ASSOCHAM
INDIA

TechSci Research

# India Food Processing, Agribusiness & Dairy Market

2015

The Associated Chambers of Commerce & Industry of India

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## Analytical Contacts

**Karan Chechi**
Research Director, TechSci Research

**Neha Tayal**
Research Manager, TechSci Research

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NEW AGE TECHSCI RESEARCH PRIVATE LIMITED
A – 51, SECTOR – 57, NOIDA, NATIONAL CAPITAL REGION, INDIA – 201301
Tel: +91 120 4523900; Email: info@techsciresearch.com; www.techsciresearch.com

# ASSOCHAM: The Knowledge Architect of Corporate India

## Evolution of Value Creator

ASSOCHAM initiated its endeavour of value creation for Indian industry in 1920. Having in its fold more than 400 Chambers and Trade Associations, and serving more than 4,50,000 members from all over India. It has witnessed upswings as well as upheavals of Indian Economy, and contributed significantly by playing a catalytic role in shaping up the Trade, Commerce and Industrial environment of the country.

Today, ASSOCHAM has emerged as the fountainhead of Knowledge for Indian industry, which is all set to redefine the dynamics of growth and development in the technology driven cyber age of 'Knowledge Based Economy'. ASSOCHAM is seen as a forceful, proactive, forward looking institution equipping itself to meet the aspirations of corporate India in the new world of business. ASSOCHAM is working towards creating a conducive environment of India business to compete globally.

ASSOCHAM derives its strength from its Promoter Chambers and other Industry/ Regional Chambers/Associations spread all over the country.

It was established in 1920 by promoter Chambers, representing all regions of India.

## Vision

Empower Indian enterprise by inculcating knowledge that will be the catalyst of growth in the barrierless technology driven global market and help them upscale, align and emerge as formidable player in respective business segments.

## Mission

As a representative organ of Corporate India, ASSOCHAM articulates the genuine, legitimate needs and interests of its members. Its mission is to impact the policy and legislative environment so as to foster balanced economic, industrial and social development. We believe education, IT, BT, Health, Corporate Social responsibility and environment to be the critical success factors.

## Members – Our Strength

ASSOCHAM represents the interests of more than 4,50,000 direct and indirect members across the country. Through its heterogeneous membership, ASSOCHAM combines the entrepreneurial spirit and business acumen of owners with management skills and expertise of professionals to set itself apart as a Chamber with a difference.

Currently, ASSOCHAM has more than 100 National Councils covering the entire gamut of economic activities in India. It has been especially acknowledged as a significant voice of Indian industry in the field of Corporate Social Responsibility, Environment & Safety, HR & Labour Affairs, Corporate Governance, Information Technology, Biotechnology, Telecom, Banking & Finance, Company Law, Corporate Finance, Economic and International Affairs, Mergers & Acquisitions, Tourism, Civil Aviation, Infrastructure, Energy & Power, Education, Legal Reforms, Real Estate and Rural Development, Competency Building & Skill Development to mention a few.

## Insight into 'New Business Models'

ASSOCHAM has been a significant contributory factor in the emergence of newage Indian Corporates, characterized by a new mind-set and global ambition for dominating the international business. The Chamber has addressed itself to the key areas like India as Investment Destination, Achieving International Competitiveness, Promoting International Trade, Corporate Strategies for Enhancing Stakeholders Value, Government Policies in sustaining India's Development, Infrastructure Development for enhancing India's Competitiveness, Building Indian MNCs, Role of Financial Sector the Catalyst for India's Transformation. ASSOCHAM derives its strengths from the following Promoter Chambers: Bombay Chamber of Commerce & Industry, Mumbai; Cochin Chambers of Commerce & Industry, Cochin: Indian Merchant's Chamber, Mumbai; The Madras Chamber of Commerce and Industry, Chennai; PHD Chamber of Commerce and Industry, New Delhi and has over 4,50,000 Direct / Indirect members. Together, we can make a significant difference to the burden that our nation carries and bring in a bright, new tomorrow for our nation.

ASSOCHAM members represent the following sectors:

- Trade (National and International)
- Industry (Domestic and International)
- Professionals (e.g. CAs, lawyers, consultants)
- Trade and Industry Associations and other Chambers of Commerce

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# 1 Executive Summary

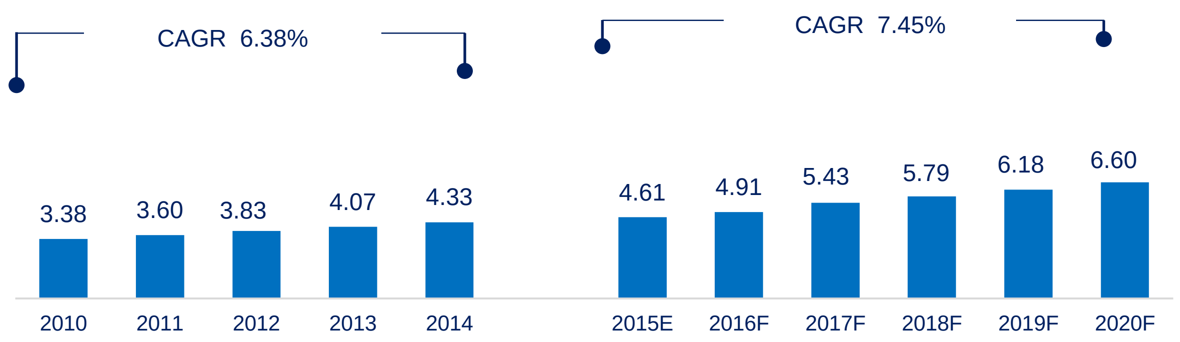
Food processing market in India is one of the most prominent industries in terms of the production, consumption and exports. Food processing market comprises grain and oil seeds, meat and marine products, packaged food products, milk and milk products, processed fruits and vegetables, and beverages, which is further segmented into alcoholic and non-alcoholic beverages.

The food processing sector in India is anticipated to exhibit growth at a CAGR of around 15% through the forecast period. The market is expected to grow due to the expanding organized food services market, emergence of logistics providers, government initiatives, etc. Moreover, efforts towards alignment of processed food products in the country with international quality standards is proving to be a major driver for food processing market in India. In India's food processing industry, food grains and pulses, being an essential part of an Indian consumer's diet, are propelling the demand for processed grain and oil seeds. In 2014, the segment contributed 36.7% in the overall food processing market. Moreover, increasing exports of these products are a major driver for rapid growth in this segment. In addition, growing popularity of processed meat and marine products among Indian consumers has been inducing the food processing companies to introduce new products. Over the last few years, the level of processing in meat and marine products has been improving owing to increasing exposure to international food products

# 2 Global Food Processing Market

Over the last decade, the food processing industry has rapidly evolved across the globe. Changing lifestyle, increasing product innovation and supportive government policies are catalyzing the growth of food processing industry, globally. The industry has gained importance on account of serving as a bridge between agriculure sector and processing industry.

**Figure 1: Global Food Processing Market Size, By Value, 2010-2020F (USD Trillion)**




*Source: TechSci Research*

Expanding frontiers for the farmers and various food processing companies owing to the flare of globalization has been spurring processed food sales over the last few years. Further, growing urbanization coupled with rising income levels in emerging nations like India, China, and Thailand, has been the major factor escalating demand for processed foods in these countries. The major factor backing growth in these nations is agricultural globalization.

Significant improvements in logistics and product processing have enabled multinational corporations to increase their production and simultaneously ensure more efficient distribution in geographically contrasting markets. Another major factor contributing to market growth is formulation of trade liberalization policies through various multilateral and regional trade agreements. Europe and North America were the leading contributors to global food processing industry in 2014.

The key factor behind growth in demand from these regions is the wide range of products available in the processed food category.

Europe has been witnessing an influx in the introduction of various innovative food products like pre-packaged salads and dried fruit snacks. In addition, high rate of expenditure of European consumers on food and drinks has been another key driver augmenting the processed food market in the region. On an average, more than 14% of the total household expenditure in Europe is spent on food and drinks. Fruits and Vegetables have been a major demand generator for processed food in Europe. However, through the forecast period, the European market is anticipated to witness a decline in the growth rate for food processing market, owing to rising health consciousness of consumers about canned food, fruits & vegetables, etc., thus increasing inclination towards fresh fruits and vegetables. Also, Asia is emerging as a high growth market with budding demand from countries like India and China. The major drivers for food processing market in this region are rapid urbanization and surging income of consumers, leading to better affordability. Both the countries are among the largest producers and consumers of fresh fruits & vegetables, dairy products and food grains due to high share of arable land, growing productivity and continuously rising demand on account of increasing middle class population.

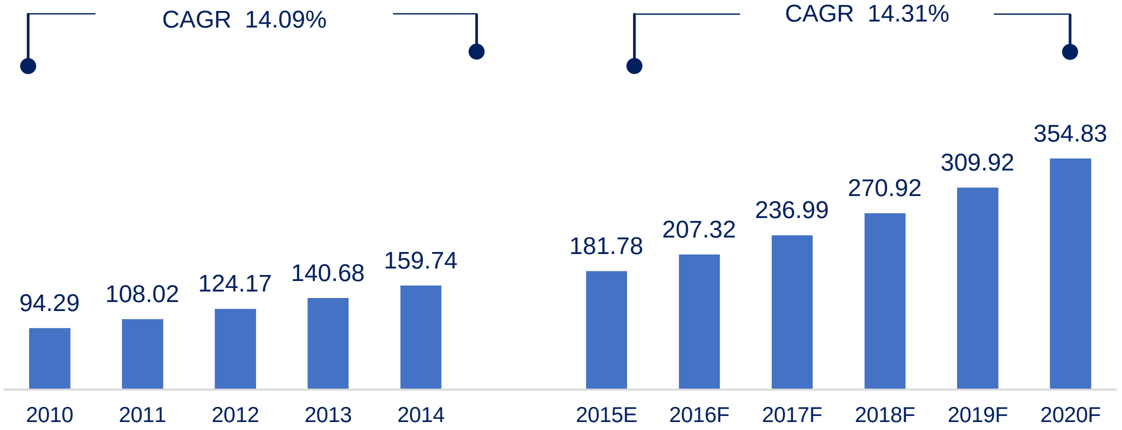
Moreover, in countries like India, government regulations and investments are playing a predominant role in propelling the industry. India has been registering a continuous increase in investments directed towards the development of new equipment and machinery, modern irrigation facilities, farmer loan waiver schemes, etc., which makes food processing and agribusiness an eye-catching market.

Introduction of technologically advanced equipment and fertilizers are boosting agribusiness market. Agrarian economies in Asia-Pacific are heavily dependent on fertilizers to increase productivity in order to feed their rising population. This makes the region an attractive market for investors interested in making investments into the food processing sector.

# 3 India Food Processing Industry Outlook

In 2014, India featured among the leading producers of food grains and oilseeds, fruits and vegetables. The country was also the leading global producer and exporter of dairy and meat products. Rising productivity, skilled man power, low labor cost, increasing government support and abundance of raw materials makes India an attractive food processing market.

