The framework also includes an international strategy to help maximize commercial opportunities at home and abroad, resulting in increased profitability, diversification and value-added activity. To a degree, however, the BSE event and its impacts on trade, markets, and prices drew attention and resources away from the new framework.

In June 2003, federal, provincial and territorial governments introduced the **BSE RECOVERY PROGRAM**. The program helped to keep the domestic market moving and provided improved returns to feedlots and processors in light of severely depressed prices. When concluded, this adjustment program had expended a total of \$ 520 million.

In November 2003, the federal government announced \$120 mil-

lion for the **CULL ANIMAL PROGRAM** to encourage the movement of livestock in markets affected by the BSE event. With full provincial and territorial participation, total funding under this program will be \$200 million.

The **TRANSITIONAL INDUSTRY SUPPORT PROGRAM (TISP)**, announced in March 2004, supports the integrity of the Canadian agricultural industry. The program includes direct payments to producers of ruminant animals, and general payments that represent bridging assistance to help the industry transition to new business risk management programming (see CAIS discussion).

The **CANADIAN AGRICULTURAL INCOME STABILIZATION (CAIS)** program replaces NISA and CFIP. CAIS integrates stabilization and disaster protection into a single program, helping producers protect their farming operations from drops in income. The CAIS program is a whole-farm program available to eligible farmers regardless of the commodities they produce. With the CAIS, participants select a protection level for their operation and then make a deposit to secure that protection level. Program payments, which include both producer funds and government contributions, are made when the participant's margin in the program year falls below their reference margin. The bigger the loss, the larger the share of the payment from governments.

The **ADVANCING AGRICULTURE AND AGRI-FOOD (ACAAF) PROGRAM** was developed based on on-going feedback from the sector. ACAAF is the successor to the Canadian Adaptation and Rural Development (CARD) Fund and will receive \$ 255 million over 5 years. The ACAAF framework is based on three-pillars. Pillar I supports projects that test or pilot approaches and solutions, and serve as an incubator for initiatives holding future promise. Pillar II supports projects that convert research results into market opportunities. Pillar III supports projects aimed at gathering, and analyzing information useful to agriculture and agri-food policy development.

**POLICY SUMMARY.** While Canada's progress is commendable, improvements can still be made. Support has been unequal across sectors, regions, and farm sizes and targeting could be improved. Nevertheless, Canada's policy approach continues to show increased market orientation, with care to minimize distortions. Canada has been moving away from commodity-specific support and towards an integrated, "whole farm" business risk management approach.

### Infrastructure and the Canadian Agri-Food Sector

Infrastructure has been critical to Canada's development. The construction of a transcontinental railway was critical to the formation of Canada as a nation and railways remain a critical mode of transportation for Canadian agri-food products, particularly grains and oilseeds. As the original "highways" and routes for exploration, Canadian waterways have also played critical roles in Canada's development as a nation. The Great Lakes and St. Lawrence Seaway system remains one of the most important commercial waterways in the world, facilitating both bilateral trade between Canada and the United States - the largest

bilateral trading relationship in the world - as well serving as a starting point for shipments to overseas destinations.

**RAILWAYS.** Canada ranks 4th in the world in terms of the total length of its railways. Railways are critical to Canada's transportation system, providing the most cost-effective method of moving containers and bulk products great distances. Canadian railways move some 270 million tonnes of freight annually. Canada's rail industry is dominated by two major players: Canadian National (CN) and Canadian Pacific (CP). CN and CP have strong domestic networks, significant links into the US, including ownership of several US rail lines, and a growing number of regional railway affiliates from which to serve North American markets. They also have easy access to Canada's major ports and interior through truck-rail inter-modal services.

