

Canada-India trade in

Agriculture & Agri-food sector

Indo-Canada Chamber of Commerce

August 2013



Introduction

Canada and India have strong trading ties in agriculture and agri-foods sector. While the relationship encompasses all sectors of the value chain, and includes a wide range of merchandize, including manufactured and processed food, it is dominated by India's import of food grains (peas and lentils). The bilateral trade in the sector is estimated to be over \$583m.

Joint Statement

During Prime Minister Stephen Harper's second visit to India in November 2012, the two Prime Ministers in their joint statement underscored the significance of the sector to the bilateral economic relations. The statement stated: "Recognizing that Canada is a key supplier of India's agricultural imports including pulses and fertilizers, Prime Minister Singh and Prime Minister Harper welcomed ongoing collaboration under the Memorandum of Understanding on Agriculture Cooperation. Recognizing the imperative of growing food demand in India and the salience of food security to India's sustained future development and growth, both leaders reaffirmed the importance of intensifying bilateral collaboration in the area of agriculture and fertilizers. In this context, they underlined the need for closer cooperation in the area of fertilizers, especially potash, as well as dairy and agricultural production, processing, distribution and monitoring."

While the on-going negotiations over the Comprehensive Economic Partnership Agreement (CEPA) will deal with many issues pertaining to tariff and non-tariff barriers, the two governments continue to work closely to develop a better relationship. Many Canadian provinces have also been proactively engaged in developing synergies with the Indian market, with Saskatchewan obviously leading the way.

Memorandum of Understanding

Since the signing of a memorandum of understanding (MoU) on agricultural promotion between the two countries in 2009, an integrated approach is evolving. The MoU stipulates promotion of dialogue and information exchanges and cooperation in the areas of knowledge exchange on emerging technologies, agricultural marketing and animal development. Subsequently, the cooperation was extended to encompass the following:

- Post-harvest and processing technology – to include supply chain logistic for horticulture produce, supply chain management and storage for food grains, food processing, development of processing varieties of fruits and vegetables, pulse processing, development of functional foods.
- Food safety, quality and packaging – to include transfer of knowledge, training for human skills development and exchange of information for best practices.



- Other areas – to include twining with research centre on food processing and pulse processing, exchange of scientists and students, identification of collaborative projects, etc.
- Live swine and pork – to include development of swine genetic improvement scheme, animal health protocol for live swine and pork and Hog farm management.
- Dairy – to include identification and registration system for dairy cattle for genetic improvement purposes and traceability initiative, dairy cattle nutrition for higher performance, sexing of bovine semen and sustainable progeny testing.
- Agricultural marketing – to include grade and standards including organic certification process, marketing information system, risk management and insurance programs and crop forecasting.

As the Indian economy grows and consumption patterns move towards processed food, new opportunities are emerging in the two-way trade in the sector, especially in subsectors where the two countries have negligible trade at present.

This report explores Canada-India relationship and linkages in the agriculture and agri-food sector and highlights the opportunities that Canadian companies have in the growing Indian market. Based on secondary research and relying upon information available in the public domain, the report examines the following:

Section	Page Number
Global scenario	5
Agriculture & Agri-foods in Canadian economy	6
Agriculture & Agri-foods in Indian economy	7
Canada's agriculture trade	9
India agriculture trade	11
Canada-India trade & investment in the sector	13
Subsector focus: Food Processing & Cold Chain	16 & 20
Legislative environment	22
Canadian provinces and the Indian market	25
Conclusion	28
References	29

Categorization

For the purpose of this report, generally used and accepted categorizations of merchandize have been adopted. According to a 2013 report An Overview of the Canadian Agriculture and Agri-

Food System by Department of Agriculture and Agri-Food Canada, the sector comprises the following components:

- Consumer spending in stores, restaurants, alcoholic beverages and tobacco
- Food Distribution (Retail/Wholesale and Foodservice)
- Food and Beverage Processing
- Primary Agriculture, and
- Inputs to Primary Agriculture

India doesn't follow the same classification as above. However, both countries follow the HS or the NAICS codification for merchandise trade in the sector. The categories included in the harmonised systems code classification for agriculture and agri-food sector include the following products:

- Live animals and animal products, vegetable products, fats, oils their cleavage products and waxes, and finally food products, beverages, spirits, vinegar and tobacco products.

Global scenario

Global trade in the sector is expected to witness a gradual transformation with the developing and the emerging economies slowly acquiring a larger market presence. According to a 2011 report OECD-FAO Agricultural Outlook 2011-2020, trade in agriculture and agri-food will grow slowly and some new patterns will emerge. The report makes the following observations:

- Slower growth in export availabilities from traditional suppliers and greater domestic production by many importers to meet their domestic needs, along with trade policies will limit the growth in trade
- The volume of commodity trade is anticipated to grow by less than 2% annually, on average, roughly half the rate of the previous decade. This will still amount to a substantial increase in trade in agricultural products up to 2020
- While certain developed countries are projected to remain dominant exporters for a range of products, market shares are gradually shifting to developing and emerging countries
- Some new trade patterns are emerging for heavily traded products such as cereals. For wheat, world trade is relatively stable or growing only slowly. However, the share of exports held by the traditional top exporters (US, Canada, Australia, Argentina, EU) is trending down and may be less than 60% by the 2020, while the share of the Russian Federation and countries in Eastern Europe and Central Asia is rising towards a 30% share
- Trade of a number of commodities is expected to grow over 20% by 2020 for coarse grains, rice, sugar and oilseeds products, especially vegetable oil (mainly palm oil from Indonesia and Malaysia)
- Growth in meat trade is expected to resume in the second half of the projection period, stimulated by better economic prospects and improved market access
- Fish and fishery products will continue to be highly traded, with about 38% of world fishery production exported in 2020. World trade of fish for human consumption is expected to grow at a slower annual growth rate of 2.3% in the coming decade. Developed countries are expected to remain the main importers of fish for human consumption, while developing countries continue to be main exporters.

