



FOOD AND FOOD PROCESSING INDUSTRY IN INDIA

Food and Food Processing Industry - India Market

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Food & Food Processing Industry – Executive Summary

Economic Growth & Contribution

The food processing sector in India has become a vital contributor to the economy, supported by the Ministry of Food Processing Industries (MoFPI). The sector has grown at an average annual rate of 7.3% from 2015 to 2022, impacting GDP, employment, and investment. The food processing industry represents 32% of India's food market, contributing significantly to manufacturing (8.8%) and agriculture (8.39%).

Urbanization and Food Demand

With 65% of India's population under 35, there is a growing demand for convenience foods due to urbanization and busy lifestyles. Increased disposable incomes are driving higher consumption of processed foods, especially in urban areas.

Investments

The government's schemes like PLIS, PMKSY, and PMFME are boosting infrastructure, supply chain efficiency, and exports in the food processing. The government allows 100% FDI in food processing, Liberalized FDI policies, a large consumer base, and government initiatives are driving foreign investments from companies like Nestle, Pepsi, and Coca-Cola.

Agri-Processing Leadership

India leads global production in milk, eggs, spices, and ranks second in vegetables, fruits, and meat. The sector employs nearly 2 million (Mn) workers in 37,468 registered units, contributing significantly to industrial output and investment. The Southern region, particularly Andhra Pradesh, Tamil Nadu, and Telangana, leads in factory registrations.

Technology

AI, robotics, and machine learning are revolutionizing the agriculture and food processing sectors, enhancing precision farming, manufacturing automation, food safety, and supply chain efficiency.

Exports & Trade

In fiscal year 2023-24, India's agricultural exports totaled USD 48.15 billion (Bn). Key exports include Agri & allied products, rice, coffee, and marine products. Rice exports grew by 15.22% to USD 11.14 bn, accounting for over 20% of total agricultural exports. Coffee exports rose by 12.3%, and marine products reached USD 8.07 bn. The USA, China, UAE, and Saudi Arabia are the largest importers, with the USA importing the most agricultural products at USD 1.26 bn, particularly marine goods.

Outlook

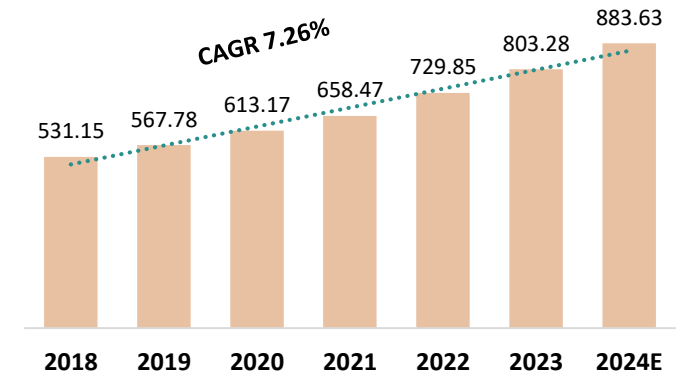
The food processing industry in India is projected to grow at 8-10% annually, with significant expansion in Tier-2 and Tier-3 cities. The organic food market and online food delivery are also expected to grow substantially, while India aims to become a global leader in millet production and exports.

Food & Food Processing Industry – Market Overview, Size & Key Statistics (1/2)

Market Overview and Contribution to Economy & Consumption Pattern

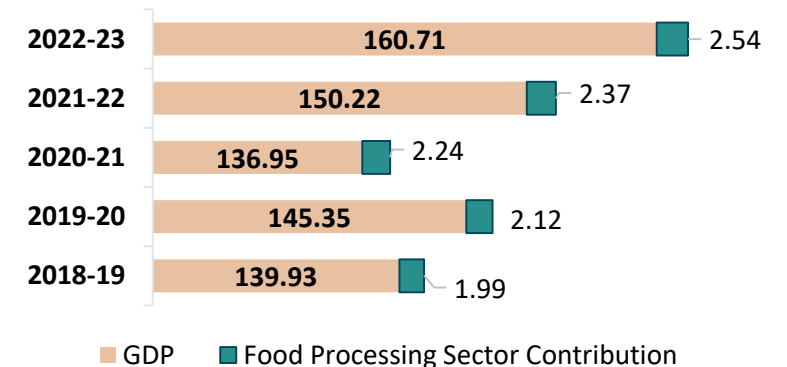
- The food processing sector has emerged as a significant contributor to India's economy in recent years, fueled by forward-looking policy initiatives from the MoFPI and the Government of India
- The food processing industry represents 32% of the total food market, making it one of the largest sectors in India. It ranks fifth in terms of production, consumption, and exports. The industry contributes approximately 8.80% to the GVA (Gross Value Added) in manufacturing and 8.39% in agriculture. Sector accounts for 13% of India's exports and 6% of total industrial investment
- India leads the world in milk production, contributing about 25% of global output in 2022-23. Milk production has grown at a Compound Annual Growth Rate (CAGR) of 5.85% from 2014-15 to 2022-23
- The country is also the second-largest producer of eggs and ranks fifth in meat production globally. Egg production has increased at a CAGR of 7.35% annually, while meat production has grown by 4.3% over the past eight years, up to 2022-23
- India is the second-largest producer of vegetables and fruits, with horticultural production estimated at 205,799 thousand tons in 2023-24
- India remains the world's largest producer of spices, with an output of 11 Mn tons of major spices in 2023-24, as per the third advanced estimate from the Spices Board of India. Over the past eight years, the food processing sector has grown at an average annual rate of approximately 5.35%
- The contribution of the food processing sector to the overall GDP has risen by 27% over the past five years till 2023
- Indian consumer spending pattern – In the 2022-2023 period, food remained the largest category of expenditure among Top 5 spending items, accounting for 27.8% of spending. It was followed by transport services at 9.3%, gross rentals for housing at 9.2%, operation of transport equipment at 6.8%, and bread, cereals, and pulses at 6.3%

Market Size - India Food & Food Processing Industry Total Revenue (USD Bn)



Source: Statista Market Insights.

Contribution of Indian Food Processing Sector to GDP (Rupees Lakh Crores)



Sources: Niti Aayog, RBI, MoFPI.

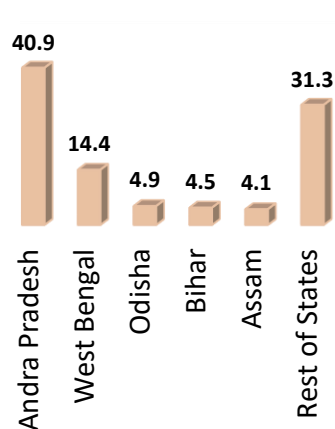
*Note – Constant (Real) GDP is considered in the above chart.

Food & Food Processing Industry – Market Overview, Size & Key Statistics (2/2)

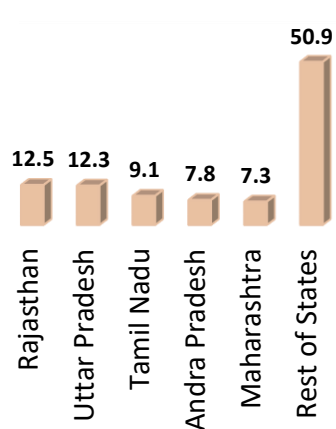
- This food processing sector is also a significant source of employment, offering jobs to nearly 2 Mn workers across approximately 37,468 registered units. These units collectively have a fixed capital investment of USD 32.85 bn and generate a total output valued at USD 160 bn
- According to the most recent data from the Annual Survey of Industries (ASI) (2021-22), the food processing sector represented 15.9% of the total number of factories, 16.7% of the operational factories, 11.4% of the workforce, and 14.1% of the output
- As per ASI, The Southern region of India leads the food processing sector in terms of geographical distribution, housing the highest number of registered factories. Andhra Pradesh holds approximately 14.3 percent of these factories, followed by Tamil Nadu with 12.7 percent and Telangana at 9.6 percent. Ongoing efforts to improve the ease of doing business are anticipated to greatly boost investor confidence and promote sustainable growth in the industry

*Note – Data as of 2021-22 as per ASI for registered food processing units

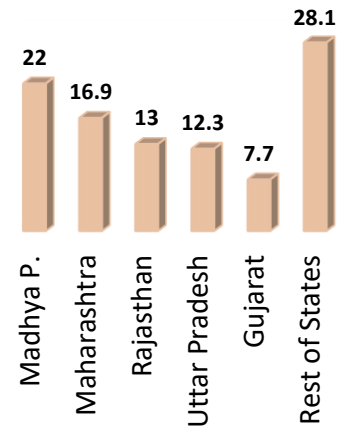
Top 5 States Fishing Output % Share - 2023



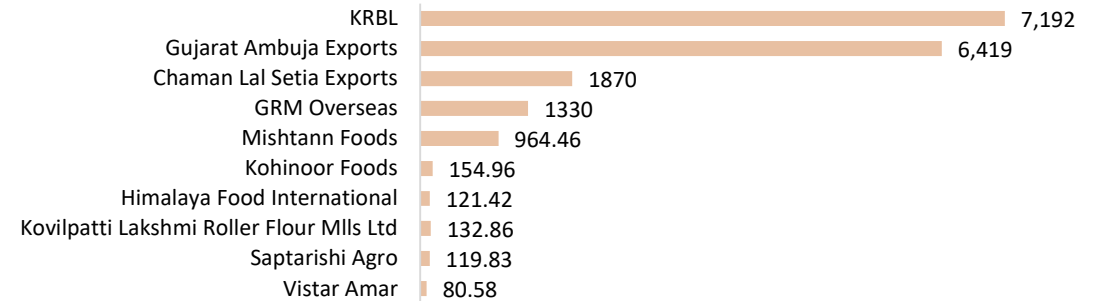
Top 5 States Livestock Output % Share - 2023



Top 5 States Pulses Output % Share - 2023



Leading Food Processing Companies In India (INR Crores)



Sources: Statista, NSE, BSE.

*Note: The list is Non-exhaustive and considers public listed companies, Based on market capitalization as of December 2024.

Commodity Production 2022-23 (Tons Mn)	
Cereals	292.4
Wheat	109.3
Rice (paddy)	129.9
Pulses	26.3
Groundnut	10.2
Sugarcane	445.1
Jute	9.2 million bales
Fruits	106.7
Vegetables	207.4
Milk	220.6
Eggs	130 bn