**PORTS AND DOCKING FACILITIES.** Canada is a maritime nation, bounded on three sides by the Pacific, Atlantic and the Arctic Oceans. Other than shipments to the United States and Mexico, trade with 3<sup>rd</sup> countries must, of necessity, take place via Canada's 300 commercial ports and harbours. Vancouver is Canada's largest port and the main terminal for goods being shipped to the Asia-Pacific region. The Port of Prince Rupert is located just below the Alaskan Panhandle and boasts the shortest sailing distance from North America to Pacific Rim countries. In the east, shipments are divided among several ports, including Montreal, Halifax, Port Cartier, Sept Iles / Pointe Noire, Saint John and Quebec with Montreal being the most important of these. Despite Canada's harsh winter, many of Canada's deep-water ports are open year round. Modern container facilities at major ports, such as Halifax, Montreal and Vancouver, connect with inland container trains to ensure rapid movement of goods throughout North America. The ports of Vancouver and Montreal are Canada's leading container ports.

**WATERWAYS.** Canada's main waterway is the Saint Lawrence Seaway, an extensive 3,000 km system of canals and locks which ocean-going vessels to pass all the way from the Atlantic Ocean to Thunderbay on Lake Superior. Co-managed by Canada and the United States, the St. Lawrence Seaway remains a model of binational cooperation. Agricultural products represent about 40 percent of all Seaway trade. Cargoes include wheat, corn, soybeans, barley, and flax.

**ROADS.** Canada ranks 4th in the world in the total length of its road system. The Canadian road network exceeds 1.4 million two-lane equivalent kilometres. The network consists of 110,000 kilometres of major highways, 115,000 kilometres of secondary highways and arterial roads, and more than 1.2 million kilometres of local streets and rural connector roads. Every year, there are roughly ten million truck trips across the Canada-US border, with the value of goods carried totaling around C\$400 billion. This makes road transport the dominant mode of north-south transportation. In recent years, the increase in traffic generated by the growth in Canada-US trade and just-in-time manufacturing have

placed demands on the road system, focusing attention on road safety and the need to further improve the quality of infrastructure.

**AIR TRANSPORT.** Canada has a highly developed air transportation system that includes 10 major international airports and a total of 1,389 airports reported in all – ranking it 5<sup>th</sup> overall in the world. Air Canada, Canada's leading airline, has comprehensive domestic and international route networks and affiliation with smaller regional carriers that link all parts of the country to transcontinental and international route systems. New air cargo policies have created opportunities for air carriers to operate international scheduled or all-cargo charter services.

**TELECOMMUNICATIONS.** Canada is making the most of recent research into intelligent transportation systems (ITS), which incorporate advanced navigation, route planning, communication, sensor and computer technologies. Canada is applying ITS to a broad range of transportation systems to improve accessibility, sustainability, productivity and safety. Automatic Vehicle Identification (AVI) technology, which speeds the movement of truck traffic across borders, is one example of how ITS is being applied. Canada, the United States and Mexico have a pilot project underway to test the feasibility of AVI technology by allowing trucks specially equipped with transponders to pass through border crossings without stopping. In addition, technological advancements in the rail industry such as computer-aided dispatching and automatic train control systems have reduced costs and improved delivery time.

When coupled with recent innovations like Global Positioning Technologies and Electronic Data Interchange (EDI) Canada's agri-food value chain has become one of the most efficient and responsive in the world (KPMG 2004). Sophisticated and comprehensive bar-coding and point-of-sale information is now a reality, with massive quantities of data available to producers, processors, customers and carriers. Containers, vehicles and packages can all be tracked in real time. "Smart stamps" are now widespread, with information on each shipment loaded on a reusable stamp attached to each package or shipment. The stamp transmits information which improves tracking, inventory management and lowers handling and labour costs.

**IRRIGATION SYSTEMS.** Canada is rich in water resources, holding almost 25 percent of the world's surface fresh water in the world. Yet, of its 33.5 million hectares of arable land, only 842 000 ha are irrigated (< 3 %). Nevertheless, irrigation is important and plays a role in every province. It is used to produce everything from hay to potatoes, canola and tree fruits, and berries to grass seed in the western provinces. In central Canada, controlled drainage and subsurface irrigation are common for high-valued crops such as potatoes, fruits and vegetables. In the Atlantic provinces, hand-move and wheel-move systems are used for supplemental irrigation and frost control.