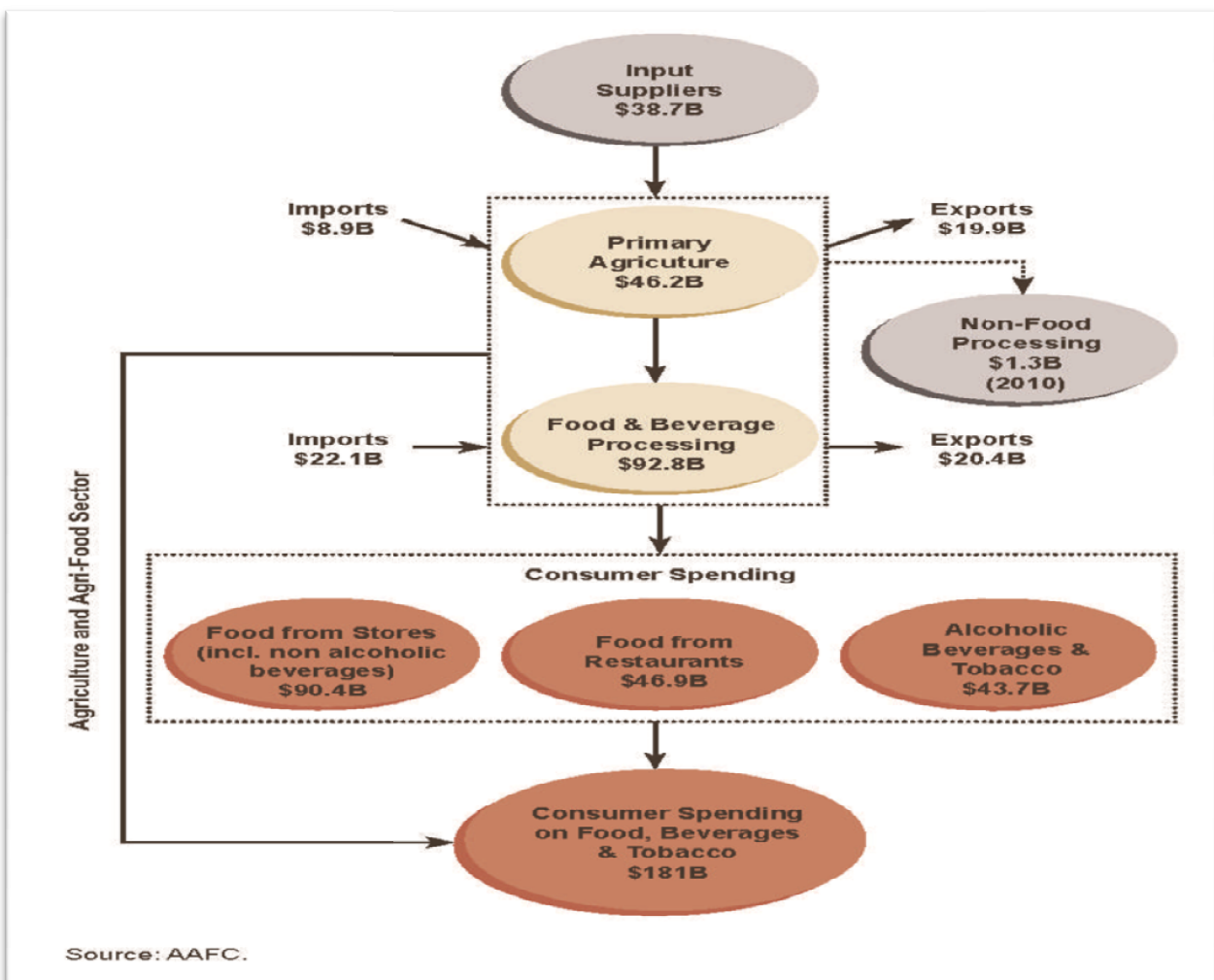


Agriculture & Agri-Foods in Canadian economy

Sector composition

Agriculture and food processing are key components of the Canadian economy and of Canada's trade portfolio. Agriculture and food account for 11% of Canada's goods GDP and almost 10% of Canada's total merchandise trade. Food processing is by far the largest manufacturing employer in Canada supporting over 250,000 jobs across the country. Added to that, there are over 220,000 farms across Canada, 90% of which are dependent on or supported by export markets.

Canadian Agriculture and Agri-food Sector (2011)



Source: *An Overview of the Canadian Agriculture and Agri-Food System 2013*,
Agriculture & Agri-food Canada



Agriculture & Agri-Foods in the Indian economy

Sector composition

According to the 2013 Annual Report of Government of India's Department of Agriculture and Cooperation, in 2012 agriculture and allied sector contributed 13.7% of India's GDP (US\$ 151.8b). There has been a continuous decline in the share of agriculture and allied sector in the GDP from 14.6% in 2009-10 to 13.7% in 2012-13. Falling share of agriculture and allied sector in GDP is an expected outcome in a fast growing and structurally changing economy.

Rice, wheat, cotton, oilseeds, jute, tea, sugarcane, milk and potatoes are India's major agricultural commodities.