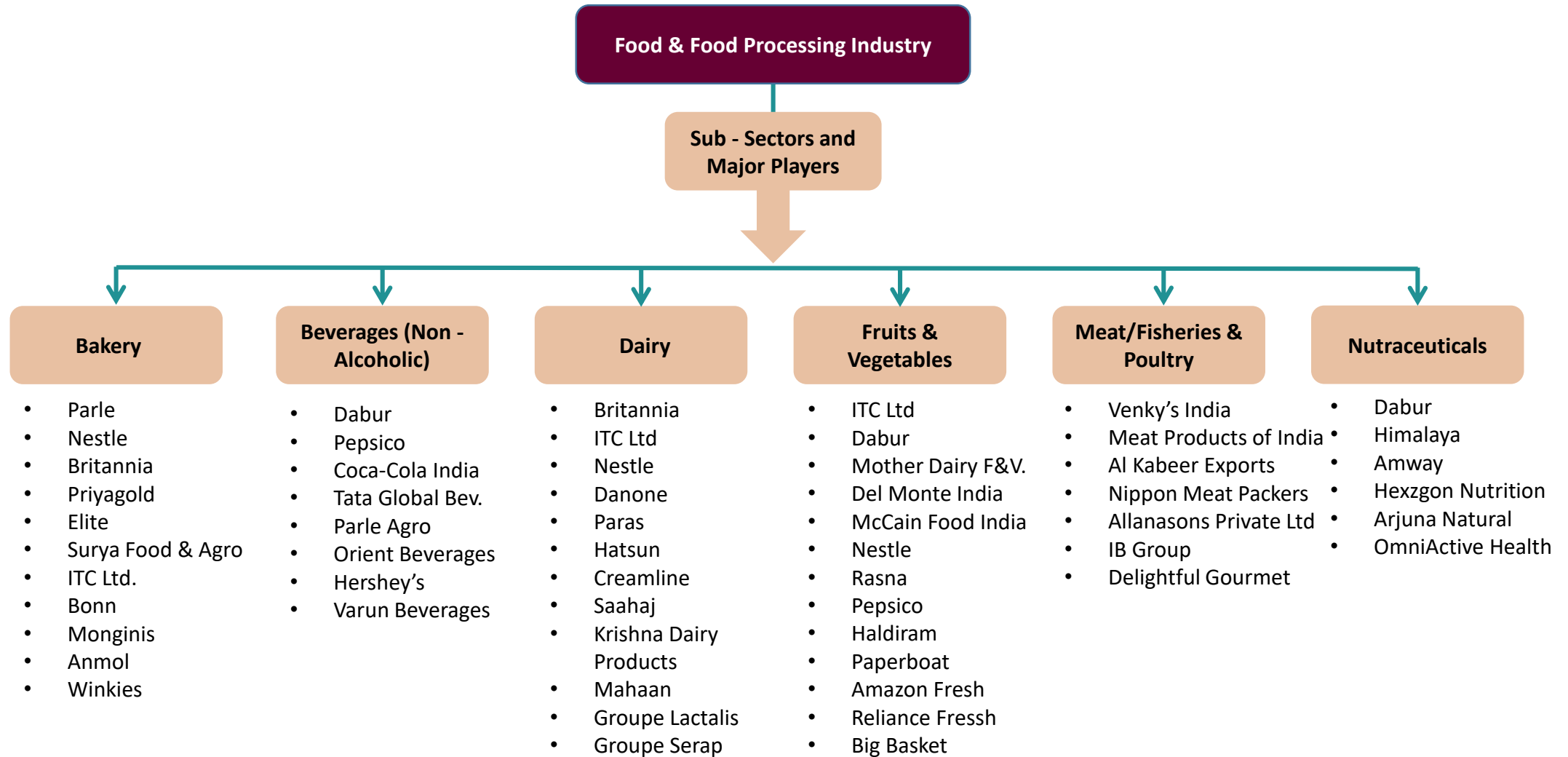
State	*Registered Food Processing Units	% Share
Andhra Pradesh	5348	14%
Tamil Nadu	4764	13%
Telegana	3598	10%
Punjab	3200	9%
Maharashtra	2509	7%
Gujarat	2338	6%
Karnataka	2249	6%
Uttar Pradesh	2083	6%
Rest of States	11379	30%

Sources: CII, Annual Survey of Industries, 2021-22, MoSPI.

*Note – Data as of 2021-22 as per ASI for registered food processing units.

Food & Food Processing Industry – Structure and Market Segment

The food processing sector in India is characterized by its diverse structure, which includes various sub-sectors that cater to different consumer needs and preferences. This diversity not only enhances the sector's resilience but also reflects the country's vast agricultural base.



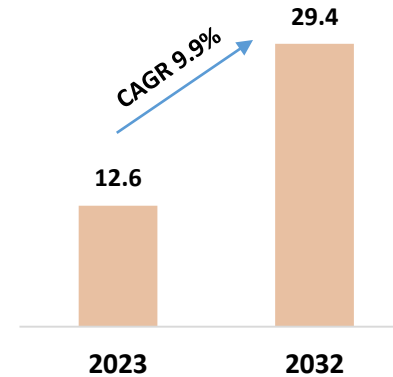
Food & Food Processing Industry – Bakery

Market Overview & Size, Key Factors leading to Growth

- The Indian bakery market size reached USD 12.6 bn in 2023. As per estimates the market is expected to reach USD 29.4 bn by 2032, exhibiting a CAGR of 9.9% during 2023-2032
- The growing population in India is driving an increased demand for bakery products, with rising consumption of bread, biscuits, and FMCG items contributing significantly to market growth. The expansion of the food and beverage industry, along with the rise of quick-service restaurants and fast-food chains, is further boosting the use of bread in sandwiches, soups, burgers, and snacks
- Additionally, hectic lifestyles and changing dietary patterns are fueling the demand for ready-to-eat bakery products. As health awareness rises, manufacturers are introducing healthier options such as low trans-fat, multi-grain, and whole wheat products
- The growth of hypermarkets, supermarkets, and convenience stores is creating new opportunities for manufacturers, while the thriving e-commerce sector, with its doorstep delivery, online payment options, and exciting offers, is further propelling market expansion
- Leading market players are investing heavily in research and development to launch innovative and improved bakery products, enhancing the overall market outlook

Source: MoFPI.

India Bakery Market (USD Bn)



Major Players

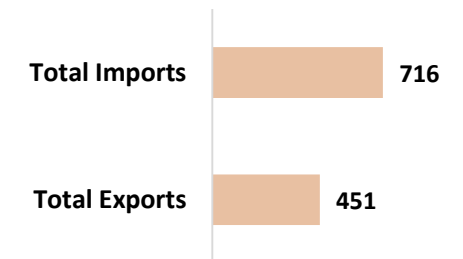
- Parle
- Nestle
- Britannia
- Priyagold
- Elite
- Surya Food & Agro
- ITC Ltd.
- Bonn
- Monginis
- Anmol
- Winkies

Source: MoFPI.

Bakery Manufacturing Clusters

- Delhi
- Uttar Pradesh
- West Bengal
- Gujarat
- Maharashtra
- Telegana
- Andra Pradesh
- Karnataka
- Tamilnadu
- Kerala

Bakery Market Trade 2022 – 2023 (USD Bn)

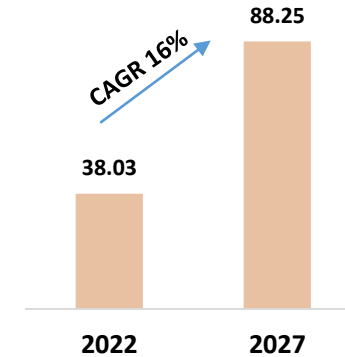


Food & Food Processing Industry – Beverages (Non- Alcoholic)

Market Overview & Size, Key Factors leading to Growth

- The market for non-alcoholic beverages in India was valued at USD 38.3 bn in 2022, reflecting a CAGR of 16.9% from 2017 to 2022. It is projected to grow to USD 88.25 bn by 2027
- India, being the second-largest producer of a variety of fruits and vegetables globally, possesses a natural advantage in the non-alcoholic beverage industry, due to the abundance of raw materials. These raw materials are essential in the production of various popular beverages in the Indian market, including carbonated soft drinks, sports drinks, tea, coffee, fruit juices, dairy substitutes, pulp-based concentrates, and bottled water
- Demographics: The middle class in India has been growing at 6.3% per year between 1995 and 2021. As of 2021, the middle class represents 31% of the population. By 2031, it is expected to be 38%, and by 2047, it is projected to reach 60%
- Population Size: By the time India turns 100 years old, more than one billion Indians will be part of the middle class. Urban population in 2008 was approximately 340 Mn. Urban population in 2030 is expected to soar to 590 Mn. Cities are projected to generate 70% of net new jobs by 2030 and produce around 70% of Indian GDP
- Per Capita Income: Urbanization is expected to drive a nearly fourfold increase in per capita incomes across India
- Market consumption volume for soft drinks increased with a CAGR of 7.3% between 2017 and 2022, to reach a total of 43,233 Mn litres in 2022, the market volume is expected to reach to 64,854 Mn liters by 2027 representing CAGR of 8.4% for the 2022 – 2027 period

India Beverages Market (USD Bn)



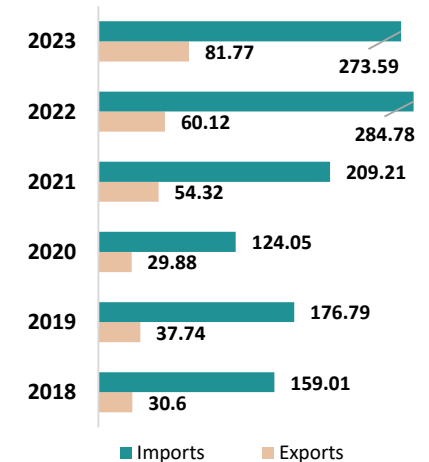
Major Export Markets

- UAE
- United States
- Nepal
- Netherlands

Major Players

- Dabur
- Pepsico
- Coca-Cola India
- Tata Global Beverages
- Parle Agro
- Orient Beverages Ltd
- Hershey's
- Varun Beverages

India Beverages Market Trade (USD Mn)



*Note: India Beverages = Non-Alcoholic Beverages Market. CAGR based on historic growth rate between 2017 -22.

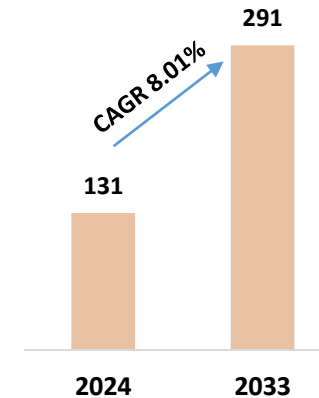
Sources: MoFPI, DGCI, ITC Trade Map.

Food & Food Processing Industry – Dairy

Market Overview & Size, Key Factors leading to Growth

- Dairy is high priority sector for Government of India due to its socio economic significance, it is single largest commodity contributing 5% to the national economy and employing more than 80 Mn farmers directly
- Total milk production in the country reached 231 million metric tons (MMT) during 2022 – 23
- Dairy products consumed in India comprised of clarified butter, cheese flavored milk, milk derivatives: whey proteins, infant food, value added products: ice creams, desserts, yoghurts, fresh cream, condensed milk
- Globally, the demand for higher processed dairy product like cheese will remain high in the European Union and United States, The cheese market size in United States is estimated to reach 5.6 MMT by 2028. Similarly developing economies in Africa and Asia are estimated to lead high demand for skimmed milk powder which puts Indian dairy processing sector on very optimistic cusp of opportunities
- Demand for dairy products in India is largely driven by household demand which generated 68.6 of total demand in last few years, Liquid milk (pasteurized and homogenized) formed the largest product category of dairy consumption in India
- Key factors growth fueling growth are country's favorable demographics, rising disposable incomes, demand for healthy food supplements and consumer preferences for dairy products
- The Indian cheese market was valued at INR 88.9 bn in 2023 and is estimated to expand at CAGR of 21.47% from 2023 to 2032, projected to reach INR 512.1 bn

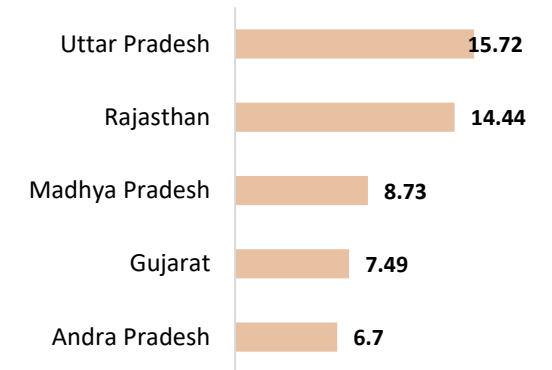
Dairy Market (USD Bn)



Major Players - Private

- Britannia
- ITC Ltd
- Nestle
- Danone
- Paras
- Hatsun
- Creamline
- Saahaj
- Krishna Dairy Products
- Mahaan
- Groupe Lactalis
- Groupe Serap

Top 5 Milk Producing States % Share*



*Note: List mentions top 5 states with largest contribution (2022-23).

Major Players - Top Cooperatives

- Amul
- Nandini
- Parag
- Mother Dairy
- Sudha
- Sanchi
- Verka
- Gokul
- Snow Cap

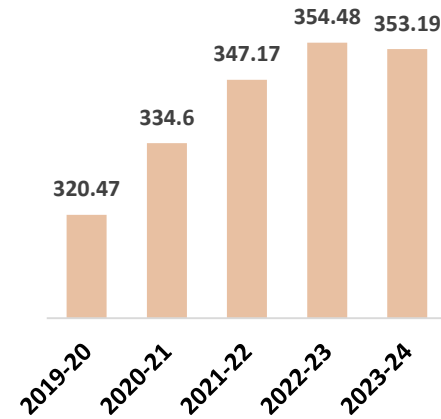
*Note: Top Cooperatives list is not exhaustive.