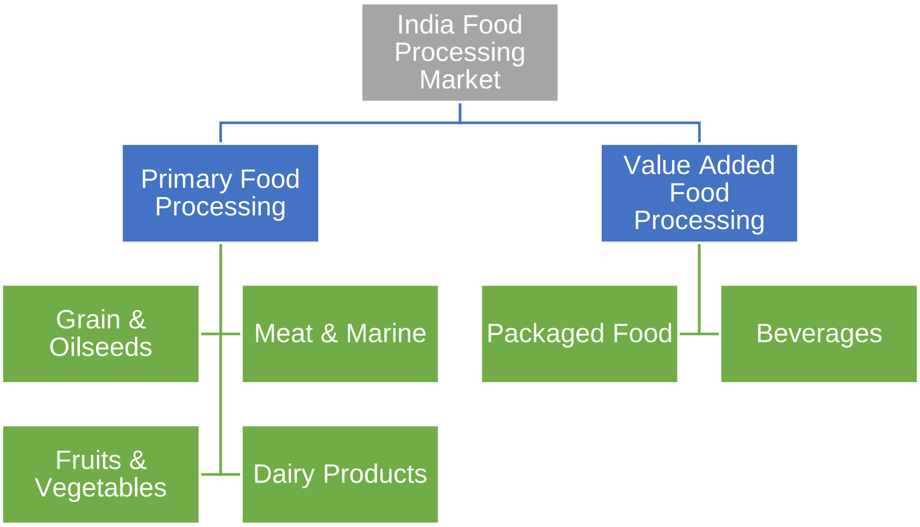
**Figure 2: India Food Processing Market Size, By Value, 2010-2020F (USD Billion)**




*Source: TechSci Research*

Rising income and changing lifestyle leading to alterations in food preferences of consumers, along with government initiatives aimed at easing the fiscal policies, have been backing the growth in food processing sector in India. The proactive role of the Indian government in attracting investments from various countries through Ministry of Food Processing Industries has been a significant contributor to growth in the country's food processing industry. Over the last five years, the continuous efforts of Government of India aimed at encouraging exports of processed food products have had a huge positive impact on the food processing sector in India. Moreover, 100% FDI under the automatic route is expected to further aid growth of the market.

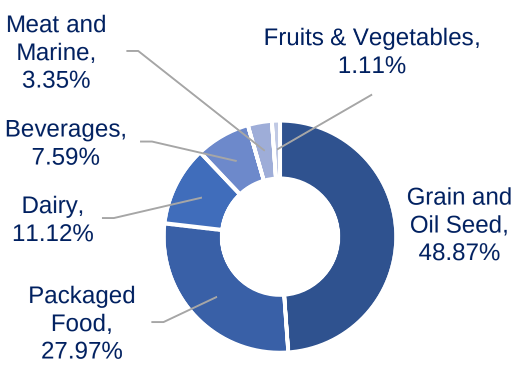
The government's plan to develop mega food parks is anticipated to be a major factor bolstering market growth during the forecast period. Upgradations in food processing units as a result of implementation of several plans/




schemes are boosting the food processing sector in the country. Increased consumer spending, emergence of logistics providers, and growing network of food chains, are other factors complementing growth of the sector.

The food processing market in India is anticipated to grow at a higher rate compared to growth in the last five years, owing to the increasing alignment of processed goods with international quality standards.

**Figure 3: India Food Processing Market Share, By Product, By Value, 2014**




*Source: TechSci Research*

**Grain and Oil Seeds:** Grain and Oil Seeds segment was the largest contributor to India food processing market in revenue terms in 2014. The factors responsible for growth of this segment were rising income and consumption, along with increasing agricultural exports. Alongside, growing participation of the private sector, emerging trend of organic farming and contract farming, and growing use of advanced technological equipment for agrarian practices have been strengthening the grain and oil seeds market in the country.

**Meat and Marine:** In 2014, India was the 2nd largest producer of inland fishery and goat meat, and the largest producer of buffalo meat.

The country's exports of processed meat and fishery products to the Middle-East and South East Asia have also been on rise over the last few years.

**Packaged Food: P**ackaged food has become a major contributor in the food processing market over the last few years. The primary reason for the emergence of this segment as a key contributor in the market is increase in the number of working women in the country, along with the busy lifestyle in urban areas, leading to greater acceptance of ready to eat and ready to cook food products.

**Dairy Products:** The share of dairy products in the market can be attributed to the large livestock population and continuously growing demand for dairy products in India. Owing to the participation of foreign multinationals, a variety of dairy products are being introduced in the market such as probiotic yoghurt, flavored curd etc., on account of which the market is projected to witness significant growth through 2020.

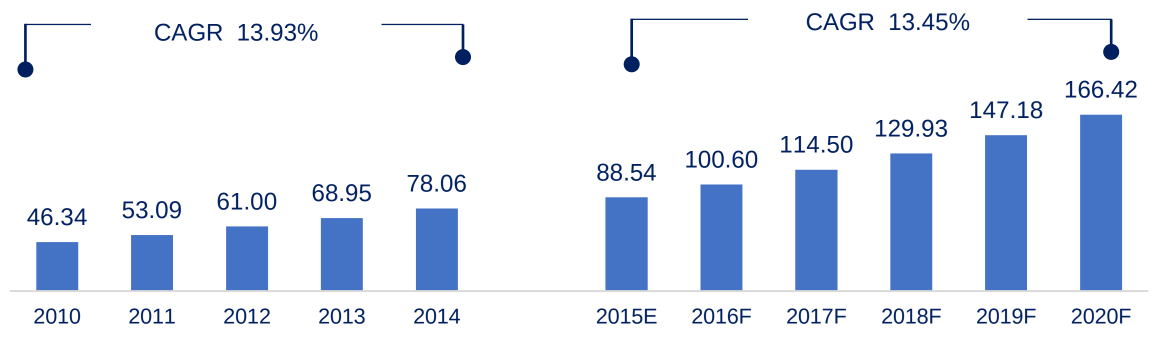
**Beverages:** Beverages include alcoholic beverages, non-alcoholic beverages, aerated drinks, juices, health drinks, tea and coffee. The rising number of companies in processed beverages segment are responsible for increase in the production over the last few years. The consumption of soft drinks in the country grew at a rate of 23% during 2010-2012. Further, the inclination of consumers towards health drinks and juices is constantly growing. The same trend is expected to continue through the forecast period

## 3.1. Primary Food Processing Market

Primary food processing involves basic cleaning, grading and packaging. It primarily includes food products such as grains and oilseeds, meet and marine products, fruits and vegetables, tea, milled flour and rice, packaged milk, spices, etc. Primary processed food products constitute around 60% of the total processed foods. This is due to growing demand from urban and rural India supported by the presence of large number of rice-mills and bakeries, fruits and food units, spices and vegetable processing units, etc.

### 3.1.1. Grain and Oil Seeds Market

**Figure 4: India Grain and Oil Seeds Market Size, By Value, 2010-2020F (USD Billion)**




*Source: TechSci Research*

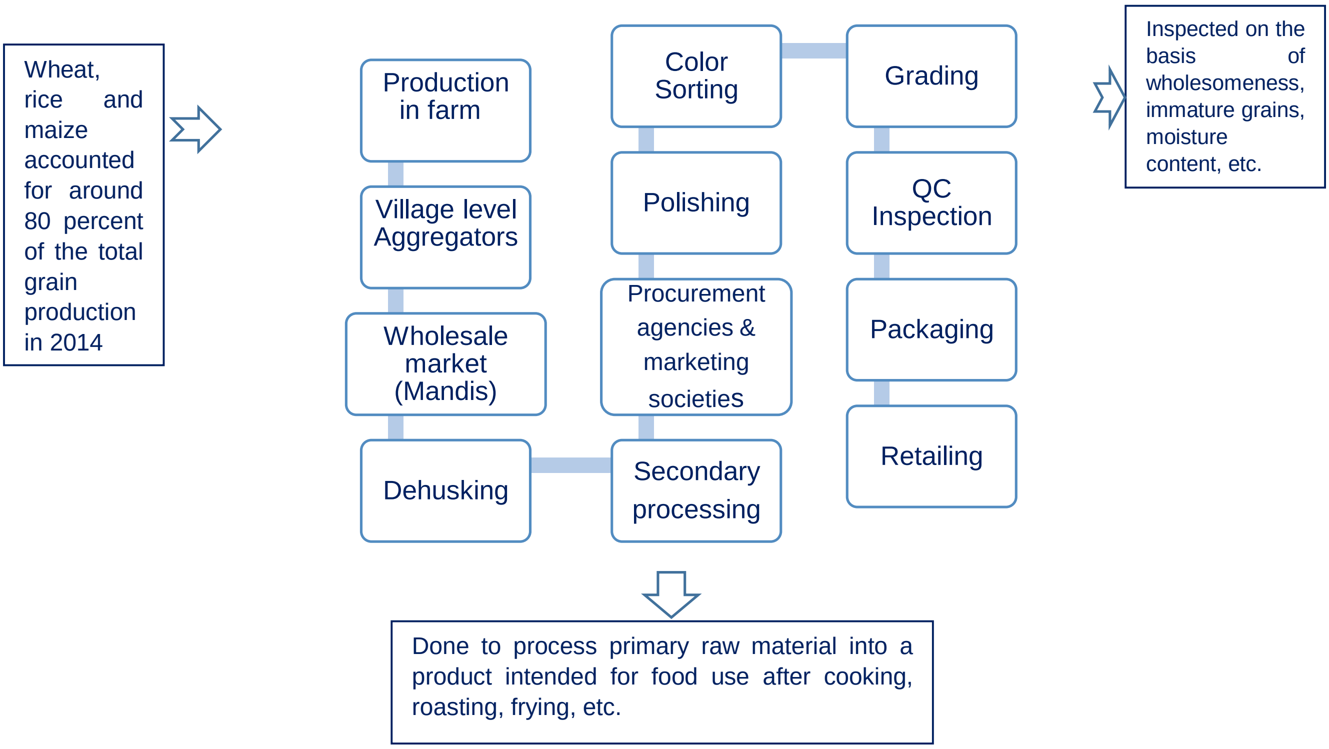
Grain and oil seeds market includes rice, wheat, barley, oil seeds, etc. The market has been witnessing double digit growth on account of increase in agricultural exports and growing demand for organic food products leading to growth in organic farming. Furthermore, the market over the next few years is anticipated to grow due to increasing investment towards improvement of agricultural infrastructure such as better irrigation facilities, cold storages and ensuring effective transportation facilities. Furthermore, increasing use of genetically modified crops to provide better yield is projected to boost the food grains and oil seeds segment during the forecast period.

