

# **FOOD PROCESSING IN INDIA**

## 1. INDUSTRY OVERVIEW

India is the world's second largest producer of food next to China, and has the potential of being the biggest with the food and agricultural sector. The food processing industry is one of the largest industries in India-it is ranked fifth in terms of production, consumption, export and expected growth. The food industry is on a high as Indians continue to have a feast. Fuelled by what can be termed as a perfect ingredient for any industry - large disposable incomes - the food sector has been witnessing a marked change in consumption patterns, especially in terms of food.

Increasing incomes are always accompanied by a change in the food basket. The proportionate expenditure on cereals, pulses, edible oil, sugar, salt and spices declines as households climb the expenditure classes in urban India while the opposite happens in the case of milk and milk products, meat, egg and fish, fruits and beverages.

For instance, the proportionate expenditure on staples (cereals, grams, pulses) declined from 45 per cent to 44 per cent in rural India while the figure settled at 32 per cent of the total expenditure on food in urban India.

A large part of this shift in consumption is driven by the processed food market, which accounts for 32 per cent of the total food market. It accounts for US\$ 29.4 billion, in a total estimated market of US\$ 91.66 billion.

The Confederation of Indian Industry (CII) has estimated that the food processing sector has the potential of attracting US\$ 33 billion of investment in 10 years and generate employment of 9 million person-days.

The Government has formulated and implemented several Plan Schemes to provide financial assistance for setting up and modernizing food processing units, creation of infrastructure, support for research and development and human resource development in addition to other promotional measures to encourage the growth of the processed food sector.

Food processing is a large sector that covers activities such as agriculture, horticulture, plantation, animal husbandry and fisheries. It also includes other industries that use agriculture inputs for manufacturing of edible products. The Ministry of Food Processing, Government of India indicates the following segments within the Food Processing industry:

- Dairy, fruits & vegetable processing
- Grain processing
- Meat & poultry processing
- Fisheries
- Consumer foods including packaged foods, beverages and packaged drinking water.

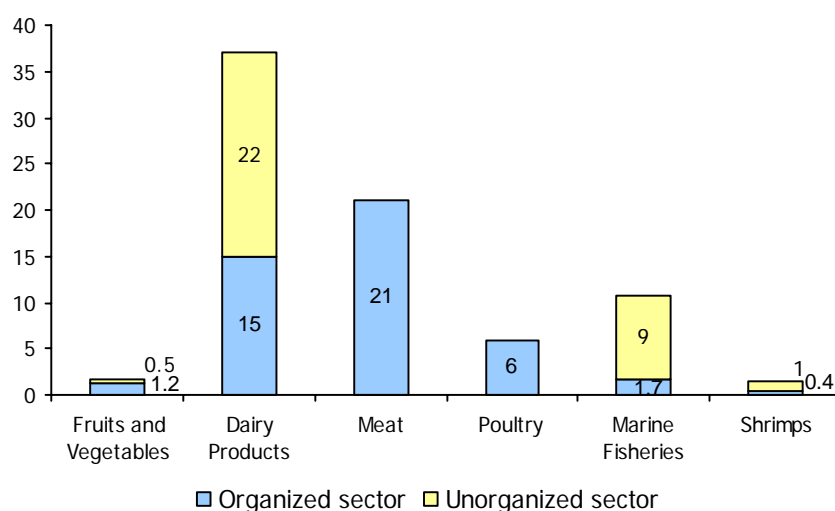
Though the industry is large in size, it is still at a nascent stage in terms of development of the country's total agriculture and food produce, only 2 per cent is processed.

The industry size has been estimated at US\$ 70 billion by the Ministry of Food Processing, Government of India. The food processing industry contributed 6.3 per cent to India's GDP in 2003 and had a share of 6 per cent in total industrial production. The industry employs 1.6 million workers directly. The industry is estimated to be growing at 9-12 per cent during the period 2002 to 2007.

Value addition of food products is expected to increase from the current 8 per cent to 35 per cent by the end of 2025. Fruit & vegetable processing, which is currently around 2 per cent of total production will increase to 10 per cent by 2010 and to 25 per cent by 2025.

The highest share of processed food is in the dairy sector, where 37 per cent of the total produce is processed, of this only 15 per cent is processed by the organized sector. The food processing industry in the country is on track to ensure profitability in the coming decades. The sector is expected to attract phenomenal investments of about Rs 1,400 billion in the next decade.

### *Food processing levels in various sub sectors:*



Source: Ministry of food processing India., Annual Report 2004

### *Segmentation of different sectors in food processing industry:*

Sectors	Products
Diary	Whole Milk Powder, Skimmed milk powder, Condensed milk, Ice cream, Butter and Ghee, Cheese
Fruits & Vegetables	Beverages, Juices, Concentrates, Pulps, Slices, Frozen & Dehydrated products, Potato Wafers/Chips, etc
Grains & Cereals	Flour, Bakeries, Starch Glucose, Cornflakes, Malted Foods, Vermicelli, Beer and Malt extracts, Grain based Alcohol
Fisheries	Frozen & Canned products mainly in fresh form
Meat & Poultry	Frozen and packed - mainly in fresh form, Egg Powder
Consumer Foods	Snack food, Namkeens, Biscuits, Ready to eat food, Alcoholic

	and Non-alcoholic beverages
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Source: Ministry of food processing India, Annual Report 2004

Primary food processing is a major industry with a highly fragmented structure that includes hundreds of thousands of rice-mills and hullers, flour mills, pulse mills and oil-seed mills, several thousands of bakeries, traditional food units and fruits, vegetable and spice processing units in the unorganized sector. In comparison, the organized sector is relatively small, with around 516 flour mills, 568 fish processing units, 5,293 fruit and vegetable processing units, 171 meat processing units and numerous dairy processing units at state and district levels. The share of the organized and unorganized sectors varies across different segments of the industry.

### *Food processing units in organized sector*

Flour mills	516
Fish processing units	568(+ 482 cold storage units)
Fruits and vegetables processing units	5,293
Meat processing units	171
Sweetened and aerated water units	656
Milk product units	266
Sugar mills	429
Solvent extract units	725
Rice mills	139,208
Modernized rice mills	35,088

Source: Ministry of food processing India, Annual Report 2004

## 1.1 Processed Foods Scenario with respect to Specific Sectors

The industry structure and ongoing transformation offers opportunities for organized players to invest and grow. As the Indian market matures and consumers become more quality and brand conscious, the organized sector is poised to grow and gain prominence.

