FOOD PROCESSING
FEEDING NEW INDIA’S GROWTH STORY
**SECTOR HIGHLIGHTS**

- Ranked 2nd globally in food production
- Ranked 1st in spice production in the world
- Ranked 2nd in world production of fish, as well as in aquaculture
- Ranked 1st in production of horticulture crops globally
- Ranked 1st in milk production in the world
- Ranked 2nd in bovine population

**GROWTH DRIVERS**

**STRONG DOMESTIC DEMAND:**
- Changing lifestyle and food habits
- Increasing disposable income

**SUPPLY SIDE ADVANTAGES:**
- High level of agricultural production - large livestock base, wide variety of crops
- Inland water bodies and long coastline, that help increase marine production

**EXPORT OPPORTUNITIES:**
- Proximity to key export destinations
- Greater integration with the global economy

**PROACTIVE GOVERNMENT POLICY AND SUPPORT**
**KEY SUB-SECTORS OF INTEREST**

**DAIRY**
- Milk production was 187.7 Mn tonnes during 2018-19 — showing an annual growth of 6.46%
- Per capita availability of milk during 2018-19 was 394 grams/day

**Major Milk Producing States:**

<table>
<thead>
<tr>
<th>State</th>
<th>Production ('000 MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uttar Pradesh</td>
<td>30,519</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>23,668</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>15,911</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>15,044</td>
</tr>
<tr>
<td>Gujarat</td>
<td>14,493</td>
</tr>
</tbody>
</table>

**Opportunities:**
- Value added dairy products viz. cheese, smoothies, flavoured milk, custard, yoghurt and other ethnic Indian products
- Bulk milk cooler, mobile milk chiller etc.
- Cattle feed, new veterinary technology, cattle diagnostics services etc.

**FISHERIES**
- Total fish production was estimated to be 13.7 Mn MT during 2018-19
- India’s fish production constitutes about ~7.5% of the global number, as per estimated values of 2018-19
- India’s seafood exports crossed USD 6.7 Bn during financial year 2018-19 – frozen shrimp and frozen fin fish continued to be the flagship export items

**OVERVIEW OF INDIAN FISHERIES**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastline</td>
<td>8,118 Km</td>
</tr>
<tr>
<td>Exclusive Economic Zone</td>
<td>2.02 Mn sq. Km</td>
</tr>
<tr>
<td>Rivers &amp; Canals</td>
<td>0.19 Mn Km</td>
</tr>
<tr>
<td>Brackish Waters</td>
<td>1.24 Mn ha</td>
</tr>
<tr>
<td>Reservoirs</td>
<td>3.15 Mn ha</td>
</tr>
<tr>
<td>Fish Landing Centers</td>
<td>1,537</td>
</tr>
<tr>
<td>Fishing Harbors</td>
<td>7 (major), 75 (minor)</td>
</tr>
</tbody>
</table>

**Major States:**
- The top 5 states in terms of production are: Andhra Pradesh, West Bengal, Gujarat, Karnataka and Kerala
- Inland Fisheries: Andhra Pradesh, West Bengal, Uttar Pradesh, Bihar and Odisha
- Marine Fisheries: Gujarat, Andhra Pradesh, Tamil Nadu, Maharashtra and Kerala

**Opportunities:**
- Most marine exports are currently in the frozen form and there is immense potential for exporting value added products
- Infrastructure development for fishing harbours / landing centres
- Value addition and product development for items such as ready-to-cook, ready-to-eat, canned and frozen goods, etc.

**Vizag, Kochi, Kolkata and Pipavav were the major ports for marine products cargo**
POULTRY AND MEAT PROCESSING

- Total poultry population in India was 851.81 Mn (as per 20th Livestock Census 2019) and egg production was ~103.3 Bn during 2018-19
- Per capita availability is around 79 eggs per annum
- India produces around 7.7 Mn MT of meat and is the largest exporter of sheep and goat meat in the world
- Exported buffalo meat worth USD 3608.72 in 2018-19. Major export destinations were Vietnam, Malaysia, Indonesia, Iraq and Myanmar

Opportunities:
- New technology in meat and poultry processing
- Egg powder plants
- Hatcheries
- New products - value added products such as frozen/chilled goods, RTE/RTE, ethnic products/snacks
- Modern abattoirs

FRUITS AND VEGETABLES

- The total horticulture production of India was estimated to be 313.85 Mn tonnes as per 3rd advanced estimate (2018-19)
- Spices production was estimated to be around 9.22 Mn tonnes

Major Fruits Producing States:

<table>
<thead>
<tr>
<th>State</th>
<th>Production (MMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>17.614</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>10.822</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>10.651</td>
</tr>
<tr>
<td>Gujarat</td>
<td>9.227</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>7.464</td>
</tr>
</tbody>
</table>

Major Vegetable Producing States:

<table>
<thead>
<tr>
<th>State</th>
<th>Production (MMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uttar Pradesh</td>
<td>26.3</td>
</tr>
<tr>
<td>West Bengal</td>
<td>12.8</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>15.6</td>
</tr>
<tr>
<td>Bihar</td>
<td>14.4</td>
</tr>
<tr>
<td>Gujarat</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Opportunities:
- New technology to reduce wastage levels
- Adequate infrastructure (cold chain, processing infrastructure, R&D for processed food, packaging and innovative farm preservation systems)
- Packaging technology for convenience foods
- Processed fruit-based ingredients for ice cream, yoghurt, beverages
India's food retail market is expected to reach USD 827 Bn by 2023, and is growing at a CAGR of 9.23%.

