CHAPTER I

INTRODUCTION

Food Processing Industry (FPI) in India is a sunrise sector that has gained prominence in the recent years. Easy availability of raw materials, changing lifestyles and favourable fiscal policies has given a considerable push to the industry’s growth. FPI serves as a vital link between the agriculture and manufacturing sectors of the economy. Strengthening this link is critical to reduce wastage of agricultural raw materials, improve the value of agricultural produce by increasing shelf-life as well as by fortifying the nutritive value of the food products and ensure remunerative prices to farmers as well as affordable prices to consumers. India has a population of one hundred crore plus and feeding this large a population calls for a strong FPI. The industry also assumes importance in the national economy due to the immense employment generation opportunities it offers and the export revenue it earns. India is one of the leading exporters of the processed food products. It has a competitive edge over other countries due to the wide variety of crops cultivated as a result of geographical and climatic diversity. Government too is trying to support the industry by formulating favourable policies. With adequate government focus on the infrastructural support, research and development and technological innovation in this sector, India could alleviate its domestic concerns on food security, malnutrition and food inflation.

1.1 OVERVIEW OF GLOBAL FOOD PROCESSING

Food processing is one of the largest global sectors at $7 trillion annual production. Currently only 2 per cent of India’s vegetable and fruits production is processed. In comparison USA and China processes their 90 per cent and 40 per cent produce. Other developing countries, such as Thailand, Philippines and Brazil are processing as high as 30, 78 and 70 per cent of their produce respectively. Geographically, North America is the largest market in the current scenario, it notes, followed by Europe, APAC and LAMEA. The leading players in the market have been focusing on mergers and partnership as their key strategies to expand their presence. For instance, Kraft foods partnered with ketchup giant Heinz to expand its business, while Tyson foods collaborated with Godrej foods in India. The Asia-Pacific region is expected to be the fastest CAGR of 5.4 per cent during 2015-2020,
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primarily driven by the growing per capita incomes and increasing health awareness. China and India are expected to show significant market growth for packaged food products.

1.2 OVERVIEW OF INDIAN FOOD PROCESSING

The Indian food industry is poised for huge growth, increasing its contribution to world food trade every year. In India, the food sector has emerged as a high-growth and high-profit sector due to its immense potential for value addition, particularly within the food processing industry. The food industry, which is currently valued at US$ 39.71 billion, is expected to grow at a Compounded Annual Growth Rate (CAGR) of 11 per cent to US$65.4 billion by 2018. Food and grocery account for around 31 per cent of India’s consumption basket.

Accounting for about 32 per cent of the country’s total food market, The Government of India has been instrumental in the growth and development of the food processing industry. The government through the Ministry of Food Processing Industries (MoFPI) is making all efforts to encourage investments in the business. It has approved proposals for joint ventures, foreign collaborations; industrial licenses and 100 per cent export oriented units. The Indian food and grocery market is the world’s sixth largest, with retail contributing 70 per cent of the sales. Food has also been one of the largest segments in India's retail sector, which was valued at US$ 490 billion in 2013. The Indian food retail market is expected to reach Rs 61 lakh crore (US$ 894.98 billion) by 2020. FDI is permissible for all the processed food products up to 100 per cent through automatic route.

Table 1.1 Foreign Direct Investment (FDI) inflows in Food Processing sector in the country during last six years.

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Year</th>
<th>FDI (Rs. Crore)</th>
<th>FDI (US $ Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2009-10</td>
<td>1,314.23</td>
<td>278.89</td>
</tr>
<tr>
<td>2</td>
<td>2010-11</td>
<td>858.03</td>
<td>188.67</td>
</tr>
<tr>
<td>3</td>
<td>2011-12</td>
<td>826.16</td>
<td>170.21</td>
</tr>
<tr>
<td>4</td>
<td>2012-13</td>
<td>2193.65</td>
<td>401.46</td>
</tr>
<tr>
<td>5</td>
<td>2013-14</td>
<td>25,106.78</td>
<td>3,982.88</td>
</tr>
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Introduction

From year 2011-12 to 2014-15, Food Processing Industries sector has been growing at an Average Annual Growth Rate (AAGR) of around 2.26 percent as compared to around 1.69 per cent in Agriculture and 6.23 per cent in Manufacturing at 2011-12 prices.

