

An overview of Food Processing Industry in India – Challenges and Opportunities

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Abstract

India holds the second largest arable land in the world. With 20 Agri-Climatic regions, all 15 major climates in the world exist in India. The country also possesses 46 of the 60 soil types in the world. India is the largest producer of pulses, milk, tea, cashew and mangoes, buffalo meat; and the second largest producer of tea, wheat, sugarcane and rice. Demand growth for processed food has been rising with growing disposable income, urbanization, a young population and rise in the number of nuclear families. Food processing industry is one of the largest industries in India, ranking fifth in terms of production, growth, consumption, and export. The total value of Indian food processing industry is expected to touch US\$ 194 billion by 2015 from a value of US\$ 121 billion in 2012, according to Mr Swapan Dutta, Deputy Director General, Indian Council of Agricultural Research (ICAR).

Introduction

The Indian food industry has witnessed strong growth over the past few years. India is the world's second largest producer of food next to China, and has the potential of becoming the biggest producer in the years to come. The total food production in India is likely to double in the next ten years. Indian food service industry is currently worth Rs 2,47,680 crore (US\$ 41.39 billion) and is expected to grow at the rate of 11 per cent to touch Rs 4,08,040 crore (US\$ 68.16 billion) by 2018, according to 'India Food Service Report 2013' by the National Restaurant Association of India (NRAI). With a huge agriculture sector, abundant livestock, and cost competitiveness, India is fast emerging as a sourcing hub of processed food. Moreover, India's market for organic food consumption has also been recognised as one with the largest potential worldwide, as per RNCOS research report titled, 'Indian Organic Food Market Analysis'.

India holds the second largest arable land in the world. With 20 Agri-Climatic regions, all 15 major climates in the world exist in India. The country also possesses 46 of the 60 soil types in the world. India is the largest producer of pulses, milk, tea, cashew and mangoes, buffalo meat; and the second largest producer of tea, wheat, sugarcane and rice. Demand growth for processed food has been rising with growing disposable income, urbanization, a young population and rise in the number of nuclear families. Domestic food spending is expected to increase from US\$ 181 billion in 2009 to US\$ 318 billion in 2020. The Government of India (GOI) expects US\$ 21.9 billion of investments in food processing infrastructure by 2015 and has also launched Infrastructure Development scheme to

increase investments in food processing infrastructure. Investments, including foreign direct investments (FDI), will rise with strengthening demand and supply fundamentals (<http://www.ibef.org>). Food processing industry is one of the largest industries in India, ranking fifth in terms of production, growth, consumption, and export. The total value of Indian food processing industry is expected to touch US\$ 194 billion by 2015 from a value of US\$ 121 billion in 2012, according to Mr Swapan Dutta, Deputy Director General, Indian Council of Agricultural Research (ICAR). India's Agri and Processed foods exports shot up 63 per cent to set a record at Rs 101,504 crore (US\$ 16.96 billion) in the first 10 months of 2012-13, as compared to Rs 62,244 crore (US\$ 10.39 billion) in the corresponding period of last year, according to data compiled by the Agricultural and Processed Food Products Export Development Authority (APEDA). The packaged food segment is expected to grow 9 per cent annually to become a Rs 6 lakh crore (US\$ 100.19 billion) industry by 2030, dominated by milk, sweet and savoury snacks and processed poultry, among other products, according to the report "India as an agriculture and high value food powerhouse by 2030" by CII-McKinsey. The food processing industries in India attracted foreign direct investments (FDI) worth US\$ 1,811.06 million during April 2000 to March 2013, according to the latest data published by Department of Industrial Policy and Promotion (DIPP). Food Processing Industry is of enormous significance for India's development because of the vital linkages and synergies that it promotes between the two pillars of the economy, namely Industry and Agriculture. India is world's second largest producer of food and has the potential to become number one in due course of time with sustained efforts. The growth potential of this sector is enormous and it is expected that the food production will double in the next 10 years and the consumption of value added food products will grow at a fast pace. This growth of the Food Processing Industry will bring immense benefits to the economy, raising agricultural yields, meeting productivity, creating employment and raising the standard of very large number of people throughout the country, specially, in the rural areas. Economic liberalization and rising consumer prosperity is opening up new opportunities for diversification in Food Processing Sector. Liberalization of world trade will open up new vistas for growth. The Food Processing Industry has been identified as a thrust area for development. This industry is included in the priority lending sector. Most of the food processing industries have been exempted from the provisions of industrial licensing under Industries (Development and Regulation) Act, 1951 with the exception of beer and alcoholic drinks and items reserved for Small Scale Sector, like vinegar, bread, bakery. As far as foreign investment is concerned automatic approval for even 100% equity is available for majority of the processed food items. The Food Processing Sector Food processing involves any type of value addition to the agricultural produce starting at the post harvest level. It includes even primary processing like grading, sorting, cutting, seeding, shelling packaging etc. The food processing sector comprises six major segments:

- **Fruits and Vegetables**

Horticultural crops in India are currently grown on 12 million hectares representing 7% of the country's total cropped area. Annual horticultural production is estimated at 100 million metric tones, which is over 18% of India's

gross agricultural output. India is the world's second largest producer of fruits and Vegetables.

- **Milk and Milk Products**

India has the largest livestock population with milk cows and buffaloes being its main constituent. India is the world's largest milk producer (72 million tones annually) and the dairy industry has been recognized the world over as its most successful development programme going by FAO estimates, while world milk production fell by 2% in the last three years, the Indian production galloped by 4%. While consumption of liquid milk accounts for 46% of the total production, the rest is converted into milk products.

- **Meat and Poultry**

India has the world's largest livestock population, accounting for 50% of buffaloes and 1/6th of the goat population. Such a large population represents a challenge to retain existing productivity traits by application of modern science and technology. Rigorous efforts are being made to improve the condition of livestock by providing basic infrastructure and latest technology. FAO has estimated the existing production of meat and poultry products at 4.42 million tonnes. Only 11% of the buffalo population, 6% of cattle, 33% of sheep and 38% of the goat population is culled for meat. At present, only a small percentage of the meat produced is converted into value added products and most meat is purchased by consumers in the fresh/frozen form for conversion into products at home, restaurants, etc. Maximum conversion takes place in pork products.

- **Fisheries and Sea Food**

India boasts of the seventh largest marine landing base in the world with an extensive 7,500 km coastline and an Exclusive Economic Zone (EEZ) of 2 million sq km, largely untapped, and a 29,000 km stretch of rivers and canals, 145 million hectares of reservoirs and 0.75 million hectares of tanks and ponds. Though India's fish potential from the EEZ has been estimated at 3.9 million tones, the harvest is only of 2.87 million tonnes. This can be increased to 3.37 million tonnes by intense tapping in offshore and deep-sea grounds using modern technology. There is also a good scope to improve fish harvest from inland waters which, at present is 2.7 million tonnes. Besides, the fish potential in aquaculture and shrimp farming has also largely remained untapped.

- **Grain Processing**

The country's current food grain production (including rice, jowar, bajra, maize, ragi, wheat, barley, gram and pulses) has been put at 225 million tones a year. Food processing industries play a crucial role in reducing post-harvest losses. Since most operations of this industry are rural based, it has the potential to generate high employment at low investment. Promotion of food processing also helps in energy conservation by reducing energy wastages in home cooking. Grain processing, with a share of 40%, is the biggest component of the food sector. Its basic feature is pre-dominance of the primary processing sector, sharing 96% of the total value, with the secondary and tertiary sectors adding about 4%. This area needs to be viewed as a high growth potential area. Indian Basmati rice commands a premium in the international market.

