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SPURring growth

Driving innovation and unlocking opportunities in the Indian food processing sector

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Message from Secretary, Ministry of Food Processing Industries

डॉ. सुब्रत गुप्ता, भा.व.से. Dr. Subrata Gupta, IAS



सचिव भारत सरकार खाद्य प्रसंस्करण उद्योग मंत्रालय **Secretary** Government of India Ministry of Foud Processing Industries

Message

The global food processing industry is undergoing a period of profound transformation, driven by changing consumer preferences, technological advancements, and an increasing focus on sustainability. In this evolving landscape, India, blessed with unparalleled agricultural diversity and a dynamic demographic profile, is uniquely positioned to emerge as a global leader in food processing.

- 2. The Indian food processing sector is not only a vital component of our economy but also a powerful catalyst for inclusive growth, rural development, and export potential. India is today the world's largest producer of milk, pulses, and millets, and the second largest producer of fruits and vegetables, cereals, and scafood. This strong agricultural base provides us with a strategic advantage to scale up value addition and position India as a global hub for processed food.
- 3. Backed by flagship government initiatives such as the Pradhan Mantri Kisan SAMPADA Yojana, PMPME Scheme, and the Production Linked Incentive (PLI) Scheme for food products, the sector is witnessing accelerated investment in modern infrastructure, capacity building, and innovation. These interventions are enabling modern infrastructure, promoting entrepreneurship, and encouraging innovation across the sector.
- With rising incomes, a growing appetite for nutritious and convenience-based foods, and increasing demand for quality and traceability, India offers unmatched potential for both domestic and global investors. At this pivotal moment, fostering deeper collaboration between government, industry, and knowledge institutions is key to unlocking the next wave of growth and innovation.
- 5. This whitepaper outlines the insightful overview of the mega trends shaping India's food processing landscape. It highlights not only emerging opportunities but also outlines the importance of strategic collaboration between the government and industry stakeholders to accelerate the growth of the food processing sector. Congratulations to all the stakeholders for their valuable contribution. This compendium will serve as a useful guide for all stakeholders committed to advancing India's food processing sector.



Message from the Federation of Indian Chambers of Commerce and Industry



Ms. Jyoti Vij
Director General
Federation of
Indian Chambers of
Commerce and Industry

FICCI, in collaboration with Deloitte, is pleased to present the White Paper on "SPURring Growth - Driving Innovation and Unlocking Opportunities in the Indian Food Processing Sector."

India stands as a global powerhouse in agricultural production and food processing, influencing the livelihoods of millions. The food processing sector not only enables substantial value addition but also serves as a direct catalyst for income enhancement across the agri-value chain. The sector has witnessed robust growth over the years, fueled by synergistic efforts from both public and private stakeholders, along with supportive macroeconomic environment. Looking ahead, the imperative is clear: to futureproof our food systems ensuring continued access to safe, nutritious, and affordable food. As global food systems—including India's—undergo rapid transformation, shifting consumption patterns are emerging as a pivotal force. Health-conscious consumers are increasingly moving towards

processed foods that align with nutritional and wellness priorities. In this context, fostering resilience and innovation in food processing will be key to securing the long-term viability of India's agri-food ecosystem.

This White Paper underscores the transformative potential of India's food processing sector, driven by robust economic growth and evolving consumer preferences. It details the dynamic shifts in consumer behavior, the rise of health-conscious eating, and the increasing demand for processed and premium foods. Additionally, the paper identifies key potential areas such as resolving regulatory complexities and managing commodity price pressures. It also proposes opportunities for innovation, rural market expansion, and leveraging technology to enhance efficiency and global competitiveness.

We trust that all stakeholders will find this White Paper insightful and engaging.

Message from FICCI Food Processing Committee



Mr. Hemant Malik
Chair-FICCI Food Processing
Committee;
Executive Director, ITC Ltd &
Div CEO ITC Foods



Mr. Prashant Peres
Co-Chair, FICCI Food
Processing Committee
Managing Director,
Kellanova South Asia



Mr. Sudhakar Rao Desai Co-Chair, FICCI Food Processing Committee CEO & Director, Emami Agrotech Ltd

The Indian food processing industry stands at a pivotal juncture, poised to drive significant economic growth and innovation. We are proud to present this report, which underscores the sector's critical role in shaping India's future.

The food processing industry is a cornerstone of the Indian economy, providing employment to millions and supporting livelihoods across urban and rural landscapes. It bridges the gap between agriculture and modern consumption trends, enhancing food security, reducing post-harvest losses, and fostering rural industrialization. The sector's contributions extend beyond economic metrics, touching lives and communities nationwide.

Consumer trends are evolving rapidly, driven by rising affluence, health consciousness, and digital engagement. Urban elites are increasingly spending on packaged foods, dining out, and deliveries, while rural consumption is shifting towards processed foods. This dynamic transformation is reshaping the food processing landscape, with consumers demanding more varied, protein-rich, and premium products. Health and wellness concerns are central to food choices, with a growing preference for high-protein, low-sugar, organic, and functional foods. The resurgence of traditional Indian superfoods like millets and makhana reflects a maturing preference for preventive nutrition.

Technology is playing a transformative role in addressing supply chain disruptions and enhancing efficiency. Innovations in AI, blockchain,

and IoT are revolutionizing supply chains, enabling real-time visibility, predictive analytics, and sustainable sourcing. These advancements are crucial in managing commodity price pressures and building resilience. The rise of quick commerce platforms is redefining convenience and impulse consumption, creating new opportunities for growth.

The regulatory landscape is evolving to support the sector's growth. Key regulators such as FSSAI, the Legal Metrology Department, and the Central Pollution Control Board govern areas from food safety and labeling to packaging and environmental compliance. Recent updates, including front-of-pack labeling guidelines and EPR mandates for plastic waste, reflect a robust regulatory framework. However, challenges remain, and a proactive, collaborative dialogue between industry and government is essential to address these evolving needs.

The future of the Indian food processing sector hinges on a collaborative effort between the government and industry. Public-private partnerships can drive innovation, streamline regulations, and enable infrastructure development. By aligning with strategic imperatives such as expanding rural penetration, prioritizing health and superfoods, and leveraging technology, we can build a resilient, consumerdriven ecosystem with global relevance. Together, we can unlock the immense potential of the Indian food processing sector, driving growth, innovation, and opportunities for all.

Foreword



Anand Ramanathan
Partner and Consumer
Industry Leader,
Deloitte South Asia



Avinash Chandani Partner Deloitte India

In a world where technology and tradition intersect, India's agri and food processing industry is not just evolving but thriving. Imagine a landscape where cutting-edge innovations meet age-old practices, crafting a future where food is not only plentiful but also seamlessly integrated into our daily lives. This report explores how these transformative changes are setting the stage for unparalleled growth and collaboration in one of the most vital sectors of the Indian economy. Dive in to uncover the critical channels and technologies shaping this revolution.

The food processing sector is vital to India's economy, contributing ~7.7 percent to the total manufacturing GVA.¹ It plays a significant role in the country's employment landscape, directly and indirectly generating ~7 million jobs.² Beyond its economic value, the sector has a profound social effect, as it supports rural incomes, reduces agricultural wastage and promotes nutritional security. Moreover, India's food processing exports are gaining global traction. This positions India as a key player in international food trade.³

Recent trends in channel evolution have created a remarkable shift in distribution and consumer engagement. Quick commerce, for instance, has democratised product access, significantly affecting the food FMCG sector by making a wide range of products available at consumers' fingertips.

Another notable development is the decreasing gap between urban and rural consumption. As rural prosperity increases, consumer behaviours are converging, with tier 2, tier 3 cities and beyond

emerging as key growth powerhouses. While local players dominate these markets, competition is expected to intensify as national FMCG leaders expand their presence in these growing markets.

This report highlights significant shifts in product categories and consumer trends. The transition from unbranded to branded food products underscores growing consumer demand for quality and food safety. Health foods, especially those promoting protein enrichment and gut health, are gradually gaining traction. Additionally, Indian ingredients and superfoods such as millets and makhana are carving niche markets due to their health and environmental benefits. However, they face challenges such as supply chain inefficiencies and margin pressures.

At the heart of these transformations is a suite of innovative technological integrations. The advent of Al and IoT is revolutionising marketing strategies and optimising supply chain operations. Meanwhile, Industry 4.0 technologies underscore the importance of efficiency and sustainability. Moreover, the constant evolution in R&D versus innovation is driving the food industry to develop appealing products while improving product safety, quality and overall consumer satisfaction.

The report also explores key themes that are shaping India's food processing and agriculture sectors, with insights into policy reforms. It provides a comprehensive analysis and a strategic perspective on trends likely to shape the sector's future trajectory, including technological advancements, evolving market dynamics and a growing focus on sustainable development.

¹ MoFPI annual report 2023-24, https://pib.gov.in/PressReleasePage.aspx?PRID=2097960

 $^{^2\} https://www.startupindia.gov.in/content/sih/en/bloglist/blogs/food-processing-sector.html$

³ https://invest.up.gov.in/wp-content/uploads/2023/04/English_Final-Food-processing-policy_160423.pdf

Leadership Insights

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The shift from unbranded to branded consumption offers significant opportunities for India's food processing industry, driven by consumer awareness of quality and safety. Additionally, there is a growing focus on healthy foods, incorporation of traditional ingredients like millets, increasing consumption of organic foods and the influence of global cuisines on Indian consumer preferences. Tier 2, 3 and rural markets are driving the growth for foods in India, and companies are taking larger portfolio to these markets as the base of consumers increases. The potential for growth in food processing is immense, and collaboration between the government and industry can help realize this opportunity.



Mr. Hemant Malik
Chair-FICCI Food Processing
Committee;
Executive Director, ITC Ltd &
Div CEO ITC Foods



As global food inflation surges and crop failures threaten food security, to feed a population of 8 billion, the world will need to produce more food in the next 40 years than it has in the last 8000 years. India has the potential to respond to this and become the world's food basket. However, India needs to go beyond exporting raw grains, and become a recognized source of high-quality, market-ready products. This begins with building scale and a strong domestic market focused on both quality and nutrition. Strategic investments and government initiatives to improve the ease of doing business, clubbed with favourable tax structures to make products more affordable, broadening schemes like PLI & PM Kisan Sampada Yojana are key to this transformation.



Mr. Prashant Peres Co-Chair, FICCI Food Processing Committee Managing Director, Kellanova South Asia



India's food processing industry is poised for significant growth, driven by rising demand for branded and high-quality products. Addressing regulatory challenges and aligning government policies with industry needs are crucial for a level playing field. The shift towards healthier products is a key trend. Strategic export opportunities can enhance India's global market presence. Embracing innovation in processing and packaging will be key to unlocking the sector's full potential.



Mr. Sudhakar Rao Desai Co-Chair, FICCI Food Processing Committee CEO & Director, Emami Agrotech Ltd

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At the heart of India's food processing revolution lies a powerful synergy between entrepreneurship, sustainable and inclusive development. It is rapidly evolving itself into a hub of innovation and opportunity to meet consumer demand. India's food processing sector is not just a value-addition industry—it is a value-creation engine that connects farm to fork, drives rural incomes, and fuels the nation's journey toward healthy living, food security and global leadership.



