

INDIAN FOOD PROCESSING INDUSTRY

The food processing industry provides vital linkages and synergies between industry and agriculture. The Food Processing Industry sector in India is one of the largest in terms of production, consumption, export and growth prospects. The government has accorded it a high priority, with a number of fiscal reliefs and incentives, to encourage commercialization and value addition to agricultural produce, for minimizing pre/post harvest wastage, generating employment and export growth. India's food processing sector covers a wide range of products fruit and vegetables; meat and poultry; milk and milk products, alcoholic beverages, fisheries, plantation, grain processing and other consumer product groups like confectionery, chocolates and cocoa products, Soya-based products, mineral water, high protein foods and so on.

The Indian food processing industry is one of the largest in the world in terms of production, consumption, export and growth prospects. Earlier, food processing was largely confined to the food preservation, packaging and transportation, which mainly involved salting, curdling, drying, pickling, etc. However, over the years, with emerging new markets and technologies, the sector has widened its scope. It has started producing many new items like ready-to-eat food, beverages, processed and frozen fruit and vegetable products, marine and meat products, etc. It also include establishment of post-harvest infrastructure for processing of various food items like cold storage facilities, food parks, packaging centres, value added centres, irradiation facilities and modernized abattoir.

India has a strong agricultural production base with diverse agro-climatic conditions and arable land of 184 million hectares. It is one of the major food producers in the world and has abundant availability of wide variety of crops, fruits, vegetables, flowers, live-stock and seafood.

India produces annually 90 million tonnes of milk (highest in the world); 150 million tonnes of fruits and vegetables (second largest); 485 million livestock (largest); 204 million tonnes of food grains (third largest); 6.3 million tonnes of fish (third largest); 489 million poultry and 45,200 million eggs. As a result, Indian food processing industry has become an attractive destination for investors the world over.

The size of the semi-processed and ready to eat packaged food industry is over Rs. 4000 crores (US \$ 1 billion) and is growing at over 20%.



Agriculture and agro products remain the most important sector of the Indian economy. They contribute nearly one third of the GDP and account for 64% of the workforce.

In short, India has the following advantages in the Food Processing Sector:

- India is one of the largest food producers in the world
- India has diverse agro-climatic conditions and has a large and diverse raw material base suitable for food processing companies
- India has huge scientific and research talent pool
- A largely untapped domestic market of 1000 million consumers
- 300 million upper and middle class consume processed food
- 200 million more consumers expected to shift to processed food by 2010
- Well developed infrastructure and distribution network
- Rapid urbanization, increased literacy, changing life style, increased number of women in workforce, rising per capita income- leading to rapid growth and new opportunities in food and beverages sector
- Strategic geographic location (proximity of India to markets in Europe and Far East, South East and West Asia)

The following are the major challenges faced by the Indian Food Processing Industry:

- Consumer education that processed foods can be more nutritious
- Low price-elasticity for processed food products
- Need for distribution network and cold chain
- Backward-forward integration from farm to consumers
- Development of marketing channels
- Development of linkages between industry, government and institutions
- Taxation in line with other nations
- Streamlining of food laws

Regulatory Regime / Food Related Laws:

<u>Ministry of Food Processing Industries</u>: This is the main central agency responsible for promoting and regulating the food processing sector. The Ministry covers the products of fruits and vegetables, dairy, meat, poultry, fishery,



consumer food, grains, non-molasses based alcoholic drinks, aerated water and soft drink. It acts as a catalyst for bringing in greater investments into this sector.

The Ministry has accorded a high priority to this sector with a number of policy measures, incentives and schemes announced from time to time. The 'National Food Processing Policy' is one such initiative, which aims to create an appropriate climate for investment in the industry.

The objectives of the Ministry are to:

- Utilize and make value addition to agricultural produce for enhancement of income of farmers.
- Minimize wastage at all stages in the food processing chain by the development of infrastructure for storage, transportation and processing of agro-food produce.
- Induct modern technology into the sector from both domestic and external sources.
- Use efficiently agricultural residues and by-products of the primary agricultural produce as well as of the processed industry.
- Encourage R&D in food processing for product and process development and improved packaging.
- Provide policy support, promotional initiatives and physical facilities to promote value added exports.
- Promote rationalization of tariffs and duties relating to food processing sector.