**NATURAL GAS.** Canada is the world's 3rd largest natural gas producer and 2nd largest gas exporter. Most homes in Canada use natural gas for heating. Natural gas is also heavily used by the industrial and commer-

cial sectors. Most of natural gas production, 88 percent, comes from gas wells, while 12 percent comes from oil wells. Canadian natural gas production almost doubled between 1988 and 1998 and is expected to rise to around 225 billion m<sup>3</sup> by 2010. The main gas producing area in Canada is the Southern portion of the Western Canadian Sedimentary Basin, with about 83 percent of gas production coming from Alberta. Processing plants transform raw natural gas into 'pipeline natural gas', suitable for end users. With the exception of Newfoundland and Prince Edward Island, gas transportation infrastructure exists in all Canadian provinces. Most Eastern Canadian gas consumption is supplied by Alberta. Canada also exports large quantities of natural gas to the U.S., supplying roughly 15 percent of U.S. gas demand.

**ELECTRICITY.** Canada is the world largest hydro-electric power producer. Canada's electrical system is predominantly hydro-electric, accounting for around 2/3 of capacity. In contrast, total world generating capacity is mainly conventional thermal. Exports account for 5 to 10 percent of Canada's total generation. Electricity is primarily exported to New England, New York, upper Midwest, the Pacific Northwest and California.

## Infrastructure: Challenges and Opportunities

**ENABLING INFRASTRUCTURE.** Canadian agri-food interests have indicated that they want to "move up the value chain" with respect to exports. They have been gradually doing so. How might such movement be enabled, if considered desirable? Some "for instances" follow.

- Higher value products are typically shipped via TEUs rather than in bulk. Do Canadian ports of entry and exit need to increase their TEU capacity? Would expansion be commercially viable?
- NAFTA trade in higher value, perishable products increased considerably since the 1990s. But it has placed demands on the highway system and border crossings which need to be addressed.
- Transshipments of goods from the U.S. Mid-West to Eastern Seaboard States often go through Ontario – placing a strain on Canadian infrastructure without commensurate economic benefits.

**INCREASED TECHNICAL "DUE DILIGENCE".** Since the events of 11 September 2001, numerous border measures have been implemented to protect travelers, citizens, and nations' security. These have costs in terms of both time and money.

- Within North America, technical and administrative procedures have inadvertently impeded trade and limited efforts to exploit cross-border complementarities in production in processing. What technical and infra-structural measures might expedite such matters? For integrated systems with no intermediaries, would it be possible to pre-clear shipments of time-sensitive products?
- International measures to deal with Biosafety, Biodiversity and Biosecurity all involve new technical and administrative measures relating to the movement of agri-food products. But there has been only modest efforts to streamline these measures or apply them consistently.

**PRODUCT INTEGRITY SYSTEMS.** Consumers are increasingly interested in the nature of the food they eat, how it is produced, and with what inputs. This has given rise to new production integrity systems with various objectives and degrees of tolerance.

■ For systems which have historically focused on bulk markets for relatively homogenous products, this involves rejigging and refitting large portions of the supply chain. The North American grains and oilseeds sector currently faces such challenges if it desires to penetrate affluent markets in Western Europe and East Asia.

■ It must be ensured that such systems are indeed driven by consumer preferences and not purely by regulatory fiat and protectionism. Otherwise, enormous supporting infrastructure costs could be incurred without corresponding benefits.

**MARKET DIVERSIFICATION.** There is concern that Canada is becoming too dependent on NAFTA markets, and suggestions have been made for Canada to diversify markets to manage risks.