**Table 1: List of Leading Food Grain Processing Companies in India, By Number of Processing Plants, 2014**

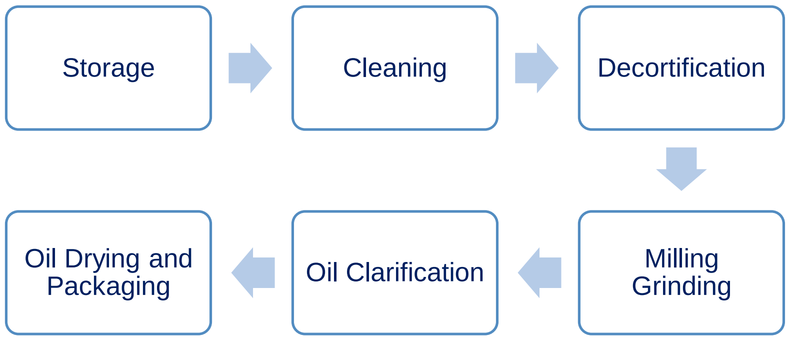
| Name of the Company | No. of Processing Plants |
|---|---|
| Usher Agro Ltd. | 3 |
| KRBL Ltd. | 5 |
| REI Agro Ltd. | 7 |
| LT Foods Ltd. | 5 |

*Source: Annual Reports and TechSci Research*

**Value Chain- Grain Processing**

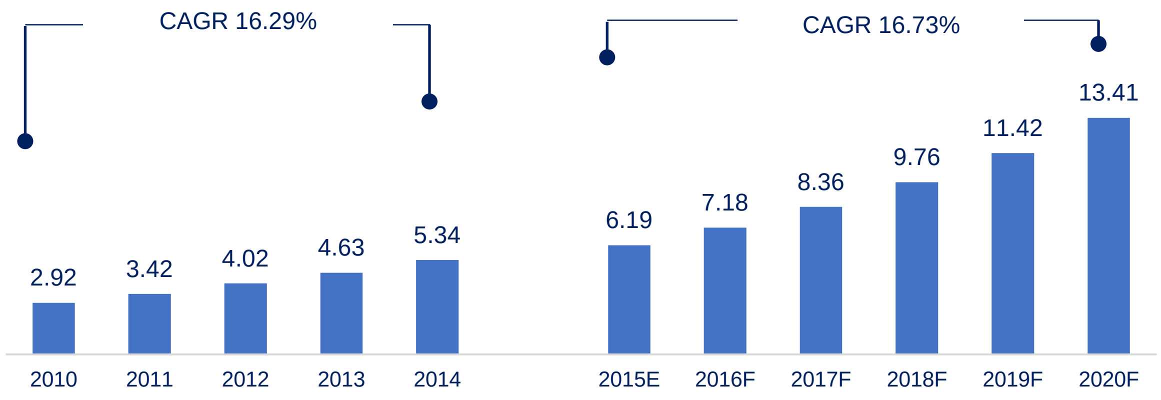



**Value Chain**



### 3.1.2. Meat & Marine Market

**Figure 5: India Meat & Marine Market Size, By Value, 2010-2020F (USD Billion)**




*Source: TechSci Research*

Meat and marine market includes buffalo meat, poultry and marine products. Sustained production, growth in the export capacity, and increasing demand for buffalo meat, primarily from the Middle-East and South Korea have been spurring growth in the market. In addition, the demand for organic buffalo meat is exhibiting an increase in domestic and foreign markets. Furthermore, various types of processed meat products like frozen chicken, canned fishes, etc., have been witnessing an increase in the demand from both domestic as well as export market. Also, other segments like lamb and goat meat have been witnessing high demand over the last few years, which is expected to grow manifold during the forecast period.

Alongside, the drift of meat and marine industry towards the development of large abattoirs-cum-meat processing plants with state-of-art technology is picking up momentum in the Indian market, resulting into double digit growth in the market. Countries such as Vietnam Social Republic, the United Arab Emirates, Thailand and Korea Republic have been the major export destinations for processed meat and marine products during 2010-2015. Buffalo meat accounts for the highest level of processing in the country, primarily on the back of high export demand for frozen buffalo meat.

## Table 2: India Processed Meat & Marine Products Share in Meat & Marine Products Industry

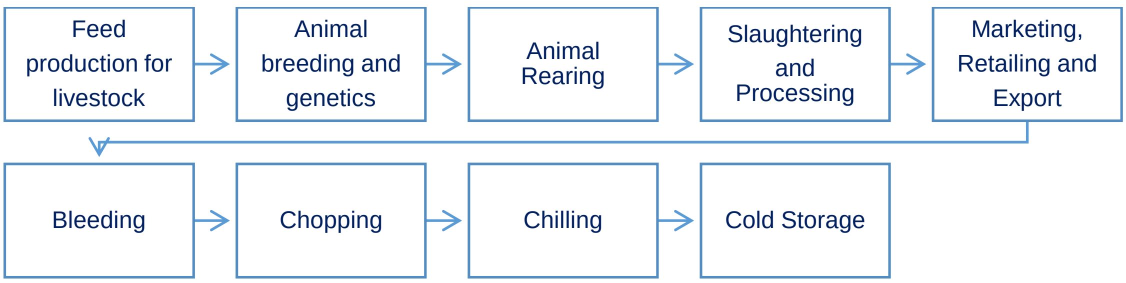
| Product | Levels Of Processing (%) | | |
|---|---|---|---|
| **Products** | **2003-04** | **2009-10** | **2014-15(E)** |
| Buffalo Meat | 21% | 35% | 45% |
| Poultry | 6% | 15% | 25% |
| Marine products | 8% | 15% | 20% |

*Source: National Skill Development Corporation*

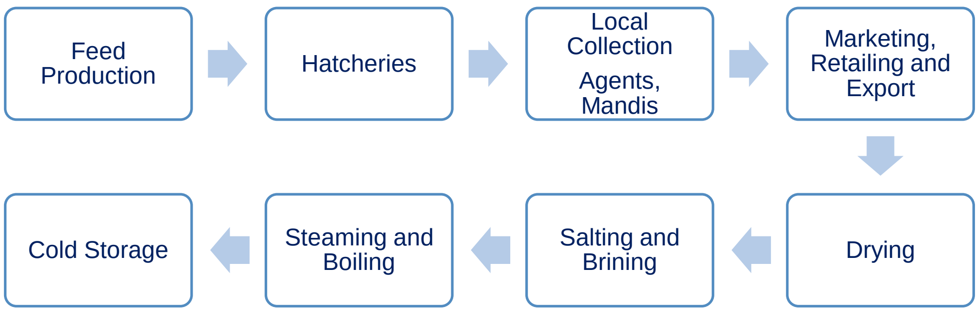
## Major Meat and Marine Products Processing Companies

| Segment | Company |
|---|---|
| **Poultry Products** | Godrej Agrovet, Venkateshwara Hatcheries |
| **Marine Products and Sea Food** | Bell Foods, Deep Sea Products and ASF Sea Products |
| **Frozen Buffalo Meat, Frozen Sheep and Goat Meat** | Frigo Refico Allana Ltd, P.M.L. Industries, Alkabeer Exports Limited and Hind Agro |
| **Pork and Other Meat Products** | A.P. Meat and Poultry Corporation, MAFCO, Ranchi Bacon Factory and U.P. Pashudhan Udyog Nigam Ltd |

### Value Chain- Meat Segment

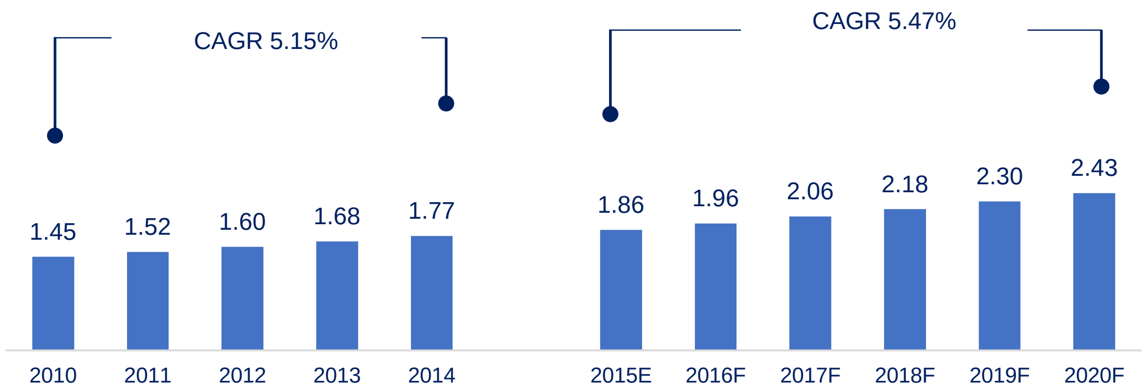



### Value Chain- Marine Products



### 3.1.3. Processed Fruits and Vegetables Market

**Figure 6: India Processed Fruits and Vegetables Market Size, By Value, 2010-2020F (USD Billion)**




*Source: National Skill Development Corporation and TechSci Research*

Processed fruits and vegetables market comprises products such as jams, pickles, sauces, packaged fruits and vegetables, etc. The primary reason behind steady growth of this segment is the favorable climatic and physio-geographical conditions which ensure growth in productivity year on year.

**Table 3: India's Share in Global Fruits and Vegetables Production, 2012**

| Fruits/Vegetables | Share (%) |
|---|---|
| Mangoes | **36.2** |
| Papaya | **41.6** |
| Okra | **71.8** |
| Cauliflower | **32.9** |
| Banana | **24.4** |
| Onion | **19.7** |

*Source: Ministry of Food Processing*

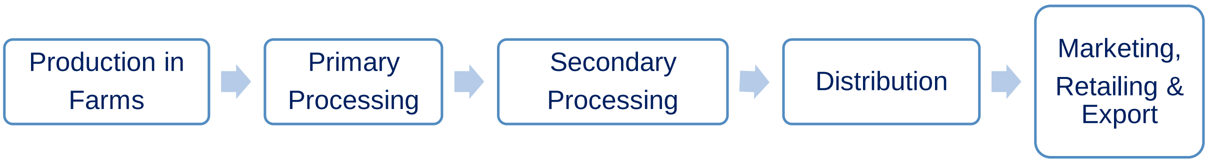
India, being bestowed with these favorable conditions, was the second largest producer of fruits and vegetables in 2014. In the same year, the total production of fruits and vegetables stood at around 81 million tons and 162 million tons, respectively. Large production indicates the immense potential of the country to export processed fruits and vegetables across the globe.

**Table 4: Key Companies in Fruit Vegetables Segment**

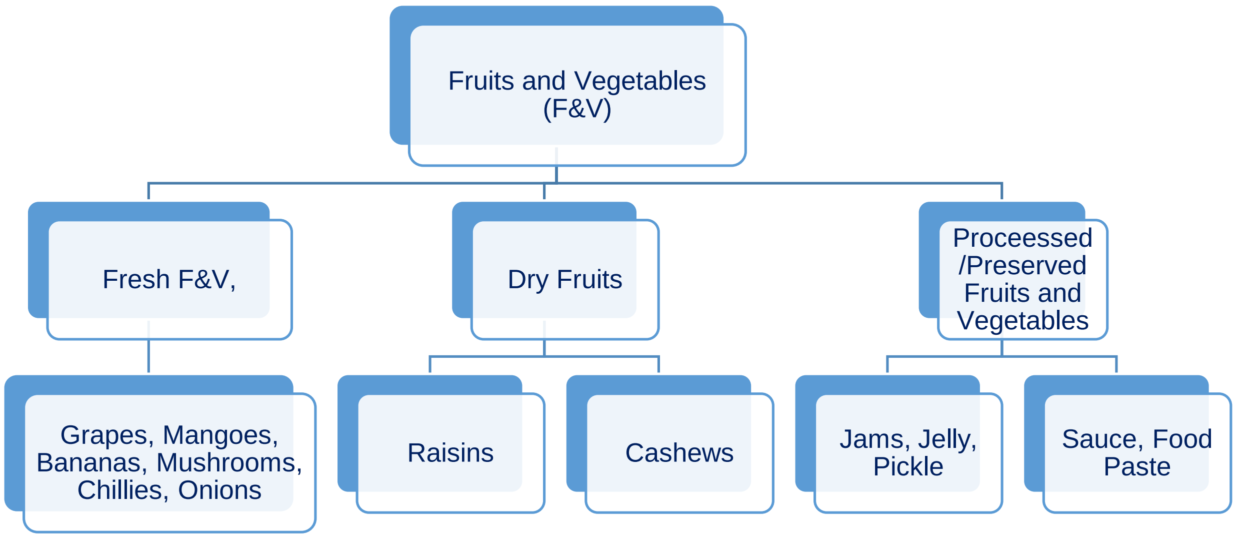
| Category | Companies |
|---|---|
| **Jams** | HUL, Marico, Kissan, Malas |
| **Pickles** | Pickles Priya Foods, Desai Brothers, Cavin Kare |
| **Pulp** | Foods and Inns, BEC, Clean Foods, Usha International |
| **Squashes** | HUL, Haldiram's, Mapro, Kissan |

In 2013, India also ranked as a leading country in terms of production of various fruits and vegetables. However, of the total production of fruits and vegetables in India, only 2% of vegetables and 4% of fruits were consumed in processed form in the country in 2013. This scenario indicates opportunities for food processing companies to tap the embryonic market. The market is projected to grow at a considerable rate during the forecast period due to rising demand from domestic market amid changing consumer lifestyle and rising disposable income. In 2013, the wastage of fruits and vegetables was estimated to be between 30-40% of the total production. The government's as well as logistics providers' efforts towards minimizing wastage will result into increased supply of raw fruits and vegetables for processing companies resulting in low processing cost.