Mr. Tarun AroraChief Executive Officer, Zydus
Wellness Limited & PresidentElect, CIFTI-FICCI



Embedding Science and Technology across the food value chain is critical to unlocking opportunities and driving sustainable growth in the food processing sector. Consumer food habits are evolving and at Hindustan Unilever, we have been continuously innovating to ensure that we provide meaningful choices to our consumers with superior food products, deploy regenerative agriculture principles and as an outcome ensure farmer livelihoods. This is in line with our overarching philosophy of "What is good for India, is good for HUL".



Mr. Rohit Jawa CEO and Managing Director, Hindustan Unilever Limited



Food Processing sector is a catalyst for economic growth in India - supporting farmers, creating jobs, providing consumer with value added products and boosting exports. It is a powerhouse of potential – where tradition meets innovation. With evolving consumer preferences, and digital transformation, industry is poised to seize new opportunities to create value, enhance sustainability, and drive inclusive growth across the ecosystem.



Mr. Samir JainPresident, Mondelez India
Foods Pvt. Ltd.



India's food processing sector remains vastly under-leveraged. And we can see the large opportunity it presents for our business to serve our consumers more effectively. Focused investments in infrastructure can catalyze value creation, streamline supply chains, and significantly reduce food loss across the agri-value chain, thereby creating a powerful multiplier effect for agriculture, retail, and export growth.



Mr. Sunil D'Souza

Managing Director & CEO, Tata
Consumer Products Ltd.



The Indian food processing sector is constantly evolving, driven by changing consumer needs and preferences. With busier lifestyles, there's a growing demand for convenience, be it in terms of product formats or rapid adoption of quick commerce channels. This dynamic shift not only presents an exciting opportunity for innovation but also challenges us to continually learn and adapt, ensuring we serve our customers in meaningful ways.



Mr. Sunay Bhasin Chief Executive Officer, MTR Foods



India will soon be the biggest country with 1.4 bn stomachs to feed. Consequently, minimizing food waste is crucial, highlighting the significance of the food processing sector to increase farmers' income. Wagh Bakri is focused on delivering exceptional and high-quality products for Indian consumers.



Mr. Sanjay Singhal Chief Executive Officer, Wagh Bakri Tea Group



Food Processing is poised for tremendous growth. Sector plays a vital role in furthering the national agenda like providing nutrition, enhancing farmer's income, generating jobs etc. Government policies and programmes that facilitate investment are needed. Corporate leadership should drive product innovation which increases the share of processed food in daily consumption and, secondly, create world class manufacturing that builds confidence in the food we supply. Together we can make Food Processing a major contributor to consumer wellbeing and national growth.



Mr. Vivek Chandra CEO – Global Branded Business, LT Foods



The Indian food processing sector stands at the forefront of innovation, transformation, and purpose-driven growth. At Danone India, we are committed to delivering health through food, leveraging advanced technologies, and promoting sustainable practices. With consumers increasingly seeking healthier, nutrientrich, and functional food options, the sector is witnessing a pivotal shift towards nutrition-focused innovation. Al and digitalization are further enabling a deeper understanding of evolving dietary needs, while sustainability and local sourcing strengthen our connection with communities. It is an exciting time as the sector evolves into a catalyst for better health, well-being, and inclusive growth.



Mr. Shashi RajanManaging Director,
Danone India



India's growing emphasis on food processing presents a transformative opportunity to drive economic growth, ensure nutrition security, and generate large-scale employment. To truly unlock this potential, innovation, scalability, and value addition must take centre stage. This report offers timely insights to navigate the evolving consumer preferences, supply chain dynamics, and growth opportunities within the Indian food ecosystem."



Mr. Anil ChughPresident-Food Business,
Wipro Consumer Care India

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India's food processing sector is poised to experience significant growth, driven by the country's position as a leading producer of fruits and vegetables. By strengthening backward linkages to ensure superior quality and productivity, embracing innovation and sustainability, and scaling value-added exports, India can unlock transformative growth and emerge as a global agri-processing leader.



Mr. Haresh Karamchandani Managing Director & Group CEO, HyFun Foods

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India's incredible growth trajectory presents a significant opportunity for the food processing industry, backed by growing consumption, evolving food preferences, and urbanization. PepsiCo India is deeply committed to building stronger supply chains by harnessing locally available ingredients, empowering farmers and communities with skills and technology, and driving inclusive growth across the food processing ecosystem.



Ms. Yashika Singh Chief Corporate Affairs Officer and Sustainability Head, PepsiCo India and South Asia





The Indian food processing sector is set for an exciting phase of growth not just in quantitative terms, but in the way it is delivered-through digitisation, sustainable practices, and planet-friendly innovation. By investing in these, we will collectively not only create growth and employment in India, make India an increasingly sought-after supply source globally, but also strengthen farm-to-fork linkages, and create a more robust, equitable food ecosystem.



Mr. Mainak Dhar Managing Director, McCain Foods India

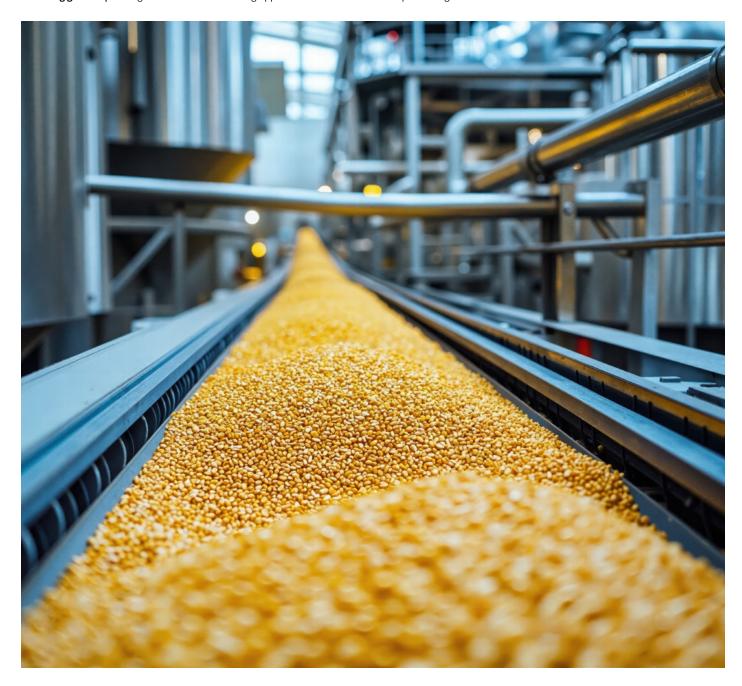


Innovation is a necessity to enable India's food processing sector to respond to consumer trends around health, wellness, convenience and indulgence. By integrating market insights, science, traditional wisdom and cutting-edge technology, we can reimagine food through more healthy, functional and sustainable solutions, thereby positioning India as a leader in progressive food innovation.



Mr. Sunil Nair B2B Commercial Head and R&D Leader, Food South Asia, Cargill





Executive summary

India's agriculture and food processing landscape is at a pivotal juncture, marked by robust economic growth and dynamic consumer trends. Over the past nine years, India's economy has become the fifth largest globally, with per capita income doubling to INR1.97 lakh.⁴ This growth is mirrored in consumer behaviour: urban elites increasingly spend ~50 percent⁵ of their food budget on packaged foods, dining out and deliveries, while rural consumption is shifting from cereals to beverages and processed foods. The food processing sector has emerged as a sunrise industry, driving crop diversification, improving food security, reducing post-harvest losses and supporting rural industrialisation.

Building on this macroeconomic momentum, India's food consumption landscape is undergoing a dynamic transformation, driven by demographic shifts, rising affluence and evolving lifestyle aspirations. Consumers across income groups are moving beyond traditional staples toward more varied, protein-rich, processed diets. Premiumisation is also an emerging trend, with higher-income consumers driving growth through demand for quality, convenience and indulgence.

⁴https://pib.gov.in/PressReleasePage.aspx?PRID=1895320

⁵https://www.business-standard.com/economy/news/rural-indians-are-now-spending-more-on-processed-food-drinks-than-cereals-household-consumption-expenditure-survey-124022600142_1.html?ref=finshots.in

Health and wellness concerns are becoming central to food choices. There is a growing preference for high-protein, low-sugar, gut-friendly, organic and functional foods, reflected through the resurgence of traditional Indian superfoods such as millets and makhana. The rise of clean-label products reflects a maturing preference for transparency and preventive nutrition. This health consciousness extends across urban and non-metro markets, indicating a more uniform behavioural shift.

There is also a rising curiosity around global cuisines and regional flavours, marking a convergence of heritage and innovation in consumer preferences. These evolving tastes are being shaped and amplified by digital media – OTT platforms, food influencers and social media are central to shaping consumption patterns, brand discovery and engagement in real time.

Adding to this transformation is the rapid growth of quick commerce, which has redefined convenience and impulse consumption. Quick commerce platforms are creating new consumption occasions by enabling the delivery of food and grocery products within minutes.

In line with changing consumer preferences, the food processing industry is undergoing rapid transformation, shaped by innovation, rural demand, sustainability imperatives, commodity price pressures and tech-enabled supply chains. Global R&D hubs and agile start-ups are reformulating products for Indian tastes, focusing on health-conscious features such as clean labels, protein enrichment and gut health. Rural FMCG consumption outpaced urban growth in FY 2024, with a 6 percent volume growth in Q36, supported by increased rural coverage and innovation in smaller SKUs. Sustainability is gaining prominence, with efforts to reduce food waste and enhance efficiency through technologies such as AI and blockchain. At the same time, persistent commodity price pressures are prompting companies to adopt tech-enabled supply chain strategies, including AI, blockchain and sustainable sourcing, to build resilience and efficiency. These forces are positioning India's food processing sector for long-term growth and global competitiveness.

India is rapidly emerging as a key player in the global food trade, backed by a strong agricultural base and strategic location. With agri exports touching ~US\$48 billion⁷ in FY 2023–24, the country leads in commodities such as rice, marine products, spices, bovine meat and sugar. However, processed food exports, currently valued at ~US\$8 billion,⁸ offer significant headroom for growth. There is potential to move up the value chain from primary commodities to value-added processed foods, which could be achieved by establishing Indian food products as a mainstream global phenomenon. Few opportunities to help enable this transition include scaling

healthy Indian food products such as millets and makhana, upgrading commodity value chains for highly exported products such as groundnut, and building strategic branding around globally trending products and India's GI-tagged products. With targeted investments and supportive policy frameworks, India can elevate its position as a global hub for high-quality, differentiated food products.

India's evolving policy and regulatory framework underpins the sector's evolution. Key regulators such as FSSAI, the Legal Metrology Department and the Central Pollution Control Board (CPCB) govern various areas, from food safety and labelling to packaging and environmental compliance. While the regulatory environment is becoming increasingly robust, with recent updates, including Front-Of-Pack Labelling (FOPNL) guidelines and EPR mandates for plastic waste, challenges remain. These include aligning labelling norms with actual consumption, sustainably managing post-expiry food and ensuring clarity in packaging and nutraceutical regulations. A proactive, collaborative dialogue between industry and government can help address these evolving needs, and the regulatory ecosystem can evolve to support innovation, ensure food safety and enable sustainable growth.