■ This presumes that other equally attractive markets exist and that Canada can compete effectively and profitably in them. This needs to be demonstrated rather than simply asserted. If diversification is pursued, “enabling infrastructure” must be revisited. Infrastructure in support of bilateral and trilateral trade with the United States and Mexico, although under stress, has been increasing over the past several years. Infrastructure for “outward” bound shipments of agri-food products to overseas markets has not kept pace. Without the supporting infrastructure, such trade is a physical impossibility. So,

sequencing of commercial export efforts needs to take place “lock step” with infrastructure development.

The history of Canada is closely tied to the history of transportation and infrastructure, and to its gradual triumph over geography.

Throughout the life of the country, and even before, Canadians have met the challenges of a vast and rugged environment to build one of the largest, most sophisticated transportation networks in the world. This network involves millions of components and thousands of people, all working together to keep the system running smoothly, the best among G-7 countries. The well-being of Canadians depends on keeping it that way.

<sup>1</sup> Agriculture and Agri-Food Canada (AAFC). Views expressed are those of the authors alone and do not reflect those of AAFC. We would like to thank, without implicating, Andrew Goldstein, Lars Brink, Scott Pellow, Tulay Yildirim, Cameron Short, Margaret Zafiriou, Warren Gould, and Brian Paddock for helpful comments and suggestions.

<sup>2</sup> A recent study by KPMG compared business costs in the agri-food sector and 11 other industries in 86 different international cities (KPMG 2004). In food processing, Canadian cities ranked 1st- with costs roughly 9 percent below U.S. counterparts. This may change, however, with the appreciation of the Canadian dollar.

<sup>3</sup> Forecasts are based on Statistics Canada’s survey of seeded area and assumptions of near-trend yields.