ITEMS	2001-02		2002-03		2003-04		2004-05	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Processed fruits and vegetables	385984.29	1100.57	423924.61	1206.93	429797.92	1125.81	589976.71	1462.72
Animal Products	292652.2	1500.93	359726.28	1800.53	793467.42	2024.81	629550.2	2252.33
Other processed products	1031177.35	1780.07	988950.37	1720.11	1279619.06	2316.44	616755.91	2032.34
<b>Grand total</b>	<b>1709813.84</b>	<b>4381.57</b>	<b>1772601.26</b>	<b>4727.57</b>	<b>2502884.4</b>	<b>5467.06</b>	<b>1836282.82</b>	<b>5747.39</b>

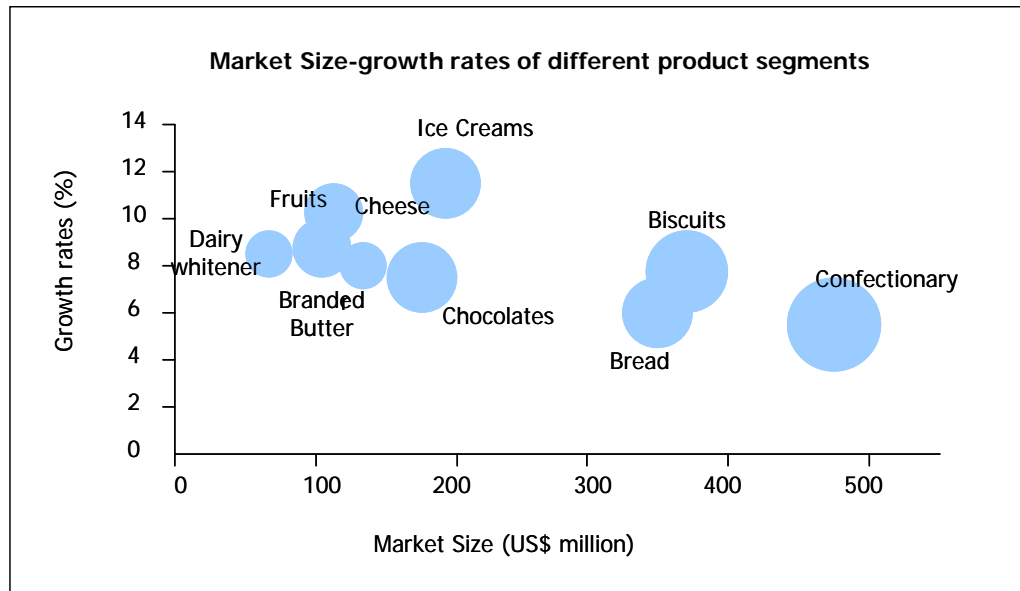
Source: Agricultural and Processed Food Products Export Development Authority, India

### 1.1.1 Dairy

In the dairy sector, most of the processing is done by the unorganized sector. Though the share of organized sector is less than 15 per cent, it is expected to rise rapidly, especially in the urban regions. Among the milk products manufactured by the organized sector, some of

the prominent ones are ghee, butter, cheese, ice creams, milk powders, malted milk food, condensed milk and infant foods.

The market size and growth rates of some of the products in organized dairy and consumer food segments are shown in the graph below.



Amongst dairy products, the 50,000 ton branded butter market, valued at US\$ 133 million is estimated to be growing at 8-10 per cent per annum. The cheese market is estimated to be US\$ 110 million in value terms and an estimated 54,000 tonnes in volume terms, and has been growing at a compounded annual growth rate (CAGR) of 8-9 per cent during 1999-2003. The growth in urban areas has been higher at about 15 per cent per annum. The ice cream market in India is estimated to be about US\$ 199 million per annum.

A few corporate players, including Multi National Corporations are now focusing on this market. For example, Nestle and Britannia have forayed into emerging segments such as Ultra Heated Treatment (UHT) and flavored milk. Ultra Heat Treated (UHT) milk is becoming popular and the market is estimated at US\$ 33.4 million (Rs1.5 billion).

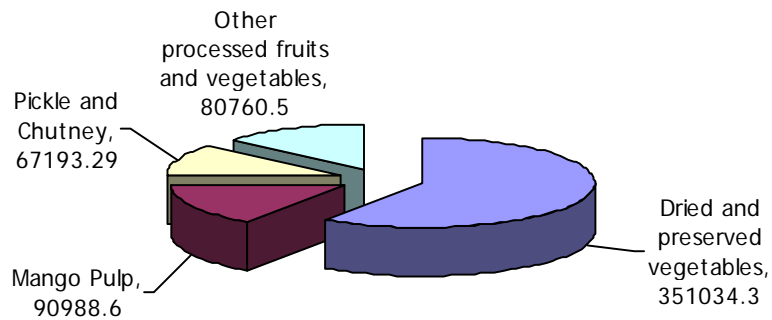
### 1.1.2 Fruits and Vegetables

Fruit and vegetable processing in India is almost equally divided between the organized and unorganized sectors, with the organized sector holding 48 per cent of the share. While products like juices and pulp concentrate are largely manufactured by the organized sector, the unorganized sector's foothold is in the traditional areas of processed items like pickles, sauces and squashes. By size, pickles form the strongest category.

The installed capacity of fruit and vegetable processing industry has increased from 1.11 million tonnes in 1993 to 2.33 million tonnes in 2004. Over the last few years, the industry has seen a positive growth in ready-to-serve beverages, fruit juices and pulps, dehydrated and frozen fruits and vegetable products, pickles, processed mushrooms and curried vegetables.

The government expects the processing in this sector to grow to 10 per cent in 2010 and 25 per cent of the total produce by 2025. Most of the units engaged in above are currently export oriented. Domestic consumption of processed fruits & vegetable products is low, indicating a potential for growth through increased penetration of the domestic market.