In conclusion, India's food processing sector is poised for growth, driven by evolving consumer preferences, expanding rural markets and rising global opportunities. To fully realise this potential, the following strategic imperatives could help drive the next phase of transformation in the sector:

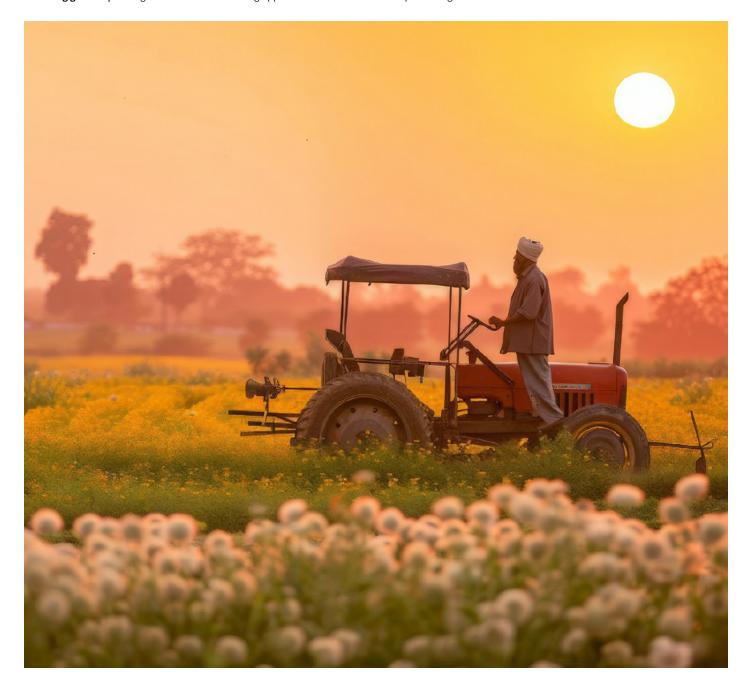
- Drive innovation to align with consumer preferences.
- Increase rural market presence by offering affordable premium products, creating localised SKUs and establishing robust distribution networks based on regional insights and aspirations.
- Prioritise health and superfoods by integrating Indian ingredients such as millets and turmeric into functional offerings validated for mainstream wellness trends.
- Foster public-private collaboration to streamline regulations, support infrastructure development and provide targeted support to MSMEs and start-ups.
- Boost food exports by enhancing value chains to meet global demand for wellness-focused, culturally rooted products, while strengthening India's food brand.
- Use technology across operations to improve agility, sustainability and competitiveness in line with Industry 5.0 principles.

By aligning with these focus areas, India could build a resilient, consumer-driven food processing ecosystem with global relevance and transformative domestic impact.

 $^{^6\,\}text{NielsenIQ}$

⁷ https://www.ibef.org/exports/agriculture-and-food-industry-india

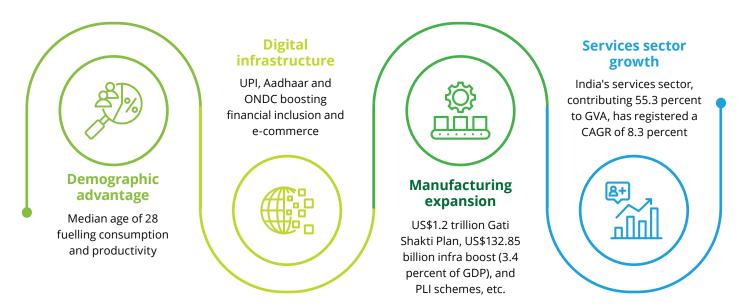
⁸ https://apeda.gov.in/ProcessedFood



Setting the context – India's agri and food processing landscape

India stands at the precipice of transformative change. The country has witnessed substantial economic development, with its economy growing from the 10th to the 5th largest in the world, and the per capita income doubling to INR1.97 lakh in nine years.⁹ There has been an uptick across sectors, a massive digital transformation and rapid growth in the manufacturing sector, establishing India the "fastest-growing major economy.¹⁰

Figure 1: Factors fuelling India's growth¹¹



As India moves towards a US\$5 trillion GDP by FY 2028 and aims to become a developed country by 2047,¹² a larger and more affluent consumer base will demand better, safer and more convenient food options.

According to Engel's economic theory, as incomes rise, spending on basic staples declines while demand for processed and discretionary foods grows. With rising incomes, urbanisation and changing lifestyles, the demand for high-quality, processed, packaged foods will increase significantly. Economic theories and consumption data indicate a fundamental shift in how India will spend on food.

In FY2023, urban elite households spent almost 50 percent of their monthly food budget on packaged foods, eating out and food deliveries, marking a 10 percent increase from a decade ago.¹³

The shift is not limited to urban regions. Rural India is witnessing a similar shift. Since 2000, spending on staples such as cereals, vegetables and pulses has declined. For the first time, expenditures on beverages and processed foods have surpassed those on cereals.¹⁴

⁹https://pib.gov.in/PressReleasePage.aspx?PRID=1895320

¹⁰https://pib.gov.in/PressReleasePage.aspx?PRID=2094025

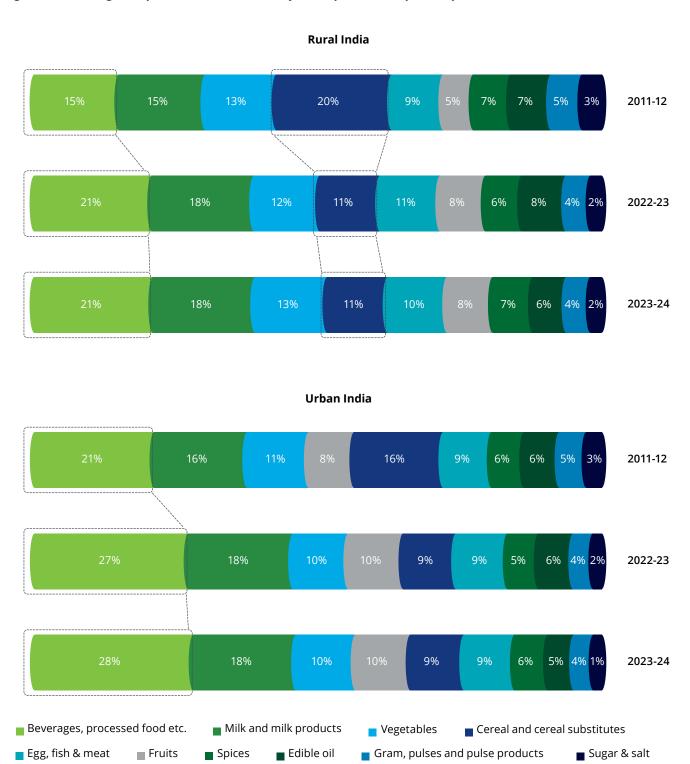
¹¹https://www.hindustantimes.com/india-news/indias-median-age-is-10-years-younger-than-china-s-says-unfpa-report-asia-s-median-age-is-31-9-years-youngest-continent-is-africa-at-18-8-years-101681931441033.html

¹²https://www.businesstoday.in/bt-tv/video/india-to-be-a-5-trillion-economy-by-fy28-reach-30-trillion-by-2047-nirmala-sitharaman-412834-2024-01-11, https://www.reuters.com/world/india/india-budget-india-keeps-infrastructure-spend-target-unchanged-record-1111-trln-2024-07-23 https://pib.gov.in/PressReleasePage.aspx?PRID=2097919

¹³https://www.business-standard.com/economy/news/rural-indians-are-now-spending-more-on-processed-food-drinks-than-cereals-household-consumption-expenditure-survey-124022600142_1.html?ref=finshots.in

¹⁴https://www.business-standard.com/economy/news/indians-spending-more-on-packaged-food-eating-out-as-home-cooking-declines-124041000308_1. html?ref=finshots.in

Figure 2: Percentage composition of MPCE (Monthly Per Capita Consumption Expenditure) on food items¹⁵

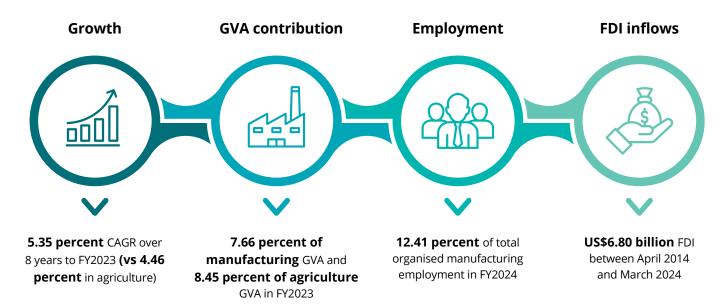


This sets the stage for food processing to become a crucial industry, bridging agriculture with modern consumption trends, driving efficiency and shaping the future of India's food economy. The government also recognises food processing as a sunrise sector that has witnessed high growth and increased investment in recent years.

 $^{^{\}rm 15}\,$ Household Consumption Expenditure Survey (HCES): 2023 - 24

Figure 3: India's food processing sector¹⁶

India's food processing sector is ~US\$23 billion high-GVA sector, contributing ~1.3 percent to the country's total GVA



The food processing sector's contributions go beyond growth metrics. It plays a crucial role in strengthening the broader food ecosystem through several strategic benefits:

- Reducing post-harvest losses: Improved shelf-life and storage conditions help reduce wastage of perishables such as fruits, vegetables and dairy.
- Enabling crop diversification: Encourages farmers to cultivate high-value crops that align with processing demand, such as tomatoes for puree and maize for snacks.
- Improving food security: Creating buffer stocks of staples and ready-to-eat options.
- Supporting rural industrialisation: Processing clusters and integrated food parks bring industry closer to the agricultural base, fostering rural growth.
- Key driver for MSME employment: The food industry is the leading employer within India's MSME ecosystem, accounting for 25 percent of total MSME employment.¹⁷ This underscores its pivotal role in job creation and inclusive economic growth.

 $^{^{16}\,}MoFPI\,annual\,report\,2023-24,\,https://pib.gov.in/PressReleasePage.aspx?PRID=2097960$

 $^{^{17}} https://www.bizfunds.com/blog/2023/09/28/the-indian-msme-sector-in-2023-a-statistical-overview/\#: \sim :text=Micro%2C%20small%2C%20and%20medium%20enterprises, units%20located%20in%20rural%20areas.$

The evolution of India's food processing sector is influenced by strong growth drivers, along with certain aspects that require ongoing enhancement.

Figure 4: Growth drivers and barriers for India's food processing sector¹⁸

Growth drivers



Changing consumer preferences

Shift to convenience, health and snacking

Growth Barriers



Fragmented supply chains

Lack of farmgate infrastructure and cold storage, 70 percent of India's cold storage units are concentrated in just three states





Limited processing at source

5–16 percent post-harvest loss is recorded for various crops before they reach processors



Retail and e-commerce expansionBroader availability and accessibility



High logistics costs

India's logistics cost is ~13–14 percent of GDP (vs. 8 percent in developed countries)



Private sector investments

Large FMCG players + start-ups in RTC, RTE formats



Regulatory complexity

Multiple laws and regulators (FSSAI, APEDA, state-level)



Government push

PLI, PMFME, agri infra fund, cold chain subsidies



Inadequate access to credit

Especially for MSMEs

Acknowledging the strategic importance of food processing, India is uniquely positioned to unlock significant opportunities in the sector.