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# CANADA

|   | Units                                | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   | 2002(e) | 2003(e) | 2004(f) | 2005(f) |
|---|--------------------------------------|--------|--------|--------|--------|--------|--------|--|---------|---------|---------|---------|
| FOOD CONSUMPTION PATTERNS                                       |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Per capita caloric intake                                       | Cal./day                             | 3100   | 3056   | 3127   | 3114   | 3110   | 3127   | 3130   | 3130    | 3130    | 3130    | 3130    |
| From animal products  | Cal./day                             | 901    | 849    | 906    | 896    | 894    | 906    | 890  | 890     | 890     | 890     | 890     |
| From vegetable products   | Cal./day                             | 2199   | 2207   | 2221   | 2218   | 2217   | 2221   | 2220   | 2220    | 2220    | 2220    | 2220    |
| Protein (percent of calories)                                   | Percent                              | 14.8   | 14.7   | 14.5   | 14.3   | 14.1   | 14.1   | 14.0   | 14.0    | 13.9    | 13.9    | 13.9    |
| Fat (percent of calories)                                       | Percent                              | 33.9   | 33.6   | 33.3   | 33.1   | 32.9   | 32.8   | 32.9   | 32.9    | 33.0    | 33.0    | 33.0    |
| Carbohydrates (% of calories)                                   | Percent                              | 51.3   | 51.8   | 52.2   | 52.6   | 53.0   | 53.1   | 53.1   | 53.1    | 53.1    | 53.1    | 53.1    |
| FOOD PRICES   |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Disposable personal income                                      | US\$/capita                          | 112531 | 12596  | 11600  | 11490  | 11805  | 12160  | 12500  | 12875.5 | 13004.2 | 13184.5 | 13264.3 |
| % disposable income spent on food                               | Percent                              | 13.7   | 13.6   | 13.8   | 14     | 14.2   | 14.3   | 14.5   | 14.4    | 14.3    | 14.2    | 14.2    |
| % spent eating out  | Percent                              | 4.4    | 4.3    | 4.3    | 4.4    | 4.7    | 4.8    | 4.9  | 5.1     | 5       | 5.1     | 5.2     |
| Food price index  | Index 1992=100                       | 104.6  | 106.0  | 108.2  | 109.7  | 111.0  | 112.9  | 118.0  | 121.0   | 123.7   | 123.2   | 125.9   |
| General Price Index (CPI)                                       | Index 1992=100                       | 104.2  | 105.9  | 107.8  | 109.8  | 112.1  | 114.6  | 117.9  | 120.5   | 123.9   | 122.7   | 126.4   |
| POPULATION AND INCOME DISTRIBUTION                              |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Total population  | Million                              | 29.63  | 29.67  | 29.99  | 30.25  | 30.50  | 30.75  | 31.00  | 31.35   | 31.70   | 32.05   | 32.20   |
| Urban   | Million                              | 23.26  | 23.29  | 23.60  | 23.87  | 24.13  | 24.38  | 24.65  | 24.99   | 25.33   | 25.67   | 25.79   |
| Non urban   | Million                              | 6.37   | 6.38   | 6.39   | 6.38   | 6.37   | 6.37   | 6.36   | 6.36    | 6.37    | 6.38    | 6.41    |
| SHARE OF AGGREGATE INCOME RECEIVED BY EACH QUANTILE OF FAMILIES |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Lowest fifth  | Percent                              | 6.4    | 6.1    | 5.9    | 5.7    | 5.5    | 5.3    | 5.2  | 5.1     | 5.1     | 5.1     | 5.1     |
| Second fifth  | Percent                              | 12     | 11.9   | 11.8   | 11.7   | 11.6   | 11.5   | 11.3   | 11.2    | 11.1    | 11.1    | 11.1    |
| Third fifth   | Percent                              | 17.4   | 17.4   | 17.3   | 17.1   | 17.0   | 16.8   | 16.7   | 16.6    | 16.5    | 16.5    | 16.5    |
| Fourth fifth  | Percent                              | 23.9   | 24     | 23.9   | 23.7   | 23.6   | 23.4   | 23.3   | 23.2    | 23.1    | 23.1    | 23.1    |
| Highest fifth   | Percent                              | 40.2   | 40.6   | 41.2   | 41.8   | 42.4   | 43.0   | 43.6   | 44.0    | 44.3    | 44.3    | 44.3    |
| Gini Ratio  |                                      | 0.34   | 0.34   | 0.33   | 0.32   | 0.31   | 0.3    | 0.28   | 0.28    | 0.28    | 0.28    | 0.28    |
| SHARE OF POPULATION IN THE FOLLOWING AGE GROUPS                 |                                      |        |        |        |        |        |        |  |         |         |         |         |
| 0-4 years   | Percent                              | 6.8    | 6.6    | 6.4    | 6.3    | 6.0    | 5.8    | 5.5  | 5.4     | 5.3     | 5.4     | 5.2     |
| 5-14 years  | Percent                              | 13.6   | 13.6   | 13.6   | 13.5   | 13.4   | 13.3   | 13.2   | 13.1    | 12.9    | 12.7    | 12.7    |
| 15-19 years   | Percent                              | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.7    | 6.7  | 6.7     | 6.7     | 6.7     | 6.7     |
| 20-44 years   | Percent                              | 40.0   | 39.6   | 39.3   | 39.0   | 38.6   | 38.2   | 37.9   | 37.5    | 37.1    | 37.1    | 36.7    |
| 45-64 years   | Percent                              | 21.0   | 21.3   | 21.7   | 22.2   | 22.7   | 23.3   | 23.9   | 24.5    | 25.1    | 25.1    | 25.7    |
| 65-79 years   | Percent                              | 9.3    | 9.4    | 9.4    | 9.5    | 9.6    | 9.6    | 9.6  | 9.6     | 9.6     | 9.6     | 9.6     |
| 80-Over   | Percent                              | 2.7    | 2.7    | 2.8    | 2.8    | 2.9    | 3.0    | 3.1  | 3.2     | 3.3     | 3.4     | 3.4     |
| Medium Age of Population  | Years                                | 34.8   | 35.3   | 35.76  | 36.22  | 36.68  | 37.14  | 37.6   | 38.0    | 38.4    | 39.2    | 39.2    |
| Female Labour Force Participation                               | Percent                              | 52.3   | 52.1   | 52.7   | 53.8   | 54.6   | 55.5   | 55.60  | 56.4    | 56.6    | 56.8    | 56.8    |