Food & Food Processing Industry – Fruits & Vegetables

Market Overview & Size, Key Factors leading to Growth

- India is positioned as one of the largest producer of horticulture including fruits and vegetables
- According to estimates, the total horticulture production for 2023-24 reached 353.19 Mn tons
- In 2022-23, India exported fresh fruits and vegetables valued at USD 1,635.95 Mn, including fresh fruits worth USD 770.70 Mn and vegetables worth USD 865.24 Mn
- In 2023-24, India exported fresh fruits and vegetables worth USD 1814.58 Mn.
- The global demand for processed fruit and vegetable products as dietary staples is expected to grow across all regions. This shift in consumer behavior is driven by the influence of Western dietary habits, a rising population, and rapid urbanization. Additionally, the increasing preference for organic and vegan products offers a promising opportunity for producers in emerging economies like India

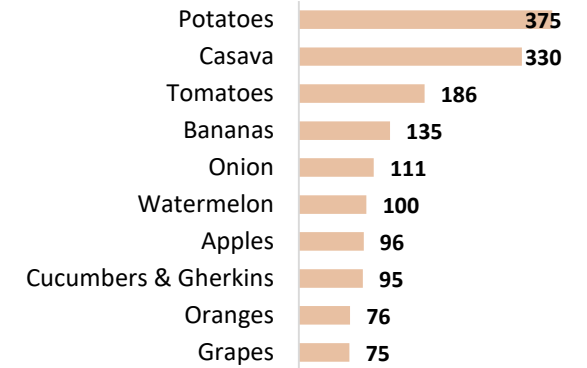
India - Horticulture Production (Million Metric Tons)



Major Players Engaged in Processed Fruits & Vegetables

- ITC Ltd
- Dabur
- Mother Dairy Fruit & Vegetable
- Del Monte India
- McCain Food India
- Nestle
- Rasna
- Pepsico
- Haldiram
- Paperboat

Global Top 10 Commodities – Production (Million Tons)



Top States – Processing Capacities of Fruits & Vegetables

- Andra Pradesh
- Tamil Nadu
- Maharashtra
- Gujarat
- Karnataka
- Rajasthan

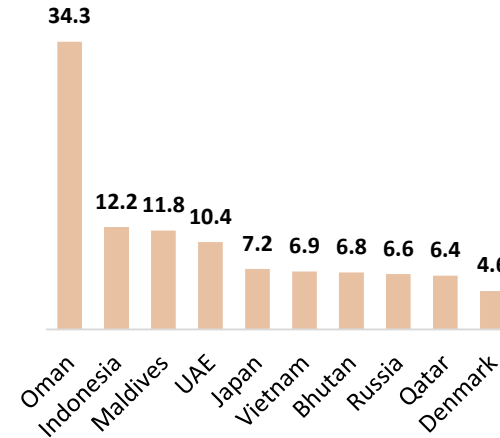
**Note: Commodities Production Data as of 2022..
Source: MoFPI.*

Food & Food Processing Industry – Meat/Fisheries & Poultry

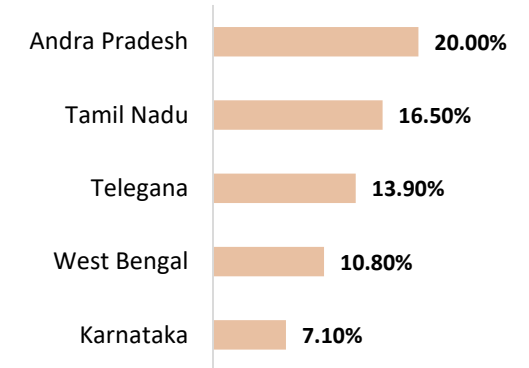
Market Overview & Size, Key Factors leading to Growth

- India holds the largest livestock population globally, with an annual meat production estimated at 9.77 Mn tons. In 2022–23, egg production in the country is estimated at 142.77 bn in 2023 - 24
- The poultry industry in India is vertically integrated and functions with efficiency comparable to that of many western countries. The Indian edible meat market is currently valued at approximately USD 14.4 bn in 2024 and is anticipated to grow to USD 16.1 bn by 2029
- Meat production in India has largely been unorganized; however, the country has witnessed the emergence of a few organized players in recent years
- The growth in the consumption of processed meat and poultry products is driven by several factors, including demographics, urbanization, income levels, food prices, traditions, cultural norms, and concerns about ethics and health. Economic growth also plays a key role in boosting consumption, as meat products tend to be expensive
- The total value of meat and poultry exports from India was estimated USD 3.9 bn in 2022 - 23
- The fish production reached an all-time high of 174.45 lakh tons MMT during FY 2023-24 accounting for 8% of global production. Total exports of Marine products reached USD 7.37 bn in 2023 -24. Andhra Pradesh is the leading fish producer in India, followed by West Bengal

Top Export Market 2022 - 23 (USD Mn)



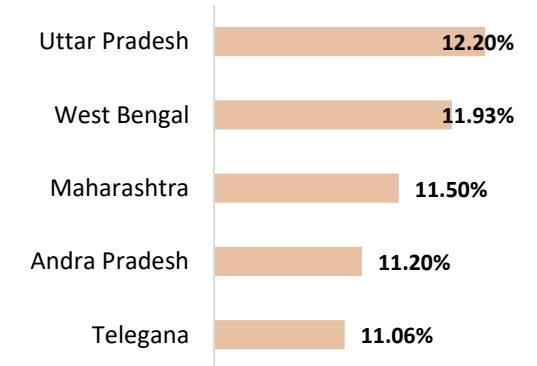
Top 5 Egg Producing States % Share – 2023 - 24



Major Players Engaged in Processed Meat & Poultry

- Venky's India
- Meat Products of India Ltd
- Al Kabeer Exports
- Nippon Meat Packers
- Allanasons Private Ltd
- IB Group

Top 5 Meat Producing States % Share



**Note: Meat & Egg Production data as of 2022..
Sources: DGCI, MoFPI.*

Food & Food Processing Industry – Nutraceuticals

Market Overview & Size, Key Factors leading to Growth

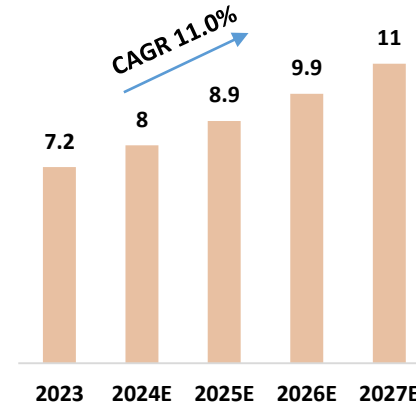
The Asia Pacific region, the largest global market for nutraceuticals, is likely to achieve a growth rate of 7% CAGR between 2023 to 2033. In India, the market is valued at USD 8 bn and is expected to grow at a CAGR of 11% from 2023 to 2027. India holds a significant share, contributing 20% to the regional revenue from nutraceutical products, with China leading the APAC market.

The Indian nutraceuticals market can be broadly divided into Dietary Supplements and Functional Foods. This includes vitamins, minerals, amino acids, herbal extracts, and foods fortified with additional nutrients.

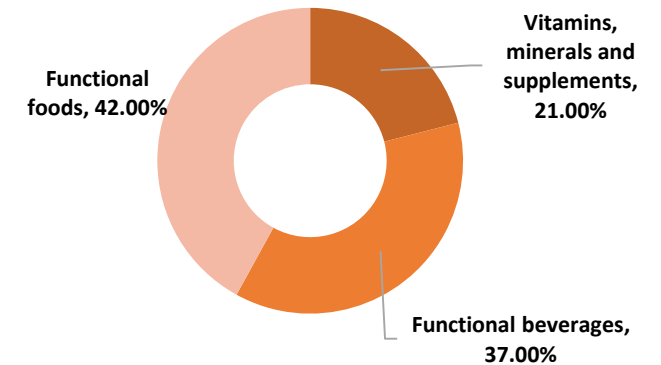
Key drivers include:

- **Increased Health Awareness:** The pandemic has heightened consumer focus on health, leading to a surge in demand for immunity-boosting products such as vitamins and herbal supplements
- **Shift in Consumer Behavior:** Consumers are moving away from curative treatments and focusing more on preventive care, favoring functional foods and dietary supplements
- **Regulatory Support:** The Food Safety and Standards Authority of India (FSSAI) is reinforcing regulations for nutraceuticals, which is expected to attract foreign investment and improve product quality

India Nutraceuticals Market (USD Bn)



Nutraceutical Market Segment % Share 2024



Major Players Engaged in Nutraceuticals

- Dabur
- Himalaya
- Amway
- Hexzgon Nutrition
- Arjuna Natural
- OmniActive Health

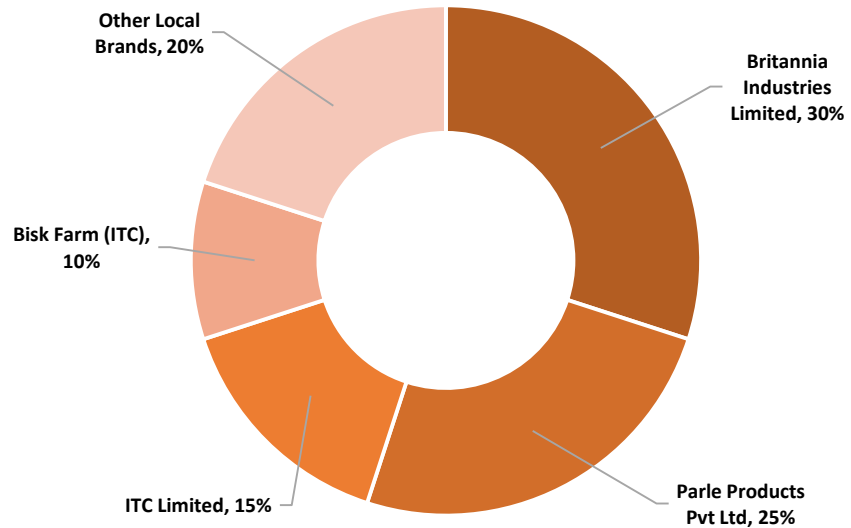
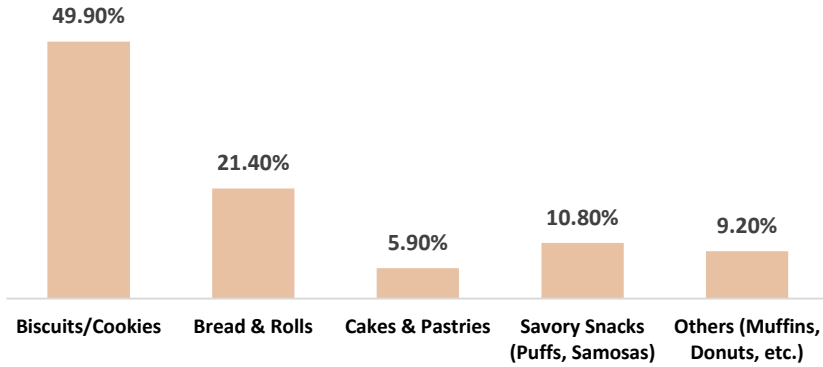
Key Stakeholders

- Ministry of Ayush
- Food Safety & Standards Authority of India (FSSAI)
- Ministry of Food Processing Industries