Table 1.2 Contribution of FPI in GDP of India. (Rs. in Crore)

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<tbody>
<tr>
<td>1</td>
<td>GDP-All India</td>
<td>81,95,546</td>
<td>85,99,224</td>
<td>91,69,787</td>
<td>98,27,089</td>
</tr>
<tr>
<td>2</td>
<td>GDP-Manufacturing</td>
<td>14,82,158</td>
<td>15,74,471</td>
<td>16,58,176</td>
<td>17,76,469</td>
</tr>
<tr>
<td>3</td>
<td>GDP-Agriculture, Forestry and Fishing</td>
<td>15,05,580</td>
<td>15,23,470</td>
<td>15,79,290</td>
<td>15,82,851</td>
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<tr>
<td>4</td>
<td>GDP-FPI</td>
<td>1,50,370</td>
<td>1,43,364</td>
<td>1,49,555</td>
<td>1,60,224</td>
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Growth (%)

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<tr>
<td>5</td>
<td>GDP-All India</td>
<td>4.93</td>
<td>6.64</td>
<td>7.17</td>
<td>6.23</td>
</tr>
<tr>
<td>6</td>
<td>GDP-Manufacturing</td>
<td>6.23</td>
<td>5.32</td>
<td>7.13</td>
<td>6.23</td>
</tr>
<tr>
<td>7</td>
<td>GDP-Agriculture, Forestry and Fishing</td>
<td>1.19</td>
<td>3.66</td>
<td>0.23</td>
<td>1.69</td>
</tr>
<tr>
<td>8</td>
<td>GDP-FPI</td>
<td>-4.66</td>
<td>4.32</td>
<td>7.13</td>
<td>2.26</td>
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Share of FPI (%)

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<tbody>
<tr>
<td>9</td>
<td>GDP-All India</td>
<td>1.83</td>
<td>1.67</td>
<td>1.63</td>
<td>1.63</td>
</tr>
<tr>
<td>10</td>
<td>GDP-Manufacturing</td>
<td>10.15</td>
<td>9.11</td>
<td>9.02</td>
<td>9.02</td>
</tr>
</tbody>
</table>

Source: MoFPI Annual Report, 2015-16

Table 1.2 Contribution of FPI in GDP of India. (Rs. in Crore)
1.3 SEGMENTS IN THE FOOD PROCESSING INDUSTRY (FPI)

The food processing sector comprises of three segments based on the levels of processing.

1.3.1 Primary Processing of Food

Primary processing of food comprises of sorting, grading and packaging of fruits and vegetables, milk, rice, spices, etc.

1.3.2 Secondary Processing of Food

Secondary processing of food comprises of re-shaping of food for ease of consumption. It includes flour, oil cakes, tea leaf and beverages powder etc. Together with primary processing, the two segments constitute around 62 per cent of the processed foods in value terms.

1.3.3 Tertiary Processing of Food (or) Value Added Food Segment

Value added food segment includes processed fruits and vegetables, juices, jam and jelly etc and holds around 38 % share in the total processed food market.

1.4 ADVANTAGES OF FOOD PROCESSING INDUSTRY IN INDIA

With its varied geographic and climatic profile and the variety of crops cultivated, India has a natural advantage in the food and food processing industry. In 1999, the FPI became a focus area for the Government of India and it was included in the list of priority sector for bank lending. With various infrastructural thrusts being provided to the industry regularly, India is projected to achieve the highest growth rate in the industry across the globe. The various advantages are:

1.4.1 Supply Side Advantages

- **Abundance of raw material**
  
  India is rich in most of the raw materials used in the food processing industry. It is amongst the leading producer of cereals and grains, livestock, milk, fish, etc. An agrarian economy, a favourable climate for agriculture and a wide variety of crops has helped India to provide abundant agricultural supply to the sector. Rich endowment of natural inland water bodies and a long coast line has helped the marine product segment of the FPI.

- **Cost competitiveness**
  
  A low raw material cost resulting from domestic sourcing and labour cost offers competitiveness to the food processing units. This lends support to the units in the export markets to capture a higher share in the global markets. However, due to
increased consumer awareness, there are pressures on the units operating in the industry to improve the quality of the processed food and at the same time maintain their cost competitiveness.