**Export of Processed Fruits and Vegetables, 2004-05**



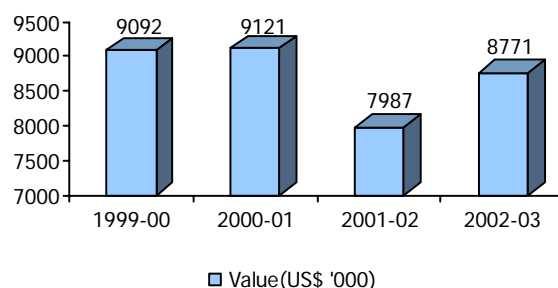
### 1.1.3 Grains

India produces more than 200 million tonnes of different food grains every year. All major grains – rice, wheat, maize, barley and millets like jowar (great millet), bajra (pearl millet) & ragi (finger millet) are produced in the country. About 15 per cent of the annual production of wheat is converted into wheat products. There are 10,000 pulse mills in the country with a milling capacity of 14 million tonnes, milling about 75 per cent of annual pulse production. The country is self sufficient in grain production and is the second largest rice producer in the world with a 20 per cent global share. Primary milling of rice, wheat and pulses is the most important activity in food grains processing. Total investment in the grain milling sector up to December 2002 was around US\$ 1.5 billion, of which US\$ 253.5 million was foreign investment. Branded rice is becoming popular in both the domestic as well as the export market. Indian Basmati rice commands a premium in the international market. This segment thus offers opportunities in marketing of branded grains, as well as grains processing.

### 1.1.4 Meat and Poultry

India has a livestock population of 470 million, which includes 205 million cattle and 90 million buffaloes. Processing of meat products is licensed under Meat Food Products Order, (MFPO), 1973. Total meat production in the country is currently estimated at 5 million tonnes annually. Only about 1-2 per cent of the total meat is converted into value added products. The rest is purchased raw and consumed at home. Poultry processing is also at a nascent stage. The country produces about 450 million broilers and 33 billion eggs annually. Growth rate of egg and broiler production is 16 per cent and 20 per cent respectively.

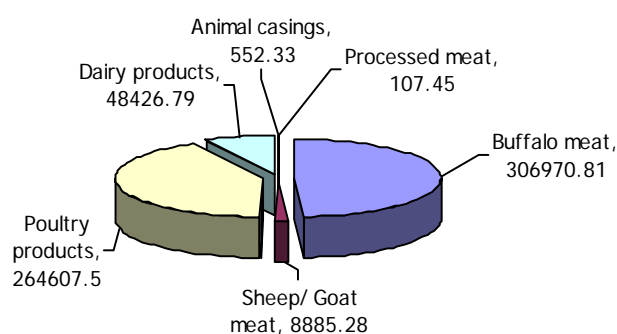
**Value of Meat Products manufactured under MFPO, 1973**



India has 3,600 slaughter houses, 9 modern abattoirs and 171 meat processing units licensed under Meat Products Order. A few modern pork processing plants are also coming up in the country. There is a large potential for setting up modern slaughter facilities and development of cold chains in the meat and poultry processing sector. Buffalo meat is surplus in the country and also has good export potential.

In the case of poultry, export from India is mostly to Maldives and Oman. Other markets such as Japan, Malaysia, Indonesia and Singapore are being explored.

**Export of Processed Animal Products, 2004-05**



The growing number of fast food outlets in the country has had a significant impact on the meat processing industry in India. As per capita incomes rise and urban families live in smaller units, the demand for processed meat products, which can be quickly cooked, has been rising. Most of the production of meat and meat products continues to be in the unorganised sector. Some branded products like Venky's and Godrej's Real Chicken are, however, becoming popular in the domestic market.

### 1.1.5 Fish Processing

India is the third largest fish producer in the world and is second in inland fish production. The fisheries sector contributes US\$ 4.4 billion to the national income, which is about 1.4 per cent of the total GDP. With its over 8,000 km of coastline, 3 million hectares of

reservoirs, 1.4 million hectares of brackish water, 50,600 sq km of continental shelf area and 2.2 million sq km of exclusive economic zone, India is endowed with rich fishery resources and has vast potential for fishes from both inland and marine resources. Processing of fish into canned and frozen forms is carried out almost entirely for the export market. It is widely felt that India's substantial fishery resources are under-utilized and there is tremendous potential to increase the output of this sector. Total investment in the sector since 1991 has been around US\$ 600 million. With the liberalized policy, fish-processing sector has been attracting more foreign investments. Foreign investment up to 2003 has been US\$ 122.5 million.

The units in the fish processing sector are largely small scale proprietary/ partnership firms or fishermen co-operatives. In the past ten years, the corporate sector has increased its operations in preservation, processing and export of coastal fish.

### ***1.1.6 Consumer Foods***

Consumer food industry includes packaged foods, aerated soft drinks, packaged drinking water and alcoholic beverages.

#### ***Packaged or Convenience Foods***

This segment comprises bakery products, ready-to-eat snacks, chips, namkeens (salted snacks and savouries) and other processed foods/ snack foods.

The market size of confectioneries is estimated at US\$ 484.3 million growing at the rate of 5.7 per cent per annum. Biscuits have a market of US\$ 373.4 million, growing at 7.5 per cent per annum. Other products like bread, chocolates are also growing at a significant rate. There is a demand for Indian snack food (Ready-To-eat) in overseas markets. The exports market is estimated at US\$ 33.4 million and is growing at around 20 per cent annually.

The packaged food industry has around over 60,000 bakeries, 20,000 traditional food units and several pasta food units. In the past decade several new biscuits & confectionery units, soya processing units and starch/glucose/sorbitol producing units have come up. Multinational Companies are coming up in confectionery and cocoa based products areas.

#### ***Aerated Soft Drinks***

The aerated soft drinks industry in India comprises over 100 plants across all States. It provides direct and indirect employment to over 125,000 employees. It has attracted one of the highest foreign direct investments in the country, amounting to around US\$ 1049 million. Two of the biggest global brands in this segment are well established in India. Soft drinks constitute the third largest packaged foods segment, after packed tea and packed biscuits. Total export earnings of the industry are over US\$ 156 million per annum. Penetration levels of aerated soft drinks in India are quite low compared to other developing and developed markets, an indication of further potential for rapid growth.