 Large share of the world's arable land: About 52 percent of India's total land area is cultivable or suitable for agriculture.¹⁹

Country	% of the world's arable land ²⁰
US	11%
India	11%
China	8%
Brazil	4%
Thailand	1%

¹⁸https://www.thehindu.com/business/Economy/indias-logistics-cost-will-come-down-to-single-digit-percentage-in-two-years-gadkari/article68764060.ece https://www.pib.gov.in/newsite/PrintRelease.aspx?relid=148566, https://retail.economictimes.indiatimes.com/news/food-entertainment/grocery/india-in-dire-need-to-upgrade-and-expand-its-cold-chain-capacity-in-food-processing-sector/83919388#:~:text=Issues%20affecting%20cold%20chain%20i-nfrastructure,affected%20due%20tow20humid%20conditions

¹⁹https://tradingeconomics.com/india/arable-land-percent-of-land-area-wb-data.html#:~:text=Arable%20land%20(%25%20of%20land%20area)%20in%20 India%20was%20reported,compiled%20from%20officially%20recognized%20sources.

 $^{^{\}rm 20}https://data.worldbank.org/indicator/AG.LND.ARBL.HA$

• Quantity of raw material available: The country has the largest livestock population, 23 percent of global milk share (the largest) and is the second-largest producer of fruits and vegetables, cereals, etc.²¹

		(Production in m	nillion tonnes)		
Food item	India	World	India's share (%)	India's rank	Next to
Cereals					
Pulses	23	90	26	First	
Rice (Paddy)	187	769	24	Second	China
Wheat	108	757	14	Second	China
Sugarcane	371	1865	20	Second	Brazil
Fruits and vegetables					
Onion (Dry)	26	105	25	First	
Vegetables and Melons	135	1139	12	Second	China
Fruits	107	900	12	Second	China
Potatoes	49	371	13	Second	China
Dairy and eggs					
Milk	210	914	23	First	
Eggs	7	93	7	Second	China
Others					
Groundnut (Excluding shelled)	10	54	19	Second	China
Tea	5	27	20	Second	China

• India's horticulture production has consistently surpassed foodgrain production since 2012–13, driven by growing domestic demand and export opportunities. In 2023–24, it produced ~352 million tonnes²² of horticultural crops, compared with 332 million tonnes of foodgrains.²³

India, despite being a top producer of perishable goods, has low levels of food processing compared with other agrarian economies. Currently, the country processes less than 10 percent²⁴ of its agricultural output (4.5 percent for fruits; 2.7 percent for vegetables; 21.1 percent for milk, 34.2 percent for meat; and 15.4 percent for fishery.)²⁵ Additionally, a large share of processing in India is focused on primary activities such as milling rice and flour, extracting edible oils and producing sugar.

²¹MoFPI annual report 2023-24

²²https://pib.gov.in/PressReleaselframePage.aspx?PRID=2022761

²³https://pib.gov.in/PressReleasePage.aspx?PRID=2058534#:~:text=The%20total%20Foodgrain%20production%20in,Rice%2C%20Wheat%20and%20 Shree%20Anna.

²⁴https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Food+Processing+Ingredients+Annual_New+Delhi_India_IN2024-0014.pdf

²⁵https://www.mofpi.gov.in/sites/default/files/final_report_of_lop_july_2021.pdf

Table 1: Comparative levels of processing at a global context²⁶

Commodity	India	US	Brazil	Thailand	China
Paddy	92%	-	95%	93%	88%
Wheat	78%	33%	88%	69%	41%
Oilseeds	49%	46%	-	54%	72%
Fruits	4%	20%	38%	46%	7%
Vegetables	3%	11%	-	32%	3%
Meat	34%	87%	56%	14%	-
Milk	21%	65%	28%	29%	-

A comparison with global peers highlights the significant growth potential for India's food processing sector. For example, in Brazil ~62 percent²⁷ of agricultural produce is processed. This higher level of processing is linked with higher rural incomes, better employment opportunities and stronger food exports. The opportunity for growth in food processing in India is immense, and it is crucial to understand changing consumer needs and preferences.

²⁶ https://www.mofpi.gov.in/sites/default/files/final_report_of_lop_july_2021.pdf

²⁷ https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Food%20Processing%20Ingredients%20Annual_Sao%20Paulo%20ATO_Brazil_BR2025-0007.pdf



Changing consumer dynamics – Consumer demand trends

India's demographic dividend and rising disposable incomes are fuelling a structural shift in food consumption patterns. As affluence grows, Indian consumers are set to move beyond traditional staples to a more varied, premium and processed food basket. This dietary evolution is driving a K-shaped recovery in the processed food sector, where high-value categories are witnessing accelerated growth.

Major trends, including the rising demand for health-focused products, global flavour profiles, clean-label offerings and a push for greater ingredient transparency, are also reshaping the sector. These changes reflect a more informed and aspirational

consumer base. Furthermore, the channels through which brands engage consumers are rapidly evolving. OTT platforms and social media are emerging as powerful vectors of influence, shaping brand perception and purchase behaviour in real time.

As part of the development of this report, Deloitte conducted a proprietary survey involving over 1,200 urban consumers to capture firsthand insights into prevailing behaviours, attitudes and expectations. The data and findings from this survey are referenced throughout the report. Henceforth, these insights will be referred to as "the survey" or "per the survey".

Transforming Indian consumers: Demographics and impact on food processing

Indian consumers across income groups

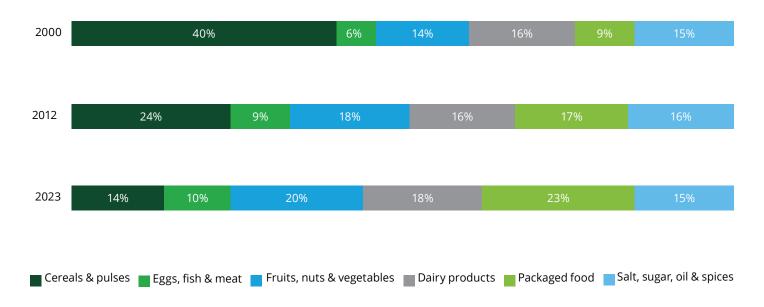
The Indian consumer landscape can be broadly segmented into low-, middle- and high-income households, each exhibiting distinct food consumption behaviours. As income levels increase, dietary preferences evolve, shifting towards protein- and fat-rich diets. Increased affluence also drives demand for convenience foods, global cuisines and indulgent offerings, reflecting a growing appetite for variety and experiential consumption.

Figure 5: Dietary patterns by income groups in India

Low-income households Medium-income households High-income households Annual household **Annual household Annual household** income of INR5-10 income of less income of more lakh than INR5 lakh than INR10 lakh **67.1%** (in 2019) **51.4%** (by 2030) 20.4% (in 2019) 26.3% (by 2030) 12.5% (in 2019) 22.3% (by 2030) Affordability is a key factor Shift towards a more Have access to an in dietary choices varied diet with increasing extensive variety of foods Reliance on staples such as purchasing power Diet rich in proteins, fats rice, wheat and millets Higher intake of dairy and sugar Often lack essential products, fruits and Noticeable inclination nutrients such as proteins, vegetables towards convenience, new vitamins and minerals Can afford a wide range of cuisines and indulgence Limited consumption of foods, including processed Demand tasty and fruits, vegetables and and packaged goods innovative processed foods protein-rich foods such as meat and dairy

As income levels rise, there is a shift from traditional diets to more animal-based products, functional foods and processed foods. This shift has led to a decline in the percentage share of staple cereals, replaced by higher intakes of dairy, meat and processed foods. Additionally, there is a growing trend towards purchasing packaged and ready-to-eat meals.²⁸

Figure 6: Percentage share of household spending on different food categories over time (2000-2023)29



Household expenditure patterns in India have undergone a marked transformation. Spending on cereals and pulses has declined sharply, from 40 percent in 2000 to 14 percent in 2024³⁰, signalling a shift away from traditional staples. Concurrently, allocation towards protein-rich items such as eggs, fish and meat has increased from 6 percent to 10 percent³¹ between 2000 and 2023. The most pronounced growth, however, has been in packaged foods, with spending nearly tripling from 9 percent to 23 percent over the same period³² underscoring the rapid rise of convenience and value-added consumption.

²⁸ https://www.dataforindia.com/consumption-expenditure/

²⁹https://www.dataforindia.com/consumption-expenditure/

³⁰ https://www.dataforindia.com/consumption-expenditure/

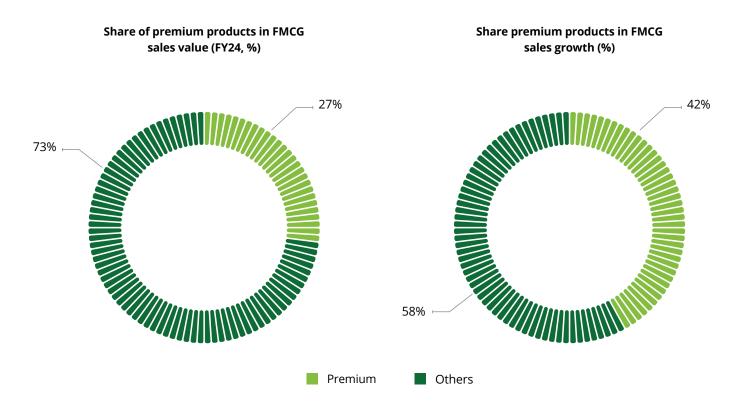
³¹ https://www.dataforindia.com/consumption-expenditure/

³² https://www.dataforindia.com/consumption-expenditure/

Premiumisation and K-shaped recovery

The Indian processed food sector has witnessed a notable shift towards premiumisation.³³

Figure 7: Premiumisation trend34



Premium products constitute 27 percent of the overall FMCG market, yet they have contributed a disproportionate 42 percent to the sector's total growth in India.³⁵ This outsized influence underscores the accelerating premiumisation trend, with consumers increasingly favouring high-quality and aspirational products.³⁶ One of the top consumer products companies has seen a 3 percent increase in sales contribution from premium products³⁷ and more than 70 percent of their new product launches in the last two years have been in the premium segment, indicating a strategic focus on higher-value offerings.³⁸

Similarly, a large biscuit manufacturer has shifted approximately 60–65 percent of its new product launches to the premium segment, up from 40 percent before COVID-19, highlighting a strategic pivot towards higher-end offerings.³⁹ Premium brands have shown resilience, with price adjustments helping to maintain revenue growth despite rising raw material costs. This focus on premiumisation has driven growth for these brands, while massmarket products have struggled, resulting in a K-shaped recovery within the industry.