1.4.2 Easier Credit

There has been significant growth in the bank credit in the FPI sector post 2009. As per RBI, the share of food processing in the total credit outstanding to all industries was 5.2 per cent in FY12, which is almost the same as it was during the previous year. Easier credit has facilitated the creation of fixed assets in the industry, which have increased at a faster rate than pre 1999 period. While the growth in fixed asset creation was pegged at 18.45 per cent for the period 2007-2009, it increased to 21.96 per cent for the period 2009-2011.

1.4.3 Policy Support

The FPI comprises a lot of segments within itself and each segment has some different needs in terms of industrial ecosystem, infrastructural support and policy impetus required from the government. The Government of India has recognized the uniqueness of each segment and has formulated policies specific to each segment to help them grow independently. Even while creating export zones, separate export hubs have been created for sea food, vegetarian food and organic food.

1.5 DEMAND DRIVERS

India is the seventh largest country in the world, with the largest area under cultivation and a strong agricultural base. India has one of the biggest emerging markets, with over 100 crore population, and a 25 crore plus strong young middle class. It is one of the largest producers of the agricultural and allied goods; and yet the food processing segment in India contributed only 1.49 per cent to the GDP. The sector is in its nascent stage as traditionally Indians prefer the consumption of raw and fresh products. Recently, the trend has been changing as the FPI has shown an impressive growth in the last few years. Some of the factors that have triggered the change are listed below:

- **Changing profile and tastes of the consumer**

  Rapid urbanization, increase in the number of nuclear families, increase in the number of working women, less time devoted in the household have changed a lot of habits of the Indian families. Increased literacy and rising per capita income have induced the customers to increase their spend on value added food, which has a higher
shelf life, packs greater nutritive value and takes less time to cook. This has led to change in consumer tastes and preferences towards processed food.

- **Product innovation**
  Companies are offering a wider range of products to the consumers as a result of their investments into product innovation, research and development. They are moving up the value chain, e.g. cooperatives are transitioning from being pure producers of milk to offering a wide range of dairy products such as flavoured yogurts, ice creams, etc. New entrants are trying to entice the markets and capture market share by offering new flavours and localized versions of international products such as chips made in Indian flavours and from Indian spices.

- **Increased spending on nutritional foods and health**
  The changing lifestyle and working habits of the younger India has lead to a rise in lifestyle diseases such as diabetes, blood pressure, cardiac problems, muscular pains, etc. With a rise in disposable income levels and increasing awareness, consumers spend on healthy and nutritional food has also gone up.

- **Advent of branded food and organized retail**
  With a higher disposable income and a higher propensity to spend, the consumers are looking for quality branded food. Organized retail has helped a greater penetration in the rural and tier II markets in India and has improved the shopping experience of the consumers. It has also helped to maintain the shelf life of the packaged food by providing the required infrastructure.

- **Better Preservation and Packaging Techniques**
  With improvement in technology, better preserving and packaging techniques have been developed that not only increase the shelf life but also improve the nutritive value of the processed food. A more conscious consumer is increasingly demanding such processed food as it promises to be more hygienic and nutritive than the raw agricultural produce which has high levels of pesticides, insecticides spayed upon it.

- **Rising export opportunities**
  The demand of processed food is higher in the developed economies where the pace of life is much faster than that of emerging markets. Moreover, the preference for Indian processed food such as pickles has added to the global demand.
India has a greater integration with the global economy and its proximity to key export markets serves as a stronger link between the trading countries.

![Fig. 1.1. Exports of food processing industry from India](image)

**Better Preservation and Packaging Techniques**

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### 1.6 KEY ISSUES AND CHALLENGES

#### 1.6.1 Decreasing Land Holding

The continued decline in the average size of land holdings has put Indian agriculture under immense duress. India’s 140 million hectare-wide farmlands are now worked upon by 14 crore farmers, up from 7 crore farmers forty years ago. The costs associated with necessary inputs and bank loans have also shot up in this period, making it difficult to sustain livelihoods purely through agriculture.

#### 1.6.2 Poor Market Linkages

A fragmented supply chain, along with inadequate forward integration, has resulted in suboptimal quality, lower prices, and high wastage of produce at the farm
level. For smaller and distant farmers, it is still a stiff challenge to directly access markets and get the desired price for their produce.