The following are the food laws applicable to food and related products in India and the food processing industry has to comply with their legal requirements:

<u>Food Safety and Standards Act, 2006 (Integrated Food Law)</u> - This aims to achieve a high degree of consumer confidence in the quality and safety of produced, processed, sold or exported food and has been enacted to:

- Consolidate the laws relating to food;
- Establish the Food Safety and Standards Authority of India for laying down science based standards for articles of food:
- Regulate manufacture, storage, distribution, sale and import of food articles with a view to ensure availability of safe and wholesome food for human consumption and;
- Pool infrastructure, manpower and testing facilities for better standard fixation and enforcement through their proper re-deployment.

<u>Essential Commodities Act, 1955</u>: A number of quality control orders have been issued under Essential Commodities Act such as FPO, MMPO, Meat Product Order and Vegetable Oils Control Order. These orders are primarily meant for regulating the hygienic conditions. To be more specific following are orders for the food safety and quality.

- Fruit Products Order (FPO), 1955 it provides for regulation of sanitary and hygienic conditions in manufacture of fruit and vegetable products. It aims to ensure that hygienic and good quality products are manufactured and sold. It is implemented by the Ministry through the Directorate of Fruit and Vegetable Preservation.
- Meat Food Products Order (MFPO), 1973 This order aims to ensure supply of wholesome meat food products to the consumers. It deals with quality control of meat food products from processing to finished product by way of ante-mortem and post-mortem inspection of meat animals so as to ensure hygienic conditions of processing of meat food products.
- <u>Milk and Milk Products Order, 1992</u> The objective of this order is to maintain and increase the supply of liquid milk of desired quality in the interest of the general public and also for regulating the production, processing and distribution of milk and milk products.
- <u>Vegetable Oil Control Orders</u>: The Vegetable Oil Industry is administered through the following control / regulation orders which are statutory in nature deriving their powers from the Essential Commodities Act:
 - (i) Vegetable Oil Products (Regulation) Order, 1998,
 - (ii) Edible Oils Packaging (Regulation) Order, 1998; and
 - (iii) Solvent Extracted Oil, De-oiled Meal and Edible Flour (Control) order, 1967.

Other Food related laws:

- Prevention of Food Adulteration Act, 1955 lays down specifications for various food products for the food safety.
- The Standards of Weights and Measures Act, 1976, and Standards of Weights and Measures (Packaged Commodities) Rules, 1977



- Agriculture Produce (Grading & Marking) Act (Ministry of Rural Development) which lays down the specifications for various agricultural commodities including some processed foods.
- Export (Quality Control and Inspection) Act, 1963.
- Environment Protection Act, 1986.
- Pollution Control (Ministry of Environment and Forests)
- Industrial License under Industries (Development & Regulation) Act, 1951 for liquor manufacture.
- Bureau of Indian Standards Act, 1986 which is the largest body for formulating standards for various food items.

Policy Measures, Government Initiatives and Duty Regime:

Some of the important policy measures and initiatives taken by the Government for the sector are:

- Most of the processed food items have been exempted from the purview of licensing under the Industries (Development & Regulation) Act, 1951, except items reserved for small-scale sector and alcoholic beverages;
- Food processing industries are included in the list of priority sector for bank lending in order to ensure easy availability of credit to them;
- Excise duty on ready to eat packaged foods, instant food mixes like dosa and idli mixes, aerated drinks, as well as on fruits and vegetables processing units, have been reduced.
- Excise duty on processed meat, fish and poultry products reduced from 8% to nil.
- Excise Duty of 16% on dairy machinery has been fully waived off.
- Excise duty reduction from 16 per cent to 8 per cent on a few more items including water purification devices, veneers and flush doors, sterile dressing pads, specified packaging material and breakfast cereals.
- Excise duty exemption on refrigeration equipment will enhance investments in the cold chain sector and help food and beverage sector.