³³ https://economictimes.indiatimes.com/industry/cons-products/fmcg/changing-consumer-trends-premium-outperforms-mass-as-new-india-seeks-quality-of-life/articleshow/112252229.cms?from=mdr

³⁴ https://www.cnbctv18.com/business/premiumisation-drives-fmcg-value-growth-in-india-nielseniq-report-19499366.htm

³⁵ https://www.cnbctv18.com/business/premiumisation-drives-fmcg-value-growth-in-india-nielseniq-report-19499366.htm

³⁶ https://www.cnbctv18.com/business/premiumisation-drives-fmcg-value-growth-in-india-nielseniq-report-19499366.htm

³⁷ https://economictimes.indiatimes.com/industry/cons-products/fmcg/changing-consumer-trends-premium-outperforms-mass-as-new-india-seeks-quality-of-life/articleshow/112252229.cms?from=mdr

³⁸ https://economictimes.indiatimes.com/industry/cons-products/fmcg/indian-premium-league-premiumisation-picks-up-pace-for-large-consumer-goods-companies/articleshow/108829721.cms?from=mdr

³⁹ https://economictimes.indiatimes.com/industry/cons-products/fmcg/indian-premium-league-premiumisation-picks-up-pace-for-large-consumer-goods-companies/articleshow/108829721.cms?from=mdr

Shifting consumer preferences: The new demand landscape

Indian consumers are demonstrating a clear shift in food preferences, driven by increasing health awareness and lifestyle changes. According to consumer surveys, there is growing demand for healthy, organic and high-protein foods, along with low or no-sugar alternatives among urban consumers. ⁴⁰ This trend reflects a broader movement towards preventive healthcare and wellness-focused consumption. Millennials and Gen Z, in particular, are prioritising functional foods that offer nutritional benefits. The rise in disposable income and digital exposure has further accelerated this transition.

Brands are responding by expanding portfolios to include cleanlabel, protein-rich and low-sugar alternatives. This shift is no longer confined to metro cities; tier 2 and tier 3 markets exhibit similar patterns.

Rising demand for healthy food

Indian households are increasingly prioritising health-focused foods and beverages, with expenditures expected to double over the next five years.⁴¹ The health food market in India is

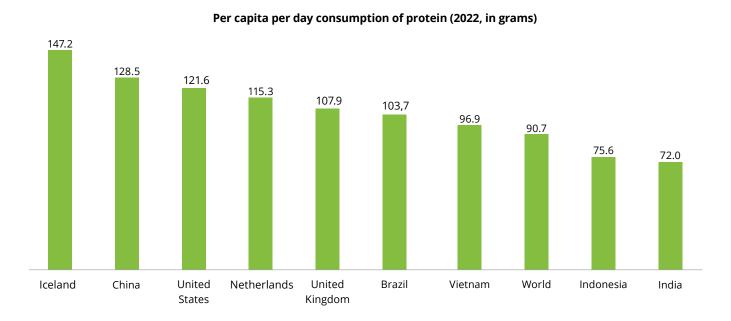
growing at 20 percent.⁴² This shift is driven by young consumers seeking healthier ingredients, leading to innovative food options such as plant-based alternatives.⁴³ The survey reveals a clear shift towards health-conscious choices. About 77 percent of respondents highly rank high-protein foods, while 71 percent prioritise no- or low-sugar options. Additionally, 30 percent of consumers cite low-fat and low-sodium products among their top dietary preferences.⁴⁴

About 73 percent of Indians prioritise reading ingredient lists and nutritional information before buying snacks.⁴⁵ About 90 percent of respondents⁴⁶ seek healthier snack options, with nearly 60 percent preferring natural, additive-free products made with wholesome ingredients such as nuts, seeds and whole grains.

Protein and protein-enriched foods

Per capita daily consumption of Indian consumers was 21 percent less than the global average in 2022.⁴⁷ The demand for proteinrich diets is on the rise in India. Protein is considered a primary macronutrient with a strong market focus.





⁴⁰ Deloitte India Consumer Survey 2025

⁴¹ https://www.marketbrew.in/weekly-insights/health-industry-india

⁴² https://www.marketbrew.in/weekly-insights/health-industry-india

⁴³ https://www.marketbrew.in/weekly-insights/health-industry-india

⁴⁴ Deloitte India Consumer Survey 2025

⁴⁵ https://www.marketbrew.in/daily-insights/india-snacking-habbit-change

⁴⁶ https://www.marketbrew.in/daily-insights/india-snacking-habbit-change

⁴⁷ https://ourworldindata.org/grapher/daily-per-capita-protein-supply?tab=table

⁴⁸ https://ourworldindata.org/grapher/daily-per-capita-protein-supply?tab=table

Protein is highlighted as one of the strongest trends within the health food space. Consumers are increasingly conscious about what is inside their food, including protein content. Indian consumers are increasingly recognising the importance of protein in their diets, thanks to initiatives such as World Protein Day. Campaigns such as #RightWayToProtein have educated people about making informed, balanced and sustainable protein choices. This growing awareness is leading to healthier dietary habits and a stronger focus on incorporating diverse protein sources into daily meals. According to the survey, 43 percent of urban respondents consider protein content very important, while 32 percent regard it as extremely important.

Consumers across age groups are more aware of this for various reasons. Children need protein for growth and muscle mass recovery in older age groups. Middle-aged groups are the most conscious and aware, leading to higher protein consumption, especially in newer formats such as bars, cookies, chips and even dairy products such as protein-rich buttermilk and paneer.⁵¹ The protein market, encompassing animal-derived and plant-based sources, is expected to grow, fuelled by the fitness culture, increasing disposable incomes and the proliferation of gyms and fitness centres.

Gut health foods

Indian consumers are increasingly prioritising digestive health as a core component of overall wellness, leading to a surge in demand for processed foods that support gut health. This trend is rooted in modern nutritional awareness and traditional dietary wisdom. Products enriched with probiotics and prebiotics—such as functional beverages, fortified dairy products and gut-friendly snacks—are witnessing growing adoption. Consumers seek convenient, ready-to-consume products that offer tangible digestive benefits without compromising taste or cultural familiarity.

Interestingly, this demand aligns closely with traditional Indian practices. Fermented foods such as yoghurt (curd), buttermilk (chaas), kanji and pickles—naturally rich in probiotics—are being reimagined in modern, packaged formats to cater to evolving consumption patterns. Additionally, processed foods incorporating ingredients known for their digestive properties—such as turmeric, ginger and fenugreek (methi)—are gaining traction in domestic and export markets. Food manufacturers are using these trends by launching value-added SKUs and clean-label innovations that combine traditional ingredients with modern food science.

HFSS foods and UPF concerns

Indian consumers are becoming increasingly aware of the health risks associated with the overconsumption of fat and sugar in packaged foods. This growing concern has sparked a significant shift in consumer preferences towards healthier options. As a result, there is a rising demand for low-fat and low-sugar foods, with many consumers actively seeking products that cater to these needs. According to the survey, 46 percent of urban consumers are willing to pay a premium for foods that are free from or contain low amounts of sugar.⁵² Additionally, 29 percent of urban consumers are prepared to spend more on foods low in fat and sodium.⁵³

Rise of Indian superfoods

Millets are gaining popularity due to their impressive nutritional profile. They are gluten-free, making them an excellent choice for those with gluten intolerance. Additionally, their low Glycemic Index (GI) makes them diabetic-friendly, helping to manage blood sugar levels effectively. Millets are also sustainable crops, requiring significantly less water to grow than other grains, which is beneficial for water conservation. Their versatility and health benefits are driving increased consumer interest and uptake. To further promote millet production and awareness, the Indian government declared 2023 as the "International Year of the Millet." This initiative aims to highlight the nutritional benefits of millets and their potential to address food security and malnutrition. The urban youth population is increasingly becoming health-conscious and shifting towards millet consumption. This trend has led to the emergence of numerous start-ups offering millet-based food products. The growth in demand is evident in urban and semi-urban areas and is expected to continue rising through 2030.

The rise of Indian products such as makhana (fox nuts) is a testament to the growing demand for healthy and nutritious snacks in India. Makhana, known for its low-calorie and high-nutrient profile, has seen a significant increase in popularity due to its health benefits and versatility.⁵⁴ This trend is part of a broader movement towards healthier eating, driven by an increasingly health-conscious consumer base. The International Year of Millets in 2023 further boosted the sales of millets, positioning India as a leader in the global millet movement.⁵⁵ These shifts reflect a growing preference for traditional, nutrient-rich foods that support overall well-being.

⁴⁹ https://indianconventions.in/2025/02/27/protein-day-2025-calls-for-smarter-protein-consumption-with-the-rightwaytoprotein/

⁵⁰ Deloitte India Consumer Survey 2025

⁵¹ Inputs of industry experts

⁵² Deloitte India Consumer Survey 2025

⁵³ Deloitte India Consumer Survey 2025

⁵⁴https://www.imarcgroup.com/india-makhana-market

 $^{^{55}\} https://www.freepressjournal.in/analysis/indias-millets-untapped-global-export-market-poised-for-growth$

Regional food preferences

Regional and North Indian cuisines hold a 20 percent share of the Indian food market, jointly leading the sector in consumer preference and market penetration.⁵⁶ Indo-Chinese cuisine also remains popular, accounting for 15 percent of the market.⁵⁷ This preference for regional flavours influences the processed food industry, with top processed food players locally inspired snack and beverage variants catering to regional palates. Indian artisanal cheese producers are gaining international recognition for their fusion of traditional and modern techniques.⁵⁸ Additionally, restaurants and packaged food brands are creatively blending regional Indian flavours with global formats, resulting in innovative products such as biriyani pizzas, masala ramen and paneer tacos.⁵⁹

Moreover, the increasing preference for organic food and local sourcing is leading to the growth of brands focused on pesticide-free produce. These trends underscore the dynamic nature of India's food industry, where traditional flavours and modern innovations coexist to meet consumers' evolving demands.

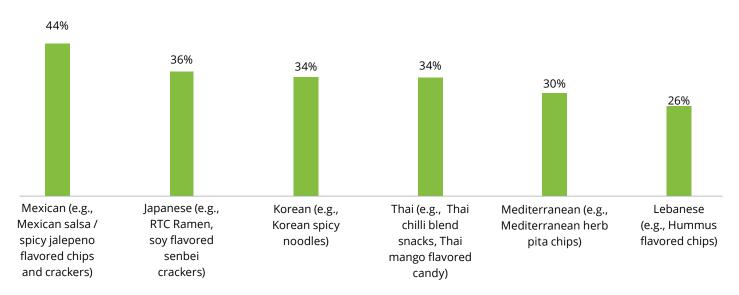
Global food influences

Consumers are seeking variety in their food choices, leading to a greater acceptance of international flavours and cuisines. Nearly 50 percent of food service experts predicted Southeast Asian cuisines would trend back in 2021.⁶¹ This trend is driven by increased urbanisation and a younger demographic eager to experiment with international flavours. This adaptation has made international cuisines more accessible and appealing to Indian consumers.

The snacking category, in particular, has seen a rise in products with international flavours, such as Korean-flavoured chips. The trend towards Asian flavours is noticeable, with consumers preferring spicier and more diverse taste profiles. ⁶² The growing demand for health and wellness products such as avocados, quinoa and kombucha reflects global influences on Indian dietary preferences.

The survey highlights growing interest in global cuisines, with Mexican (44 percent), Japanese (36 percent) and Korean and Thai (34 percent each) emerging as the most sought-after among Indian consumers.⁶³





The demand for international flavours has led to increased innovation in product development. Companies are introducing new SKUs and flavours to cater to this demand.