**Value Chain- Fruits and Vegetables Segment**




**Segments of Fruits and Vegetables Market in India**



## 3.2. Trade Dynamics

**Table 5: India Exports of Meat and Marine Products, By Value, By Volume, 2013-14**

| Product | Quantity (Million Metric Tons) | Value (USD Billion) | Major Export Destination | Leading Producers |
|---|---|---|---|---|
| **Buffalo meat** | 1.44 | 4.41 | Vietnam Social Republic, Malaysia, Thailand, Egypt Arab Republic, Saudi Arabia and Jordan. | Uttar Pradesh, Andhra Pradesh, Maharashtra and Punjab. |
| **Sheep & Goat meat** | 0.02 | 0.12 | United Arab Emirates, Saudi Arabia, Qatar, Kuwait and Oman. | Rajasthan, Jammu & Kashmir, Uttar Pradesh, Gujarat, Hilly regions of North and Eastern Himalayas |
| **Poultry Products** | 0.43 | 0.09 | Oman, Germany, Indonesia, Saudi Arabia and Afghanistan | Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra, Gujarat, Madhya Pradesh, Orissa and North Eastern States |

*Source: APEDA*

**Table 6: India Exports of Processed Fruits and Vegetables, Top 5 Countries, 2013-14**

| Country | Quantity (Thousand Metric Tons) | Value (USD Million) |
|---|---|---|
| **United States of America** | 28.05 | 51.945 |
| **Saudi Arabia** | 41 | 43.195 |
| **United Kingdom** | 31.79 | 42.97 |
| **Netherlands** | 31.21 | 41.14 |
| **United Arab Emirates** | 18.8 | 25.083 |

*Source: DGCIS Annual Export*

### 3.3. Emerging Trends & Opportunities

**Fruits and Vegetables**

Opportunities

1. Favorable agro-climatic conditions.
2. Wide range and abundance of raw material for fruits and vegetables processing industries.
3. Presence of a small number of companies is creating opportunities for new entrants in the market.

Trends

1. Fresh, packed and processed fruits and vegetables are increasingly gaining traction in the Indian market. As a result, small retailers and dairies in the country have started keeping stock of frozen peas and corn.
2. Growing prominence of organic food.

**Meat and Marine**

Opportunities

1. Frozen and canned products are proving to be suitable substitutes to fresh food due to ease of storing and usability.

**Grains and Oil Seeds**

Opportunities

1. Improvement in processing infrastructure of grain and oil seeds is encouraging processing companies to optimally utilize their resources.
2. The gradual shift from manual techniques to modern techniques for threshing will help threshing equipment companies to explore growth opportunities in the market.
3. Use of gunny bags rather than hooks for loading/unloading can reduce the losses.

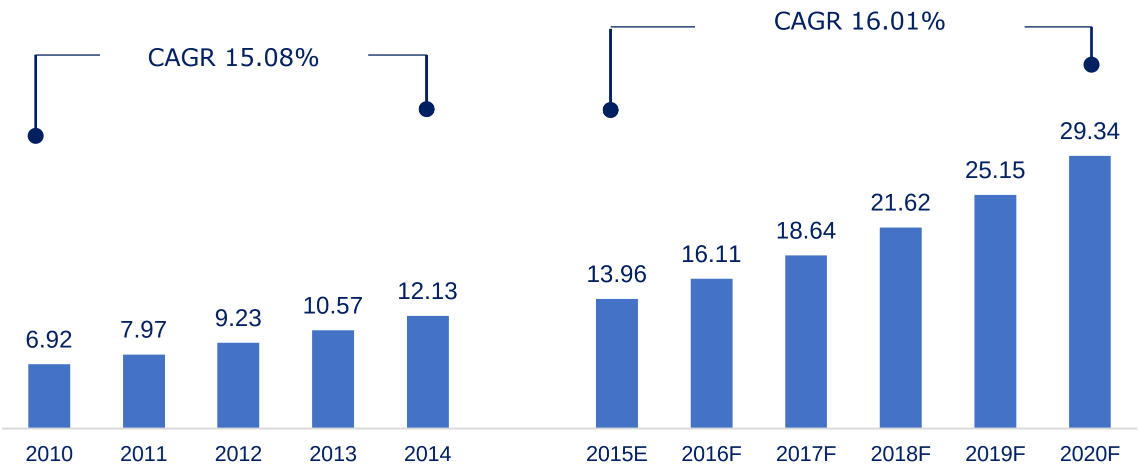
### 3.2. Value Added Food Processing Market

Value-added food processing is the step in production that adds value to the primary processed product for the final consumption of the customer and leads to the higher net worth of the product. Value added food processing market includes packaged food market and beverages market. Of late, value added food processing market has been gaining eminence amidst the Indian consumers owing to their increased discretionary income and surged cognizance regarding international food products. Moreover, upgradation to latest machinery and equipment, which are prominent in other countries have been increasing the availability of value added food products.

#### 3.2.1. India Beverages Market

India Beverages market comprises alcoholic, aerated, non-aerated, ready-to-drink and functional beverages. Over the last few years, the beverages market in India has witnessed growth owing to the shift in the tastes and preferences of Indian consumers. The dynamics of the beverages market have been constantly evolving, shifting from local flavored drinks to functional/fortified beverages and the influx of premium international alcohol.

**Figure 7: India Beverages Market Size, By Value, 2010-2020F (USD Billion)**




*Source: National Skill Development Corporation and TechSci Research*

Beverages market in India has been growing at a significant pace during the last few years. India beverages market is anticipated to witness growth at a CAGR of around 16.01% during the forecast period. Growth in the market is primarily accelerated by rapid expansion and establishment of malls and cinemas, which has boosted the sales of beverages. Moreover, the availability of organic beverages, energy drinks is rising across the country and is expected to stimulate growth in the beverages market during 2015-2020.

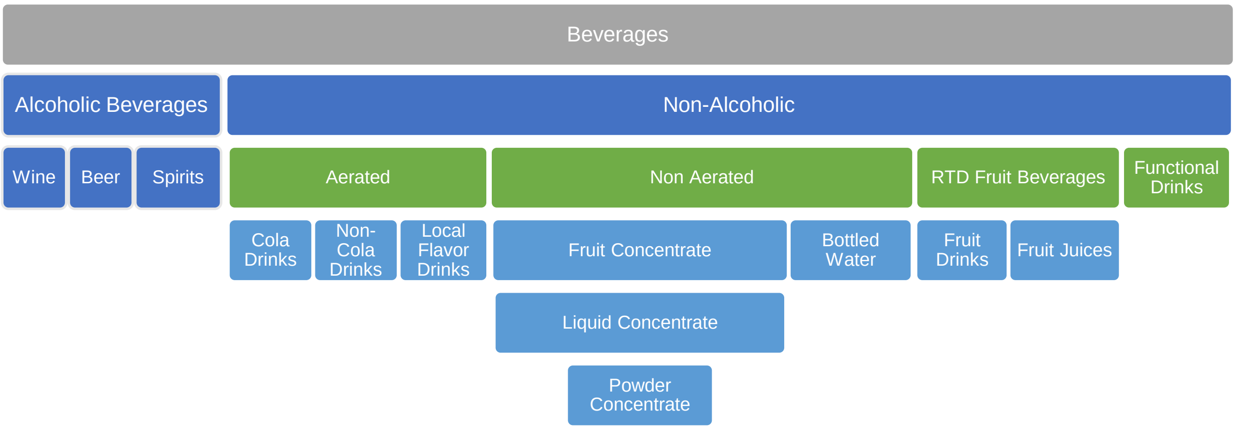
Of late, increasing prominence of breweries in the alcohol segment has been propelling growth in the alcoholic beverages segment. Moreover, the surging acceptance of alcoholic beverages has been a significant contributor to the growth of the overall beverages segment.

**Key Players in Beverages Segment**

| Sub Segments | Key Players |
|---|---|
| Beer | United Breweries, Sab Miller, Carlsberg, Mohan Meakin |
| Wine | Grover Vineyards, Sula Vineyards, Fratelli Wines, Vinbros & Co. |
| Whisky | Pernod Ricard, Radico Khaitan, United Breweries, Sea Gram, |
| Rum/Brandy | Mohan Meakin Ltd., Radico Khaitan, Madhuloka |
| Fruit Juice, Fruit drinks | PepsiCo, Dabur, Parle, Del Monte, Tunip, Mother dairy |
| Tea, Coffee | HUL, Nestle, Tata, Tetley, Organic India |
| Bottled/Mineral Water/Aerated Drinks | Bisleri International, Parle, Coca Cola, Kinley, Aquafina |

Apart from growth in the much developed alcoholic beverages segment, the segments which are relatively smaller in terms of market size have lately been witnessing emerging demand. For instance, the gradually rising health concerns have been inducing the demand for functional beverages. Moreover, the addition of new products in existing segments like aerated drinks has also been backing growth in India beverages market.

**Segments of Beverages in India**




### 3.2.2. India Packaged Food Market

India packaged food market constitutes confectionary, baked goods, ready to eat and ready to cook products, biscuits, etc. The concept of packaged food has rapidly been gaining acceptance among the Indian consumers due to innovations in the packaging of various products which in turn increases the shelf life of the product. Moreover, packaged food market is garnering the attention of consumers due to the rising popularity of ready to cook products which save time while preparing a dish.