1.6.3 Inadequate Farm and Marketing Infrastructure

The lack of adequate storage and market infrastructure like weighting, auction platform, and packaging has added to the complexity of the problems facing Indian agriculture.

1.6.4 Lack of Processing-worthy Produce

Indian agriculture is still dominated by the practice of production-driven market supply instead of market-driven production, which leads to an inconsistency in the quality of produce and the supply thereof. Thus, there is a severe need to focus on processing-worthy varieties of produce and ensure a year-round supply of the same.

1.6.5 Processing Equipment and Latest Technology

The quest is on to discover newer methods, technology, and machinery for the food processing industry, with least impact on sensory qualities - color, texture, etc. Therefore, technological progress is necessary for the growth of the food processing sector. The development and diffusion of quality-enhancing and yield-increasing technologies remains a key challenge.

1.6.6 Lack of Adequate Manpower

At each level in the food processing value chain, there are marked deficiencies in technical knowhow and support. Further, in comparison to the amount of research carried out in this field, there is still a gap in the transference from laboratory to industry. Knowledge flows from academic centres to the centres of commercial manufacturing are very critical.

1.6.7 Inadequate Infrastructure and Supply Chain

The non-availability of such core infrastructure as high-tech controlled production facilities, grading and packaging units, cold chain logistics, warehousing and integrated processing units, besides an inefficient supply chain, poor transportation, and erratic power supply, are major concerns across the food value chain. The lack of specialized distribution companies for perishable produce and processed food products is another problem that the sector urgently needs to address.

1.6.8 Growth of SMEs

SMEs provide the essential link between the agricultural and industrial segments of the economy by enhancing the value of agricultural production. The main challenges faced by SMEs are the increasingly rigorous quality standards demanded
by export markets, and a shortage of technical grade manpower. In addition, SMEs are also facing survival challenges given the highly competitive market environment.

1.7 MITIGATIONS

1.7.1 Capital Infusion/Investment into the Sector

There is a strong need for further capital infusion into the sector. At present, the food processing industry receives low levels of investment as compared to other sectors and accounts for only 1.6 per cent of the total FDI inflow into the country. International manufacturers need to be invited to set up processing facilities and supply chain and distribution infrastructure in India. Multinational food companies who are already in India, e.g. PepsiCo, Unilever, Nestlé, Del Monte, Conagra, Tyson, etc. should be encouraged to put in more investment. Also, there is need to attract visionary and bold entrepreneurs who can invest in the food processing sector. Large Indian corporate has not been taking any interest in the government’s flagship schemes like MFP, ICC, etc. There is an urgent need to understand their reservations against investing and develop measures to attract investment from them into the sector. However, with the government’s outlay of INR 15,000 crore for food infrastructure creation over the next five years, the sector is bound to generate huge investment opportunities and making it ripe for private sector participation.

1.7.2 Market-driven Production Planning

Given that agricultural production in India is still supply-driven rather than market-driven, collective endeavours are needed from all stakeholders, right from the R&D organizations, extensions, market players, and governmental agencies. Farmers will also have to play an active role in the adoption of new technologies shared by the public and private extension systems.

1.7.3 Strengthening Food Infrastructure

In order to eliminate the extant shortcomings within the Indian food value chain, it is imperative that the necessary infrastructure be created forthwith. Such creation should primarily seek to redress the shortfall in:

- Production Infrastructure: With the target being the ramping up of processing-worthy production, such fundamental needs as quality germplasm, seed multiplication facilities; agricultural inputs (e.g. seeds, plant nutrients, and plant protection chemicals), irrigation infrastructure, controlled production facilities, farm mechanization, etc. must be met all year-round.
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- Processing infrastructure: It is also mandatory to have farm-level, post-harvest facilities like cool chambers, grading and sorting facilities, storages, pack houses for back-end support, and integrated industrial processing units for processing and value addition.

- Distribution infrastructure: Finally, supply chain infrastructure including warehouses and cold chain logistics need to be bolstered, with the objective of ensuring perennial usage across the commodity spectrum without any compromise in utilization efficiency.

1.7.4 Manufacturing and Technology Impetus

Most foreign machinery manufacturers are raring to set up operations in India, including providers of cold chain technologies, advanced processing technologies, commercial kitchen equipment, etc. Such manufacturers must be welcomed and encouraged to set up base. This will help achieve cost and operational efficiency in food processing. However, this should not be done at the cost of domestic machinery suppliers, who also need to be protected.