⁵⁶ https://www.statista.com/statistics/1236233/cuisine-trends-in-india/

⁵⁷ https://www.statista.com/statistics/1236233/cuisine-trends-in-india/

⁵⁸ https://journalofethnicfoods.biomedcentral.com/articles/10.1186/s42779-023-00189-0

⁵⁹ https://www.supermarketperimeter.com/articles/8001-new-takes-on-asian-cuisine

⁶⁰ https://www.deccanherald.com/opinion/what-drives-indias-shift-to-processed-foods-3347151

⁶¹ https://www.statista.com/statistics/1236233/cuisine-trends-in-india/

⁶² Inputs of industry experts

⁶³ Deloitte India Consumer Survey 2025

⁶⁴ Deloitte India Consumer Survey 2025

Clean label and transparency demand

The demand for clean labels and transparency in food products is rising in India. Consumers are increasingly seeking products with minimal, recognisable and natural ingredients. This trend is driven by a desire for healthier and more ethical food choices.⁶⁵

Clean label products often emphasize being free from artificial additives, preservatives and allergens, catering to health-conscious consumers. Over 90 percent of urban consumers consider clean labels important while purchasing food products.⁶⁷ About 31 percent of urban consumers are willing to pay a more than 10 percent premium for products with clean labels and natural claims.⁶⁸ Between 2020 and 2025, India's clean-label food market is expected to grow by about ~7.5 percent, the highest growth rate in the APAC region.⁶⁹ A shift towards health-oriented and sustainable products drives this growth. Here are some key trends in the Indian clean-label food industry:

Figure 10: Importance of clean labels in purchasing food and beverages⁶⁶

Importance of clean labels in purchasing food and beverages (Percentage of consumers)

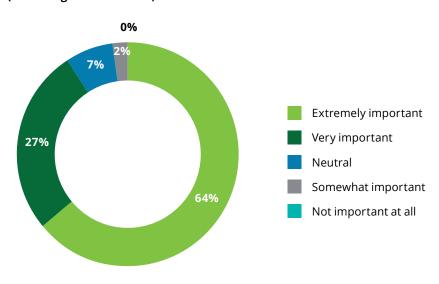
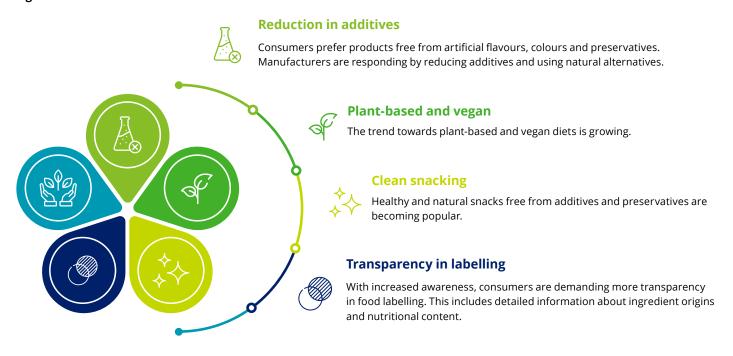


Figure 11: Demand trends of clean-label foods





Natural and organic ingredients

Rising demand for food products made with natural and organic ingredients. This includes the use of natural sweeteners such as honey, jaggery and dates instead of artificial sweeteners.

- 65 https://www.foodtechbiz.com/opinion/clean-label-ingredients-a-paradigm-shift-towards-healthier-and-transparent-food-choices
- ⁶⁶ Deloitte India Consumer Survey 2025
- ⁶⁷ Deloitte India Consumer Survey 2025
- ⁶⁸ Deloitte India Consumer Survey 2025
- 69 https://agronfoodprocessing.com/riding-the-clean-label-wave/

Consumers are becoming more conscious about their nutrition, questioning product sourcing, ingredients and environmental impact. This shift towards clean labels reflects a broader movement towards holistic health and well-being.

Fortified food

The demand for fortified food in India is rising, driven by the urgent need to combat malnutrition among low-income groups. According to the National Family Health Survey (NFHS-5), 34.7 percent of children under five years of age are stunted, and 17.3 percent are wasted.70 These statistics highlight the prevalence of micronutrient deficiencies, which significantly affect growth and development. Fortified foods, enriched with essential vitamins and minerals, offer a cost-effective and scalable solution to address these deficiencies. The Food Safety and Standards Authority of India (FSSAI) has implemented regulations to

fortify staples such as wheat flour, rice, milk and edible oil with nutrients such as iron, vitamin B12, folic acid and vitamins A and D.71 These initiatives aim to improve the nutritional intake of vulnerable populations, thereby reducing the country's malnutrition burden.

Government policies and programmes have bolstered the adoption of fortified foods. The National Food Security Act (NFSA) and various state-level schemes provide subsidised fortified staples to low-income households. 72 Additionally, organisations such as the Global Alliance for Improved Nutrition (GAIN) support large-scale food fortification projects in states with high malnutrition rates.73 These efforts have led to increased awareness and consumption of fortified foods, contributing to better health outcomes.

Channels of influence in food and beverages in India

OTT platforms and social media influencers have significantly shaped food and beverage trends in India. They have popularised international cuisines and driven consumer preferences towards healthier, more transparent food choices. Influencers have also played a crucial role in promoting clean-label products and reducing sugar intake, reflecting a broader movement towards holistic health and well-being.

Consumption of global content on OTT platforms

The influence of OTT platforms on food and beverage trends in India is significant. Korean dramas and OTT docuseries have played a pivotal role in shaping consumer preferences. For instance, the popularity of Korean dramas has led to a surge in the demand for Korean cuisine in India. Restaurants and food trucks offering Korean dishes such as kimchi, bibimbap and tteokbokki have become increasingly common. OTT docuseries have also contributed to this trend by showcasing diverse culinary traditions and inspiring viewers to explore new flavours and cooking techniques.74



Curiosity

Exposure to global content sparks a keen interest among consumers in exploring new flavours and cuisines

Trial

This curiosity drives consumers to sample dishes from diverse global cuisines at restaurants and cafes taste for global cuisines, they seek convenient ways to access these foods, such as through packaged foods or readyto-eat/ready-to-cook items

⁷⁰ https://globalnutritionreport.org/resources/nutrition-profiles/asia/southern-asia/india/

⁷¹ https://fssai.gov.in/cms/fortified-food.php

⁷² https://pib.gov.in/PressNoteDetails.aspx?NoteId=151969&ModuleId=3®=3&lang=1

⁷³ https://www.ijres.org/papers/Volume-10/Issue-5/Ser-3/A10050103.pdf

⁷⁴ https://www.hotelierindia.com/fb/how-ott-platforms-influence-food-menus-in-restaurants

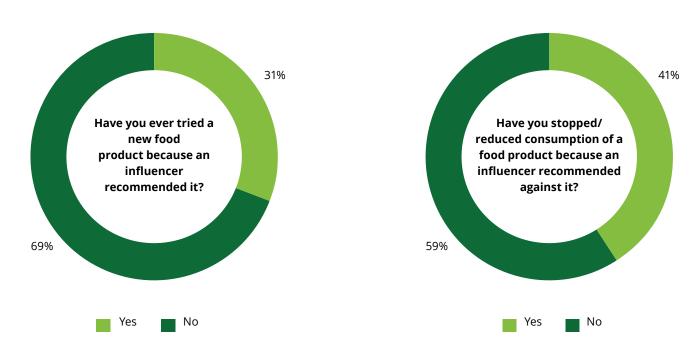
Rise of food influencers

Over time, the deeper penetration of the internet has given rise to a new type of social media influencer focused on raising awareness and sharing knowledge about foods and beverages. These influencers, known as food influencers, have significantly affected marketing strategies in the food and beverage industry.

The innovative marketing approach through social media influencers has revolutionised how brands engage with consumers, promote products and drive sales in an increasingly

competitive market. Social media influencers have become powerful advocates for food and beverage brands, wielding significant influence over their followers' culinary preferences and purchasing decisions. They help in creating content that resonates with consumers and drives engagement. According to the survey, 31 percent of respondents have tried a new food because an influencer recommended it.⁷⁵ The popularity of international flavours, such as Korean and Asian cuisines, has been partly driven by influencers showcasing these trends on social media.⁷⁶

Figure 13: Influencers' influence on food choices (Percentage of consumers)77



Food influencers have also made consumers more conscious about what they consume, leading to increased scrutiny of nutritional information and ingredient transparency.⁷⁸ A notable effect of food influencers is their role in the conversation around reducing sugar intake. Social media influencers have significantly driven the trend towards sugar-free and low-sugar products. According to the survey, 41 percent have stopped consuming a specific food product because of an influencer.⁷⁹ A global survey by Kerry found that 7 in 10 respondents are reducing their

sugar consumption for long-term health benefits.⁸⁰ While food influencers have played a positive role in increasing consumer awareness, the rising trust in digital content has also led to the rapid spread of misinformation. Inaccurate health claims and misleading details about food products can lead to poor dietary choices. The absence of formal regulation presents a valuable opportunity to establish oversight that promotes accurate, responsible and consumer-safe content from influencers in the food and beverage sector.

⁷⁵ Deloitte India Consumer Survey 2025

⁷⁶ https://influencerdaily.com/the-impact-of-influencer-marketing-in-the-food-and-beverage-industry/

⁷⁷ Deloitte India Consumer Survey 2025

⁷⁸ https://agronfoodprocessing.com/the-trendsetters-exploring-the-impact-of-food-bloggers-and-influencers-on-the-fb-industry/

⁷⁹ Deloitte India Consumer Survey 2025

⁸⁰ https://www.fooddive.com/news/sugar-reduction-meet-consumer-needs-kerry/652498/

Many consumers trust social media content, which has led to changes in consumption patterns. For instance, visually appealing posts about new snack products, health drinks or innovative food packaging on social media can drive trends and influence purchasing decisions.⁸¹

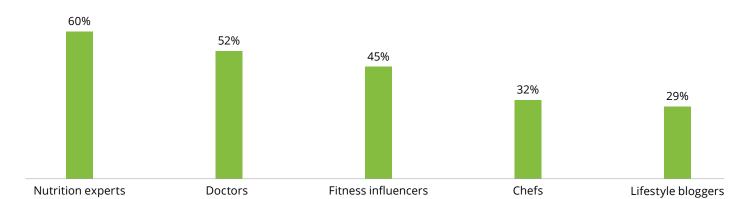


Figure 14: Type of influencers trusted by consumers (Percentage of consumers)82

Studies have shown that social media recommendations can significantly affect consumer behaviour, with many people trying new products based on influencer endorsements.⁸³ Influencers often share detailed reviews, unboxing videos and personal experiences with packaged foods, which can build trust and credibility among their followers. This trust also means misinformation can spread quickly, affecting consumer choices and health. For example, exaggerated claims about the health benefits of certain packaged foods or misleading information about ingredients can lead to misguided consumption decisions. This shift towards digital trust underscores the importance of accurate and reliable information in the food and beverage industry.

Overall, food influencers have become powerful advocates for food and beverage brands, shaping consumer preferences and driving engagement.