**Segments of India Packaged Food Market**

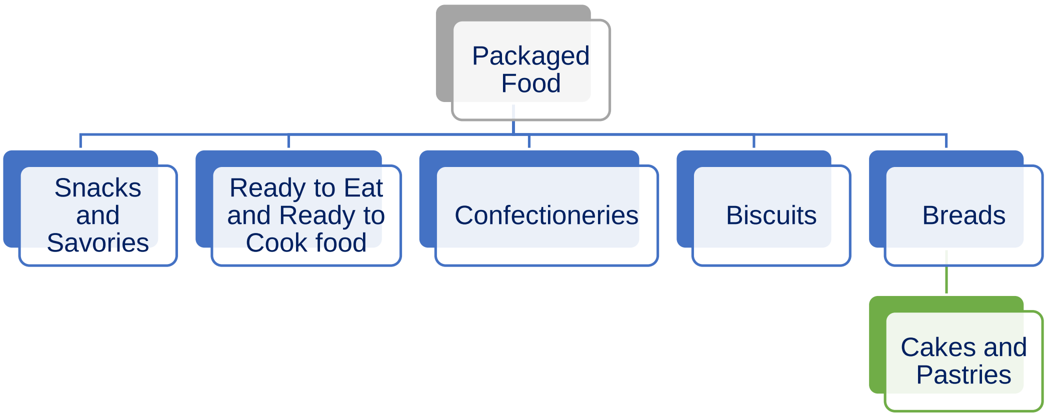
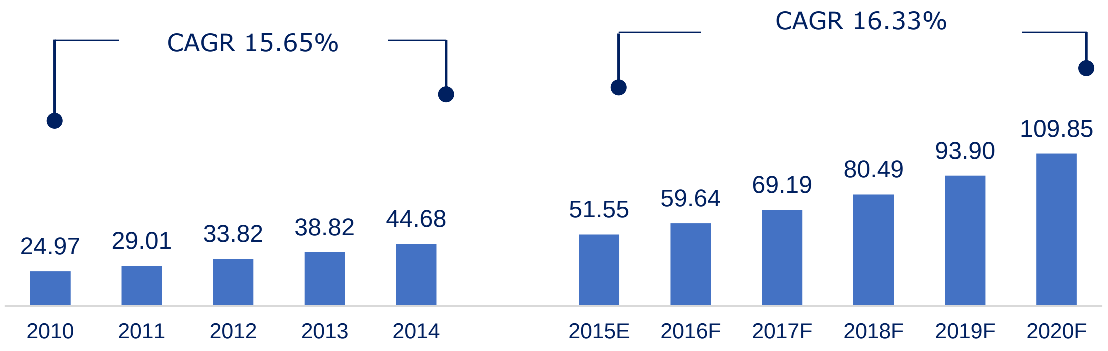


**Figure 8: India Packaged Food Market Size, By Value, 2010-2020F (USD Billion)**




*Source: Director General of Foreign Trade (DGFT)*

Packaged food market has been witnessing strong growth on the back of several factors like changing lifestyle, advancement of retail formats, and introduction of packaged foods with healthy ingredients. Moreover, rapid urbanization coupled with the growing per capita income of individuals has been propelling the market for packaged food in India. Majority of the demand for packaged food comes from the urban areas of the country, which accounted for more than 2/3rd of the total demand for processed food in 2011. Increase in the number of working women and growth in the youth segment of the country are major drivers for the market. The increasing demand for packaged foods, along with introduction of new products in the segment, is anticipated to surge penetration of packaged goods in organized retail to 15% by 2016.

**Table 7: Exports of Mineral Water & Aerated Water, By Export Destination, By Value, 2013-14 (USD Million)**

| Country | Value (USD Million) |
|---|---|
| **United States of America** | 0.05 |
| **Nepal** | 0.03 |
| **Canada** | 0.02 |
| **Australia** | 0.02 |
| **United Arab Emirates** | 0.01 |
| **Others** | 0.06 |

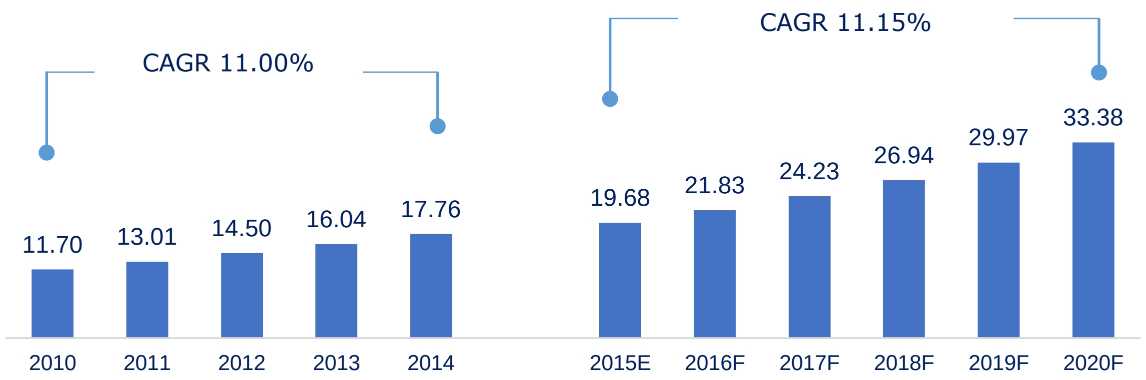
***Total Exports: USD0.19 million***
***Exports: USD0.19 million***

*Source: Director General of Foreign Trade (DGFT)*

# 4 India Dairy Market Outlook

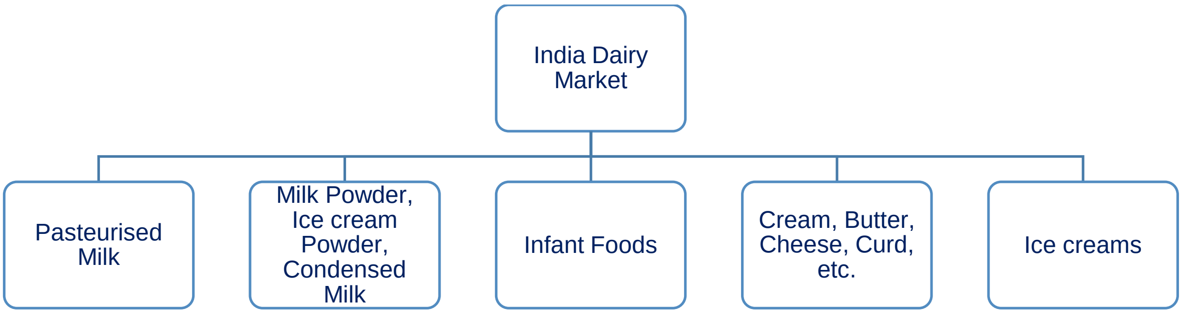
Dairy market constitutes milk and milk products. In 2014, dairy market in India was highly fragmented and dominated by unorganized players. In 2012, organized players processed 13 million tonnes of milk whilst the unorganized sector processed 22 million tonnes. However, owing to the rising footprints of multinational players in the country's market, various value added milk products like probiotic curd, flavoured milk, etc., have been exhibiting an increase in demand

**Figure 9: India Dairy Market Size, By Value, 2010-2020F (USD Billion)**



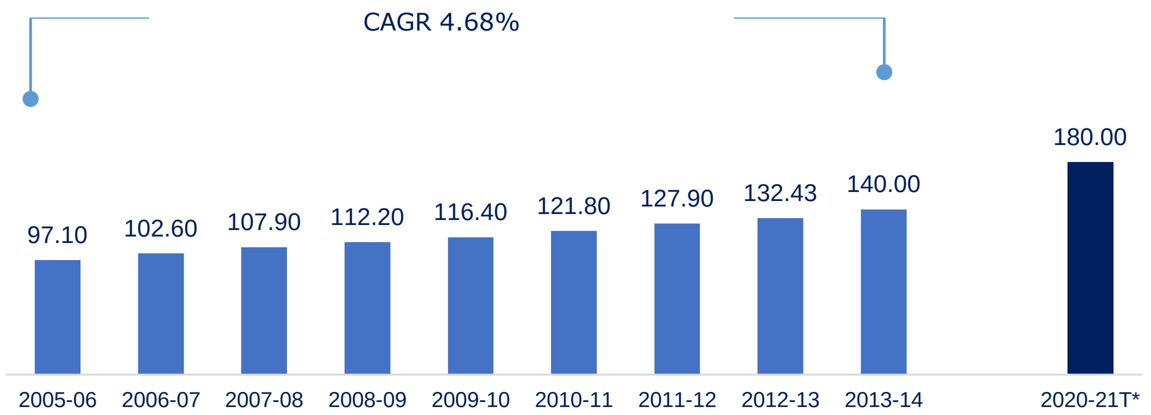

*Source: National Skill Development Corporation and TechSci Research*

**Major Segments of Dairy Market in India**



The major driver for the dairy market in the country has been a gradual increase in the per capita income of the consumers leading to increased affordability of high value dairy products like yoghurt, flavoured milk and curd. However, given the strong growth in consumption, the market is anticipated to grow at a CAGR of around 11.15% during the forecast period. The growth rate is expected to increase only marginally compared to the last five years on account of various factors like lack of availability of fodder grass, poor access to institutional credit, etc. In India dairy market, international companies have an upper hand on domestic companies in terms of the product range offered and the number of companies as compared with domestic companies. However, to maintain their share in the fragmented market, the domestic players have, of late, been introducing a range of milk products so as to lure the consumers with economical yet diversified products.

**Figure 10: India Milk Production, By Volume 2005-13, (Million Tonnes)**




*Source: Department of Animal Husbandry, India*
**Target set by National Dairy Development Board*

Milk production in India has been steadily increasing over the last decade on the heels of improving productivity and emergence of new breeds of cattle due to cross-breeding. In 2013-14, the country featured among the leading milk and milk product producers across the globe. Uttar Pradesh maintained its dominance in India in terms of milk production in 2013-14, followed by Rajasthan and Gujarat However, the per capita demand for milk and milk products was maximum in Punjab and Haryana in the same year. Raw milk accounts for over two-thirds of the overall revenues of the Indian dairy industry. However, the sales of processed products are gaining momentum

## Key Domestic & Foreign Dairy Processing Companies in India Dairy Market

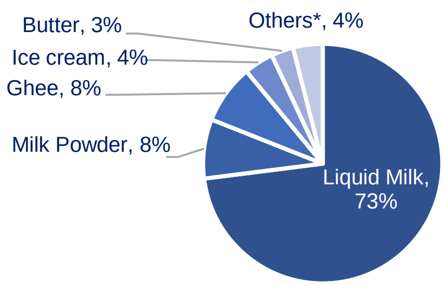
| Global Brands | Indian Brands |
|---|---|
| Kraft foods *** | GCMMF(Amul)*** |
| Nestle*** | Mother Dairy*** |
| Unilever** | Britannia* |
| * low presence, ** mid presence, *** high presence | |

## Major Indian Dairy Companies and their Product Range

| Company | Brands | Product Range |
|---|---|---|
| Gujarat Co-operative Milk Marketing Federation Ltd. | Amul | Milk, butter, cheese, yoghurt and other milk products |
| AP Dairy Development Cooperative Federation (APDDCF) | Vijaya | Table butter, UHT milk, skim milk powder, ghee, flavoured milk, khoya, pasteurised butter, kulfi and processed cheese |
| Punjab State Cooperative Milk Producers' Federation (MILKFED) | Verka | Ghee, flavoured milk, paneer, ice cream, skim milk powder, lassi, table butter, sweets and cheese |
| Mother Dairy | Mother Dairy | Milk and milk products |

## Segment Wise Dairy Market Overview

### Figure 11: India Dairy Market Share, By Product Type, By Value, 2012-13




*Others segment in the market includes products like flavoured milk, cheese, paneer and curd

*Source: Ministry of Animal Husbandry, National Dairy Development Board*

### 4.2. Emerging Trends and Opportunities

**Opportunities**

1. Immense potential in the development of green fodder grass.
2. Improvement in transportation and freezing systems.

**Trends**

1. Increased participation of the private sector.
2. Surging development of health-friendly milk products.

### 4.3. State Wise Production of Milk (Top 5 Producing States), 2013-14

| States | Production (Million Tons) | % of Total Production* |
|---|---|---|
| Uttar Pradesh | 24.19 | 17.57% |
| Rajasthan | 14.57 | 10.58% |
| Andhra Pradesh | 13.00 | 9.45% |
| Gujarat | 11.11 | 8.07% |
| Others | 74.81 | 54.33% |