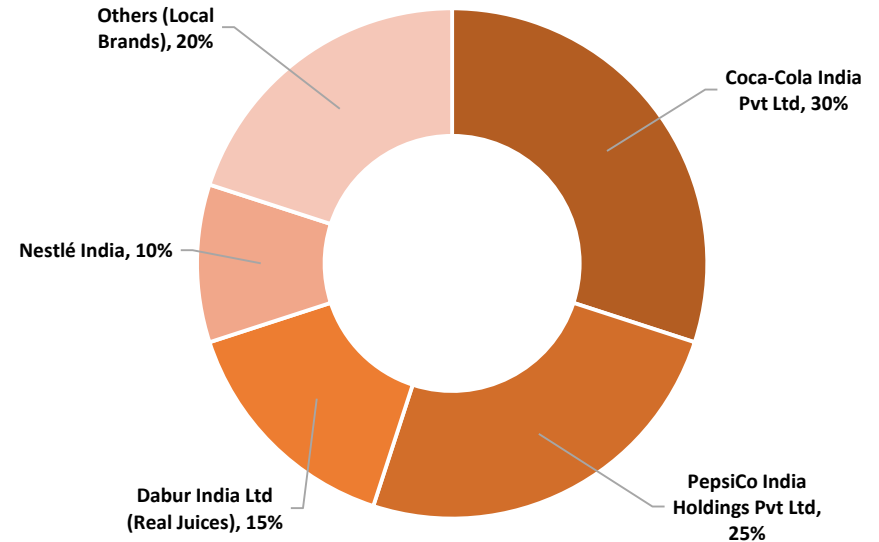
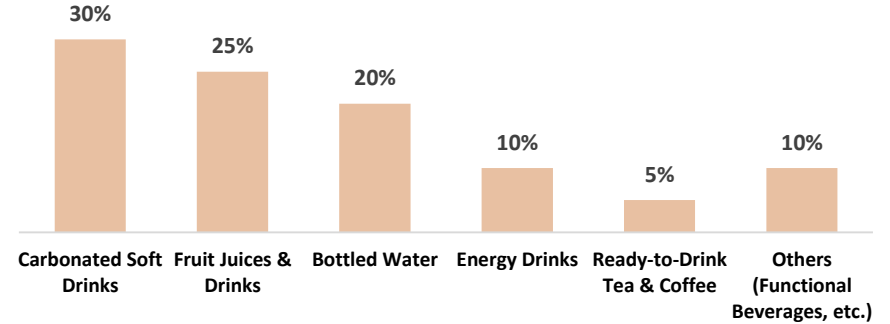
Sources: Euro Monitor, Kearney.

Food & Food Processing Industry – Market Share by Product Segment and Key Players (1/3)

Bakery - India Market Share by Product Segment and Key Players (2022 – 23)



Beverages (Non - Alcoholic) India Market Share by Product Segment and Key Players (2022 – 23)

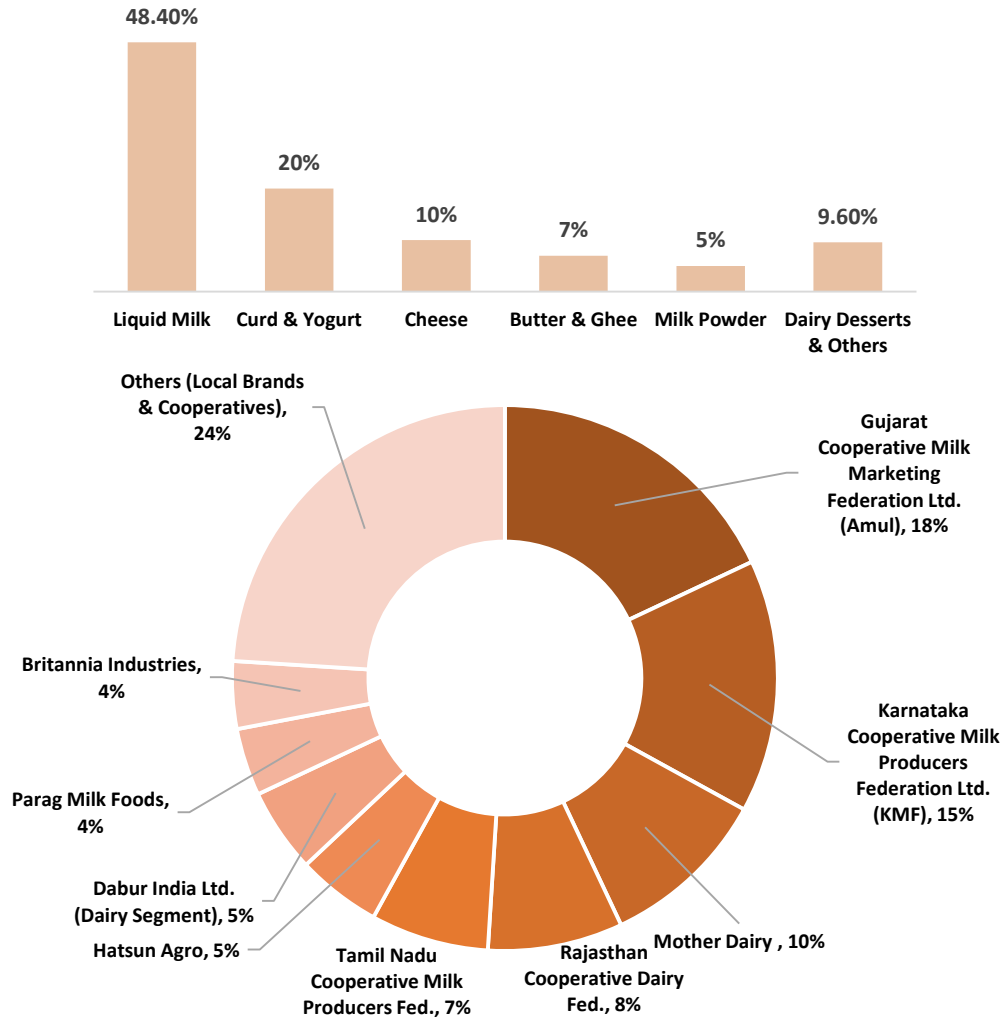


*Note – Data as of 2022 – 23.

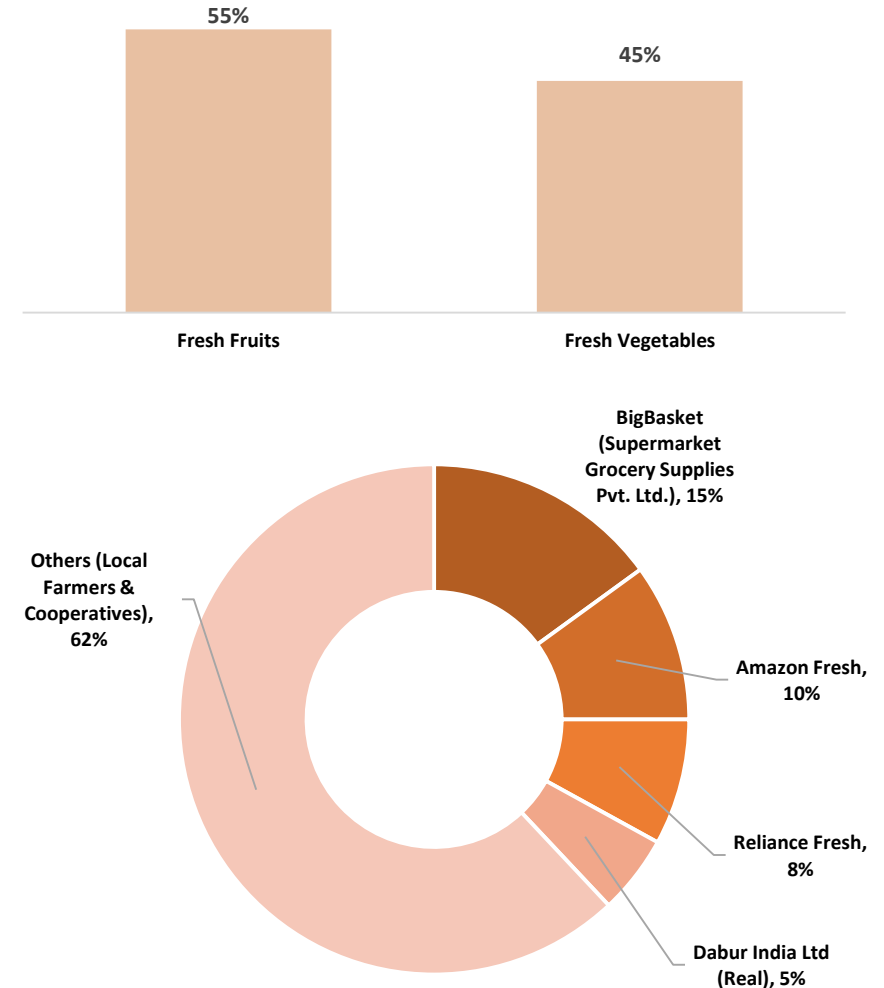
Sources: MoFPI, Blue Wave Consulting, Fortune Business Insights, TechSci Research.

Food & Food Processing Industry – Market Share by Product Segment and Key Players (2/3)

Dairy – India Market Share by Product Segment and Key Players (2022 – 23)



Fruits & Vegetables – India Market Share by Product Segment and Key Players (2022 - 23)

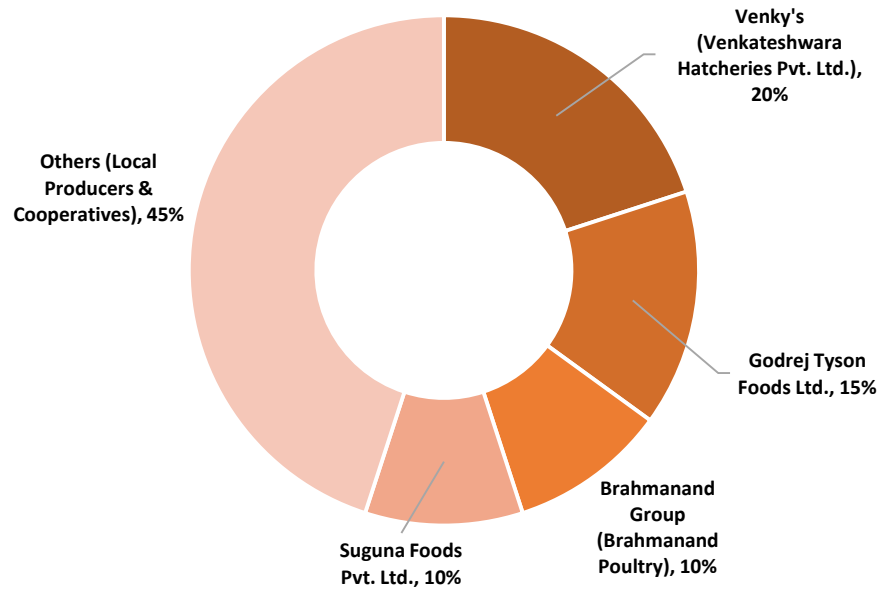
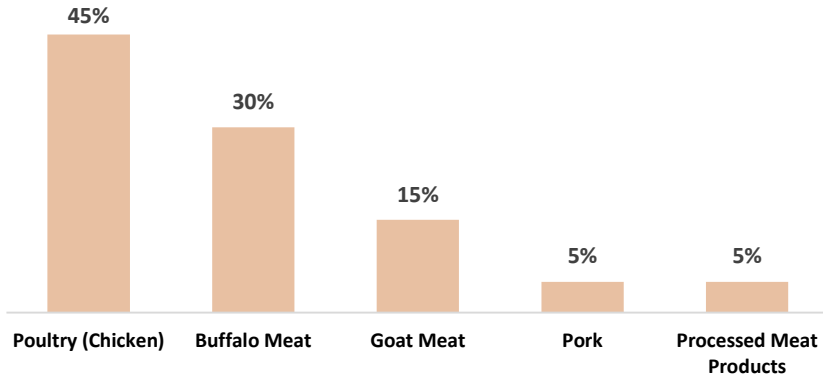


*Note – Data as of 2022 – 23.