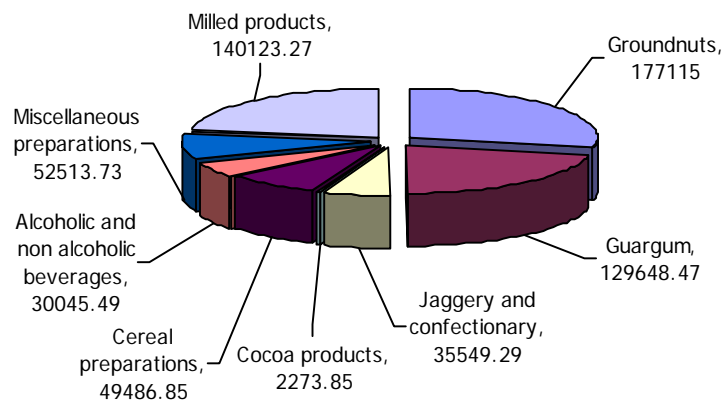
### *Packaged Drinking Water*

The market size for packaged drinking water in India has been estimated at around US\$ 223 million. The industry comprises 215 companies which have been granted license for manufacturing packaged drinking water and 3 for manufacturing packaged natural mineral water. Trends such as shortage of drinking water in the large metropolitan cities, changes in consumer lifestyles leading to demand for convenience and availability of various packaged sizes to suit different needs have led to a spurt in growth over the last 3-4 years and these trends are expected to continue to fuel demand in this sector.

### *Alcoholic Beverages*

India is the third largest market for alcoholic beverages in the world. The demand for spirits and beer is estimated to be around 373 million cases per annum. There are 12 joint venture companies producing grain based alcoholic beverages that have a combined licensed capacity of 33.9 million litres per annum. 56 units are engaged in manufacturing beer under license from the Government of India. The demand per annum for wine in the domestic market is estimated to be around 6 million bottles (750 ml), while the domestic production of wine is over 2.4 million bottles. The market is estimated to grow at a healthy rate of around 25 per cent per annum in the next five years, indicating attractive investment potential.

**Export of other Processed Food Products, 2004-05**



## **1.2 Competitive advantages that India enjoys**

The Indian food processing sector is highly competitive.

There are a large number of players in the organised as well as unorganized sector. The organised sector is small but growing - for example, it forms less than 15 per cent of the dairy sector and around 48 per cent of the fruits and vegetable processing. The sector offers

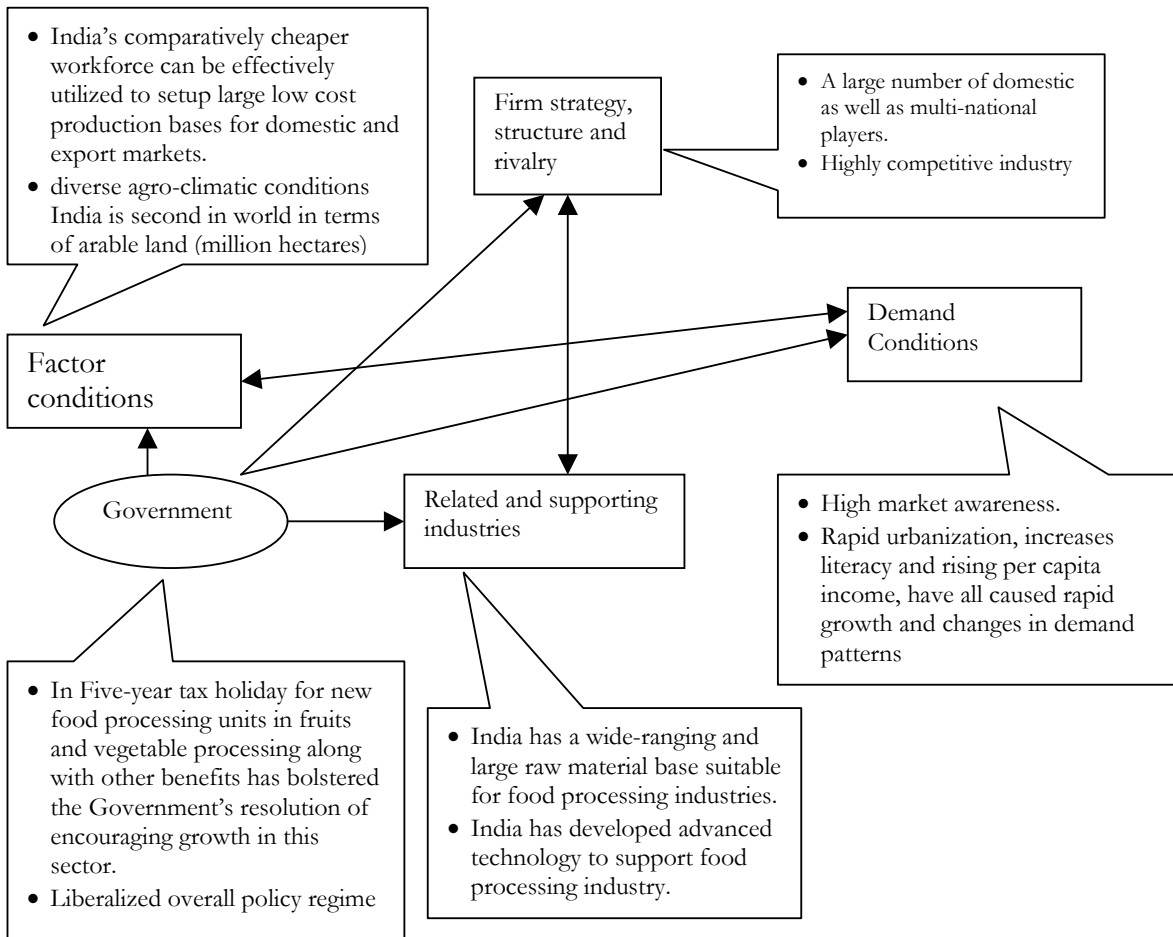
potential for growth and a large number of Multi National Corporations have entered into India to leverage this opportunity.

Some of the successful overseas players in this sector include Unilever, Cadbury, Nestle and Pepsi. These players face competition from strong Indian brands. Companies have adopted various strategies to maintain and increase their market share in India. These include competitive pricing, aggressive advertising campaign, expansion plans etc. Examples of such strategies are

- Agro Tech Foods uses two strategies to counter the threat of low priced competition. By launching lower-priced blended oils under the Sundrop umbrella, and acquiring a fairly strong presence in the mass market for edible oils through its low priced brand, Crystal. Secondly, it has reengineered its costs to lower its own fixed cost structure.
- In the mass segment, Britannia has introduced biscuit packs at lower price points.
- Gits is strategically growing and broadening its export market and has launched new international style export packaging.
- The strategy followed by Haldiram is competitive pricing and labor intensive products that predominantly cater to the Indian palette. It follows aggressive marketing in terms of TV advertisements, print ads and kiosks of Haldiram's range of products at railway stations.
- Hindustan Level Limited has followed the strategy of divesting its non-core businesses and focusing on its food business as a growth driver.
- New products are being continuously launched in all product segments by Nestle. The dairy portfolio consisting of regular and flavoured curds, skimmed milk and fruit-based milk, condensed milk and butter is being expanded by launch of lassi and cheese.