***Total Production= 140 million tons***

*Source: NDDB*

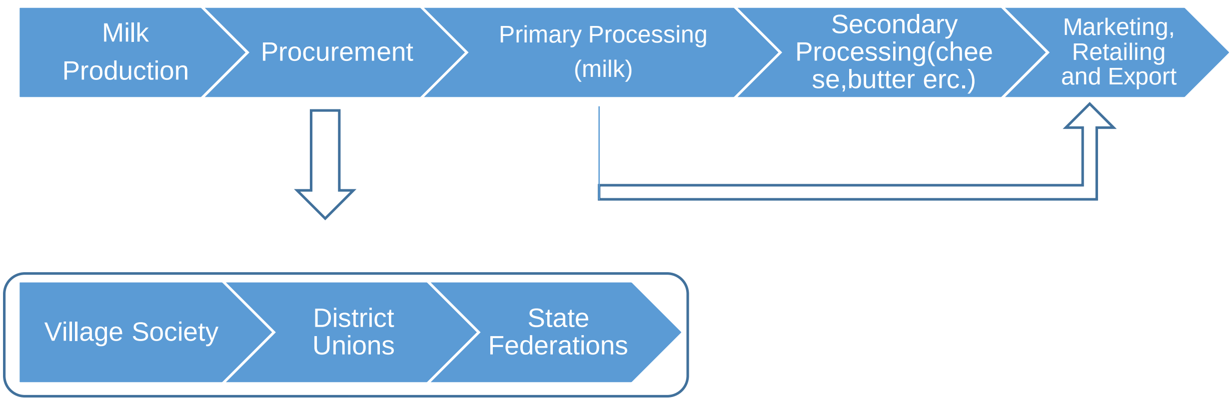
### 4.4. Exports of Dairy Products to Top 5 Countries, By Value, 2013-14

| Country | Quantity (Thousand Metric Tons) | Value (USD Million) |
|---|---|---|
| Bangladesh | 31.48 | 104.57 |
| Egypt | 14.00 | 50.32 |
| United Arab Emirates | 12.71 | 50.31 |
| Algeria | 10.24 | 33.84 |
| Yemen | 8.95 | 33.19 |

***Total Exports: Value (USD Million): 546.14, Quantity (Thousand Metric Tons): 159.22***

*Source: DGCIS Annual Export*

**4.5. Value Chain- Dairy Market**




# 5 Gujarat Food Processing Industry Overview

Gujarat features among the leading contributor to the food processing industry in India. The state boasts of high fruits and vegetables, dairy and meat product yield. The long coastline and ports network provide access to the traders to the exports markets such as Middle-East and Africa for exports.

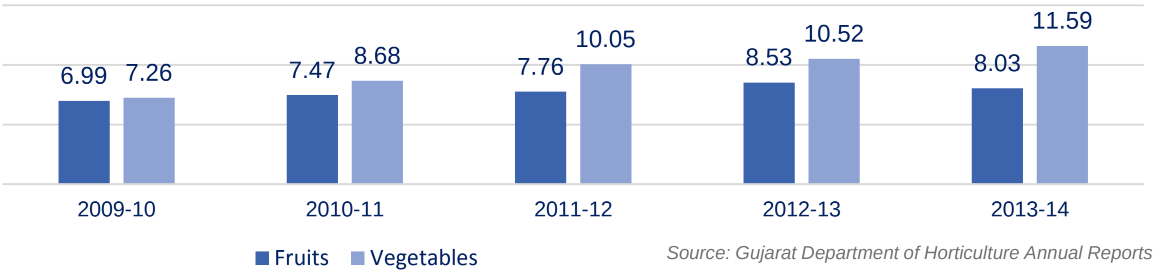
Gujarat also has seven agro climatic zones and different soil varieties which increases its competitiveness in producing varied horticultural and agricultural crops. Around 65% of the overall land of the state is covered by agricultural activities. As a result, the agricultural output of the country has grown at around 11% during the past 10 years. Further, the state is a leading producer of vegetables such as Onion, Potato, Brinjal, Tomato, Okra, Cucurbits, and spices viz. cumin, fennel and garlic. In addition, then investments in the agribusiness sector has been on the rise. The central government and the state government of Gujarat jointly invested a cumulative sum of around USD175 million during 2005-11 in Micro-Irrigation System.

**Figure 12: Gujarat Area under Fruits & Vegetable Production 2009-14 (Thousand Hectares)**


*Source: Gujarat Department of Horticulture Annual Reports*

The increase in the farm area has resulted into increased in productivity. The state is a leading grower of banana, mango, Chiku, Pomegranate, Citrus, Custard apple, grown primarily in the districts such as Bharuch, Kheda, Bhavnagar, Valsad, Navsari, Junagadh, Amreli, Sabarkantha etc. Therefore, the abundance of fruits and vegetables and growing industrialization in the state offers enormous opportunities to food processing companies to tap the rising potential of Gujarat.

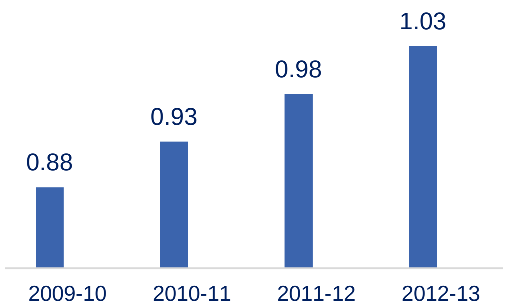
**Figure 13: Gujarat Fruits and Vegetable Production 2009-14 (Million Metric Tons)**



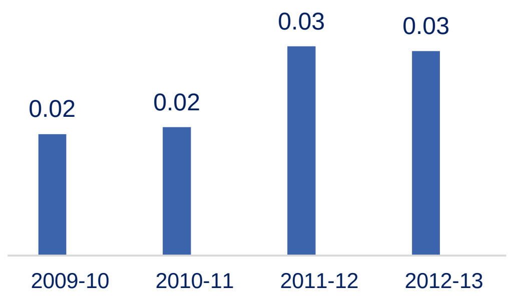

*Source: Gujarat Department of Horticulture Annual Reports*

The marine and meat produce of the state is also very high. Due to 1,600km long coastal belt, the state share was around 28% in the overall marine exports of India in 2012. Fishing fleet of the state is around 35,725. In addition, Gujarat has around 23 Intensive Cattle Development Projects (ICDP) with 1078 Breeding Centres in the state for the purpose of improving the cattle breed. Thus the milk and meat production of the state has grown at a significant pace of the past five years

**Gujarat Milk Production 2009-13 (Million Tons)**




**Gujarat Meat Production 2009-13 (Million Tons)**




*Source: Gujarat Department of Aniumal Husbandry*

Thus, amid rising agricultural, horticultural and dairy, along with investment friendly state government, Gujarat is expected to be a industrial hub of food processing companies in near future.

ASSOCHAM INDIA

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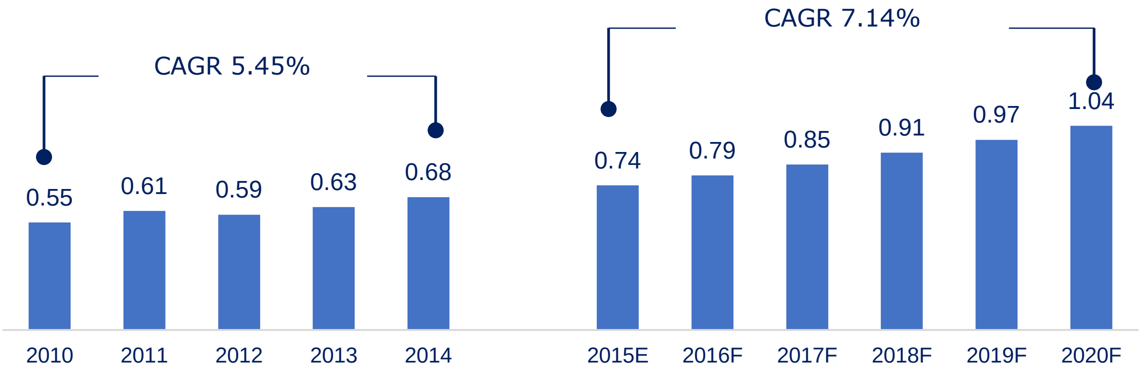
# 6 India Agribusiness Market Overview

Agriculture has been a critical sector for growth of the Indian economy. The sector has been playing a major role in employment generation over the decades. In spite of a decline in the employment share, agriculture was still the highest employment generating sector with over 47% share in 2012. Over the past few years agribusiness has been a major determinant of the country's socio economic development. India's agri business market includes agro equipment, micro irrigation and fertilizer and seed market.

## 6.1. India Agro Equipment Market

**Figure 14: India Tractor Market Size, By Volume, 2010-2020F (Million Units)**




*Source: TechSci Research*

India features among the largest agro equipment markets in the world. The market presents huge scope of growth in the future due to technological advancements. Although, majority of the farmers still rely on outdated agrarian practices, this trend is gradually changing. Easy availability of credit, improved productivity, and increase in minimum base price to sell produce has boosted farmers' income. Consequently, the market for tractors is witnessing high growth. In addition, the government is focused on improvement of agricultural practices in the country.

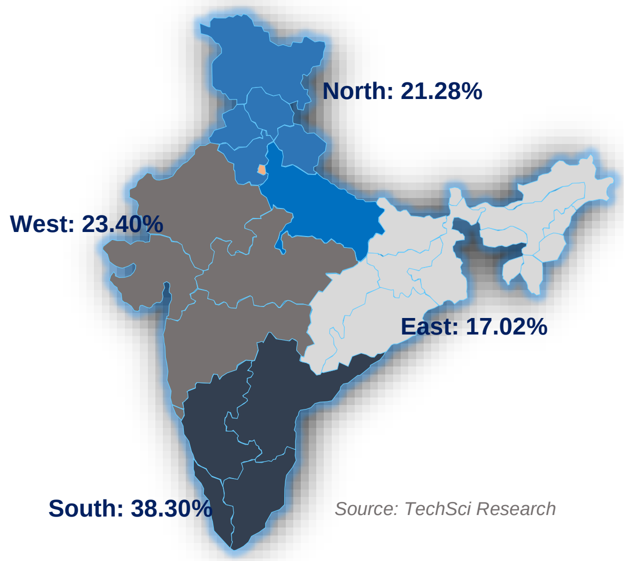
The government of India has been increasing its spending on the development of agriculture sector. In the union budget 2015-16, the Ministry of Agriculture allocated USD1.7 billion for the same.

India tractor market is anticipated to grow at a CAGR of 7.14% through the forecast period. The surge in market growth is anticipated on the heels of availability of finance to the farmers at lower rates, encouraging them to incorporate the latest agrarian techniques and equipment. In the union budget 2015-16, the government of India decided to extend credit of around USD134 billion to the farmers.

Moreover, the plans of various tractor manufacturers in the country to initiate capacity expansion projects have been backing the escalating demand for tractors in the country. Various tractor manufacturers in India have already implemented multiple capacity expansion projects in order to effectively address the steadily increasing demand for tractors in the country. During 2013, tractor companies such as John Deere India and New Holland Fiat India implemented their capacity expansion plans in the country. New Holland Fiat India, a part of the Italian automotive major Fiat Industrial Group, invested around USD0.18 billion to set up a new Greenfield plant in Maharashtra in 2013, which would facilitate the company in increasing its total production capacity by 50% through 2016. John Deere India also invested around USD0.16 billion in its Greenfield tractor manufacturing plant at Dewas, Madhya Pradesh, in 2013.