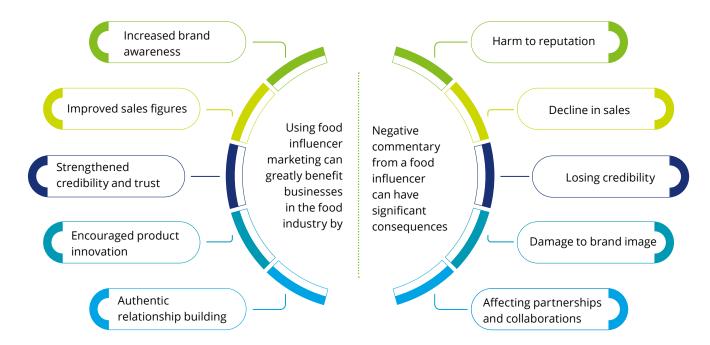


Figure 15: Influence of social media food influencers on brands

⁸¹ https://www.hotelierindia.com/fb/the-powerful-role-of-social-media-in-influencing-food-and-beverage-trends 8

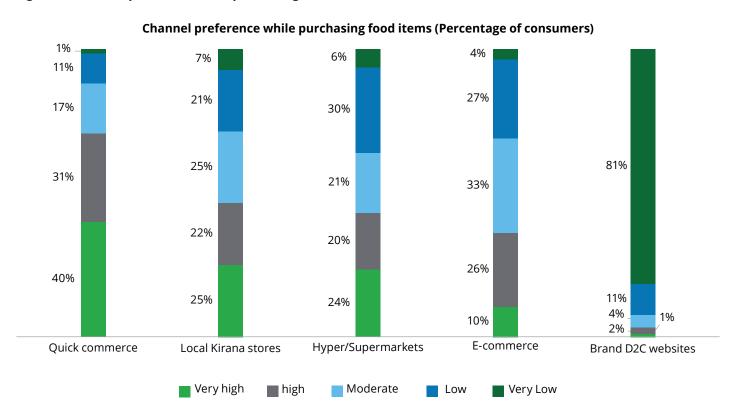
⁸² Deloitte India Consumer Survey 2025

⁸³ https://www.emerald.com/insight/content/doi/10.1108/bfj-12-2024-473/full/html

Evolving retail channel: Opportunity for the food processing industry

Quick commerce is rapidly growing in India, driven by urban consumers' demand for fast delivery services. This trend is linked to impulse purchases and is more prevalent in urban areas. Meanwhile, the food service sector, including QSRs and cloud kitchens, is also expanding, fuelled by changing dining preferences and urbanisation. Quick commerce and local Kirana stores are the top channels urban consumers prefer.⁸⁴

Figure 16: Channel preference while purchasing food items85



Rise of quick commerce

The convenience-seeking cohort, particularly urban consumers with busy lifestyles, has increasingly relied on quick commerce. Quick commerce offers the convenience of fast delivery, which has become a significant driver of consumer preference. Consumers appreciate the ability to receive products within minutes. Quick commerce platforms have played a pivotal role in shaping consumer demand for packaged food and beverages. The Gross Merchandise Value (GMV) of quick commerce in India reached US\$2.3 billion in 2023, with a projected CAGR of 27.9 percent from FY2022 to FY2027.86 This rapid growth is driven by the need for convenience and the increasing adoption of

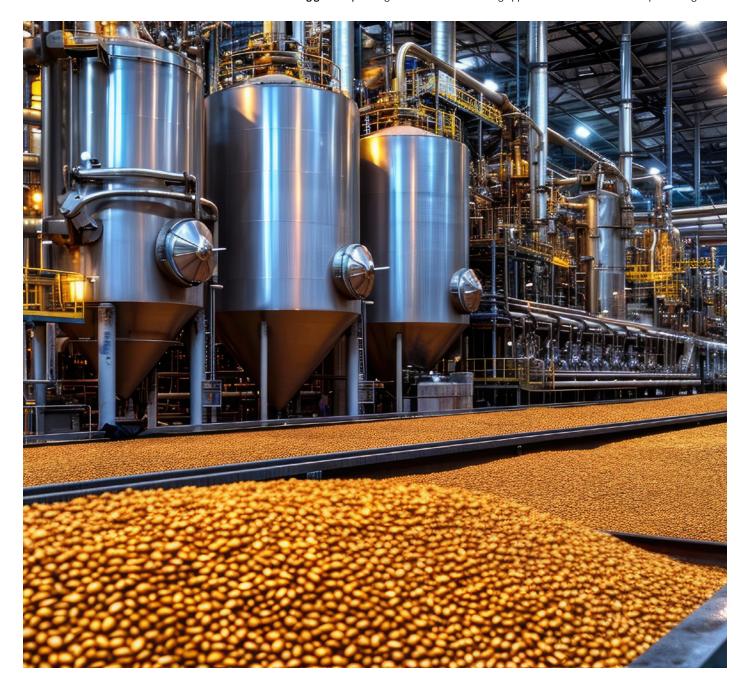
digital shopping platforms. Quick commerce is closely linked to impulse purchases, with consumers often using these services for immediate needs rather than planned purchases. This trend is particularly strong in urban areas where quick commerce services are more readily available. This while urban consumers are more inclined to use quick commerce and e-commerce, rural consumers still rely more on traditional retail channels. However, the trend towards online shopping is growing in both segments. Emerging platforms that provide café services to consumers hyper-quickly will increase institutional demand for ready-to-cook, ready-to-eat and high-shelf-life products.

⁸⁴ Deloitte India Consumer Survey 2025

⁸⁵ Deloitte India Consumer Survey 2025

⁸⁶ https://www.ibef.org/blogs/the-rise-of-quick-commerce-in-india-revolutionising-retail-and-last-mile-delivery

⁸⁷ Inputs of industry experts



Forces shaping the Indian food processing market



Innovation across food processing

Innovation in the food processing sector has become a key differentiator as companies respond to shifting consumer preferences, rising health awareness and evolving regulatory standards. While India has long been a production hub, innovation is expanding beyond operational efficiency to include product reformulation, ingredient innovation and packaging transformation.

R&D to reformulate for Indian consumers

Food processing innovation in India is increasingly driven by global R&D centres tailoring products to local preferences. A major area of focus is reformulating existing product lines to reduce sugar, salt and trans fats without compromising taste, especially as health-conscious consumers seek more nutritious options. Functional ingredients such as protein, fibre and essential micronutrients are added to support digestion, immunity and overall wellness. Clean-label products, featuring fewer and more natural ingredients, are also gaining ground, with claims such as "no preservatives," "plant-based" and "gluten-free" becoming more mainstream. Nearly 65 percent of new food product launches in India now focus on health and nutrition attributes, reflecting strong consumer demand.88

These trends are being powered by multinationals setting up advanced R&D hubs to localise products to Indian tastes. A multinational invested over INR230 crore in a global innovation hub in Manesar, supporting 11 factories and 13 markets, equipped with pilot kitchens and sensory labs for rapid prototyping. Another agribusiness firm started a 17,000 sq. ft. centre to reformulate products with reduced salt, sugar and fat, catering to India's growing demand for healthier options. To accelerate development, companies are also setting up regional innovation accelerators that explore non-core categories such as functional foods, millet-based products and protein-rich snacks, blending Indian ingredients with global formats for faster, more relevant innovation.

Rural growth accelerates: A new consumption engine for food processing

Over the past year, rural India has increasingly become a growth engine for the food and FMCG industry, reversing the earlier trend of urban-led expansion. While urban markets face headwinds from food inflation and cautious middleclass spending, rural regions are witnessing a resurgence in consumption, especially in staple and essential categories.

Since January 2024, rural consumption growth has outpaced urban growth, marking a reversal in trend and underscoring the rising importance of rural markets in driving overall demand.⁸⁹

Rural consumption of FMCG products such as packaged atta, edible oils and soap witnessed a 6 percent volume growth in Q3 FY2024, surpassing the 2.8 percent growth in urban areas, down from 11 percent in the same quarter a year ago. This trend marks a significant change, with rural markets now outpacing urban ones in volume growth across most Indian regions.

Larger food processing companies have significantly expanded their rural coverage, introducing smaller SKUs of premium and functional products to tap into growing aspirations. As rural India's role in consumption growth becomes more pronounced, companies are expanding their product portfolios to include a broader range of offerings tailored for these markets. Many are deepening their presence through direct distribution in large rural centres, bypassing traditional intermediaries to ensure better control and availability. Others are focusing on localised supply chains to manage costs and improve responsiveness. Price-accessible innovation, tailored packaging and region-specific flavours are also gaining traction, enabling brands to cater more effectively to rural consumer preferences and purchasing power.

Regional disruptors redefining market play

Regional players are rapidly capturing market share in India's food and beverage space, outpacing national brands by aligning closely with evolving consumer needs and local preferences. With a 12.7 percent volume growth between April 2022 and April 2023, significantly higher than the 8.2 percent posted by national brands. These companies use a deep understanding of regional taste profiles and offer tailored products that resonate with local consumers. Their success is further bolstered by a strong value proposition: high-quality ingredients at affordable price points, often delivered in low-unit packs that appeal to the aspirations of consumers in non-urban markets. These consumers, while price-conscious, are increasingly seeking branded, well-packaged products that combine affordability with premium appeal.

Moreover, regional brands enjoy distinct advantages in distribution and agility. Retailers often find them more accessible and responsive, ensuring steady inventory and strong relationships. Their leaner operations, without heavy marketing overheads, allow for better margins while keeping product prices low. These brands are also agile innovators—quickly adapting packaging, formats and flavours based on real-time feedback and hyperlocal insights. This ability to experiment and evolve rapidly, coupled with the trust they build in specific geographies, positions them as formidable challengers to traditional national players. As digital commerce grows, especially among mass consumers, regional brands also use quick commerce channels to reach customers faster, further accelerating their growth.

Building a sustainable future in food processing

As India's food processing industry grows, contributing nearly 30 percent to the national food market, sustainability has become critical. 4 An estimated 20–25 percent of food is wasted annually due to supply chain inefficiencies, 5 leading to losses of ~INR90,000 crore and worsening food insecurity and environmental consequences. 6

To address this, companies are adopting operational excellence strategies to cut waste and improve efficiency, from lean manufacturing and precision agriculture to better cold chain logistics (currently covering only 10 percent of perishables)⁹⁷ and waste-to-energy systems. TPM and data-driven inventory tools are also being used to reduce spoilage and improve reliability.

Initiatives such as Feeding India and government schemes such as Operation Greens support efforts. Operation Greens targets a 20 percent reduction in post-harvest losses through better infrastructure and logistics. With coordinated innovation and policy backing, the sector is well-positioned to lead a shift towards zero-waste, sustainable production, enhancing competitiveness and resilience.