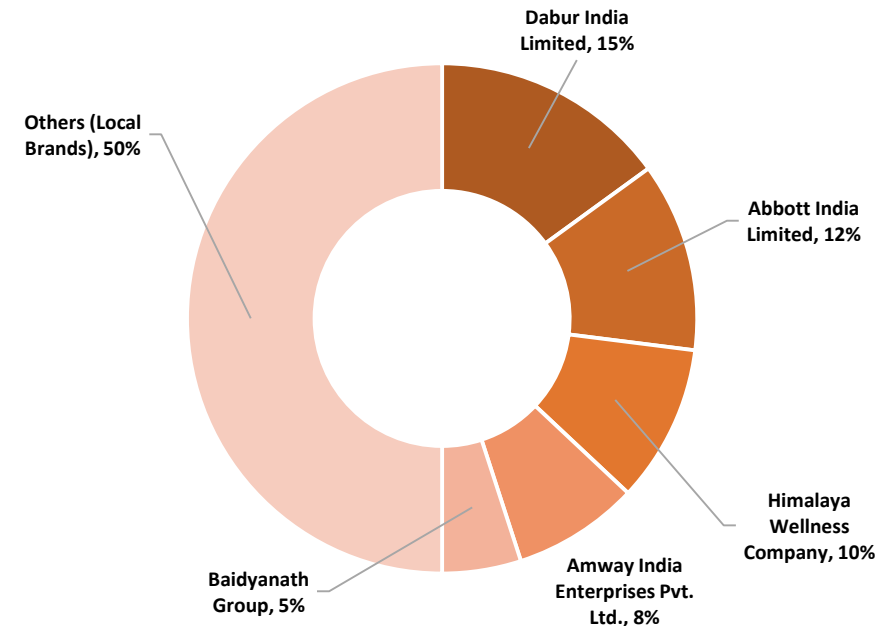
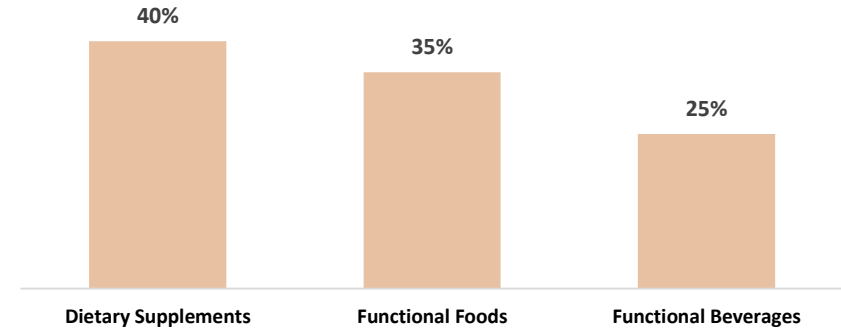
Sources: MoFPI, Blue Wave Consulting, Fortune Business Insights, TechSci Research.

Food & Food Processing Industry – Market Share by Product Segment and Key Players (3/3)

Meat/Fisheries & Poultry
India Market Share by Product Segment and Key Players (2022 – 23)



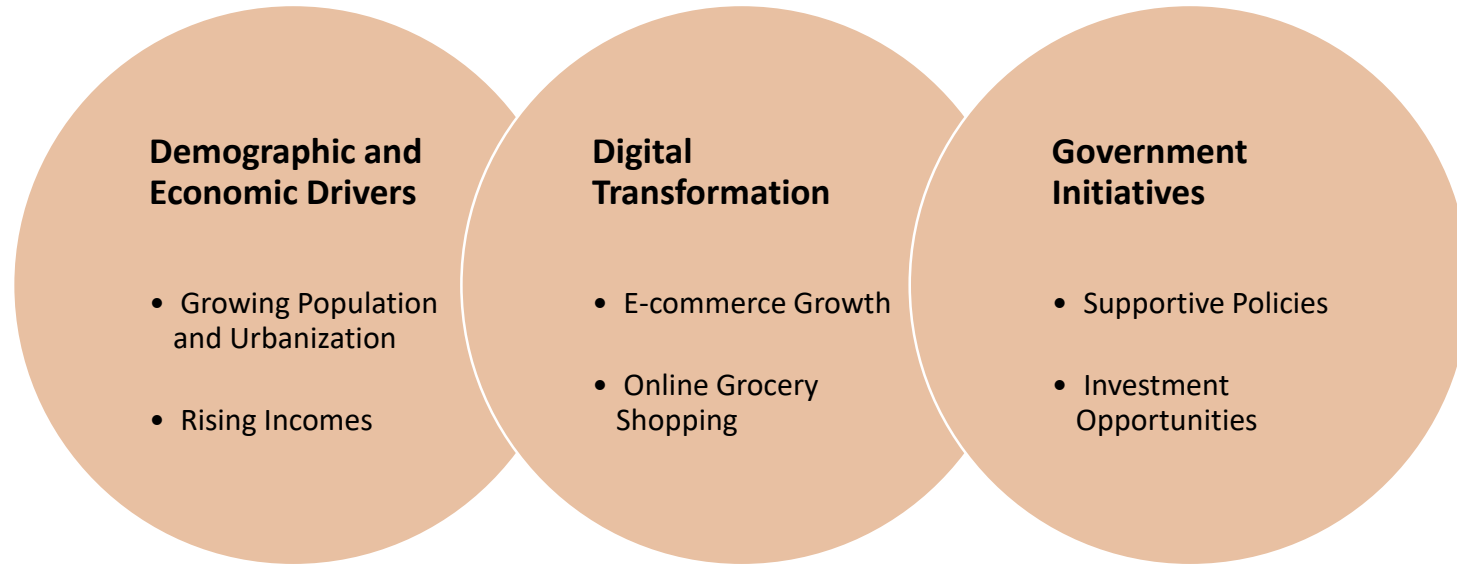
Nutraceuticals
India Market Share by Product Segment and Key Players (2022 – 23)



*Note – Data as of 2022 – 23.

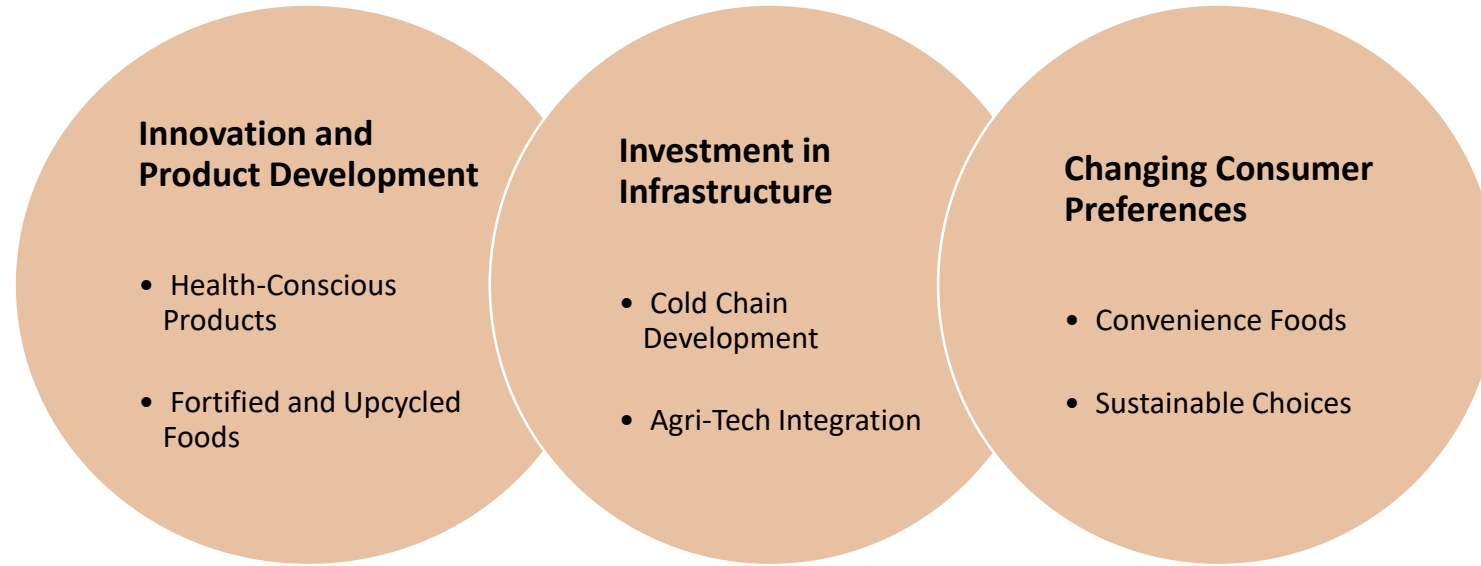
Sources: MoFPI, Blue Wave Consulting, Fortune Business Insights, TechSci Research.

Food & Food Processing Industry – Growth Drivers



- **Growing Population and Urbanization:** With approximately 65% of India's population under 35 years old, there is a shift towards urban lifestyles, increasing demand for convenience foods such as ready-to-eat meals
- **Rising Incomes:** Increased disposable incomes are leading to higher consumption of processed foods, particularly among urban consumers
- **E-commerce Growth:** The digital revolution has transformed the food supply chain, facilitating direct connections between farmers and processors through platforms like Ninjacart. This reduces intermediaries and enhances market access for processed food products
- **Online Grocery Shopping and Food Delivery:** The online food delivery and grocery market is expected to grow exponentially, with a projected increase from USD 2 bn in 2020 to USD 12 bn by 2025
- **Supportive Policies:** The Indian government has implemented various schemes such as the Production Linked Incentive Scheme (PLIS) and the Pradhan Mantri Kisan Sampada Yojana to boost domestic manufacturing and exports in the food processing sector. These initiatives aim to create modern infrastructure and improve supply chain efficiency
- **Investment Opportunities:** The government has allowed 100% FDI in food processing, attracting significant foreign investments from companies like Nestle, which plans to invest Rupees 5,000 crore by 2025

Food & Food Processing Industry – Key Trends



- **Health-Conscious Products:** There is a growing trend towards health-focused and functional foods. Companies are introducing innovative products that incorporate traditional ingredients in modern formats, such as millet-based snacks
- **Fortified and Upcycled Foods:** The market for fortified products is expanding as consumers become more health-conscious. Additionally, upcycled products are gaining traction as sustainability becomes a priority for consumers
- **Cold Chain Development:** The establishment of cold chain facilities and food processing parks is crucial for reducing post-harvest losses and improving the quality of processed products
- **Agri-Tech Integration:** The rise of agri-tech startups is enhancing agricultural productivity through technology, ensuring a consistent supply of quality raw materials for food processors
- **Convenience Foods:** There is an increasing demand for frozen and ready-to-eat products due to busy lifestyles, particularly in urban areas where cooking time is limited
- **Sustainable Choices:** Consumers are shifting away from refined sugars and highly processed foods towards healthier alternatives such as natural sweeteners and organic products, reflecting a broader trend towards sustainable eating habits

Food & Food Processing Industry – Government Policies & Impact (1/2)

The Ministry of Food Processing Industries through the implementation of schemes supports the development of modern infrastructure and efficient supply chain management from farm gate to retail outlets. These initiatives aim to promote the overall growth of the food processing industry by creating employment opportunities, reducing agricultural produce wastage, increasing processing levels, and boosting the export of processed foods.