- Customs duty on food processing machinery and their parts have been reduced from 7.5% to 5%.
- A large number of foreign collaborations have been approved.
- Up to a maximum of 24% foreign equity is allowed in SSI sector.
- Use of foreign brand names is now freely permitted.
- MRTP (Monopolies & Restrictive Trade Practices Act) rules and FERA (Foreign Exchange Regulation Act) regulations have been relaxed to encourage investment and expansion by large corporates.
- Most of the items can be freely imported and exported except for items in the negative lists for imports & exports. Capital goods are also freely importable, including second hand ones in the food processing sector.
- Units in Export Processing Zone / Free Trade Zone and 100% Export oriented units can retain 50% of foreign exchange receipts in foreign currency accounts.
- 50% of the production of Export Processing Zone / Free Trade Zone and 100% EOU units are saleable in domestic tariff area.
- All profits from export sales are completely free from corporate taxes.
 Profits from such exports are also exempt from Minimum Alternate Tax (MAT).
- The government has proposed for the establishment of mega food parks in different parts of the country, which will be run by a Special Purpose Vehicle created by all the stakeholders to create an integrated value chain from the farm gate to the consumer.
- Another strategic initiative taken in India is to establish cold chain facilities including refrigerated vans all over the country, to provide relief to the farmers, to enhance the shelf life of their product and retain its quality.



Budget 2008-09:

The following fiscal incentives were announced in the Budget 2008-09 for the food-processing sector:

- Creation of fund of Rs 5, 000 crores in NABARD to enhance its refinance operations.
- Customs duty being reduced on bactofuges from 7.5 per cent to nil for the benefit of dairy industry and to increase shelf life of milk.
- Reduction in general CENVAT rate on all goods from 16% to 14%.
- Excise duty exemption on Tea and Coffee Pre Mixes, Milk containing edible nuts with sugar or other ingredients and Puffed Rice (goods of mass consumption) from 16%.
- Excise duty reduced on specified packaging material from 16% to 8% (OTS Cans, Aseptic Bags and Aseptic Packaging Paper).
- Excise duty on certain varieties of packing paper reduced from 12% to 8%.
- Excise duty reduced on Breakfast Cereals from 16% to 8%.
- To encourage Cold Chain facilities refrigeration equipments (consisting of compressors, condensers, evaporators etc) above 2 tonne refrigeration utilizing power of 50 KW and above, exempted on end-use basis.
- To promote outsourcing of research, a weighted deduction of 125% on payments made to companies engaged in R&D.
- Central Sales Tax reduced from 3% to 2%.

The following projects will also boost the food processing sector:

- Rashtriya Krishi Vikas Yojana launched with an outlay of Rs. 25,000 crore, National Food Security Mission with an outlay of Rs. 4,882 crore under National Policy for Farmers in the Eleventh Five Year Plan.
- National Horticulture Mission (NHM): NHM covering 340 districts in 18 States and two Union Territories, provided Rs.1, 100 crore in 2008-09.
- Plantation Crops: Special Purpose Tea Fund for re-plantation and rejuvenation to be provided Rs.40 crore in 2008-09; similar support to cardamom, rubber and coffee; crop insurance scheme for tea, rubber, tobacco, chilli, ginger, turmeric, pepper and cardamom to be introduced and so on.



Foreign Direct Investment Policy:

- Automatic approval for foreign equity up to 100% is available for most of the processed food items, excepting alcohol and beer and those reserved for small scale sector (subject to certain conditions);
- The policy for distillation of alcohol was announced in 2006 according to which FDI up to 100% is permitted on the automatic route for distillation & brewing of alcohol subject to licensing by the appropriate authority.
- FDI up to 100% is permitted under the automatic route in the food infrastructure (Food Park, Cold Chain/warehousing).
- In so far as food retail is concerned the FDI policy does not permit FDI into Retail sector except Single Brand Product Retailing.
- No industrial license is required for almost all of the food & agro processing industries except for some items like: beer, potable alcohol & wines, cane sugar, hydrogenated animal fats & oils etc. and items reserved for exclusive manufacture in the small scale sector. Items reserved for S.S.I. include pickles & chutneys, bread, confectionery (excluding chocolate, toffees and chewing-gum etc.), rapeseed, mustard, sesame & groundnut oils (except solvent extracted), ground and processed spices other than spice oil and olioresins, sweetened cashew nut products, tapioca sago and tapioca flour.