Indian Agriculture and Agri-food sector

According to a 2013 sector factsheet Agriculture and Agri-food sector in India by YES Bank Ltd's Public and Social Policies Management (PSPM) Group (referred to as YES Bank factsheet hereafter), agriculture continues to remain the predominant source of livelihood for about 58% of India's population. It states that India is among the 15 leading exporters of agricultural products in the world. Among the main sector achievements, the factsheet lists the following:

- Horticulture is the main catalyst driving the growth of Indian agriculture. India is currently producing 257.2m tonnes of horticulture produce from an area of 23m ha.
- With a production of over 129m tonnes during 2011-12, accounting for more than 17% of the total global milk production, India has retained its pole position among all milk producing nations of the world.
- The food processing industry is one of the largest in India and is ranked fifth in terms of production, consumption, exports and expected growth. It is currently valued at about US\$70b and contributes to more than 35% of the total food market. This subsector is separately discussed later in this report.

According to a 2011 presentation India Market Opportunities for Canadian Companies in Agriculture and Agri-Food Processing Sectors by Sudha Kshatriya Counsellor (Agriculture & Food) and Trade Commissioner, Canadian Trade Commissioner Service, New Delhi (referred to as Sudha Kshatriya's presentation hereafter), by 2020, the Indian food market is expected to reach US\$318b making India the 4th largest food retail market in the world.

Key players

According to a June 2013 report by India Brand Equity Foundation, (referred to as the IBEF report hereafter) the following new ventures will enhance the sector's growth prospects:



- Ruchi Soya Industries, India's leading food and agro-based FMCG player, has inked a joint venture (JV) with J-Oil Mills Inc and Toyota Tsusho Corporation (TTC), both from Japan. The JV plans to start supplying products to the institutional customers by the end of 2013
- Mini Melts has tied up with HoneyBee Amusements for a foray in to India's US\$417.59m organised ice cream market
- ITC will invest US\$ 167.03m in food and consumer goods sector in India in the next two to three years
- Costa Coffee plans to add 200 more outlets with an investment of US\$33.41m by 2015, to expand its presence in India
- Cargill will invest about US\$66.80m to set up a corn milling plant in Karnataka, and another US\$16.70m on expansion of capacity of existing edible oil plants
- Twinings India, a subsidiary of the UK-based Associated British Foods, is gearing up to bring malted drink brand Ovaltine to India. The tea major has earmarked US\$8.36m as investment for this fiscal and expects to make its top-line grow five times in the next three years.



Canada's agriculture trade

According to Canadian Agri-food Trade Alliance (CAFTA), Canada is the fifth largest agri-food exporter in the world after the EU, the U.S., Brazil and China. Canada exports almost \$44b a year in agriculture and food products including half its beef production, 65% of its malt, two-thirds of its pork, almost 75% of its wheat and 85% of its canola.

Canada's top agriculture exports

Merchandize	CA\$
Rape/colza seeds, low erucic acid, for oil extraction, w/n broken (Kg)	5.18b
Wheat, nes and meslin (Metric Ton)	4.65b
Low erucic acid rape (canola) or colza oil and its fractions, crude (Kg)	1.97b
Durum wheat (Metric Ton)	1.47b
Low erucic acid rape (canola) or colza oil & its fractions, refined (Kg)	1.42b
Swine cuts, frozen nes (Kg)	1.25b
Soya beans, other than seed for sowing, whether or not broken, for oil extraction (Kg)	1.23b
Rape/colza seed oil-cake & o solid residue, low erucic acid, w/n ground/pellet (Kg)	1.12b
Potatoes prepared or preserved other than by vinegar or acetic acid, frozen (Kg)	0.86b
Bread, pastry, cakes, biscuits and similar baked products and puddings (Kilogram)	0.79b
Total agriculture and agri-food exports	43.60b

Source: Canadian Agri-food Trade Alliance (CAFTA)

According to an August 2013 Conference Board of Canada's report Liberalization's Last Frontier – Canada's Food Trade, (referred to as the Conference Board report hereafter) between 1995 and 2002, Canadian food exports to the United States more than doubled and the share of Canada's food exports shipped south of the border rose from less than half to more than two-thirds. Such an increase in food trade between Canada and the U.S. wouldn't have been possible without NAFTA.

Since 2002, however, the importance of the U.S. in Canada's food trade has fallen, as Canada has been exporting and importing a growing share of food products to and from the rest of the world.

In fact, Canada exported more than half of its food products to countries other than the U.S. in 2012. In particular, Canada has significantly increased its exports of canola, peas, lentils, and soybeans to countries such as Mexico, India, and China. Canada's imports from those countries have also risen substantially in recent years.



Canada's top agriculture export markets

(2012)

Countries	CA\$
United States	23.60b
China	5.39b
Japan	4.22b
Mexico	1.78b
Hong Kong	0.75b
Russian Federation	0.66b
South Korea	0.57b
India	0.53b
United Arab Emirates	0.51b
Netherlands	0.48b

Source: Agriculture and Agri-foods Canada



India's agriculture trade

As per United Commodity Trade Statistics Database (UNCOMTRADE) 2010, India's share is only 1.48% of global agricultural trade India's share in world agricultural trade is relatively low. The small share is primarily on account of low land holding size, low productivity, and large domestic consumption, constraints of supply chain and marketing linkages as well as low level of processing.