Southern India was the major contributor in tractor market in 2013, with sales surging to around 139 thousand tractors. The high sales of tractors in the region can be attributed to the improvement in irrigation system as well as wheat and paddy production in the region.

Figure 15: India Tractor Market Share, By Region, By Volume, 2013




*Source: TechSci Research*

Southern and Western India have been the major demand generators for tractors in India. The major driver for tractor sales in these regions have been the improvements in irrigation systems. In addition, the shift towards high mechanisation and high horse power tractors has been a significant factor contributing to sales of tractors in the west region.

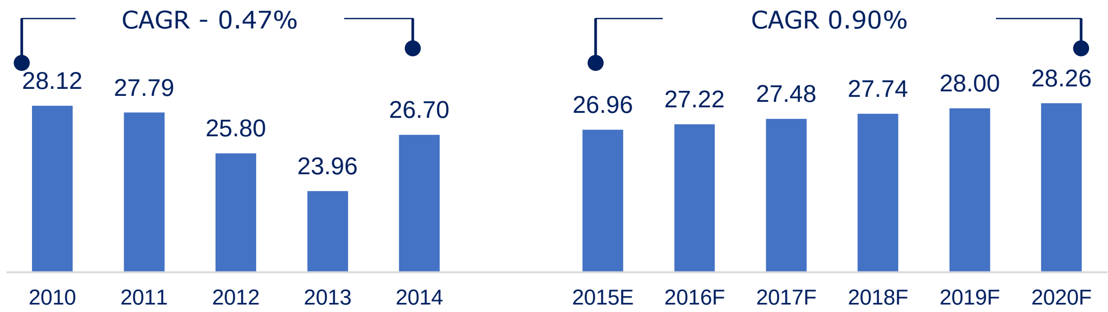
Table 8: Major Tractor Manufacturing Companies, By Units Sold, 2014-15

| Company | Sales (Thousand Units) |
|---|---|
| **Mahindra and Mahindra** | 22.34 |
| **Escorts** | 59 |
| **VST Tillers** | 7.4 |

*Source: Company Websites and TechSci Research*

### 6.2. India Fertilizer and Seed Market

Figure 16: India Fertilizer Market Size, By Volume, 2010-2020F (Million Metric Tons)




*Source: Ministry of Chemicals and Fertilizers and TechSci Research*

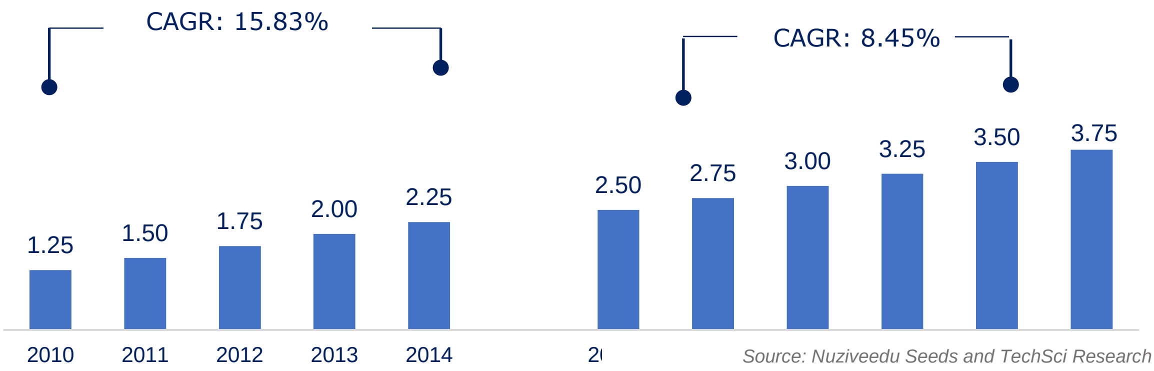
India fertilizer market registered a decline in volume terms during 2010-2013. The decline in the market can be attributed to the paucity of raw materials and fluctuations in the subsidy on fertilizers, which acted as major constraints for the market. The subsidy on P&K fertilizers decreased from USD6.01 billion in FY12 to USD4.90 billion in FY 2013, leading to increase in the prices. Decrease in nutrient based subsidy rates has been another factor hindering growth of the market.

However, India fertilizer market is showing signs of recovery, exhibiting significant growth in 2014, in volume terms, on account of increasing government investments and initiatives. For instance, in the Union Budget 2015-16, USD8.33 billion have been allocated for the revival of four fertilizer plants and set up of new plants producing farm nutrients. Additionally, development of hybrid fertilizers has been spurring the growth in the market, as more farmers are adopting these fertilizers to increase their crop yield.

In general, this segment also witnesses higher private sector participation. APMC Act passed in various states over the last few years has significantly decreased barriers for private participation towards areas such as contract farming and direct procurement. Moreover, an estimated expansion in storage capacity to 35 million metric tons under the 12th five year plan is anticipated to bolster the fertilizer and seed market.

Countries like Israel have been increasing their cooperation with India in agribusiness, aiding the Indian farmers to increase their income by incorporating better practices, yield and the best of class fertilizers. In addition, the market for fertilizers is anticipated to grow owing to the increase in investments in agricultural infrastructure to develop irrigation facilities, cold storage, transportation, etc. Furthermore, the increasing use of genetically modified crops, along with several other initiatives of the Ministry of Food

**Figure 17: India Seeds Market Size, By Value, 2010- 2020F (USD Billion)**




*Source: Nuziveedu Seeds and TechSci Research*

Processing Industries is anticipated to back growth in the market. India seeds market has been witnessing double digit growth owing to the increasing use of hybrid seeds so as to increase the crop yield and improve the quality of produce. Rising inclination of various private as well as foreign players towards the use of hybrid seeds has been bolstering the market. The participation of foreign players has significantly contributed towards the development of hybrid seeds for rice, sunflower and maize.

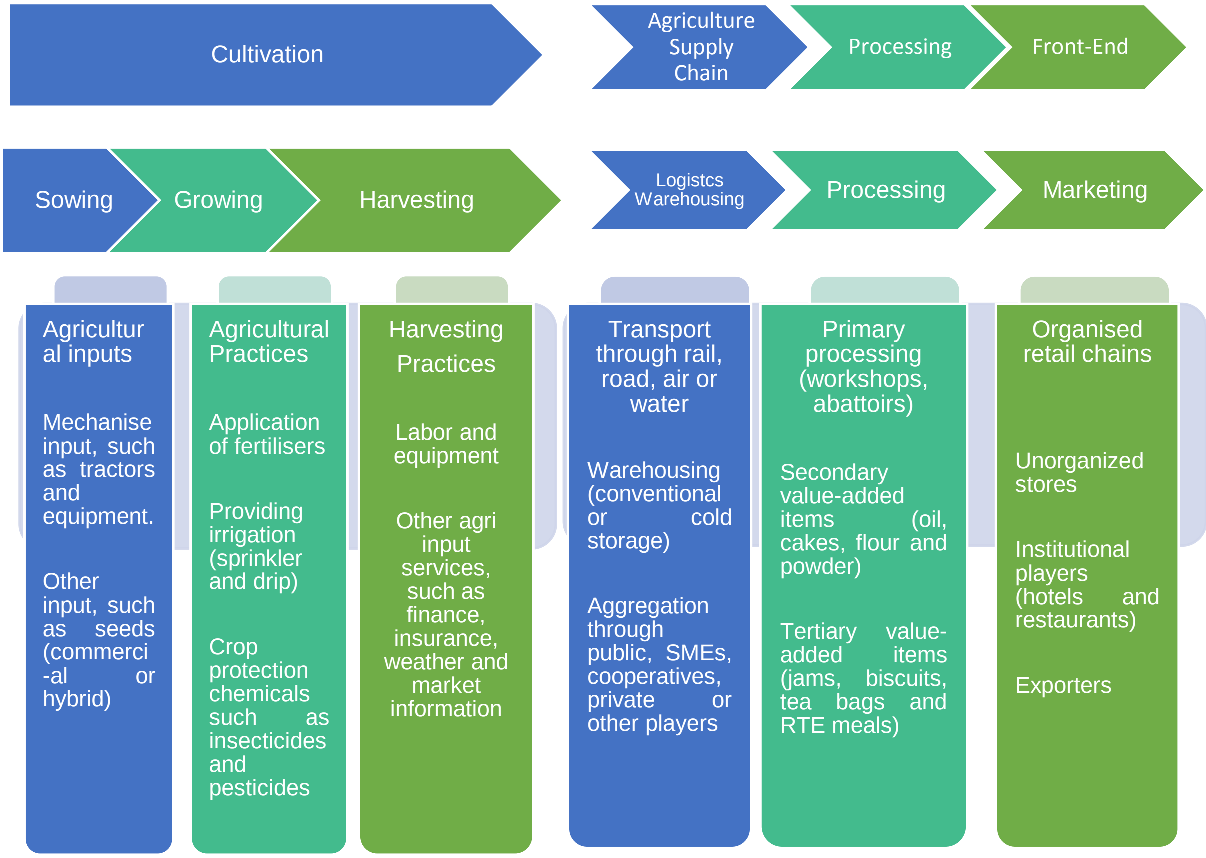
The market for seeds is anticipated to grow at a lower CAGR owing to lower acreage and unfavourable climatic conditions in leading producer states. For instance, sowing area for castor oil seeds was lower in 2013 by around 40% as compared to 2012. Since castor oil seeds market in India is export driven, international buyers have tied up with major companies to procure seeds at fixed prices which are generally lower compared to global standards.

**Table 9: Major Companies in Fertilizers and Seeds Market, By Revenues, 2013-14 (USD Billion)**

| Companies | Revenues (USD Billion), 2013-14 |
|---|---|
| Coromandel International | 1.56 |
| National Fertilizers Limited | 1.34 |
| Chambal Fertilisers and Chemicals Limited | 1.33 |
| Rashtriya Chemicals and Fertilizers Limited | 1.15 |
| Mangalore Chemicals and Fertilizers Limited | 0.55 |
| FI Industries | 0.31 |
| Rallis India | 0..27 |
| Meghmani Organics Limited | 0.15 |

*Source: Company Annual Reports*

## 6.3. Value Chain




# 7 Investment Landscape

The government of India has been extensively involved in the investments and promotions of various segments in food processing industry so as to strengthen the domestic market and increase exports of processed products.

One of the major investment proposals made by the Government of India is the development of mega food parks. The implementation of food parks projects has been divided in three phases.