Market Trends

Employing over 1.6 million people, India's food processing industry contributes 6.3% to the GDP and 16% to exports and 6 per cent of total industrial investment. Food retail accounts for 26 per cent of India's GDP and is growing at a compounded annual growth rate of 7-8 per cent.

At present, the food processing segment holds a 32% share of India's booming food industry. Exports of processed food have grown at over 190% between 2002-03 and 2006-07, increasing from \$6.98 billion in 2002-03 to \$20.51 billion in 2006-07. FDI inflows in the food sector have been high and according to estimates, they are likely to touch \$325 million by 2009.



The market size for processed foods is pegged at \$102 billion, with the potential to grow by 10% to \$330 billion by 2015.

India, with the second largest arable land area, is one of the key food producers in the world. The Indian processed food industry ranks fifth in size in the country. It ranks first in the world in production of cereals and milk, second in production of fruits, third in vegetable production, seventh largest producer of fish in the world, ranked second in inland fish production and is among the top five producers of rice, wheat, groundnuts, tea, coffee, tobacco, spices, sugar, and oilseeds. It is the second largest exporter of rice and fifth largest exporter of wheat in the world.

The country produces over 500 million tonnes of agricultural, horticultural and dairy produce annually, thus making it one of the world's largest food producers.

However, the country's food processing industry is in a nascent stage. Only around 2% of fruits and vegetables are processed, and the figure stands at 15 per cent for milk, 26% for marine, 6% for poultry and 20% for buffalo meat, as against 60-70% of the overall food production in developed countries. Milk and milk products contribute to nearly 17% of the country's total expenditure on food. India has 53% of world's buffalo, 23% of sheep and 842 million poultry (6th largest in the world)

India is a largely untapped domestic market of over one billion consumers of whom 300 million consume processed and packaged foods while an additional 200 million are expected to shift to processed food consumption by 2010. Moreover, the food processing industry has been declared a Priority sector in the country.

In 2007-08, food grain production in India had registered a 4.6 per cent growth with 227.32 million tonnes as against 217.28 million tonnes in 2006-07, according to estimates by the agriculture ministry.

The output of coarse cereals in 2007-08 was 39.67 million tonnes, 17 per cent higher than the 33.92 million tonnes in the previous fiscal.

The total output of oilseeds is estimated to have risen to a record 28.2 million tonnes, about 16 per cent higher than the 24.29 million tonnes in 2006-07.

The production of pulses has risen to 15.19 million tonnes, registering a year-on-year growth of 7 per cent, and touching a new high.



In the Financial Year '08, Indian food processing industry logged an impressive growth rate of 18%.

India currently produces about 50 million tonnes of fruit (about 9% of the world's production) and about 90 million tonnes of vegetables (11% of the world's production).

The turnover of the total food market is approximately Rs.250, 000 crores (US \$ 69.4 billion) out of which value-added food products comprise Rs.80, 000 crores (US \$ 22.2 billion).

Sector-wise Breakup:

<u>Snacks and Confectionery:</u> The Indian market for snack food is estimated to be a market worth US\$ 3 billion. The organized sector of the snack food market is growing at 15-20 per cent a year while the growth rate of the US\$ 1.56 billion unorganized sector is 7-8 per cent.

<u>Dairy and Probiotics:</u> The current size of the Indian dairy sector is US\$ 62.67 billion and has been growing at a rate of 5 per cent a year. The dairy exports in 2007-08 rose to US\$ 210.50 million against US\$ 113.57 million in the corresponding period, in the last fiscal.

The market of neutraceuticals and probiotics has earned revenues of over US\$ 185 million in 2007 and is projected to touch an estimated US\$ 1,161 million in 2012.

Beverages: alcoholic, non-alcoholic, carbonated, fruit based and health drinks: The market for carbonated drinks in India is worth US\$ 1.5 billion while the juice and juice-based drinks market accounts for US\$ 0.25 billion. Growing at a rate of 25 per cent, the fruit-drinks category is one of the fastest growing in the beverages market.

The market for wine in India is also growing at over 25 per cent per year. The state of Maharashtra recorded an impressive 59.84 per cent growth of wine production.

Marine Food: Indian seafood exports rose to US\$ 1.55 billion during 2007-08. Frozen shrimp accounted for 52 per cent of total marine exports at US\$ 980 million followed by frozen fish at US\$ 326 million.