India's top agriculture exports

Merchandize	US\$ m
Rice-basmati	2493.92
Oil Meals	2437.9
Spices	1768.08
Sugar	1198.92
Other cereals	803.61
Tea	736.45
Coffee	661.77
Castor Oil	654
Guergam Meal	646.08
Cashew	619.23
Fresh vegetables	559.53
Sesame seeds	507.25
Groundnut	480.45
Fresh fruits	478.63
Processed fruits and juice	228.64
Pulses	190.52
Processed vegetables	167.88
Rice (non-basmati)	50.86
Fruits / Vegetable Seeds	40.52
Niger Seeds	9.85
Wheat	0.15
Total agri exports	14734.24

*Source: Government of India Ministry of Commerce & Industry Lok Sabha Unstarred
Question No. 657 Answered on 13-08-12*



India's top agriculture export markets

(2012-13)

Country	US\$ m
USA	5355.79
Vietnam	2554.94
Iran	2034.19
UAE	1924.91
Saudi Arabia	1471.78
China	1351.22
Bangladesh	1233.72
Malaysia	1165.95
Indonesia	1148.18
Thailand	952.33
Canada	283.17

Source: Agricultural and Processed Food Products Export Development Authority, India



Canada-India trade & investment in the sector

Trade

Trade between Canada-India in agriculture and agri-food sector is approximately over \$583m.

Canadian agriculture and agri-food exports to India include pulses, oilseeds / seeds, food residues and fodder, fats and oils and products of animal origin.

India's exports to Canada in the sector include dairy produce, and edible products of animal origin, cocoa and cocoa preparations, and residues and waste from the food industries, and prepared animal fodder.

According to a 2011 report Agriculture, Food and Beverage Sector Profile – India by Gurbans Sobti, Canada's Trade Commissioner (Chandigarh, India) (referred to as Gurbans Sobti's report hereafter) Canada supplies around 50% of India's pulse needs and is the largest supplier of yellow peas.

Investments

Information on Canadian agriculture and agri-food companies operating in India needs more rigorous compilation. The listing below is from Sudha Kshtriya's presentation.

- McCain Food (<http://www.mccainindia.com/>)
- Richardsons (www.richardson.ca)
- Bunge India Private Limited (www.bunge.com)
- Grace Kennedy (Ontario) (<http://www.gracekennedy.com/companies/grace-kennedy-ontario-inc-canada>)
- Connors Bros (<http://www.connors.ca/>)
- Western Delight (N/A)
- Balcorp (<http://www.balcorp.com/>)

While these represent investments by Canadian companies into India, there will be many companies – large and small – operating in the sector especially in trading. Such a list needs to be compiled.

Similarly, information about Indian companies' presence in Canada in the sector is not available in the public domain. There have been reports of proposals of Indian corporate entities buying agriculture land in Canada, especially to grow pulses and lentils. However, information is at best sketchy and generic, without specific names being provided.



Opportunities

According to the Gurbans Sobti's report Canadian agriculture sector companies should focus on the following subsectors, because of their inherent strengths

- Canola Oil: 55% of edible oil available in India is imported. Currently, India is the largest importer of edible oils in the world. The total import of vegetable oil for the year 2009-10 is reported at 6.1m tonnes. The import tariff has also come down from 85% to 7.5% and is sure to give a flip to the sale of oil in India
- Seafood: Imported seafood is emerging as a preferred choice for many consumers who are experimenting with foreign varieties such as salmon, lobster, tuna and seabass
- Nutraceuticals: It is estimated that higher disposable incomes and greater awareness on health have buoyed the US\$380m nutraceuticals market in the country which is growing at about 40%
- Processed Food: This subsector is discussed later in the report.

Similarly, according to a 2012 report Opportunities in the Indian Food Markets of India prepared by Dennis Pervis, Senior Markets Analyst, Marketing and Trade Team, Agriculture and Agri-Food Canada, between 2005 and 2010, the value of Indian imports of agricultural, agri-food & seafood products from all sources increased at a rate of 18.6% per year while the value of imports from Canada increased at a rate of 27.3% per year from CA\$202.6m to CA\$568.3m. In 2010 Canada held 4.11% of the market of this CA\$13,819.7m market.

The best prospects in the Indian market for Canadian exporters are:

- | | |
|---|---|
| • Fish, Nesoi, with Bones, Fresh or Chilled | • Kidney Beans & White Pea Beans, Dried Shelled, Including Seed |
| • Milk & Cream, Concentrated, Sweetened, Powder, Granules / Other Solids, Not over 1.5% Fat | • Beans Nesoi, Dried Shelled, Including Seed |
| • Milk & Cream, Concentrated, Sweetened, Powder, Granules / Other Solids, over 1.5% Fat | • Leguminous Vegetables Nesoi, Dried Shelled, Including Seed |
| • Fats and Oils Derived from Milk, Nesoi | • Nuts Nesoi, Fresh or Dried, Shelled or Not |
| • Human Hair, Unworked and Waste of Human Hair | • Pears and Quinces, Fresh |
| • Peas, Dried Shelled, Including Seed | • Black Tea Fermented & Other Partly Fermented Tea Nesoi |
| | • Ginger |



- Poppy Seeds, Whether or Not Broken
- Natural Gums, Gum Resins, Resins and Balsams Nesoi
- Cocoa Paste, Not Defatted
- Cocoa Powder, Not Sweetened
- Nonalcoholic Beverages, Nesoi
- Ethyl Alcohol & Other Spirits Denatured, Any Strength
- Raw Silk (Not Thrown)
- Wool, Not Carded or Combed, Greasy, Nesoi
- Wool Not Carded / Combed Degreased Not Carbonized, Shorn

Challenges

The report identifies the following challenges for Canadian companies in the Indian market:

- High tariffs, low initial volumes and competing on price with suppliers from other countries Price is one of the most important considerations for choice of food so the price-value equation has to be carefully evaluated before any product launch
- The investment in brand building, increasing awareness, advertising and promotion can be significantly higher for the initial years
- Other challenges in this sector are lack of an efficient cold supply chain system
- Cultural issues such as 30% of population adhering to vegetarianism and a large percentage of meat eaters eschewing beef and pork

Subsector focus: Food Processing & Cold Chain

Food Processing

According to the IBEF report, food processing industry is one of the largest industries in India, ranking fifth in terms of production, growth, consumption, and export.