| HEALTH  |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Life Expectancy   |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Males   | Years                                | 75.2   | 75.5   | 75.8   | 76.1   | 76.3   | 76.1   | 76.1   | 76.1    | 76.2    | 76.2    | 76.2    |
| Females   | Years                                | 81.1   | 81.2   | 81.4   | 81.5   | 81.7   | 81.9   | 81.9   | 81.9    | 81.9    | 81.9    | 81.9    |
| FOOD INFRASTRUCTURE   |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Trade capacity  |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Grain and oilseed exports (crop year)                           | 1000 Tonnes                          | 25246  | 29299  | 29091  | 24341  | 27949  | 27615  | 23266  | 15000   | 24500   | 24800   | 25000   |
| Grain and oilseed imports (crop year)                           | 1000 Tonnes                          | 1024   | 1276   | 1854   | 1448   | 1659   | 2855   | 5381   | 5300    | 3400    | 2900    | 2800    |
| Total food and agricultural trade                               | Million US\$                         | 22,088 | 24,513 | 27,048 | 26,294 | 25,717 | 27,399 | 29,565   | 29,667  | 32,232  | 32,400  | 32,900  |
| Total food and agricultural exports                             | Million US\$                         | 12828  | 14754  | 16243  | 15248  | 14643  | 15693  | 17161  | 16497   | 17400   | 17500   | 18000   |
| Total food and agricultural imports                             | Million US\$                         | 9260   | 9758   | 10805  | 11046  | 11074  | 11705  | 12404  | 13170   | 14832   | 14900   | 14900   |
| Fishery Exports   | Million US\$                         | 2232   | 2184   | 2201   | 2162   | 2177   | 2200   | 2725   | 2900    | 3000    | 3000    | 3000    |
| Fishery Imports   | Million US\$                         | 1048   | 1177   | 1143   | 1213   | 1283   | 1400   | 1400   | 1390    | 1400    | 1400    | 1400    |
| Perishable products   | Million US\$                         | 4012   | 4091   | 4211   | 4550   | 4830   | 5119.8 | 5375.79  | 5650    | 5250    | 5500    | 6000    |
| FOREIGN INVESTMENT IN THE FOOD SECTOR (author's estimates only) |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Inward FDI stock in the food sector,                            | TotalMillion US\$                    | 10298  | 11132  | 12342  | 12500  | 12750  | 13000  | sector specific statistical data no longer available |         |         |         |         |
| Outward FDI stock in the food sector,                           | TotalMillion US\$                    | 6215   | 6085   | 5956   | 5800   | 6500   | 7000   | sector specific statistical data no longer available |         |         |         |         |
| ROLE OF AGRICULTURE AND TRADE IN THE ECONOMY                    |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Agriculture as share of GNP (GDP)                               | Percent                              | 1.7    | 1.8    | 1.7    | 1.6    | 1.6    | 1.6    | 1.7  | 1.7     | 1.6     | 1.6     | 1.6     |
| Self-sufficiency in grain                                       | Ratio of Net Production/Consumption  | 1.76   | 2.07   | 1.72   | 1.77   | 1.76   | 1.75   | 1.6  | 1.2     | 1.5     | 1.7     | 1.7     |
| Self-sufficiency in horticultural products                      | Ratio of Net Production/ Consumption | 0.8    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9  | 0.85    | 0.9     | 0.9     | 0.9     |
| POLICY TRANSFERS  |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Consumer subsidy equivalents                                    | Percent                              | -12    | -12    | -14    | -16    | -16    | -14    | -13  | -14     | -16     | -16     | -14     |
| Total transfers from Taxpayers                                  | Million US\$                         | 5197   | 5101   | 4373   | 4773   | 4324   | 5186   | 5119   | 5400    | 5600    | 5700    | 5200    |
| Consumer nominal assistance coeff. (NAC)                        |                                      | 1.13   | 1.13   | 1.16   | 1.19   | 1.18   | 1.17   | 1.15   | 1.15    | 1.16    | 1.17    | 1.15    |
| Total transfers per capita                                      | US\$/capita                          | 175    | 175    | 143    | 145    | 152    | 154    | 147  | 144     | 150     | 151     | 145     |
| MACROECONOMIC DATA  |                                      |        |        |        |        |        |        |  |         |         |         |         |
| Exchange rate   | Cdn\$/US\$                           | 1.37   | 1.36   | 1.39   | 1.48   | 1.49   | 1.49   | 1.55   | 1.57    | 1.39    | 1.39    | 1.39    |
| GDP Growth (Real at 1992 \$)                                    |                                      | 2.6    | 3.8    | 3.0    | 4.2    | 4.7    | 1.5    | 3.4  | 1.7     | 2.8     | 3.2     | 3.2     |
| Bank Rate   |                                      | 7.3    | 4.5    | 3.5    | 5.1    | 4.9    | 5.8    | 4.3  | 2.8     | 3.5     | 4.3     | 4.3     |
| Marine Port Throughput (Not Capacity)                           | million tonnes360 (estimated)        | 358    | 355    | 360    | 365    | 370    | 373    | 375  | 378     | 381     | 383     | 383     |
| Marine Port Est Capacity  | million tonnes                       | 403    | 407    | 410    | 413    | 417    | 420    | 423  | 425     | 429     | 432     | 436     |
| Containers Handled  | 000 TEUs                             | 1534   | 1715   | 1859   | 1958   | 2189   | 2736   | 2675   | 2750    | 2790    | 2840    | 2860    |
| Road Access (all are estimates)                                 | 000 kms                              | 902    | 905    | 908    | 911    | 914    | 916    | 919  | 922     | 925     | 928     | 931     |