Mega Food Park (MFP) Scheme

- The goal of the MFP scheme was to establish a system that connects agricultural produce to the market
- Currently, 24 out of the 41 projects approved under this initiative are operational
- These food parks feature state-of-the-art food processing units and supply chain infrastructure, including collection centers, processing facilities, and cold storage chains. Additionally, they offer developed plots for entrepreneurs within clearly defined agricultural or horticultural zones

Pradhan Mantri Kisan Sampada Yojana (PMKSY)

- PMKSY was launched to create modern infrastructure and efficient supply chains
- A total of 540 projects were approved, with 399 projects completed under this scheme from April 2020 to January 2024
- Through the completed projects, 86.06 lakh metric tons (LMT) of processing capacity and 22.63 LMT of preservation capacity have been created

Integrated Cold Chain and Value Addition Infrastructure Scheme

- The aim of starting this scheme was to establish a seamless cold chain from farm to consumer
- As of October 2023, the scheme led the creation of the following capacities;
 - 10.3 lakh metric tons of cold storage, controlled atmosphere (CA)/modified atmosphere (MA) storage, and deep freezer capacity
 - 335 metric tons per hour of individual quick-freezing (IQF) capacity
 - 175.8 lakh litres per day of milk processing/storage capacity

Production Linked Incentive Scheme for Food Processing Industry (PLISFPI)

- PLISFPI was introduced with the following objectives;
 - Encourage manufacturing support innovative and organic products from small and medium enterprises
 - Promote Indian brands globally
 - The scheme received an allocation of approximately USD 1.3 Bn. The scheme is to be implemented from 2021-22 to 2026-27

PLI Scheme for Millet-based Products (PLISMBP)

- The scheme was launched in 2023 with the goal of making India the global hub for millets
- A budget of USD 120 Mn has been allocated to this initiative

Pradhan Mantri Formalization of Micro Food Processing Enterprises (PMFME) Scheme

- The PMFME scheme provides financial and technical assistance to establish new micro food processing enterprises or upgrade existing ones
- The goal of the scheme is to support two lakh micro food processing enterprises through this initiative
- As of June 30, 2024, a total of 92,549 micro food processing enterprises have received approval for assistance under the PMFME scheme

One District One Product (ODOP) Scheme

- The ODOP programme was launched to foster balanced socio-economic growth across the country by selecting, branding, and promoting one product from each district
- 1,000 products have been identified under this initiative from 760 districts

Food & Food Processing Industry – Government Policies & Impact (2/2)

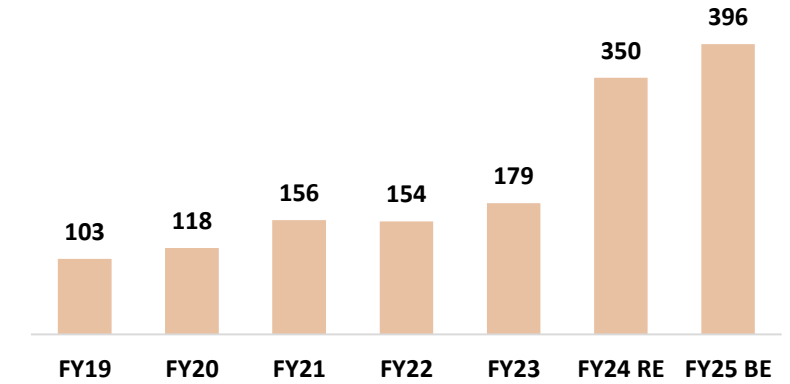
Measures to Boost Investment in the Food Processing Sector by MoFPI

- Exempting all processed food items from licensing requirements under the Industries (Development and Regulation) Act, 1951
- Allowing 100% FDI through the automatic route for the food processing sector, subject to sector-specific regulations
- Permitting 100% FDI, under the Government approval route, for trading, including e-commerce, of food products manufactured or produced in India
- Reducing GST rates for raw and processed food products; over 71.7% of food items under various chapters and sub-heads fall within the lower tax slabs of 0% and 5%

PMFME Scheme and Impact across States (2023 – 24)

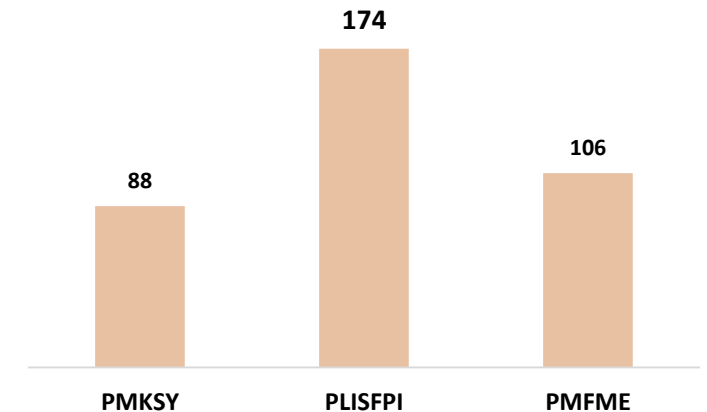
- A total of 72,556 loans have been sanctioned under the credit-linked subsidy scheme, including 1,175 loans in Odisha
- Rupees 771.12 crores have been released as Seed Capital for 236,704 Self-Help group members, including Rupees 67.91 crores for 23,400 self-help group members in Odisha
- 62,140 beneficiaries have been trained under the Food Processing Entrepreneurship Development Program, including 6,439 trained in Odisha
- 14 ODOP Brands and 166 products have been successfully launched so far, though no proposals have been received from Odisha in this regard

MoFPI Budget Allocation (USD Mn)



Source: Union Budget (RE = Revised Estimates, BE = Budget Estimates)

Budget Allocations for Schemes 2024-25 (USD Mn)



Source: Union Budget.

Food & Food Processing Industry – FDI & Investment Environment

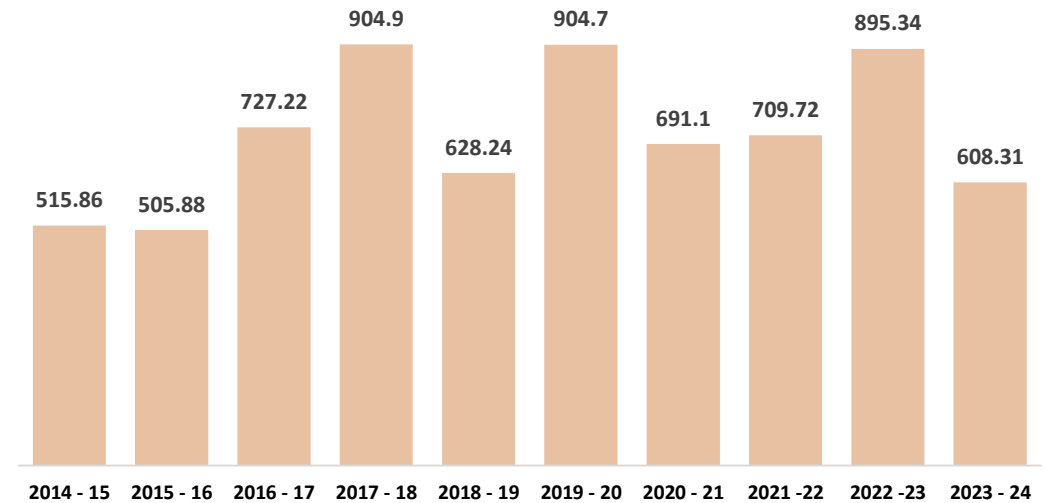
India's food processing industry offers strong foreign investment prospects, driven by favorable policies, a large consumer base, and government initiatives designed to boost the sector's competitiveness and sustainability.

Leading multinational companies like Kraft, Mars, Nestle, McCain, Danone, Ferrero, Del Monte, Kagome, Kellogg's, Pepsi, Coca-Cola, Unilever, Perfetti van Melle, Cargill, Hershey's, Yakult, Amazon, ITC, and Britannia have already invested in India's food processing industry.

Key Factors Driving FDI Inflows

- **Liberalized FDI Policies:** India allows 100% FDI in the food processing industry through the automatic route, simplifying the investment process
- **Expanding Consumer Market:** With over a bn people and rapid urbanization, India offers a vast and growing market for processed food products
- **Government Initiatives:** Programs like the Production-Linked Incentive scheme provide incentives and exemptions to encourage investment in manufacturing and sales of Indian food products, boosting sector growth. Additional tax incentives and state-wise preferential treatments are also available
- **Infrastructure Development:** Investments in infrastructure, such as cold chains, storage, and transportation networks, are vital for the industry, providing opportunities for foreign investors to contribute to its growth.
- **Export Potential:** India's agro-export sector has seen a surge in processed food exports, with the country becoming a major player in the global market. Government efforts to promote exports further enhance the sector's investment appeal
- **Government Support for Mega Food Parks:** The development of Mega Food Parks, equipped with advanced infrastructure and supported by government initiatives, offers a favorable investment environment
- **International Collaborations:** The industry welcomes collaborations with foreign companies, enabling technology transfer, knowledge sharing, and market expansion

FDI Inflows Trends - Food Processing Sector (USD Mn)



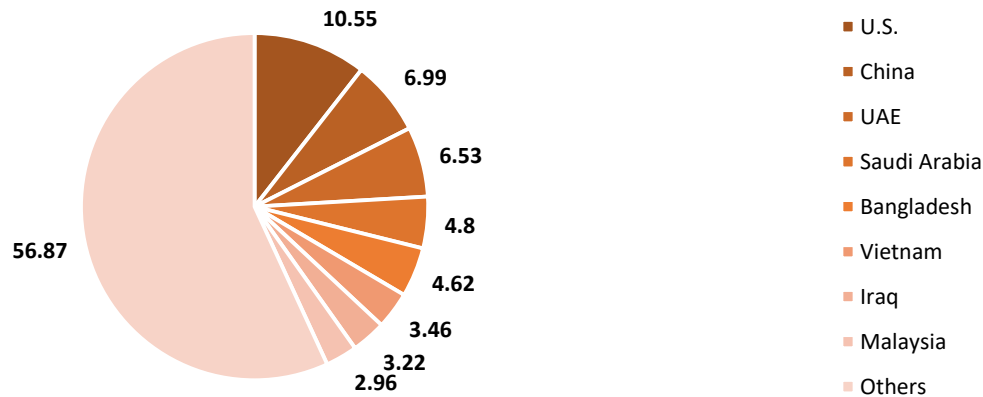
Source: Department for Promotion of Industry and Internal Trade

* Note: 2024 data as of Sep 2024.

Food & Food Processing Industry – Exports, Imports & Global Trade

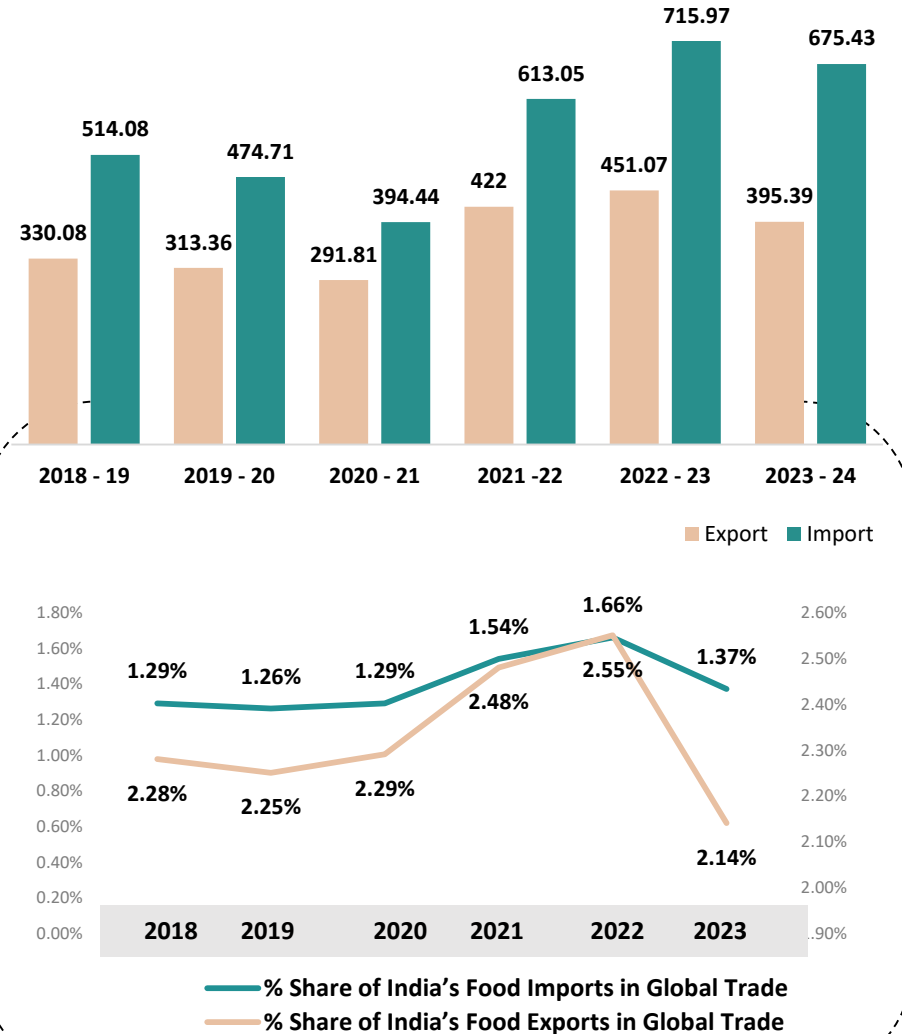
- In the fiscal year 2023-24, agricultural exports from India amounted to USD 48.15 bn, while in 2022-23, the figure stood at USD 52.50 bn. During 2021-22, India recorded agricultural exports worth USD 50.2 bn, marking a 20% increase from USD 41.3 bn in 2020-21. India's agriculture sector mainly exports Agri & allied products, marine products, plantation goods, and textile & allied products. Exports of Agri & allied products were valued at USD 37.3 bn, showing a 17% growth compared to 2020-21
- In 2023-24, India's rice exports were valued at approximately USD 5.84 bn a 5.27% increase compared to the previous year. This includes both basmati and non-basmati rice
- India's coffee exports also increased by 12.3% in 2023, reaching 1,146.2 Mn tons, driven by higher exports of instant coffee and re-exports. Additionally, marine product exports rose to USD 8.07 bn in 2022-23, benefiting farmers in coastal states like West Bengal, Andhra Pradesh, Odisha, Tamil Nadu, Kerala, Maharashtra, and Gujarat
- As of 2024 (up until June 2024), the USA, China, UAE, and Saudi Arabia were the top importers of India's agricultural products. During this period, the USA was the largest importer of Indian agricultural products at USD 1.26 bn with a share of 10.55% of the total exports. The USA and China were the key importers of India's marine products.