### 1.3 Diamond porter analysis of Indian Food Processing Industry

The various competitive advantages in the food processing sector in India have been analyzed under the frame work given below:



## 2. POLICIES AND REGULATIONS

### 2.1 Policy Initiatives

Given the size of the industry and the nascent development stage, the food processing sector is a key focus area for the Government of India. The importance of the sector is further enhanced by the fact that over 70 per cent of the population depends upon agricultural activity for livelihood. The government has therefore been focusing on commercialization and value addition to agricultural produce, minimizing pre/post harvest wastage, generating employment and export growth in this sector, through a number of regulatory and fiscal incentives. The industry is largely unorganised, with a small but growing organised sector.

The popularity of food and agro products is not surprising when the sector is now offering a growth of more than 150 per cent in sales. With such promise in the sector, a number of foreign companies have joined the fray. While US brands such as McDonald's, Pizza Hut and Kentucky Fried Chicken have become household names, more are on their way.

The new wave in the food industry is not only about foreign companies arriving here attracted by the prospective size of the market. It is also about the migration of the Made in India tag on food products traveling abroad. Indian food brands and fast moving consumer goods (FMCGs) are now increasingly finding prime shelf-space in the retail chains of the US and Europe. These include Cobra Beer, Bikanervala Foods, MTR Foods' ready-to-eat food stuff, ITC's Kitchen of India and Satnam Overseas' Basmati rice.

The Government has formulated and implemented several schemes to provide financial assistance for setting up and modernizing of food processing units, creation of infrastructure, support for research and development and human resource development in addition to other promotional measures to encourage the growth of the processed food sector.

- The Centre has permitted under the Income Tax Act a deduction of 100 per cent of profit for five years and 25 per cent of profit in the next five years in case of new agro processing industries set up to package and preserve fruits and vegetables.
- Excise Duty of 16 per cent on dairy machinery has been fully waived off and excise duty on meat, poultry and fish products has been reduced from 16 per cent to 8 per cent.
- Most of the processed food items have been exempted from the purview of licensing under the Industries (Development and regulation) Act, 1951, except items reserved for small-scale sector and alcoholic beverages.
- Food processing industries were included in the list of priority sector for bank lending in 1999.
- Automatic approval for foreign equity up to 100 per cent is available for most of the processed food items except alcohol, beer and those reserved for small-scale sector subject to certain conditions.
- The Union Commerce Ministry has approved a brand promotion campaign for value-added "Made in India" cashew being launched in the West Asian market by March end. The campaign, mooted by Cashew Export Promotion Council of India (CEPCI), involves a financial assistance of US\$ 344,787 by the Ministry.

- Full repatriation of profits and capital has been allowed.
- Zero duty import of capital goods and raw material for 100 per cent export oriented units.
- Sales of up to 50 per cent in domestic tariff area for agro based, 100 per cent export oriented units is allowed.
- Government grants have been given for setting up common facilities in agro Food Park.
- Full duty exemption on all imports for units in export processing zones has been done.

## **2.2 Food Safety and Standard Act, 2006**

Till the year 2005, thirteen different laws were applicable on the food and food processing sector. Multiple laws/ regulations prescribe varied standards regarding food additives, contaminants, food colours, preservatives and labeling. In order to rationalize the multiplicity of food laws, a Group of Ministers (GoM) was set up to suggest legislative and other changes to formulate integrated food law, to be a single reference point in relation to regulation of food products. Based on the recommendations of the GoM the ministry of food processing enacted the Food Safety & Standard Act (FSSA), 2006. Salient features of the act:

- FSSA will be aided by several scientific panels and a central advisory committee to lay down standards for food safety. These standards will include specifications for ingredients, contaminants, pesticide residue, biological hazards and labels.
- The law will be enforced through State Commissioners of Food Safety and local level officials.
- Everyone in the food sector is required to get a licence or a registration which would be issued by local authorities.
- Every distributor is required to be able to identify any food article to its manufacturer, and every seller to its distributor. Anyone in the sector should be able to initiate recall procedures if he finds that the food sold had violated specified standards.

## **2.3 Foreign Direct Investment**

The government of India is planning to offer 100 per cent foreign direct investment and income tax benefits in the food processing sector.

Foreign direct investment (FDI) in the country's food sector is poised to hit the US\$ 3-billion mark. In the last one year alone, FDI approvals in food processing have doubled. The cumulative FDI inflow in food processing reached US\$ 2,804 million in March '06. In '05-06, the sector received approvals worth US\$ 41 million. This figure is almost double the US\$ 22 million approved in 2004-05.

Nearly 30 per cent of FDI in this sector comes from EU countries such as Netherlands, Germany, Italy and France. Some of the successful ventures from EU countries are Perfetti, Cadbury, Godrej-Pilsbury, Nutricia International, Manjini Comaco, etc.

The US-based private equity fund, New Vernon Private Equity Limited (NVPEL), has decided to invest Rs 45 0 million in Kochi-based masala major, Eastern Condiments, the flagship company of Eastern Group.

America's largest chocolate and confectionery-maker Hershey is acquiring 51 per cent stake in Godrej Beverages & Foods for US\$ 54 million.

## **2.4 Vision strategy and action plan**

Ministry had commissioned a Vision preparation for the growth of FPI sector. The Vision Document was released on April 07, 2005. The Vision envisages that industry should aim to increase processing level of perishables from 6per cent to 20 per cent, increase value addition from the present level of 20 per cent to 34per cent and share in global trade up from 1.6 per cent to 3 per cent, thus tripling the size of processed food industry by 2015. Tripling of the size of industry is estimated to generate direct employment of 2.8 million and indirect employment of 7.4 million persons.

## **2.5 Tax Relief for Speed Growth of FPI Sector**

### *Budget of 2006- 07*

Recognizing the enormous benefits that the food processing industry can bring to agriculture and job creation, and to consumers, food processing will be treated as a priority sector for bank credit. NABARD will create a separate window with a corpus of US\$ 225 million for refinancing loans to the sector, especially for agro-processing infrastructure and market development. Government will also set up the National Institute of Food Technology Entrepreneurship and Management. The Paddy Processing Research Centre at Thanjavur will be developed into a national-level institute.