## CANADA

|                                 |                               |        |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Rail Access                     | 000 kms                       | 80     | 77    | 77    | 76    | 75    | 74    | 74    | 74    | 74    | 74    | 74    |
| Phone Access                    | Percent                       | 98.5   | 98.7  | 98.7  | 98.7  | 98.7  | 98+   | 98+   | 98+   | 98+   | 98+   | 98+   |
|                                 | Households with Telephones    |        |       |       |       |       |       |       |       |       |       |       |
| Telecommunications              | Lines                         | 17763  | 18051 | 18190 | 18330 | 18470 | 18600 | 18700 | 18900 | 19040 | 19180 | 19300 |
| Refrigeration Access            | Percent                       | 99.7   | 99.6  | 99.6  | 99.6  | 99.6  | 99.6  | 99.6  | 99.6  | 99.6  | 99.6  | 99.6  |
|                                 | Households with Refrigerators |        |       |       |       |       |       |       |       |       |       |       |
| <b>OVERALL ENERGY BALANCE</b>   |                               |        |       |       |       |       |       |       |       |       |       |       |
| Generation                      | Billion Kwh                   | 537.00 | 551   | 551   | 543   | 547   | 552   | 552   | 552   | 552   | 552   | Power |
| Production                      | PJ                            | 4829   | 4869  | 4909  | 4947  | 4984  | 5020  | 5020  | 5020  | 5020  | 5020  | 5020  |
| Consumption                     | PJ                            | 3425   | 3478  | 3531  | 3585  | 3638  | 3691  | 3691  | 3691  | 3691  | 3691  | 3691  |
| Ratio of Production/Consumption |                               | 1.41   | 1.40  | 1.39  | 1.38  | 1.37  | 1.36  | 1.36  | 1.36  | 1.36  | 1.36  | 1.36  |