- The sector's total output stood at US\$93.1b in 2010, it accounted for nearly 7.5% of aggregate gross value added of major industries during that year.
- The industry attracted foreign direct investments (FDI) worth US\$1,811.06m during April 2000 to March 2013
- The total value of the industry is expected to touch US\$194b by 2015
- Second-fastest growing sub-segment within manufacturing in 2012. Growth for food products and beverages shot up to 14.8% in 2012
- Sector exports shot up 63% to set a record at US\$16.96b in the first 10 months of 2012-13, as compared to US\$10.39b in the corresponding period of last year
- Packaged food segment is expected to grow 9% annually to become a US\$100.19b industry by 2030, dominated by milk, sweet and savoury snacks and processed poultry, among other products.
- Unorganised sector accounts for 42% of industry and a sizeable presence of small scale industries points to the sector's role in employment generation.
- Ready-to-drink tea and coffee market in India is expected to touch US\$367.37m in next four years
- Packaged milk, as a category, is projected to grow from US\$7.76b to US\$32.9b by 2030, registering an annual growth of 8%
- About 73% of the milk sold by 2030 would be branded, against 31% at present.
- India's food processing industry is one of the largest industries and accounts for 19% of India's industrial workforce.

Opportunities

According to the YES Bank factsheet, the following are the emerging opportunities in the sector:

Integrated Dairy Farms

Although India is a leading dairy producer, the industry remains relatively inefficient and unproductive with low productivity levels and a below average milk yield.

Demand for milk is expected to reach 180m tonnes by 2021-22, which requires the milk production to grow at the rate of almost 5.5 % per annum by the next decade. In order to achieve these supply levels it is imperative to address the challenges of low productivity of milch



animals, poor quality of raw milk and high costs of domestic production. Increasing the competitiveness of the Indian dairy industry will require both improved technology as well as efficient management.

Integrated Dairy Farms, therefore, provide a way forward. Particularly they provide increase in herd size per farm, better quality of dairy animals, mechanized milking, use of improved artificial insemination techniques and hi-tech production of fodder and feed.

Streamlining Agri Supply Chains

India has a diversified crop base with production of different crops fragmented across geographies. These crops are produced at specific locations but consumed all over India. The harvesting of these crops happens over a fortnight, but their arrival occurs over a period of three to four months. The consumption, however, happens throughout the year. Thus, to fulfill demand across the country, these crops have to be physically moved from limited areas of production to consumption sites. Moreover they need to be stored beyond their period of arrival so as to ensure steady supplies over the entire year.

There lies tremendous opportunity in managing the supply chain for crops as there is no single company in India that operates across various categories of crops – grains, oilseeds, exotic/plantation crops, spices, fruits, vegetables and cotton.

Integrated Warehousing

Annually, on an average India incurs losses across the value chain anywhere between 25% to 40%. The current scenario indicates a lack of scientific storage infrastructure at the right locations for storing the surplus produce. Integrated warehousing projects, envisaged as a fall out of the Warehousing Development and Regulation Act (WDRA) by the Government of India, are expected to come up on PPP mode to accelerate implementation. Community participation in case of localized warehousing is also an important derivative, driving sustainable growth in remote regions.

Cold Storage Facilities

India is the second largest producer of Fruits and Vegetables in the world. However, the cold storage facility is available only for about 10% of the produce resulting in up to 30% of the post-harvest losses. The wastage is largely due to the non-availability of appropriate infrastructure, both static and mobile. For more information see the next section.



Government initiatives

The Indian government has made efforts to attract Foreign Direct Investment in the food processing sector. The objective seems to be that a relatively low production cost, a skilled and abundant work force and 100% FDI under automatic route in food processing industries (except alcohol) may help India gain competitiveness in processed food production. The present policies are focussed on infrastructure development and supply chain management and include projects such as Mega Food Parks, Cold Chain Infrastructure and Modernization of Abattoirs.

According to the IBEF report, government has supported 966 food processing units with financial assistance of US\$ 24.37m during 2012-13 (till February 15, 2013) under the scheme for technology upgrading, establishment and modernisation of food processing industries.

To implement various schemes for promotion and development of food processing sector, the government has made a plan allocation of US\$1b during the Twelfth Plan. The government had launched a centrally sponsored scheme – National Mission on Food Processing (NMFP) which aims at increasing the level of food processing from 10% in 2010 to 25% by 2025.

The government plans to increase the level of processing of perishables such as fruits and vegetables from 6% to 20%. Besides, it also aims to enhance value addition to farm products from 20% to 35% in the years to come.

In the Indian Government's annual budget for 2013-14, an additional provision of US\$1.67b has been allocated for National Food Security Act. The Act is expected to be passed soon by the Parliament.

For promoting food processing industries, the government has also been implementing a scheme for creation of infrastructure which includes components like mega food parks, cold chain, value addition & preservation infrastructure, and modernisation of abattoirs.