- Output of foodgrains likely to be 209.3 MT
- 2 per cent credit on farm loans
- To double farm loans in 3-Years
- US\$ 22 million fund to help tea growers
- Increased funding for repair of water bodies
- To double farm loans in 3 years Short term credit to farm

Food processing industry has been given a fillip as the condensed milk, ice cream, preparation of meat, fish and poultry, pectins, pasta and yeast have been fully exempted from excise duties.

## **2.6 Eleventh Five Year Plan (2007-2012) Initiatives**

- To cope up with the growth of 9% visualized during the 11th Five Year Plan milk production has to be enhanced, so that, per capita availability is doubled as milk contributes almost 60-65% of the total livestock product value
- To build participatory institutions of collective action for small-scale farmers that allow them to get vertically integrated with livestock processors and input suppliers
- To create an environment in which farmers will increase investment in ways that will improve productivity in the livestock sector
- To promote effective regulatory institutions to deal with the threat of environmental and health crisis stemming from livestock
- To increase per ha. fish production through private sector to bring it at par with national average
- To develop PAN culture for raising fish finger-lings
- Renovation of 1,642 seasonal ponds through NREG Programme to make available approx. 6,000 ha. additional water area
- Development of fish seed production and infrastructure in vicinity of NVDA reservoirs
- Providing employment to fisherman communities by allotting water bodies on long lease for fish culture
- To introduce biotechnology in fish seed and fish production

## **2.7 Infrastructure Development in Food Processing Sector**

There is a lack of suitable infrastructure in the shape of cold chain, packaging centres, value added centre, modernized abattoirs etc. Improvement in general infrastructure is also an aid for energizing of sector. Government attaches highest priority to development and expansion of physical infrastructure for facilitating prompt growth of industries. In order to address the problem of infrastructure in food processing sector, the Government has implemented the scheme for infrastructure development comprising the following components:

### ***Food Park Scheme***

The idea behind setting up of food parks is that small and medium entrepreneurs find it difficult to invest in capital-intensive activities. Therefore, as a part of the strategy to develop food processing infrastructure, the Ministry has been pro actively pursuing the task of setting up of food parks in different parts of the country. In the food parks, common facilities like cold storage, food testing and analysis lab, affluent treatment plant, common processing facilities, packaging centre, power supply, water supply, seminar / conference / training facilities etc can be assisted. Financial assistance for food parks is provided at 25 per cent for general and 33.33 per cent for difficult areas subject to a maximum of Rs. 40 million. Under the scheme, 02 food parks were assisted under 8th Plan, 39 under 9th Plan Scheme and 10 under 10th Plan. An amount of Rs. 1.04 billion has been sanctioned up to December 2005. 22 food parks have become operational.

In a bid to boost the food sector, the Government is working on agrizones and the concept of mega food parks. Twenty such mega parks will come up across the country in various cities to attract Foreign Direct Investment (FDI) in the food processing sector.

The Government has released a total assistance of US\$ 23 million to implement the Food Parks Scheme. It has so far approved 50 food parks for assistance across the country. The Centre also plans US\$ 22 billion subsidy for at least 10 mega food processing parks.

### ***Packaging Centres***

The Scheme aims to provide facilities for packaging, which may help in enhancement of shelf life of food products and make them internationally acceptable. Assistance at 25 per cent of the project cost in general areas and 33.33 per cent in difficult areas subject to a maximum of Rs. 20 million is provided for establishment of packaging centre. Assistance is available to all implementing agencies. So far assistance of Rs. 1450 million has been sanctioned to one packaging centre in Jammu & Kashmir.

### ***Integrated Cold Chain Facility***

The scheme is intended to improve viability of cold storages and enhance cold storage capacity. Assistance at 25 per cent of the project cost in general areas and 33.33 per cent in difficult areas subject to a maximum of Rs. 7.5 million is provided for establishment of cold chain facilities. During 10th Plan an amount of Rs. 4010 million has been sanctioned towards assistance for three cold storages in Gujarat, three in Maharashtra, one each in U.P., Kerala, Manipur, Meghalaya, Andhra Pradesh, Haryana, Delhi and Goa. During 9th Plan, assistance of Rs. 148.6 million was extended to 53 cold storages.

### ***Value Added Centre (VAC)***

The Scheme is intended to enhance value addition leading to enhanced shelf life, higher total realization and value addition at each level of handling and also to facilitate traceability. Assistance at 25 per cent of the project cost in general areas and 33.33 per cent in difficult areas subject to a maximum Rs. 7.5 million is provided for establishment and modernization of value added centre. So far, three VACs i.e. one each in Maharashtra, Himachal Pradesh and Punjab have been sanctioned assistance involving an amount of Rs. 1100 million during 10th plan.

### ***Irradiation Facilities***

The scheme aims at enhancing shelf life of the food product through irradiation techniques by preventing infestation like in flour, sprouting and change in chemical composition of the product (as in potato). Financial assistance at 25 per cent of the project cost in general areas and 33.33 per cent in difficult areas subject to a maximum of Rs. 50 million is provided for establishment of irradiation facilities. So far four irradiation projects i.e. two in Maharashtra and one each in West Bengal and Haryana have been sanctioned assistance involving an amount of Rs. 78.9 million.

### ***Modernized Abattoir***

The Scheme aims at scientific and hygienic slaughter, causing least pain to the cattle and ensuring better byproduct utilization. Assistance at 25 per cent of the project cost in general

areas and 33.33 per cent in difficult areas subject to a maximum of Rs. 40 million is provided to local bodies for modernization of abattoirs. So far only one case i.e. of MCD Delhi has been approved for grant of Rs. 40 million.

## **2.8 Sector-Specific Government Policies**

### ***2.8.1 Fruits and vegetables***

Though no industrial license is required for setting up Fruits & Vegetable Processing industries, setting-up 100 per cent Export Oriented Units require specific Govt. approvals.