**Table 10: Status of Implementation of 40 Mega Food Park Projects as on 31.03.2014**

| S.NO | Name | Project Cost (USD Million) | Date of Final Approval | Amount of Grant Approved (Million) | Amount of Grant Released (Million) | Actual Expenditure (Million) |
|---|---|---|---|---|---|---|
| 1. | Srini Food Park Pvt Ltd, Andhra Pradesh | 19.19 | 27.03.09 | 8.21 | 7.38 | 19.74 |
| 2. | Patanjali Food & Herbal Park Uttarakhand | 15.60 | 27.03.09 | 8.21 | 7.38 | 12.02 |
| 3. | North East Mega Food Park Ltd. | 12.47 | 27.03.09 | 8.21 | 4.92 | 5.80 |
| 4. | Jharkhand Mega Food Park | 18.70 | 27.03.09 | 8.21 | 2.46 | 4.34 |
| 5. | Jangipur Bengal Mega Food Park Pvt Ltd. West Bengal | 21.77 | 16.03.10 | 8.21 | 7.38 | 14.41 |
| 7. | Karnataka Food Park Pvt Ltd, | 23.69 | 27.03.11 | 8.21 | 6.42 | 11.65 |
| 8. | International Mega Food Park | 21.40 | 25.05.11 | 8.21 | 7.39 | 13.56 |
| 9. | M/s Paithan Mega Food Park Ltd. | 20.44 | 08.03.13 | 8.21 | 0.82 | 1.24 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **10.** | M/s Shaktiman Mega Food Park Pvt. Ltd., Jagdishpur, Uttar Pradesh | 27.67 | 27.03.09 | SPV has been granted extension till 2014 | | |
| **11.** | M/s Keventer Food Park Infra Ltd., Bhagalpur, Bihar | 24.261 | 30.11.11 | 7.88 | 0.79 | 0.52474 |
| **12.** | M/s Sikaria Mega Food Park Pvt. Ltd., Agartala, Tripura | 13.780 | 30.11.11 | 7.88 | 3.28 | 4.491018 |
| **13.** | M/s Anil Mega Food Park Pvt. Ltd., Vadodara, Gujarat | 22.329 | 13.01.12 | SPV has withdrawn from the project and has been asked to refund the grant amount with interest | | |
| **14.** | M/s MITS Mega Food Park Ltd., Rayagada, Orissa | 12.633 | 16.04.12 | 7.88 | 0.79 | 0.86 |
| **15.** | M/s Indus Best Mega Food Park Pvt. Ltd., Raipur, Chhattisgarh | 20.123 | 27.08.12 | 7.88 | 4.73 | 10.42 |
| **16.** | M/s Indus Best Mega Food Park Pvt. Ltd., Raipur, Chhattisgarh | 19.683 | "In-principle" approval has been accorded | | | |
| **17.** | M/s Raipur Mega Food Park Ltd., Raipur, Chhattisgarh | 20.430 | "In-principle" approval has been accorded | | | |
| **18.** | M/s RFK Greens Food Park Pvt. Ltd., Pulwama, Jammu & Kashmir | 12.767 | 19.02.14 | 7.88 | NIL | NIL |
| **19.** | M/s Soma New Towns (P) Ltd., Sirsa, Haryana | 23.177 | "In-principle" approval accorded to the project has been cancelled | | | |
| **20.** | M/s Greentech Mega Food Park Pvt. Ltd., Ajmer, Rajasthan | 17.824 | 19.02.14 | 7.88 | NIL | NIL |
| **21.** | M/s Chakranemi Infrastructure Pvt. Ltd., Abhishekhpakkam , Puducherry | 23.620 | "In-principle" approval has been accorded | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **22.** | M/s Godavari Mega Aqua Park Pvt. Ltd., West Godavari, Andhra Pradesh | 18.771 | 16.12.13 | 7.88 | NIL | NIL |
| **23.** | M/s Pristine Logistics & Infraprojects Pvt. Ltd., Khagaria, Bihar | 22.531 | "In-principle" approval has been accorded | | | |
| **24.** | M/s Gujarat Agro Infrastructure Mega Food Park , Surat, Gujarat | 17.066 | "In-principle" approval has been accorded | | | |
| **25.** | M/s Poliyan Mega Food Park Pvt. Ltd., | 15.384 | "In-principle" approval has been accorded | | | |
| **26.** | M/s Satara Mega Food Park Pvt. Ltd., Satara, Maharasthra | 20.841 | "In-principle" approval has been accorded | | | |
| **27.** | M/s Huma Coastal Mega Food Park Pvt. Ltd., Ganjam, Odisha | 18.445 | "In-principle" approval has been cancelled on 19th February, 2014 | | | |
| **28.** | M/s Kanchenjunga Mega Food Park Ltd., South Sikkim, Sikkim | 12.665 | "In-principle" approval has been cancelled on 19th February, 2014 | | | |
| **29.** | M/s Himalayan Food Park Pvt. Ltd., Udham Singh Nagar, Uttarakhand | 19.622 | 23.01.2014 | 7.88 | NIL | NIL |
| **30.** | M/s Bengal Mega Food Park Pvt. Ltd., Jalpaiguri, West Bengal | 17.948 | "In-principle" approval has been cancelled on 19th February, 2014 | | | |
| **31.** | M/s Smart Agro Industries Corporation Pvt. Ltd. | 7.879 | "In-principle" approval has been accorded | | | |
| **32.** | M/s JVL Mega food Park Pvt. Ltd. | 7.879 | "In-principle" approval has been accorded | | | |
| **33.** | M/s Fanidhar Mega Food Park Ltd. | 7.879 | "In-principle" approval has been accorded | | | |
| **34.** | Continental Warehousing Corporation | 7.879 | "In-principle" approval has been accorded | | | |

| | | | |
|---|---|---|---|
| | (Nhava seva) Limited | | |
| **35.** | Himachal Integrated Mega Food Park Pvt. Ltd. | 7.879 | "In-principle" approval has been accorded |
| **36.** | M/s Suyojit Mega Food Park Pvt. Ltd. | 7.879 | "In-principle" approval has been accorded |
| **37.** | M/s Amravati Integrated Mega Food Park | 7.879 | "In-principle" approval has been accorded |
| **38.** | Mizoram Mega Food Park | 7.879 | "In-principle" approval has been accorded |
| **39.** | Uttar Pradesh Mega Food Park Pvt. Ltd. | 7.879 | "In-principle" approval has been accorded |
| **40.** | M/s Maharashtra Mega Food Park Pvt. Ltd | 7.879 | "In-principle" approval has been accorded |

*Source: MoFPI*

Besides these investments, other significant investments/proposals of investments that have been made are:

**1**. The government of India has arranged a USD315.15 million corpus for NABARD to enable lending to food processing units at a lower interest rate. This fund can be availed by food chain units, and also for development of infrastructure in mega food parks.

**2.** GCMMF also known as "AMUL" is planning to invest around USD800 million towards the setting up of ten new processing plants. The investment also involves the expansion of current milk production capacity to 32 million liters per day through 2020. Owing to the continuous efforts of the government to introduce state-of-art infrastructure, along with the upgraded technology and machinery, FDI inflows in food processing sector have constantly been surging across various segments. Another major reason for the increasing FDI is the approval of 100% FDI in food processing sector under the automatic route.

## Sector Wise FDI Inflows in Food Processing Sector

**Figure 16: FDI in Beverages, By Value, 2012-2014 (USD Million)**

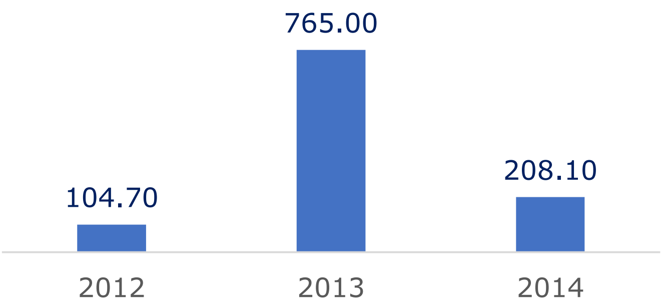
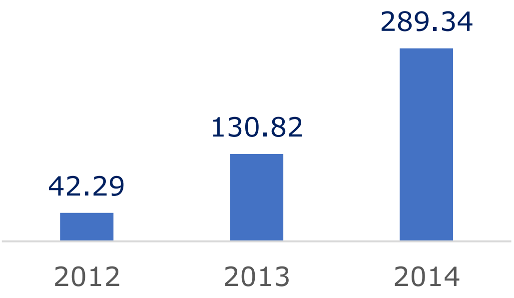



**Figure 17: FDI in Agricultural Machinery, By Value, 2012-2014 (USD Million)**




*Source: Ministry of Commerce and Industry, Govt. of India*

**Figure 18: FDI in Fertilizers & Agri Equipment, By Value, 2012-2014 (USD Million)**


*Source: Ministry of Commerce and Industry, Govt. of India*

# 8 Policy & Regulatory Landscape

100% FDI is allowed in India food processing sector including meat and marine products, agriculture based products and dairy products, except in the following cases:

- Plans that entail an industrial license, and instances where the foreign investment goes beyond 24% equity in the manufacturing of items retained for small-scale industries.
- Instances in which the international collaborator has had a former venture or alliance in India as on January 12, 2005.

Automatic approvals are granted for FDIs and technology transfer in most of the cases. Agri-products based units that are 100% export-oriented are permitted to sell up to 50% in the domestic market. The import duty on capital goods and raw materials for 100% export-oriented units is fully exempted.

To foster the growth of food processing sector in India, various policies and promotions have been formulated:

- **Vision 2015 Action Plan:** The Vision 2015 plan developed by the Ministry of Food Processing Industries (MOFPI), includes escalating the size of the industry, raising the levels of the processing of perishable products from 6% to 20%, and mounting the value addition from 20% to 35%.

- **Agri Export Zones:** 60 fully authenticated Agri Export Zones have been formed to boost the exports of food processing and agricultural products. Till 2005, there were more than 10 laws regulating the food and the food processing sector. These laws established various standards regarding food additives contaminants, food colors, preservatives and labelling. However, in 2006, an integration of these laws, termed as Food Safety and Standards Act, 2006 was passed. Under this act, FSSAI (Food Safety and Standards Authority of India), a government body, was formed for governing food safety regulations in India.

**According to the Food Safety and Standards Act, 2006:**

- It shall be the duty of the Food Authority to regulate and monitor the manufacture, processing, distribution, sale and import of food so as to ensure safe and wholesome food.
- The standards and guidelines in relation to articles of food and specifying an appropriate system for enforcing various standards notified under this Act.
- The limits for use of food additives, crop contaminants, pesticide residues, residues of veterinary drugs, heavy metals, processing aids, myco-toxins, antibiotics and pharmacological active substances and irradiation of food.

- The mechanisms and guidelines for accreditation of certification bodies engaged in certification of food safety management systems for food businesses.
- The procedure and the enforcement of quality control in relation to any article of food imported into India.
- The procedure and guidelines for accreditation of laboratories and notification of the accredited laboratories.

# 9 Recommendations

### Establishment of Industry Accredited Training Centers

- India food processing industry is in vital need of training centers to educate farmers regarding best practices in agriculture, latest equipment, use of hybrid corps and efficient methods of irrigation, so that they are able to improve the yield and reduce the spoilage of crops.

- The dairy plant machinery market would benefit the most from establishment of training centers as there are no skilled personnel at the operational level for handling dairy plant machinery.
- The training centers can be accredited to specialised bodies such as UGC (University Grants Commission) or AICTE which will
- Provide industry defined curriculum to develop skilled manpower.

### Enhance the Sustainability of Supply Chain

- The supply chain scenario in various segments of food processing market is inadequate which ultimately has the tendency of leading to loss in value of the product. In spite of increasing government investments, there is minimal focus on segments such as cold chain and warehousing facilities.
- Alliance of retailers and logistics providers, along with the support of government, has the capacity to enhance supply chain efficiency. Moreover, the government has an important role to play, by introducing various modes of investments to ensure better sustainability of the supply chain.

# Notes

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