1.7.5 Create and Develop Indian Food Services Retail Brands

Modern Indian food retail is going through a challenging phase, but is working towards building a robust supply chain network. There are many successful examples of multinational food services players such as McDonalds, KFC, Domino’s Pizza, etc. As the food processing and food services industries are interrelated, there is need to encourage and develop domestic expertise, including suppliers, entrepreneurs, and retailers in food services retailing.

1.7.6 Capacity Building

Technology transfer, capacity building, and skill upgrading are critical for the growth of the industry. Strong linkages need to be built to transfer technologies developed in isolation, at different public and private research organizations to the targeted beneficiaries. Manpower training needs to evolve from being simply about increasing production, to educating workers about bringing in efficiencies into businesses. By 2022, the food processing industry requires a total of 178 lakhs workers, with an annual skilled manpower demand of about 74 lakhs.
1.7.7 Making SMEs More Competitive

Currently, SMEs lack the financial muscle to compete seriously with other players in their sectors. They require significant support in such areas as skill upgrading, certification, capacity building, establishing market linkages, etc.

1.8 COMPANY-INTRODUCTION

Patson Foods (India) Private Limited (PFIL) incorporated on 22 January 2003. It is classified as Non-government Company and is registered at Registrar of Companies, Ahmadabad. Its authorized share capital is Rs. 6,500,000 and its paid up capital is Rs. 6,500,000. It is involved in Manufacture of other food products. It has brands named Rasanand and Tastom. The annual turnover is Rs. 12 crores.

PFIL is situated in open, green, clean and healthy environment free from polluted industries nearby which makes interference of dust and pollution. PFIL has total area of 1 lac sq.ft. on highway no. 8, at Navsari. PFIL has exclusively targeted manufacturing, packaging and distribution of authentic and ethnic foods. PFIL has eye catching packing to gather with the finest quality products. PFIL is engaged in manufacturing in manufacturing pickles, sherbets, chutneys, pastes, jams, canned vegetables, canned fruit pulp, vinegar, tomato ketchup and Chinese sauces. PFIL has registered certificates of FPO, ISO 22000: 2005, BRN, AFST (I), AIFPA, APEDA, BCCI, CFTRI, FDA, FFRM, GPCB, SID, USFCE and many others.

From the year 2006, the products of PFIL are exported in USA, UK, Canada, Australia, Saudi Arabia, Bahrain, Qatar, UAE, Lebanon, France, Netherlands, Germany and many others.

1.8.1 Motto of the Company

The main principles of the company are concern and priority for farmers, prosperity through green industrial revolution, fair dealings, straight forward approach, integrity and honesty.

a) From the land
b) For its farmer
c) For its entrepreneurs
d) For its economy and people
1.8.2 Vision of the Company

a) To be a world class producer and supplier in key crops.
b) To increase competitiveness by adopting an integrated approach.
c) To multiply our harvest and returns several times over.

1.9 PRACTICAL UTILITY OF THE STUDY

Market for processed food product is growing at rapid speed. Consumers are key role for this growth. To develop more efficient FPI and flourishing of market, it is necessary to satisfy the consumers. So, it is important to know the impact of concerned factors which appeals the sense of decision regarding the purchase by the consumers. This study is envisaged with identifying the important areas of consumer’s buying behaviour which includes socio-economic profile of consumers, aesthetic factors of packaging, affluent segment and influence of advertisement. This will help food processing industries to sabotage the problems, penetrate into different markets, reach the consumers as well as entice more consumers.

1.10 OBJECTIVES OF THE STUDY

➢ To study socio-economic profile of consumers.
➢ To study the impact of aesthetic packaging elements on consumer’s buying behavior.
➢ To identify the factors for affluent consumers of processed food product.
➢ To study influence of advertisement in buying behavior of consumer.

1.11 LIMITATION OF THE STUDY

1. This survey was restricted to Surat city of Gujarat.
2. The sample size for the survey of people was limited to 100 respondents, which might not be representing the whole area.
3. The results were totally derived from the respondent’s answers. There might be a difference between the actual and projected results.
4. The information was filled in the questionnaire through personal biased and based on the memory of them.