- Many Fruits & Vegetables Processing industries are eligible for automatic approval of foreign technology agreement and up to 51 per cent foreign equity participation including tomatoes, mushrooms & other frozen vegetables, fruit, nuts, fruit-peel, fruit jellies, marmalades, fruit juices & vegetable juices etc.
- This sector is regulated by the Fruit Products Order, 1955 (FPO), issued under the Essential Commodities Act
- All processing units are required to obtain a license under this order
- Some items like: pickles & chutneys, tapioca sago and tapioca flour are reserved for exclusive manufacture in the small scale sector
- Export of fruit & vegetable products is freely allowed

### ***2.8.2 Fisheries***

- Foreign equity is permitted in fish processing sector. Fish processing projects with a minimum of 20 per cent value addition can be set up as 100 per cent Export Oriented Units
- All items can be exported freely except for silver pomfrets of weight less than 300 grams
- Export of marine products is allowed only after registration of the units as an exporter with the Marine Products Export Development Authority (MPEDA), Cochin

### ***2.8.3 Meat & Poultry***

- The Meat Products Control Order, 1973 under the Essential Commodities Act, 1954 regulates the manufacture, quality and sale of all meat products
- A license is required under this order to set up of a factory for producing/processing meat products
- Export of meat is subjected to pre-shipment inspection and a certificate is required from State Animal Husbandry Department/Directorate of Marketing and Inspection
- Slaughter of cows is banned in most of the States. Export of beef is prohibited
- A No Objection Certificate (NOC) has to be obtained from the District administration for the slaughter of cattle, buffaloes etc.

- Permission from the civic bodies/State Government (Department of Animal Husbandry) is also required before setting up a meat processing unit integrated with a slaughter house

#### ***2.8.4 Milk & Milk products***

- Milk and Milk Products Order (MMPO) regulates milk and milk products production in the country. The order requires no permission for units handling less than 10,000 litres of liquid milk per day or milk solids up to 500 tonnes per annum
- All the milk products except malted foods are covered in the category of industries for which foreign equity participation up to 51 per cent is automatically allowed
- Ice cream, which was earlier reserved for manufacturing in the small scale sector, has now been de-reserved. As such, no license is required for setting up of large scale production facilities for manufacture of ice cream
- Subsequent to de canalization, exports of some milk based products are freely allowed provided these units comply with the compulsory inspection requirements of concerned agencies like: National Dairy Development Board, Export Inspection Council etc.

#### ***2.8.5 Grains***

The Rice Milling Industry (Regulation) Act 1958 & Rice Milling Industry (Regulation & Licensing) Rules 1959 have been repealed from 28 May, 1997.

- Rice milling and pulse milling sectors, which were earlier reserved for the small scale sector, have now been de reserved
- Since liberalization, there is no license requirement for setting up or capacity expansion of roller flour mills. The mills can obtain their wheat supply from any source
- There is no license requirement or price/distribution controls on manufacture of wheat products

#### ***2.8.6 Packaged Foods***

- The industry is de licensed and automatic approval for foreign investment up to 51 per cent of equity (except for items like malted food and items which are reserved for production in small scale sector) is granted
- The setting up of 100 per cent export oriented units requires specific government approval
- The packaging laws and regulations affecting food products are mainly covered under the Standards of Weights and Measures Act, 1976, and the Standards of Weights and Measures (Packaged Commodities) Rules, 1977 (SWMA) specifying the quantity and package labeling regulations for all products
- The Prevention of Food Adulteration Act, 1954, and the Prevention of Food Adulteration Rules, 1955 (PFA) specify food adulteration/contamination norms and permissible ingredients from consumer health and safety point of view

- The Agmark Rules relate to the quality specifications and needs of certain agricultural products to be eligible for Agmark certification

### 3. COMPETITION OVERVIEW

#### 3.1 Dabur India Ltd.

Dabur India Limited is the fourth largest FMCG Company in India with interests in Health care, Personal care and Food products. Building on a legacy of quality and experience for over 100 years, today Dabur has a turnover of Rs.19 billion with powerful brands like Dabur Amla, Dabur Chyawanprash, Vatika, Hajmola & Real.

It is a closely held company with promoters holding at 78.4per cent of the total share capital. Dabur foods is a 100 per cent subsidiary of Dabur India, with a turnover of Rs 858 million in 2004.

Catering to the beverages and cullinary segment, its major products are fruit juices, cooling pastes, coconut milk, tomato puree, lemon drink, chilli powder and honey.

The company will further focus on boosting sales to hotels, restaurants and caterers in addition to retail sales.

#### 3.2 Gitz Food Products Pvt. Ltd.

Gitz Food Products Pvt. Ltd. is majorly into snack foods and dairy products with a large product range of sweet mix, namkeens, snack mixes, pure ghee, dairy whitner and milk powder.

Gitz exports to Europe, UK, USA, Australia, Canada and the Middle East contributing to the extent of approximately 35 per cent of its total revenue. Gitz is an unlisted private family owned business.

Gitz is strategically growing and broadening its export market and has launched new international style export packaging.

#### 3.3 Godrej Industries Ltd

Godrej Industries Ltd, a member of the Rs. 45 billion (US\$ 1 billion) Godrej Group is India's leading manufacturer of oleo chemicals and food products. The foods division of Godrej Industries produces and markets edible oils, vanaspati, bakery fats, fruit drinks, fruit nectar and tomato puree. Their revenues from the food segment were US\$ 41.3 million (Rs1.9 billion) in FY04.

The division has two state-of-the-art manufacturing facilities: at Wadala in Mumbai, the capital of the western Indian state of Maharashtra; and at Mandideep near Bhopal in the northern Indian state of Madhya Pradesh. It has a national distribution network consisting of 800 distributors and 24 consignment agents. The plants are equipped with the best of modern equipment for the processing and packaging of a wide variety of food products.

The company's strategy is to increase capacity utilization in edible oils and to tap the niche health conscious market.

### **3.4 Haldiram Marketing Pvt. Ltd**

Haldiram Marketing Pvt. Ltd was started in 1936. Their major share is namkeen and snack food market in India along with syrups, crushes, chips and papads. They have a strong presence in northern India especially in New Delhi. They exports to USA, UK, Canada, Australia, Singapore and the UAE.

### **3.5 MTR Foods Ltd**

MTR Foods Ltd is an ISO 9002 and HACCP certified company is amongst the top five processed food manufacturers in India. They manufacture, market and export a wide range of packaged foods to global markets that include USA, UK, Australia, New Zealand, Malaysia, Singapore, UAE and Oman. The turnover is estimated at US\$ 261 million (Rs12 billion), with the export market accounting for approximately 10 per cent of MTR's total sales.

Their wide range of products include ready-to-eat curries and rice, ready-to-cook gravies, frozen foods, ice cream, instant snack and dessert mixes, spices(turmeric, coriander, black pepper) and a variety of accompaniments like pickles and papads.

The strategy followed is competitive pricing and labor intensive products that predominantly cater to the Indian palette.