<u>Poultry and Processed Meat:</u> The country's poultry market is expected to grow at 12-15 per cent per annum. At the same time, fuelled by a booming retail sector, the market for processed meat is also growing at an estimated 15-20 per cent per annum.

Retail Landscape: Food Chains and Restaurants:

The food and grocery market in India is presently valued at US\$ 236 billion and is the sixth largest in the world. Food and grocery retail contributes to 70 per cent of the total retail sales.

According to industry estimates, the segment is growing at a rate of 104 per cent and is expected to grow to US\$ 482 billion by 2020. Ninety nine per cent of this segment is unorganized, and therefore, there is immense scope for growth for the organized sector.

Exports:

The Indian food –processing industry is primarily export oriented. India's geographical situation gives it the unique advantage of connectivity to Europe, the Middle East, Japan, Singapore, Thailand, Malaysia and Korea. One such example indicating India's location advantage is the value of trade in agriculture and processed food between India and Gulf region.

Products that have growing demand in the export market are pickles, chutneys, fruit pulp, canned fruits and vegetables, concentrated pulps and juices, dehydrated vegetables and frozen fruits and vegetables along with processed animal-based products.

India's exports of agricultural and processed food products in 2007-08, has grown by 38 per cent, which, in absolute value terms, is US\$ 6.59 billion, against US\$ 4.79 billion in 2006-07.

Initiatives taken for Export Promotion

 Free trade zones (FTZ) and export processing zones (EPZ) have been set up with all necessary infrastructure. Also, setting up of 100% Export oriented units (EOU) is encouraged in other areas. They may import free of duty all types of goods, including capital foods.



- Capital goods, including spares up to 20% of the CIF value of the Capital goods may be imported at a concessional rate of Customs duty subject to certain export obligations under the EPCG scheme. Export linked duty free imports are also allowed.
- Units in EPZ / FTZ and 100% Export oriented units can retain 50% of foreign exchange receipts in foreign currency accounts.
- 50% of the production of EPZ / FTZ and 100% EOU units are saleable in domestic tariff area.
- All profits from export sales are completely free from corporate taxes.
 Profits from such exports are also exempt from Minimum Alternate Tax (MAT).

Export Statement (2004-2005 to 2006-2007)

Value in: Rs Lakhs Quantity in: Mts

Processed Fruits & Vegetables

	2004-05		2005-06		2006-07	
	QTY	VALUE	QTY	VALUE	QTY	VALUE
Dried & Preserved Vegetables	72814.66	22736.78	124495.71	36411.26	118787.46	42406.20
Mango Pulp	95857	31571.94	134613.2	36424.12	156835.52	50582.79
Pickles & Chutneys	71975.51	12934.71	135381.85	26098.14	145216.00	29359.48
Other Processed Fruits & Veg	84646.21	28899.85	107335.24	37021.34	129110.24	50814.71
Pulses	266987.85	58985.45	441742.59	109505.94	247532.33	77064.60
Total For Processed Fruits & Vegetables	592281.23	155128.73	943568.59	245460.80	797481.55	250227.78

Other Processed Foods

	2004-05		2005-06		2006-07	
	QTY	VALUE	QTY	VALUE	QTY	VALUE
Groundnuts	177154.08	54702.39	190053.34	51368.77	251428.65	79846.01



Guar Gum	131299.98	68947.69	186718.4	104923.29	189304.36	112579.2
Jaggery & Confectionery	40561.49	10822.88	112644.06	26497.09	455935.85	87346.11
Cocoa Products	2313.3	2765.63	2147.09	2183.27	2891.00	3507.85
Cereal Preparations	51803.14	29204.34	76880.63	39395.70	79849.48	46271.31
Alcoholic Beverages	30748.49	11774.41	55532.46	16048.57	28778.68	11661.83
Miscellaneous Preparations	54397.88	23214.83	49606.69	22577.20	57696.80	22364.88
Total for Other Processed Foods	488278.36	201432.17	673582.67	262993.89	1065884.82	363577.19

Major Indian and Overseas Players in the Food processing industry:

- ITC Limited (Packaged Foods & Confectionery)
- Parle Products Pvt. Ltd. (Business and Confectionary)
- Agro Tech Foods (Snacks)
- Amul (Dairy)
- Perfetti India Ltd. (Confectionary)
- Cadbury India Ltd. (Confectionary and Beverages)
- PepsiCo India Holdings (Snacks and Beverages)
- Nestle India Pvt. Ltd. (Confectionary)
- Britannia Industries Ltd. (Bakery Products)
- Milkfood Limited (Milk Products)
- MTR foods limited (Snacks and Icecreams)
- Godrej industries Limited (Beverages and Staples)
- Gits Food Products Pvt. Ltd. (Snacks and Dairy)
- Dabur India Ltd. (Beverages and Culinary)
- Haldiram's (Bakery products and Snacks)
- Hindustan Unilever Limited (Beverages, Staples, Dairy)

Industry Localization:

Due to changing lifestyle of its population, growing income of the middle class and surplus production of fruits, vegetables and milk, North India, comprising



Punjab, Haryana and Himachal Pradesh and parts of Jammu & Kashmir, is fast emerging a hub of the food processing industry.

Financial incentives from Himachal Pradesh and Haryana and liberal policies of the Punjab Government have helped attract big players like Pepsi, Satnam Overseas, Nestle and Dabur to this region. In addition, a large number of local brands like Bakeman's, Verka, Vita and Cremica have also strengthened their hold over the market.

At present 20-25% of fruit, vegetables and milk is processed in the North region as against around 10% at the national level.

In comparison to other regions of the country, the North has been showing a much higher growth in the consumption of processed food, fruit and milk products.

The trend of consumption of bread, biscuits, canned juices, packed milk and milk products besides processed vegetables even in small towns is significantly higher in North India than in the Southern or North-Eastern region.

The initiatives of the Punjab and Haryana governments to set up food parks, agro-export zones and support to apple growers by the Himachal Government have also strengthened the food processing industry. Towns like Ludhiana, Jalandhar, Solan, Baddi, Faridabad, Karnal and Ambala are developing as centres of the food processing industry.

Key Opportunity Areas:

The Indian food market is set to more than double by 2025. The market size for the food consumption category in India is expected to grow from US\$ 155 billion in 2005 to US\$ 344 billion in 2025 at a compound annual growth rate of 4.1 per cent.

In India, the food processing industry is one of the largest in terms of production, consumption and export prospects. As the country's Gross Domestic Product (GDP) growth rate had increased from 3.5 per cent in 2002-03 to 9 per cent in 2006-07, the food-processing sector had grown from 7 per cent to 13.1 per cent during the same period.

The Government has set an investment target of Rs 1, 00,000 crore for the food-processing sector by 2015. This is expected to almost double the country's



presence in the global food trade to three per cent. The investments of one lakh crore, as estimated by the government will, undoubtedly, catapult the growth of this sector, and put it at the higher growth trajectory.

Among the emerging business avenues and growth options in the diverse Indian agribusiness sector, the food-processing sector is particularly promising and is undoubtedly one of the largest potential markets for processed foods. The segments with the largest growth potential for processing are dairy, fruits and vegetables, wine, confectionary, poultry, convenience food and drinks and milk products. Products that have growing demand in the export market are pickles, chutneys, fruit pulp, canned fruits and vegetables, concentrated pulps and juices, dehydrated vegetables and frozen fruits and vegetables along with processed animal based products. As India is world's third largest producer of agricultural products and large production base for a variety of raw materials covering food crops, commercial crops and fibres. Due to India's diverse agro-climatic conditions, it has a wide-ranging and large raw material base suitable for food processing industries. Presently a very small percentage of these are processed into value added products. And demand for processed/convenience food/ readyto- cook/ ready- to- eat is constantly on the rise. Moreover, urbanization and nuclear families are becoming the norm.

The market size for the processed foods is bound to increase from INR 4,600 bn (\$102 bn) to INR 13,500 bn (\$ 330 bn) by 2014-15, assumed to grow at 10%, and the share of the value added products in processed foods would grow from INR 2800 bn (\$44 bn) to INR 5700 bn, growing at the rate of 15%. The growth witnessed by the sector in the last decade and further improvement in growth rate expected in the years to come, presents innumerable opportunities for investment.