Food Retail

According to Sudha Kshatriya's presentation, the food retail market is estimated at less than 2% of total food retail in India but is the fastest growing retail segment in India. Around 20% of the products carried by organised food and grocery retail chains are imported products. Among the entities that have entered the food retail segment are some of the biggest names in Indian corporate world:

- Future Group's Pantaloon Retail, Mumbai – Big Bazaar
- Vishal Mega Mart- Vishal Retail Limited
- Reliance, Mumbai – Reliance Fresh Stores
- RPG Retail, Kolkata – Spencer's Supermarket &

- Hypermarket, Food World Supermarket
- Hypermarket, KBFP, Food Bazaar Supermarket and Aadhaar Retail stores (rural)
- Aditya Birla Group, Mumbai – More, Trinethra Supermarket
- JSW Green

The report further states that foreign food retailers (allowed only in wholesale trade till recently) include:

- Metro AG Germany has six wholesale stores in India (1st overseas retailer to open store in 2003).
- Wal-Mart, has opened five wholesale stores in India and, plans to open as many as 12 wholesale stores in 2011.
- The French retail group Carrefour set up in Delhi in December 2010 its first cash-and-carry outlet
- South Africa's Shoprite – Shoprite Hyper store
- UK's Tesco set up cash & carry stores with Tata's Trent Hypermarket- Star Bazaar

Cold chain

According to Sudha Kshatriya's presentation, in India the farm level wastage is about 15% of total produce. At transportation level it is about 25%. Supply chain inefficiencies lead to more wastage, and India is looking to improved transportation, refrigerated vans and pre-cooling chambers to bring down the wastage (about 40%).

According to a 2011 report by the US Commercial Service report on prospects of cold chain sector in India, the total value of India's cold chain industry is currently estimated at US\$3b and reportedly growing at an annual rate of 20-25% and the total value for the industry is expected to reach at US\$8b by 2015.

The Indian agricultural sector is witnessing a major shift from traditional farming to horticulture, meat and poultry and dairy products, all of which are perishables. The demand for fresh and processed fruits and vegetables is increasing as urban populations rise and consumption habits change.

Due to this increase in demand, diversification and value addition are the key words in the Indian agriculture today. These changes along with the emergence of an organized retail food sector spurred by changes to Foreign Direct Investment laws are creating opportunities in the domestic food industry, which includes the cold chain sector.

As a result of the Government of India's new focus on food preservation, the cold storage sector is undergoing a major metamorphosis. The Government has introduced various incentives and policy changes in order to curtail production wastage and control inflation; increase public private participation and improve the country's rural infrastructure.

The industry is still evolving, not well organized and operating below capacity. Most equipment in use is outdated and single commodity based.

According to government estimates, India has 5,400 cold storage facilities, with a combined capacity of 23.66m metric tons that can store less than 11% of what is produced.

The majority of cold storage facilities are utilized for a single commodity, such as potatoes. Most of these facilities are located in the states of Uttar Pradesh, Uttaranchal, Punjab, Maharashtra, and West Bengal.

India has about 250 reefer transport operators (this includes independent firms) that transport perishable products. Of the estimated 25,000 vehicles in use, 80% transport dairy products (wet milk); only 5,000 refrigerated transport vehicles are available for all other commodities.

India's greatest need is for an effective and economically viable cold chain solution that will totally integrate the supply chains for all commodities from the production centers to the consumption centers, thereby reducing physical waste and loss of value of perishable commodities.

The Government of India recognizes that development of cold chain is an essential next step in upgrading India's food processing industry. In the 2011-2012 annual budget the Indian government announced a series of measures to reduce the production and supply chain bottlenecks to facilitate modernization, ease import of foreign equipment, and attract foreign investment in India. Some of these measures include:

- Infrastructure status to post-harvest storage, including cold chain
- Hiked the corpus of Rural Infrastructure Development Fund XVII to \$4b in 2012 from \$3.5b in 2011 and the additional allocation would be dedicated to the creation of warehousing facilities
- The Viability Gap Funding Scheme is extended for public private partnership projects to set up modern storage capacity
- Air-conditioning equipment and refrigeration panels for setting up cold chain facilities would be exempted from excise duty beginning in the next fiscal year
- Conveyor belts for equipment used in cold storage, wholesale markets and warehouses would be also exempted from excise duty
- Creation of an additional 15m tons capacity of storage capacity through public private partnerships put on a fast track
- The National Horticulture Mission has sanctioned 24 cold storage projects with a capacity of 140,000 metric tons
- An additional 107 cold storage projects with a combined capacity of over 500,000 metric tons have been approved by the National Horticulture Board
- Promised full exemption from service tax for the initial set up and expansion of cold storage, cold room (including farm pre-coolers for preservation or storage of agriculture and related sectors produce) and processing units
- A package of measures to improve the availability of storage and warehouse facilities for agricultural produce and to incentivize food processing
- Announcement to set up 15 more mega food parks in the country
- States asked to reform the Agriculture Produce Marketing Act urgently to improve the supply chain
- Credit flow in agriculture raised from US\$84b to US\$107b ensuring that resources do not constrain growth in the sector



Legislative environment

According to the 2010 Canada-India Joint Study Group Report Exploring the Feasibility of a Comprehensive Economic Partnership Agreement (which paved the way for the CEPA negotiations), there is a considerable ground to be covered between the two countries before bilateral trade in the sector can be enhanced. The report provides an in-depth summary of the existing legislative environment for the sector (circa 2010).

Canada's Approach

A Canada-India CEPA should affirm that SPS (Agreement on the Application of Sanitary and Phytosanitary Measures—also known as the SPS Agreement) measures shall be governed by the WTO SPS Agreement. That being said, there is a lack of knowledge about and experience with each other's regulatory systems. This can result in unresolved bilateral SPS issues, which can effectively undermine market access concessions negotiated in a CEPA.