After establishing itself in the south, MTR is developing its brand in the west and north Indian markets in line with the rapid expansion of its products.

### **3.6 Parle Agro Private Ltd**

Parle Agro Private Ltd is leading player in the fruit based beverages segment and the bottled water segment. Its flagship product is the fruit based drink Frooti Mango, which has 75 per cent market share. It is also present in the mineral water segment.

### **3.7 Mill Food**

It is a subsidiary of LP Investments Ltd. which is a wholly owned subsidiary of Jagatjit Industries Ltd. They cater mainly to the dairy products segment, with a product range of milk powder, baby food, cheese and other milk products.

### **3.8 Hindustan Lever Limited (HLL)**

The parent company Unilever holds 51.55 percent of HLL's equity. Unilever is a Fortune 500 transnational, which sells Foods and Home and Personal Care brands in about 100 countries worldwide. India's largest fast moving consumer goods company, with leadership in Home & Personal Care Products and Foods & Beverages. HLL's Foods segment is at 9 per cent, beverages are at 12 per cent of its businesses.

It caters mainly to the beverages, staples, snacks and dairy products with a wide range of products like tea, instant coffee, biscuits, ice creams, salt, wheat flour, instant drinks, soups, jams and squash.

### **3.9 Britannia Industries Ltd**

A leading player in the Indian organised biscuit market with nearly 30 per cent value share. The Nusli Wadia group, one of the oldest business houses in India and Groupe Danone, French multi-products food company, equally share the 48.5 per cent promoter holding in Britannia. Britannia achieved sales of Rs. 18.18 billion in the financial year 2005-06.

It mainly caters to the bakery products segment with a product portfolio of biscuits, flavoured milk, dairy whitener, ghee, bread, cake and rusk.

### **3.10 Agro Tech Foods**

A dominant player in the edible oils and branded foods sector, in India. ConAgra Foods Inc of USA, world's third largest foods company, along with Tiger Brands of South Africa holds a majority stake of 52.3 percent in Agro Tech Foods Ltd, through CAG Tech Holdings, Mauritius. It made net sales of Rs. 2.8 billion in the second quarter of financial year 2007.

It mainly caters to the snacks and staples food market having a product portfolio of wheat flour, edible oil, vanaspati, popcorn, French fries and green peas.

### **3.11 ITC Ltd.**

ITC is a listed company with British American Tobacco (BAT) holding 33 per cent stake and Institutions holding 50 per cent stake. ITC made its entry into the branded & packaged foods business in August 2001 with the launch of the Kitchens of India brand. A more broad based entry was made in mid 2002 and the company currently has a wider portfolio in the confectionery, staples and snack foods segments.

It caters to the staples and snacks food segment having a product range of wheat flour, salt, ready to eat meals, biscuits, confectionaries, snacks and cooking pastes.

### **3.12 Nestle India Pvt. Ltd.**

Nestle India Pvt. Ltd. was incorporated in 1959 as Food Specialties, Nestle Alimentana, Switzerland promoted Nestle India (NIL). Nestle India is a 51 percent subsidiary of Nestle SA (founded 1866), which is today the world's largest food and beverage company. The net sales of Nestle for the year 2006 were Rs. 281.61 billion.

It majorly caters to dairy products, beverages and snack foods, with products ranging from instant coffee, condensed milk, dairy whitener and infant food to chocolates and confectionaries.

The company is focusing on launching new products in all product segments.

### **3.13 PepsiCo India Pvt. Ltd.**

PepsiCo was founded in 1965 through the merger of Pepsi-Cola and Frito-Lay. It acquired Tropicana in 1998 and further merged with The Quarter Oats Company including Gatorade in 2001.

It caters to the beverages and snack food segment having a product portfolio of soft drinks, fruit juices and chips.

It's focus is high volume sales and is planning to raise capacity by setting up of new Greenfield projects as well as appointing new franchisee bottlers.

### **3.14 Cadbury India Ltd.**

Cadbury India Ltd is a subsidiary of Cadbury Schweppes which is a dominating player in the Indian chocolate market with strong brands like Dairy Milk, Five Star, Perk, Gems etc. Dairy milk is the largest chocolate brand in India. Chocolates and confectionery contribute to 75 per cent of Cadbury's turnover.

It basically caters to the confectionaries segment and is a dominant player. It has a huge product portfolio including chocolates, hard boiled confectionery, malt foods, and cocoa powder.

#### 4. CHALLENGES AND OPPORTUNITIES

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.

The market forces are compelling the Indian agriculture producers to increase the quality of their farm produce while continuing to maintain their cost competitiveness in order to be able to compete effectively in the global food market. Even in the domestic market, rising per capita incomes and changing demographic profile of the population has ensured the growing demand for processed and convenience foods. Increasing consumer awareness about health and hygiene has shifted the focus of the market to "safe" foods. The Indian food-processing sector is undergoing a veritable revolution - all the way from the plate to the plough.

Indian food processing industry has seen significant growth and changes over the past few years, driven by changing trends in markets, consumer segments and regulations. These trends, such as changing demographics, growing population and rapid urbanization are expected to continue in the future and, therefore, will shape the demand for value added products and thus for food processing industry in India. The Government of India's focus towards food processing industry as a priority sector is expected to ensure policies to support investment in this sector and attract more FDI. India, having access to vast pool of natural resources and growing technical knowledge base, has strong comparative advantages over other nations in this industry. The food processing sector in India is clearly an attractive sector for investment and offers significant growth potential to investors.

##### **Challenges faced by the Indian industry**

The most crucial challenge today that the Indian food processing industry is facing is the lack of suitable infrastructure in the shape of cold chain, packaging centres, value added centre, modernized abattoirs etc.

Improvement in general infrastructure is also a must requirement for the industry to progress. Some other important initiatives that are needed are

- Promotion of appropriate crossbreeds while conserving indigenous breeds of livestock
- Establishment of livestock marketing system
- Promotion of rural backyard poultry in a cooperative marketing setup
- Development of cooperative dairy firms
- Enhancing livestock extension services
- Encouraging private veterinary clinic
- Institutionalising a framework for utilising synergy between restoration and creation of water bodies for water harvesting and fishery

- Provision of an insurance package to avoid distress

### **Strengths and opportunities that India enjoys**

- It is the seventh largest country, with extensive administrative structure and independent judiciary, a sound financial & 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 for 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 urbanisation, 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, provide 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 & vegetable processing, meat, fish & poultry processing, packaged, convenience food and drinks, milk products etc.