The food retail market is majorly dominated by Food Grocery (FG) and Food Service (FS) segments.

Organized retail in FS is growing at a CAGR of 15% and modern retail in the FG is growing at a CAGR of 25%.

The growth of the food grocery market is mainly driven by the dry food grocery segment since the products involved are not only consumed in a raw form, but also serve as raw material for food processing.

Other growing segments are spices, perishables, fresh produce, other processed food and beverages.

As it deals with items of everyday consumption, the FG market can never face a shortage of demand, thus resulting in constant growth.

Due to evolving economic demographics and economic growth, India is likely to drive the global food service industry. Some key aspects that drive the demand in this segment are:

- Improving demand metrics of ready-to-eat products
- Impact of technology on the entire food service industry, from sourcing of raw materials to reservations and on-demand delivery
- Online aggregators and third party logistics service providers

Key formats behind the FS market's growth are Quick Service Restaurants (QSRs), Casual Dining Restaurants (CDR), Cafes, Frozen Dessert Parlours, Lounges, Fine-Dining Restaurants, etc.
COLD CHAIN SOLUTIONS

Need for integrated cold chain and feasible cold chain solutions is critical in India. Gaps identified by the National Center for Cold Chain Development (NCCD) –

- Cold Storage Capacity  –  3.2 Mn MT
- Packhouses  –  69,000
- Refer Vehicles  –  50,000+
- Ripening Chambers  –  8,000+

According to a study by the Central Institute of Post-harvest Engineering and Technology (CIPHET), the total harvest and post-harvest losses of agricultural produce in India equal USD 14 Bn

PROCESS FLOW OF COLD CHAIN

Government initiatives to curb wastage in supply chain of agri-food produce:

- Under the Pradhan Mantri Kisan SAMPADA Yojana, Ministry of Food Processing Industries (MoFPI) provides financial aid for setting up integrated cold chain and reservation infrastructure facilities up to a maximum of INR 10 Cr (USD 1.4 Mn) per project
- Ministry of Agriculture launched the Mission for Integrated Development of Horticulture (MIDH) under which cold chain development was given a thrust to ensure the enhancement of horticulture yields for gainful end-use
- Setting up of cold chain infrastructure is assisted by the Agricultural and Processed Food Products Export Development Authority (APEDA), National Horticulture Board (NHB) and the National Centre for Cold Chain Development (NCCD)
- Cold chain projects have been given infrastructure status
- 327 Integrated cold chain and value addition infrastructure projects were approved by MoFPI – 210 are operational as on 31st December 2020

Opportunities:

- Efficient technologies for cold chain system
- Modern pack houses, ripening chambers, bulk coolers, cold distribution hubs etc.
**GOVERNMENT INITIATIVES**

1. **FDI Policy**
   - 100% FDI permitted for food processing
   - 100% FDI under government approval route for trading, including the same through e-commerce, with respect to food products manufactured and/or produced in India

2. **Pradhan Mantri Kisan SAMPADA Yojana**
   - Mega Food Parks
   - Integrated cold chain and value addition infrastructure
   - Creation of infrastructure for agro processing clusters
   - Creation/Expansion of food processing and preservation capacities (Unit Scheme)
   - Creation of backward and forward linkages
   - Food Safety and Quality Assurance Infrastructure
   - Human Resources & Institutions

3. **Nivesh Bandhu**
   - A dedicated investors’ portal aimed at facilitating ease of doing business, and presenting information on incentives and policies on a single platform

4. **Infrastructure Support**
   - 37 Mega Food Parks – 21 Operational
   - 327 Approved Cold Chain Projects – 210 Operational

5. **Operation Greens**
   - A scheme to control the price fluctuation of Tomato, Onion and Potato by promoting Farmer Producers Organisations (FPOs), agri-logistics, processing facilities and professional management etc.

6. **Investor Targeting and Facilitation Desk**
   - Dedicated Investment Targeting and Facilitation Desk (ITFD) at Invest India to assist potential investors in a structured manner, and help frame policies/strategies to sensitise the investment community about opportunities as well as policies
KEY STAKEHOLDERS

GOVERNMENT MINISTRY/DEPARTMENT

- Ministry of Food Processing Industries
- Agriculture and Processed Foods Export Development Authority
- Marine Products Export Development Authority
- Ministry of Agriculture & Farmers Welfare
- Food Safety and Standards Authority of India

RESEARCH INSTITUTIONS

- National Institute of Food Technology Entrepreneurship and Management (NIFTEM)
- Indian Institute of Food Processing Technology (IIFPT)
- Indian Council of Agricultural Research (ICAR)
- Central Marine Fisheries Research Institute (CMFRI)
- Central Food Technological Research Institute (CFTRI)

MEGA FOOD PARKS

Ready Infrastructure

- 37 Approved Mega Food Parks
- 21 Operational Mega Food Parks

* Under MoFPI assistance

All information in this brochure was last updated on Jan 07th, 2021.
HOW WE HELP INVESTORS

- Research Content Provided
- Policy Advisory/Representation
- Stakeholder Meeting
- Site Visits
- Location Analysis
- Issue Resolution
- Regulatory Clearance Facilitation

To find out more:
www.investindia.gov.in/sector/food-processing

Phone No: 011 2304 8101
Email ID: foodprocessing@investindia.org.in

First Floor,
Vigyan Bhawan Annexe,
Maulana Azad Road, New Delhi - 110011