Canada's experience with many markets is that an effective bilateral mechanism to provide a forum for ongoing cooperation and information exchange and facilitate discussions on bilateral SPS issues has been useful as an effective means to avoid disputes. Canada would want to build on existing bilateral mechanisms with India.

The existing bilateral mechanism, however, does not offer full coverage of issues, and, notably, there is currently no mechanism to deal with animal health or food safety issues at the technical level. Moreover, Canada and India do not have a bilateral SPS mechanism which provides for broader policy level discussion of all SPS issues, which Canada has also found helpful in some of its other bilateral relationships.

India's Approach

In India, foreign direct investment in farming and foreign ownership of farmland is not permitted, with the exception of a recent opening up to seeds and planting material, and in food processing it is capped at 24% for alcoholic beverages and so-called "small scale" food processors.

In India, import control measures have been put in place by the Bureau of Indian Standards, the Directorate General of Foreign Trade, the Ministry of Health and Family Welfare, and the Ministry of Agriculture.

Inspection and certification of exportable commodities is the responsibility of the Export Inspection Council. The Government of India has enacted several laws to regulate import of food products, livestock and its products, plant materials and other agricultural commodities into the country.



Likewise, there are several rules, regulations, orders, notifications, etc. issued by the Government, laying down procedures as to how the imports of above products are to be dealt with. The Customs has a pivotal role to play because, it is the agency stationed at the border to enforce the rules, regulations and orders issued by various administrative Ministries.

The import control in India for the food sector is operated under the Prevention of Food Adulteration Act by the Ministry of Health and Family Welfare for health and safety aspects and the Ministry of Agriculture for quarantine aspects. All products which are under compulsory certification by the BIS for the domestic market should conform to BIS standards when imported as well.

The Export Inspection Council is the only agency in India responsible for export inspection and certification of a range of commodities in areas like food, chemicals, leather, engineering and footwear as commodities notified under the Export (Quality Control & Inspection) Act, 1963. To date, nearly 1000 commodities have been notified by the central government under the Act.

Tariff and non-tariff barriers

According to the Conference Board report global reduction in tariff barriers have led to an exponential rise in global trade in the sector. However, despite their reduction in the past two decades, trade barriers to food remain high in most developed countries. Import duties on food products of more than 100% are especially common among developed countries with large food trade deficits. In contrast, countries with large food trade surpluses tend to have far fewer agricultural support measures in place and their import tariffs on food are well under 10%.

According to Sudha Kshatriya's presentation the trade in the sector between Canada and India is hampered primarily because of regulatory and market access issues in India.

The report lists the following impediments:

- Regulatory Barriers - Market access, high tariffs, differential tax system between states
- Market Access - Canada has number of outstanding access issues and is currently negotiating access for seafood, pork, live cattle, live swine, poultry genetics and other animal products.

Additionally, in the context of CEPA, Cam Vidler, Director, International Policy, Canadian Chamber of Commerce, in a presentation before the House of Commons Standing Committee on International Trade (March 27, 2013) stated, "the CEPA should reduce and bind Indian tariffs on major Canadian exports, such as chemicals, wood products, manufactured goods, *and especially food stuffs—where tariff rates can hover near 30%.*" (emphasis added).

He further stated, “Second, these tariff reductions need to be accompanied by strong disciplines against non-tariff barriers. Licensing requirements, technical standards and product certification procedures are often onerous and insufficiently harmonized with international best practices. Companies also report local content requirements and government procurement practices that discriminate against foreign companies.”

According to an Official Communiqué by the Canadian Agri-Food Trade Alliance (CAFTA), the on-going CEPA negotiations must expand the range of products Canada exports to India. Although India is currently Canada’s seventh-largest agri-food export market, more than 95% of shipments are peas and lentils. The CEPA must expand the range of products that Canada ships to that country.

While several Canadian agri-food sectors, including pork and canola, have identified India as a market of interest, trade in these and most other products is minimal to non-existent, due to trade barriers. Import tariffs are high across most agri-food products and most sectors face non-tariff barriers, including religious and cultural restrictions on certain products (e.g., beef), and strict and often-shifting sanitary and phytosanitary requirements. These barriers restrict trade or greatly increase the cost of exporting to India.

The CAFTA advocates that to expand trade, the CEPA must eliminate tariffs on all agri-food products; eliminate the differential tariff structure that currently exists among oilseed products, which distorts the market and discriminates against certain imports; and lift the religious prohibition on importing beef from cattle.

Canadian provinces and the Indian market

The following is a summary of the various measures undertaken by Canadian provinces to promote trade in the sector with India.

Alberta

According to Alberta-India Agriculture Highlights – 2012, Alberta's agriculture goals in India are:

- Work with the federal government to enhance market access in pork, live cattle, live swine and poultry genetics. Reduce or eliminate tariffs such as the 7.5% duty of refined oil and non-tariff trade barriers
- Enhance relationships, including mutually beneficial partnerships and trade agreements
- Expansion of current trade in dried peas, canola oil, beef and livestock genetics
- Increase attraction of foreign investment from India into Alberta

According to Alberta Pulse Growers, in 2010 approximately 654,000 tonnes (70%) of Alberta's pulses were exported to the for the Indian market totalling \$123m.

Discussions are currently underway for a twinning relationship between Alberta and Punjab. In 2010, Alberta entered into a Memorandum of Understanding with Punjab focusing on education and agriculture.