- **Alcoholic Beverages**

Liquor made in India is categorised as beer, country liquor and Indian Made Foreign Liquor (IMFL). Country liquor is made from a variety of raw materials and has different names in different parts of the country. IMFL production comprises wine, vodka, whisky, gin, rum, brandy, etc. Pre-mixed drinks like gin and lime, rum and cola are being introduced in India now. Draught beer is another recent introduction and has done well where introduced. Canned beer is also a recent introduction. There are 36 breweries with a licensed capacity of 160 million litres per annum. Current production is over 300 million litres. In all, Rs. 11,000 million including Rs. 7,000 million of foreign investment, has been made in this sector in the last six years.

Indian Agri-Business: Key facts

- Varied agro climatic zones.
- 2nd largest arable land (161 million hectares) in the world.
- Largest irrigated land (55 million hectares) in the world.
- Largest producer of wheat (72 million tones), accounting for nearly 15% of global wheat production.
- Largest producer of pulses (15 million tones), accounting for nearly 21% of global pulse production.
- Largest producer of milk (96 million tons), accounting for nearly 17% of global milk production.
- Largest producer and exporter of spices.
- 2nd largest producer of tea, accounting for nearly 28% of the global tea production.
- 2nd largest producer of rice (92 million tons), accounting for nearly 22% of global Rice Production.
- Largest exporter of the world's best basmati rice.
- 2nd largest producer of fruits (50 million tones) and vegetables (100 million tones).
- 2nd largest producer of sugarcane (296 million tones), accounting for nearly 21% of the global sugarcane production.
- 3rd largest producer of edible oilseeds (25 million tons), accounting for nearly 7% of the global edible oilseed production.

Major Challenges for the Indian Food Industry

Food-processing industry is facing constraints like non-availability of adequate infrastructural facilities, lack of adequate quality control & testing infrastructure, inefficient supply chain, and seasonality of raw material, high inventory carrying cost, high taxation, high packaging cost, affordability and cultural preference of fresh food. Unprocessed foods are prone to spoilage by biochemical processes, microbial attack and infestation. Good processing techniques, packaging, transportation and storage can play an important role in reducing spoilage and extending shelf life. The challenge is to retain the nutritional value, aroma, flavor and texture of foods, and presenting them in near natural form with added conveniences. Processed foods need to be offered to the consumer in hygienic and attractive packaging, and at low incremental costs. Major Challenges for the Indian Food Processing Industry are:

- **Inadequate Infrastructure Facilities:**

The inadequate support infrastructure which is the biggest bottleneck in expanding the food processing sector, in terms of both investment and exports includes: long and fragmented supply chain, inadequate cold storage and warehousing facilities, road, rail and port infrastructure.

- **Absence of Comprehensive national level policy on food processing sector:**

The food processing sector is governed by statutes rather than a single comprehensive policy on food processing. India urgently needs a national food processing policy which incorporates tax breaks for the sector. The policy to be effective will have to be comprehensive and adopt a number of legislative, administrative and promotional measures.

- **Food Safety Laws & Inconsistency in State and Central policies:**

The Indian food regulations comprise various food policies that have been enacted at different points of time, and are under the ambit of various ministries of Government of India (GOI). Historically they were introduced to complement and supplement each other in achieving total food sufficiency, safety and quality. The result is that the food sector in India is governed by a number of different statutes rather than a single comprehensive enactment. This incremental approach has led to incoherence and inconsistency in the food sector regulatory scenario.

- **Lack of adequate trained manpower:**

Many positive developments in the food processing sector have also resulted in the apprehension about the emerging skill shortages due to mismatch between the demand for specific skills and available supply. In fact, of late, shortage of skilled, semi-skilled and unskilled workers has emerged as a critical factor impacting the competitiveness of Indian food industry.

Apart from the above major challenges hampering the growth of sector, constraints in raw material production, Consumer education on nutritional facts of processed foods, 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, lack of applied research etc as other major challenges for the growth of food processing sector. Indian food industry is gradually making an important mark in the global food arena as a large producer and exporter of agro food products. At present small players dominate the Indian food processing industry.