Country wise % Share of Exports FY25 (as of June 2024)



Sources: IBEF, DGCI, ITC Trademap, Ministry of Commerce & Industry, EPW.

India's Food & Processed Food Exports and Imports (USD Bn)



* Note: Exports & Imports includes total food and processed food numbers.
Sources: DGCI, Kolkata, ITC Trademap (Jan 2023), Agricultural Trade Database.

Food & Food Processing Industry – Technology (1/2)

The Role and Impact of Technology in Food Processing

Agriculture

Technology is revolutionizing agriculture, with precision farming driven by Artificial Intelligence (AI)-powered drones and robots equipped with advanced sensors to monitor crops, soil health, and water usage. Machine learning (ML) algorithms analyze this data to determine optimal planting times, predict yields, and detect diseases early.

Food Manufacturing

To address growing food demand, automated food manufacturing is becoming essential. Robotics are used to clean and categorize various types of food, such as sorting fruits and vegetables into separate containers, and even processing food before it is packaged.

Packaging

Robotics and AI in food processing can assemble packaged meal components, such as frozen meals, organize food into boxes for storage and shipment, and streamline, simplify, and accelerate store operations.

Cooking

The need for robotic chefs is increasing, as restaurants adopt AI and robotics to create meals. Robots handle time-consuming preparation tasks, boosting efficiency in the kitchen.

Coca-Cola



Coca-Cola leverages AI and ML algorithms to optimize its distribution and supply chain. The technology helps accurately forecast demand, ensuring products are available when needed while minimizing stockouts and excess inventory.

Starbucks



Starbucks utilizes AI-driven personalization to offer customers customized recommendations in its mobile application by analyzing past orders, preferences, and location data.

Beyond Meat



Beyond Meat employs AI and ML to continuously enhance the flavor and texture of its meat products. The technology analyzes sensory data, user feedback, and ingredient profiles to refine the flavor and ensure consistent quality.

Nestle



Nestle uses AI to innovate and enhance its products. AI-powered platforms analyze market data, social media trends, and customer feedback to identify emerging trends and create new products.

Food & Food Processing Industry – Technology (2/2)

Supply Chain

Generative AI enhances the food industry's supply chain operations by monitoring food standards, conducting product testing, managing inventory, and tracking products from harvest to distribution.

Food Safety Compliance

AI-powered systems can generate automated compliance reports, predict equipment failures, and schedule timely maintenance. Additionally, AI helps improve hygiene and food quality standards.

Creation of Innovative Products

AI helps industry players develop new products by leveraging algorithms to identify trends, predict consumer preferences, and forecast demand through ML and AI-driven analytics.

Sorting

Robotics equipped with precision actuators can sort and separate products based on specific criteria, accurately identifying flaws, sizes, and quality

Food Retail

AI is expanding the capabilities of food retailers by optimizing inventory management, predicting demand through historical data, seasonal trends, and real-time analytics, helping reduce waste and improve inventory efficiency

Food & Food Processing Industry – Competitive Edge, Advantage India & Startups (1/2)

India's Agro-Climatic Advantage in Food Production

- India's diverse agro-climatic conditions support the abundant production of cereals, pulses, fruits, and vegetables, positioning the country as a major global producer of various food items. In 2022-23, India was the world leader in milk production, contributing an estimated 25% to the global supply. The country also ranked second in the production of vegetables, fruits, and eggs, and fifth in meat production during the same period

Global Leadership in Spice Production

- India is the largest producer of spices globally, with 11.26 Mn tons of major spices produced in 2022-23, according to estimates by the Spices Board of India

India's Growing Food Market

- India is one of the world's top food producers, boasting a vast and rapidly expanding local market. The retail food product market is currently valued at nearly USD 620 bn, making it one of the largest markets globally

Rising Demand for Processed Food

- There is also a growing demand for processed food driven by socio-economic changes such as increased disposable income, evolving demographic patterns, the rise of nuclear families, and more working women

Growth of Organized Retail and Technological Advancements

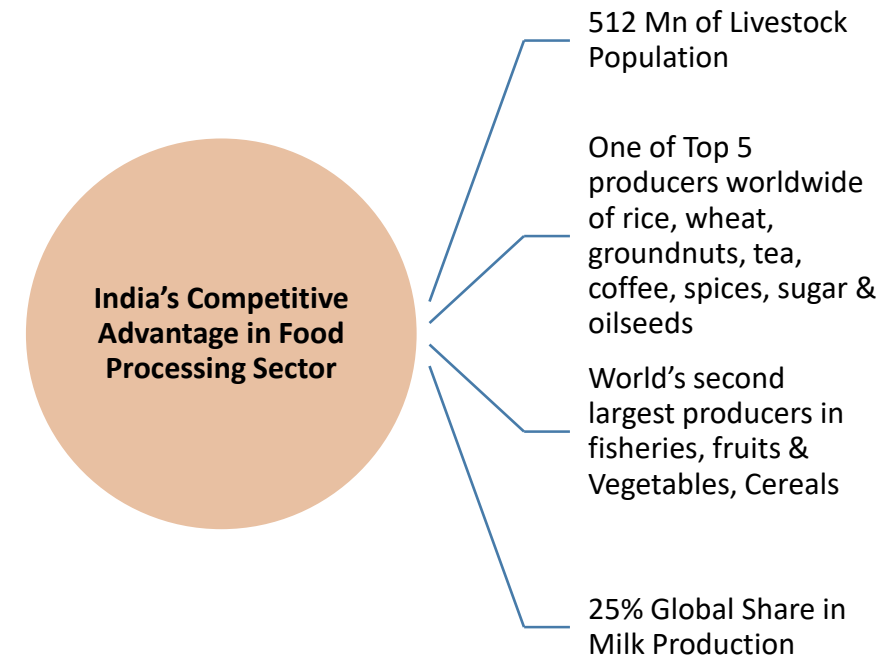
- The rapid expansion of organized retail is enhancing productivity across the supply chain through disintermediation and advanced technology, while the rise of tier 1 and 2 cities and the "shopping mall culture" further contribute to this growth

Booming Online Food Delivery Industry

- The online food delivery industry is experiencing exponential growth, with platforms like Zomato, Swiggy, gaining popularity

Supportive Government Policies and Incentives

- Government policies and incentives, such as relaxation of FDI limits and tax breaks, are also playing a crucial role in fostering the sector's growth

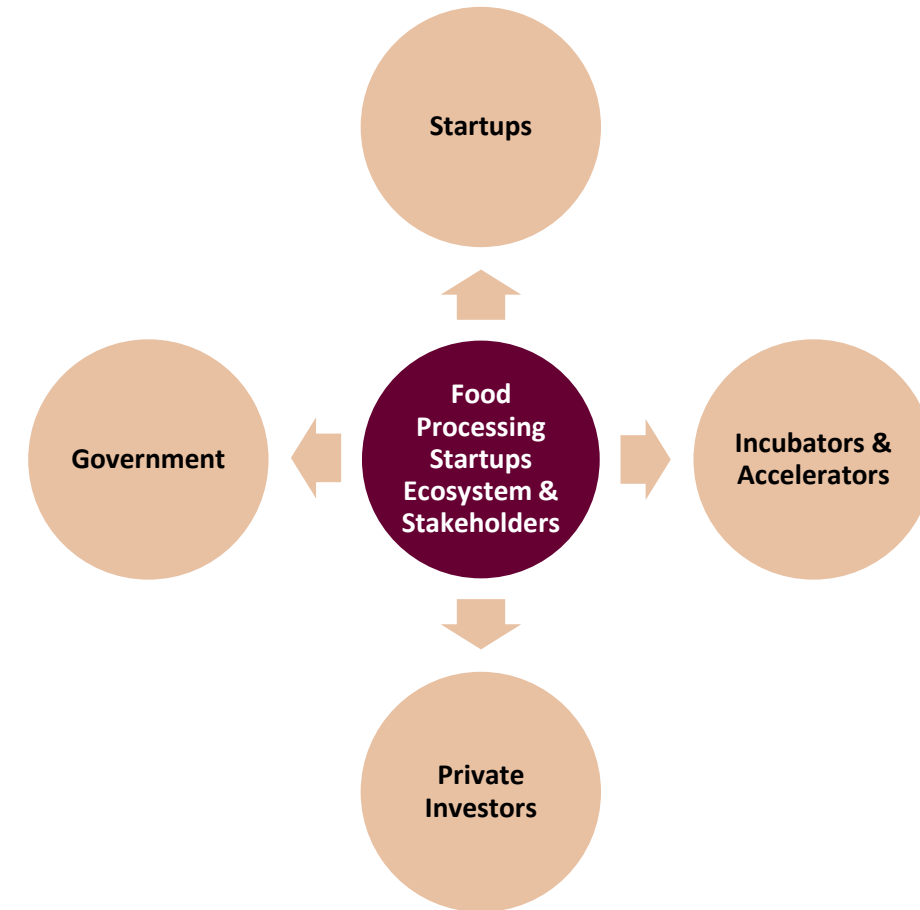


Sources: IBEF, MoFPI, PMF, 19th Livestock Census, Department of Agriculture and Farmers Welfare.