Atlantic Canada

According to the Atlantic Canada Opportunities Agency, in 2012, Atlantic Canada exported \$140m in goods to India. With the help of the Atlantic Canada Opportunities Agency (ACOA) and its partners, including the four Atlantic Provinces (New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador), the Consulate General of Canada in Mumbai and Agriculture and Agri-Food Canada, Atlantic companies are actively exploring a variety of sectors in India, including food and beverage, education, and energy to seize the promising opportunities that India offers.

British Columbia

According to Trade & Invest British Columbia, the province's agri-food exports (including seafood) amount to \$2.4b to 140 countries globally. India has been identified as a key new market along with China and Korea, as the province attempts to reduce its export dependence on the United States. Specialty products such as smoked salmon and wine are gaining popularity with India's growing middle class. Food processing is another key areas of focus because India's



processed food industry is in its infancy, currently representing only 2% of India's total food production, and is an ideal niche for the province's agri-food industry.

Manitoba

During the February 2013 Manitoba's trade mission to India led by the province's premier Greg Selinger, Westeel, a Manitoba-based manufacturer of agricultural storage products, announced that it would set up a sales office in India. Westeel hopes to tap into the new awareness in India of food wastage, which accounts for nearly 30-40% of all produce, to build a market in India. Manitoba is trying to expand its export base into the emerging markets by focusing on traditional (food grains) and non-traditional (food manufacturing and processing) exports.

Ontario

Most of Ontario's exports to India are in the manufacturing sector, and food manufacturing and processing equipment forms a small percentage of \$7.5m the machinery parts exported to India in 2012.

Quebec

Gujarat-based IFFCO has signed a \$1.2b investment deal to set up an agro-chemicals plant in Quebec. A partnership agreement was entered into in December 2012 between IFFCO Canada, La Coop fédérée, Investissement Québec and Pacific Gateway Energy with a view to setting up a fertilizer production plant at Bécancour. Under the agreement, La Coop fédérée committed to distributing 500 000 tonnes of urea per year across the organization's extensive network.

Saskatchewan

Of all the Canadian provinces, Saskatchewan has the most extensive trade relations with India. In 2009 Saskatchewan exported close to a billion dollars' worth of product to India (CA\$975,724,403). This account for 45.43% of Canada's total exports to India (source: Trade Data Online). The vast majority of those exports include potash, peas, lentils and chickpeas.

In 2011, Saskatchewan Premier Brad Wall led a high-powered trade delegation to India and Bangladesh. During this trip, Saskatchewan signed several MoUs with different agencies in India. Wall was joined on the trade mission by members of the Saskatchewan Trade and Export Partnership (STEP) and the Saskatchewan Pulse Growers (SPG). During the mission, SPG announced research findings produced by the Tamil Nadu Agricultural University showing that Indian customers will accept the use of Saskatchewan green lentils in their traditional Indian foods. This could capture up to 20% of the imported pea market or 200,000 tonnes annually, which would be worth up to \$160m annually to Saskatchewan pulse producers.

Among the many MoUs signed, two pertained to the sector:

- Province of Saskatchewan and the Indian Ministry of Agriculture: Under the MOU, Saskatchewan and the Indian Ministry of Agriculture will exchange professional knowledge and expertise in crop production, post-harvest management, food processing, and agri-business development and management. They also agree to promote and market agricultural products and cooperate on agricultural technology transfer. A coordinating committee will be established to oversee the implementation of the agreement.
- Saskatchewan Pulse Growers (SPG) and the Indian Institute of Crop Processing Technology (IICPT): The Saskatchewan Pulse Growers (SPG) and Indian Institute of Crop Processing Technology (IICPT) signed an MOU that will result in further collaboration to increase the market for Saskatchewan pulse crops in India. SPG and IICPT will conduct joint research to identify new Indian foods made of SK pulses and improve food storage technologies in India.

Conclusion

Trade between Canada and India in the agriculture and agri-food sector is expected to rise exponentially in the near future.

India's growing economy and the rising consuming class will propel this growth. The trade will also move towards non-traditional subsectors such as food processing, storage and cold chain construction and management.

The trade impediments – tariff and non-tariff barriers – that exist at present will hopefully be addressed by the on-going CEPA negotiations and pave the way for more enhanced trade in the sector.

Canadian exporters will continue to face stiff competition especially from exporters of countries that deal with the same set of products and are in close geographical proximity to India.

In future, product innovation and experimenting with new products such as canola oil and blends of canola with locally popular vegetable oils may be the way forward.



Reference

The report is based on the following reports/publications/presentations

Publication	Organization
Canadian	
An Overview of the Canadian Agriculture & Agri-food system – 2013	Agriculture & Agri-Food Canada 2013
Opportunities in the food markets of India	Agriculture & Agri-foods Canada 2012
Market Access for the Future	Canola Council of Canada 2012
Canola Digest 2012-13	Canola Council of Canada 2012
Liberalization's last frontier Canada's Food Trade	Conference Board of Canada 2013
Indian	
Indian Agrochemicals Industry	FICCI 2013
Annual Report 2012-13	Ministry of Agriculture & Cooperation
Export of Agriculture Products	Lok Sabha Q&A 2012
Food Processing presentation	Indian Brand Equity Foundation 2013
Agriculture & Agri-food sector in India	Public and Social Policies Management Group, YES BANK Ltd 2013
India's cold chain industry	US Commercial Service 2011

Information in this report is also derived from the following websites

Canada	
Industry Canada	http://www.ic.gc.ca
Agriculture & Agri-Food Canada	http://www.ats.agr.gc.ca/asi/4476-eng.htm
India	
Agriculture & Processed Food Products Export Development Authority of India	http:// www.apeda.gov.in

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August 2013