Strengths and Opportunities of India

The future of the Indian farmer depends on the success of the food industry as India's prosperity is predominantly linked to the growth of incomes in the agrarian sector of the economy. Increasing liberalization of the economy has tried to lift the protection that the food and agriculture sector once enjoyed in the country. This has exposed the sector both to the opportunities and challenges of the global food economy.

- It is the seventh largest country, with extensive administrative structure independent judiciary, a sound financial and infrastructural network and above all a stable and thriving democracy.
- Due to its diverse agro-climatic conditions, it has a wide-ranging and large raw material base suitable of food processing industries. Presently a very small percentage of these are processed into value added products.

- It is one of the biggest emerging markets, with over 1 billion population and a 250 million strong middle class.
- Rapid urbanization, increased literacy and rising per capita income, have all caused rapid growth and changes in demand patterns, leading to tremendous new opportunities for exploiting the large latent market. An average Indian spends about 50 per cent of household expenditure on food items.
- Demand for processed/convenience food is constantly on the rise.
- India's comparatively cheaper workforce can be effectively utilized to setup large low cost production bases for domestic and export markets.
- Liberalized overall policy regime, with specific incentives for high priority food processing sector, provides a very conducive environment for investments and exports in the sector.
- Very good investment opportunities exist in many areas of food processing industries, the important ones being fruit and vegetable processing, meat, fish and poultry processing, packaged, convenience food and drinks, milk products etc.

Conclusion

The Indian food industry presents a very large opportunity to every stakeholder. This is primarily driven by a robust consumer demand, the changing nature of the Indian consumer, who is more informed and willing to try new products; and the strong production base of the country. Needless to add, the several gaps in the current production and delivery systems actually present a huge opportunity for the growth of companies willing to bet long term in this sector. However, the growth of food processing companies has been sub-optimal because of high cost, low level of productivity, high wastage and lack of competitiveness of Indian food products in the global market. Therefore, to fully leverage the growth potential of the sector, current challenges that are being faced by the industry need to be properly addressed and steps need to be taken to remove the bottlenecks hampering the pectoral growth.

References:

Murthy K.S. and D. Himachalam. (May 2011) "Problems of Fruit Processing Industry in Andhra Pradesh – A Case Study of Select Units in Chittoor District". International Journal of Research in Commerce & Management, Volume 2, Issue No. 5.

Bhuyan, A (2010) "India's Food industry on the Path of High Growth" Indo-Asian News Service.

IBEF (September 2011). "Food Industry"
<http://www.ibef.org/industry/foodindustry.aspx>.

R. P. Kachru, Indian Council of Agricultural Research, New Delhi, Agro-Processing Industries In India Growth, Status And Prospects, Status Of Farm Mechanization In India.

Area and Production Estimates of Horticulture Crops, October 2011, National Horticulture Board, www.nhb.gov.in

Ministry of Food Processing Industries (MoFPI), Agricultural and Processed Food Products Export Development Authority, Media reports, Department of Industrial Policy and Promotion (DIPP), Union Budget 2013-14, Press Information Bureau (PIB)

Surendra P. Singha, Fisseha Tegegne and Enefiok Ekenem,(March 2012) “The Food Processing Industry in India: Challenges and Opportunities”. Journal of Food Distribution Research, Volume 43, Issue 1.

FICCI survey on challenges in food processing sector, Bottlenecks in Indian Food Processing Industry – Survey 2010 www.cccindia.co.

A Brief report on food processing sector in India, August – 2012, Corporate Catalyst India, KS House, New Delhi. www.cci.in.

Processed Food Industry In India: A Mega Growth Opportunity, Published in the F&B News Magazine Nov 2009, TATA STRATEGIC MANAGEMENT GROUP, www.tsmg.com

Indian Food Processing Industry - Opportunities and Outlook 2015. Gyan Research and Analytics Pvt. Ltd., 2012.

www.ediindia.org

www.osec.ch

www.nhb.gov.in

<http://www.worldoffoodindia.com>

www.mp trifac.ogr.