Food & Food Processing Industry – Competitive Edge, Advantage India & Startups (2/2)

Surge of Startups in India's Food Processing Sector: Innovation, Support, and Government Initiatives

- There are 3319 DPIIT recognized startups in the Food Processing Sector as of 2023 spread across 425 districts of the country and employing approximately 33,000 people. These startups are focusing on diverse areas such as food delivery, organic and health foods, plant-based proteins, sustainable packaging, and supply chain optimization
- Incubators and accelerators are supporting startups in the food processing industry. Among the incubators and accelerators are the Swissnex India Accelerator, SAP-SINE Social (S-Cube) Accelerator Programme, Agri-Tech Startup Accelerator, CIE Hyderabad, and the ICRISAT Food Processing Business Incubator/Agribusiness Incubator (ABI) that support startups in the sector. Additionally, there are academic institutions such as IIT Madras' Rural Technology and Business Incubator and T-Hub Accelerator, which is supported by the Government of Telangana and three of India's premier academic institutes (IIIT- H, ISB & NALSAR)
- Food and agriculture value chain funds, such as the Startup India Seed Fund Scheme, Startup India Tax Exemption Benefits, Orkla Foods Fund, SEAF India Agribusiness International Fund, and Rabo Equity Advisors, Omnivore Capital and Aspada Investments as well as few impact funds like Aavishkar, Villgro Innovations and Mentara are supporting the ecosystem
- The government launched the Startup India initiative in 2016 to build a strong eco-system for nurturing innovation and startups in the country. The program supports simplification of the procedures and handholding, funding support and tax incentives, industry academia partnership and incubation, credit guarantee fund for startups through Small Industries Development Bank of India amongst others
- Union Budget 2024-25 to bolster the Indian start-up eco-system, boost the entrepreneurial spirit and support innovation, the government proposed to abolish the so-called angel tax for all classes of investors. The initiative will help strengthen the startup ecosystem and provide them more financial base for innovation and technology development






**Note: Startup data as of April 2023.*

IIITH = The International Institute of Information Technology Hyderabad, NALSAR = The National Academy of Legal Studies and Research, ISB = Indian School of Business, DPIIT = Department for Promotion of Industry and Internal Trade.

Food & Food Processing Industry – Key Financial Ratios (Industry)

S. No.	Ratios	Unit	2018 - 19	2019 - 20	2020 - 21	2021 - 22	2022 - 23
1	Debt to equity ratio	Times	1	0.85	0.76	0.71	0.66
2	Interest Coverage ratio	Times	2.94	2.39	3.7	4.6	4.49
3	Debt service coverage ratio (DSCR)	Times	0.41	0.47	0.58	0.55	0.56
4	Net Working Capital	Rs. Million	148,087.10	216,738.00	352,154.90	489,941.40	572,039.80
5	Current Ratio	Times	1.06	1.09	1.15	1.2	1.22
6	PBDITA as % of total income	%	7.66	9.22	8.71	7.78	7.45
7	PAT as a % of total income	%	2.02	3.11	3.35	3.53	3.2
8	Debtors turnover	Times	11.72	12.15	14.07	16.91	17.41
9	Creditors turnover	Times	5.82	5.78	6.44	8.01	8.61
10	PAT as a % of capital employed	%	5	7.23	7.51	9.03	8.25

Food & Food Processing Industry – Industry Players

Company	Logo	Category	Year Founded	Key Professionals	Revenue (Rs. Crore FY24)	Employees	Overview
KRBL		Agri – Food Processing	1889	Anil Kumar Mittal (CMD)	5,481.35	2,768	KRBL Limited is a rice milling company and exporter of Basmati Rice. It operates in two segments: Agri and Energy. The Agri segment focuses on agricultural commodities.
Gujarat Ambuja Exports		Agri – Food Processing	1991	Manish Gupta (CMD)	5,071.48	2,590	Gujarat Ambuja Exports Ltd is engaged in agro-processing and trading, with a strong emphasis on exports and competition in the global market.
Chaman Lal Setia Exports		Agri – Food Processing	1974	Vijay Kumar Setia (CMD)	1,365.20	188	Chaman Lal Setia Exports Ltd is involved in the milling and processing of both raw and parboiled Basmati rice. The company's product range includes Maharani Basmati rice and Parboiled Basmati rice.
GRM Overseas		Agri – Food Processing	1974	Atul Garg (CMD)	1,218.04	503	GRM Overseas Ltd is involved in the processing and sale of almond kernels, paddy, cloves, pistachios, rice, and wheat.
Mishtann Foods		Agri – Food Processing	1981	Hiteshkumar Gaurishankar Patel (MD)	322.47	NA	Mishtann Foods is involved in the manufacturing, processing, and trading of basmati and non-basmati rice, wheat, dal, salt, and other food grains in India.
Kovilpatti Lakshmi Roller Flour Mills Ltd		Agri – Food Processing	1964	Sharath Jagannathan (MD)	413.66	208	KLRF Limited is an India-based company that operates in three segments: food, textile, and engineering. The company's food division offers products such as maida, atta, and wheat.
Himalaya Food International		Agri – Food Processing	1979	Man Mohan Malik (CMD)	47.25	56	Himalaya International Ltd offers a range of mushrooms, including White, Crimini and Portobello, available in various forms such as frozen buttons, slices, dices, and de-stemmed caps.
Vistar Amar		Agri – Food Processing	1983	Rajesh Kumar Babulal Panjari (MD)	74.09	NA	The Company's principal activity is trading in fish and fishmeal.

Food & Food Processing Industry – Challenges & Risks

Study across the country highlights that the wastage of cereals ranges from approximately 3.89% to 5.92%, while wastage of fruits and vegetables varies from around 4.87% to 15.05%. Additionally, there are significant losses in sectors such as milk, meat, poultry, and marine fisheries, with wastage ranging from 1% to 6%.

- **Infrastructure Challenges** - India's agricultural sector is large but fragmented and underdeveloped, leading to issues such as inadequate storage facilities, poor transportation infrastructure, and high levels of wastage. The deficiencies in the supply chain infrastructure result in insufficient primary processing, storage, and distribution capabilities. Additionally, there is a lack of connectivity between production and processing, mainly due to the absence of processable crop varieties.
- **Seasonality and Low Capacity Utilization** - Operations are often seasonal, and there is low capacity utilization across many sectors or crops.
- **Institutional Issues** - There are institutional weaknesses within the supply chain, such as a heavy reliance on Agricultural Produce Market Committee (APMC) markets, which hinders efficient operations.
- **Insufficient Focus on Quality and Safety Standards** - The food processing industry in India is largely informal, with over 75% of the sector consisting of small-scale and unorganized units. This structure makes it challenging to implement and enforce food safety standards and regulations.
- **Lack of Skilled Labor** - The industry faces a shortage of skilled labor, which is exacerbated by the limited availability of vocational training programs in India.
- **Regulatory Environment** - The regulatory environment for the industry in India is intricate and fragmented, which can pose challenges for businesses in adhering to the rules and regulations.
- **High Cost of Capital** - The cost of capital in India is comparatively high, which makes it challenging for businesses to invest in new technologies and infrastructure. In addition to the aforementioned challenges, the food processing industry in India is also confronted with new demands, including the need to adopt sustainable practices and cater to the increasing demand for healthy and nutritious food.

Sources: Ministry of Food Processing Industries, The Economics Journal.

Post Harvest Losses of Major Crops & Commodities – Study

Crops/ Commodities	Wastage & Loss (%)	
	As per ICAR-CIPHET Study (2015)*	As per NABCONS study (2022)*
Cereals	4.65 - 5.99	3.89 - 5.92
Pulses	6.39 - 8.41	5.65 - 6.74
Oil Seeds	3.08 - 9.96	2.87 - 7.51
Fruits	6.70 - 15.88	6.02 - 15.05
Vegetables	4.58 - 12.44	4.87 - 11.61
Plantation Crops & Spices	1.18 - 7.89	1.29 - 7.33
Milk	0.92	0.87
Fisheries (Inland)	5.23	4.86
Fisheries (Marine)	10.52	8.76
Meat	2.71	2.34
Poultry	6.74	5.63
Egg	7.19	6.03

Source: Ministry of Food Processing Industries.

* Note: The Ministry estimates post-harvest losses for various agricultural commodities based on studies conducted through primary surveys. Two significant studies were commissioned by the Ministry: (i) a study by the Indian Council of Agricultural Research-Central Institute of Post-Harvest Engineering and Technology (ICAR-CIPHET). (ii) a study by NABARD Consultancy Service Pvt. Ltd (NABCONS)

Food & Food Processing Industry – Outlook & Opportunities (1/2)

The path to achieving 'Viksit Bharat by 2047' is closely tied to the transformative potential of the food processing sector. By adopting global best practices, overcoming challenges, and promoting innovation, a comprehensive approach is crucial. The sector's impact goes beyond economic growth; it plays a key role in shaping a resilient and thriving India. As India strives to become a developed nation, the food processing industry reflects its capacity to innovate, adapt, and lead globally. By recognizing its critical importance, aligning policies, and encouraging collaboration, India can usher in a new era of progress through its vibrant and dynamic food processing sector.

Category	Total Value of World Imports, USD Bn	India's Share of Market %	India Ranking	World Leader	World Leader Market Share %	Opportunity
Processed Fruits & Vegetables	52.4	0.9	18	China	15.6	The development of new technologies to minimize waste and the growing emphasis on processed food products.
Processed Sea Food	97.2	4.6	6	China	14.6	The growing demand for frozen foods presents a significant export opportunity to various countries. Additionally, innovations in product development, including ready-to-cook, ready-to-eat, canned, and frozen food options, are expanding.
Meat	101.8	1.6	10	USA	12	The increasing demand for ready-to-eat and convenient, on-the-go food products.
Diary	77.9	0.3	35	New Zealand	14.3	There is a growing demand for value-added dairy products such as cheese, custard, and flavored milk.
Poultry & Egg	24.7	0.2	61	Brazil	22.2	Increasing awareness of protein-rich diets, along with the higher nutritional value of poultry.

Source: FICCI

*Note: Data as of 2023 – 24.

Food & Food Processing Industry – Outlook & Opportunities (2/2)

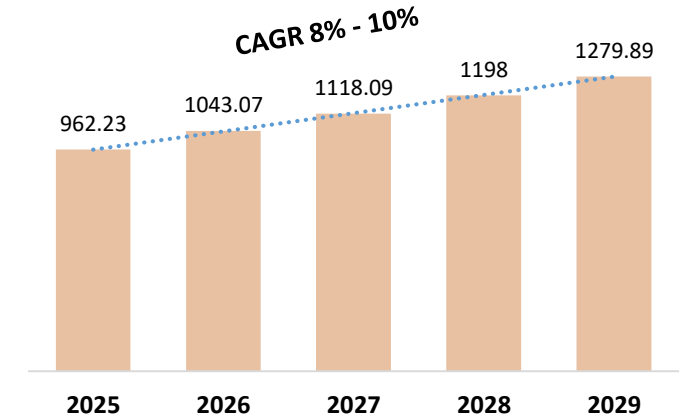
- India's food processing market is projected to grow at a CAGR of 8% to 10% for the forecasted period between 2025 to 2029 with Tier-2 and Tier-3 cities emerging as key consumer markets for FMCG and Food processing businesses, closely mirroring consumption trends seen in metropolitan areas
- India's organic food market is expected to expand significantly, growing from USD 1.6 Mn in 2023 to USD 8.9 Mn by 2032
- The online food and grocery ordering market in India is experiencing rapid growth, with a CAGR of around 50%, and the market, valued at USD 2 bn in 2020, is anticipated to reach USD 12 bn by 2025
- By 2030, India's consumer market is projected to grow to 773 million people, a 46% increase from 529 Mn in 2023

**Note: A consumer is defined as an individual who spends a minimum of USD 12 per day.*

India's Aspiration to Become the Global Hub for Millet

- In 2023, India has actively promoted the International Year of the Millet, highlighting the crop at the G20 Summit and showcasing its millet-based food products. Millets, recognized as a nutritious cereal and considered a "superfood," have gained significant attention
- In the fiscal year 2022-23, India exported millets worth USD 75.46 Mn, an increase from USD 62.95 Mn in 2021-22. However, according to the industry body APEDA, the share of millet-based value-added products remains minimal, which is an area the Indian government is focusing on. India is the world's largest producer of millet, followed by Niger and China, with key millet-growing states including Rajasthan, Maharashtra, Karnataka, Andhra Pradesh, and Madhya Pradesh

India Food & Food Processing Industry Total Revenue Estimates & Forecast (USD Bn)



Source: Statista Market Insights.

The food processing sector in India is positioned for sustained growth, backed by favorable demographic trends, government policies, and increasing domestic demand. The sector's expansion will continue to contribute significantly to India's economic development, employment generation, and global trade. With the ongoing transformation in consumer preferences and infrastructure improvements, the food processing industry holds a promising future.

* Views are personal

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