⁸⁹ NielsenIQ

⁹⁰ NielsenIQ

⁹¹ https://timesofindia.indiatimes.com/business/india-business/at-6-rural-fmcg-growth-2x-of-urban/articleshow/115064750.cms

⁹² https://economictimes.indiatimes.com/industry/cons-products/fmcg/will-fmcg-giants-be-able-to-slay-their-puny-challengers/articleshow/107424479. cms?from=mdr

⁹³ https://www.financialexpress.com/business/industry-local-brands-keep-big-fmcg-players-on-their-toes-3318385/

⁹⁴ https://www.skilglobal.com/zero-waste-strategies-for-indias-food-processing-industry-optimizing-for-sustainability-and-efficiency/

⁹⁵ https://www.skilglobal.com/zero-waste-strategies-for-indias-food-processing-industry-optimizing-for-sustainability-and-efficiency/

https://www.drishtiias.com/daily-updates/daily-news-analysis/international-day-of-awareness-of-food-loss-and-waste

⁹⁷ https://www.skilglobal.com/zero-waste-strategies-for-indias-food-processing-industry-optimizing-for-sustainability-and-efficiency/

^{**} https://www.google.com/search?q=Schemes+like+Operation+Greens%2C+launched+by+the+Ministry+of+Food+Processing+Industries%2C+aim+to+reduce+post-harvest+losses+by+20%25&rlz=1C1GCEA_enIN1032IN1033&oq=Schemes+like+Operation+Greens%2C+launched+by+the+Ministry+of+Food+Processing+Industries%2C+aim+to+reduce+post-harvest+losses+by+20%25&gs_lcrp=EgZjaHJvbWUyBggAEEUYOdIBBzI1NWowajmoAgCwAgE&sourceid=chrome&ie=UTF-8

Commodity price management

In FY2024, food processing companies in India grappled with persistent cost pressures driven by elevated commodity prices. Average Consumer Price Index (CPI) inflation rose to 6.8 percent, up from 5.8 percent in the previous year, significantly raising the cost of raw materials. Key inputs such as palm oil, crude oil, wheat, sugar and other edible oils saw notable price escalations. For instance, crude oil prices climbed from US\$78 to US\$83 per barrel during the year, amplifying transportation and logistics expenses across the supply chain. In January 2025, wheat prices surged over 8 percent within a fortnight, sugar prices rose by 10 percent due to lower production and import duties on edible oils were raised to as much as 35.75 percent, sugar prices training processor margins. Inflationary pressures compressed operating margins by 50–100 basis points across several players in the sector.

Firms with strong rural exposure were particularly vulnerable, as imported commodities such as palm oil became more expensive due to currency depreciation. Processors dependent on wheat

and dairy inputs also faced rising procurement costs, especially in price-sensitive rural markets that were already under pressure from inflation and stagnant incomes.

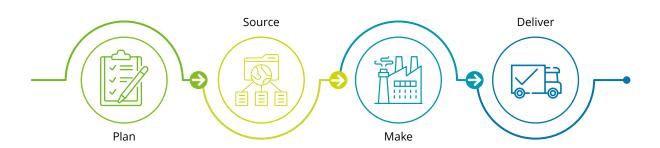
To manage these rising costs, many companies implemented targeted price increases. However, these were introduced cautiously to protect market share in an intensely competitive environment. Alongside pricing actions, leading players are adopting technology-led solutions, such as predictive analytics, digitised supply chains and Al-driven procurement tools, to optimise sourcing and reduce leakages. Some are also deepening their engagement with Farmer Producer Organisations (FPOs) to strengthen backwards integration and secure more stable, localised sourcing amid commodity volatility.

Building on these efforts, companies are accelerating initiatives to enhance supply chain resilience, drive operational efficiencies and strengthen sourcing models, positioning themselves for sustainable growth despite the inflationary headwinds.

Tech-enhanced supply chain

Large food processing companies are increasingly turning to technology to build more agile and efficient supply chains. Using tools such as AI, IoT and predictive analytics, these companies are moving towards smarter operational models that enable real-time visibility, demand forecasting and proactive risk management. Adopting Industry 5.0 principles, where human expertise is enhanced by automation and intelligent systems, is helping reduce waste, optimise logistics and improve responsiveness to market shifts. This techenabled transformation is becoming central to sustaining competitiveness in a dynamic and fast-evolving food ecosystem.

Food factory workflow



- 99 https://www.phdcci.in/wp-content/uploads/2024/01/CPI-Inflation-rose-to-5.6-in-December-2023.pdf
- 100 Adani Wilmar Annual Report FY24
- ¹⁰¹ https://economictimes.indiatimes.com/news/economy/agriculture/government-selling-wheat-to-millers-as-prices-rise-over-8-in-2-weeks/articleshow/117032986.cms?
- 102 https://www.reuters.com/world/india/indian-sugar-mills-close-early-lifting-local-prices-2025-02-10/?utm
- 103 https://www.reuters.com/world/india/india-likely-raise-vegetable-oil-import-taxes-help-support-local-farmers-2025-02-21/?
- ¹⁰⁴ Reliance and Wipro Annual Report FY24

A. Plan

In demand planning, Al-powered solutions use machine learning algorithms to delve into historical data, identifying intricate patterns and generating precise forecasts. This comprehensive methodology provides real-time insights, considering variables such as sales trends, seasonal fluctuations, promotional activities and external factors such as weather conditions or socioeconomic shifts.

Case study: An Indian subsidiary of a leading global F&B company uses AI to assess multiple data types, providing insights at the postal code and demographic levels. This helps the subsidiary customise consumer choices and better launch new products.¹⁰⁵

B. Source

Leading FMCG companies in India are increasingly integrating advanced technologies such as AI and IoT into their sourcing strategies to enhance sustainability and efficiency. By deploying AI-powered analytics and IoT sensors, these companies can monitor environmental conditions, assess supplier performance and ensure real-time compliance with sustainability standards. In addition, companies are collaborating with agri-tech firms to better understand cropping patterns and optimise the sourcing of raw materials, ensuring improved quality and more resilient supply chains

Case study: A major Indian FMCG conglomerate implemented an Al-driven platform with IoT sensors to optimise its sourcing of agricultural raw materials. The system analysed data on soil health, weather patterns and crop yields, enabling the company to make informed procurement and supplier selection decisions. As a result, the company achieved a 20 percent reduction in supply chain disruptions, improved product quality consistency and enhanced its overall sustainability metrics. ¹⁰⁶

C. Make

Smart factory

A smart factory is a fully connected and flexible system that can learn and adapt to new demands by analysing a continuous stream of data from connected systems. Per a 2022 survey by a leading technology company, 50 percent of the tech spend by Indian manufacturers is on Industry 4.0 technologies.¹⁰⁷ Manufacturers have witnessed improvement across KPIs by implementing smart factory solutions across industries, including F&B. With the advent of Industry 5.0, the improvement is expected to be higher owing to improved working conditions, employee morale and workforce productivity.

D. Deliver

Blockchain in supply chains

Blockchain enables real-time, tamper-proof data sharing across complex food supply chains. It enhances transparency in key areas such as product origin, ingredient tracking and sustainability reporting. It also aids in faster traceability during foodborne outbreaks, improving coordination and recall efficiency.

Case study: Using a blockchain-based system, a leading retailer reduced the time to trace mangoes from over 6 days to just 2.2 seconds. 108

Shelf life and cold chain technologies

Fresh produce often spends nearly half its life in transit, ¹⁰⁹ making cold chain management vital. Even short delays can cause high water loss in the fresh produce. For example, a four-hour gap between harvest and pre-cooling can cause up to 50 percent water loss in strawberries.

Case study: A start-up developed a plant-based coating to slow oxidation and retain moisture. Covering just one avocado saved 23 litres of water and enough energy to charge a smartphone nine times.¹¹⁰

¹⁰⁵ How AI is transforming India's FMCG and retail sector - BusinessToday - Issue Date: May 28, 2023: https://www.businesstoday.in/magazine/deep-dive/story/how-ai-is-transforming-indias-fmcg-and-retail-sector-381057-2023-05-12

¹⁰⁶ https://economictimes.indiatimes.com/small-biz/sme-sector/leveraging-ai-in-dairy-and-beverage-manufacturing-to-ensure-product-quality-sanjay-singal-coo-dairy-beverages-itc-foods/articleshow/106534381.cms?from=mdr

¹⁰⁷ India industry 4.0 adoption: a case to mature manufacturing digitalisation by 2025; NASSCOM, Feb 2022

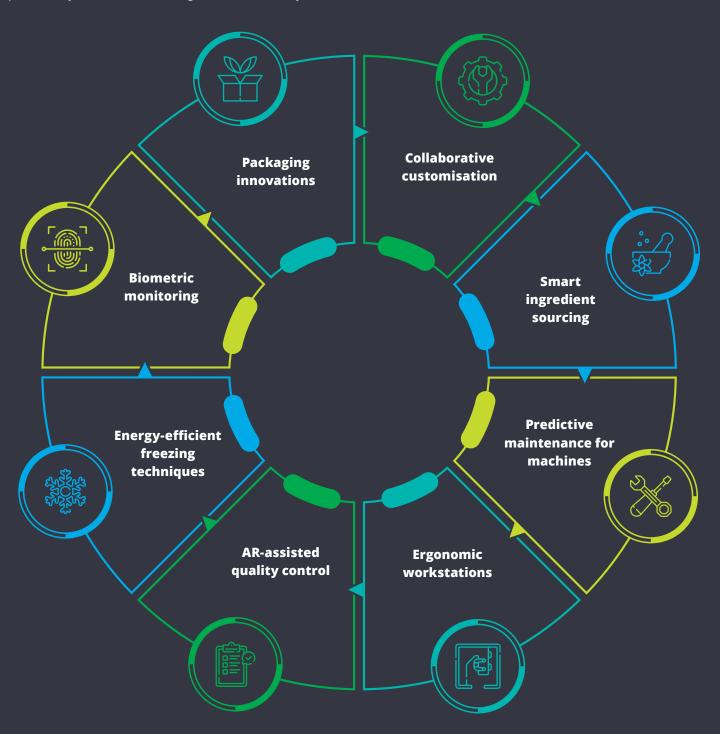
 $^{^{108}\} tech. walmart.com/content/walmart-global-tech/en_us/blog/post/blockchain-in-the-food-supply-chain.html$

¹⁰⁹ https://onethird.io/one-third-blogs/9-methods-to-extend-the-shelf-life-of-fresh-produce

¹¹⁰ https://www.ellenmacarthurfoundation.org/circular-examples/apeel

Case study: Elevating food production by integrating human expertise with advanced technology

In the evolving world of food production, Industry 5.0 marks a shift towards collaboration between human expertise and advanced technology. It envisions food factories with adaptive workflows, empowered workers and sustainable practices. This section explores how food factories—illustrated through a model ice cream plant—can apply Industry 5.0 to boost productivity, human-centric design and sustainability.



Frosty delights: The futuristic ice cream factory



Collaborative customisation: Artisans and cobots work side by side, orchestrating personalised ice cream flavours. Cobots handle precise measurements, ensuring consistent swirls and portions. Reduced errors and faster customisation enhance production efficiency.



Smart ingredient sourcing: Blockchain ensures transparency by recording every ingredient's journey. Smart contracts trigger timely orders based on demand fluctuations, optimising inventory levels. Further, traceable ingredients build consumer trust.



Predictive maintenance for machines: Sensors, such as compressors, continuously monitor ice cream machines. All predicts maintenance needs based on wear patterns, stress levels and historical data. Technicians receive real-time alerts, allowing proactive repairs.



Ergonomic workstations with exoskeletons: Workers wear lightweight exoskeletons during heavy-lifting tasks, such as moving tubs of ice cream or stacking crates. Sensors track posture, preventing strain. Cobots assist in packaging, ensuring consistent portioning.



AR-assisted quality control: Technicians don AR glasses during quality checks. Augmented reality overlays visual criteria—texture, colour and uniformity—on each batch. Imperfections trigger immediate adjustments, resulting in consistent product quality, minimised waste and streamlined inspection processes.



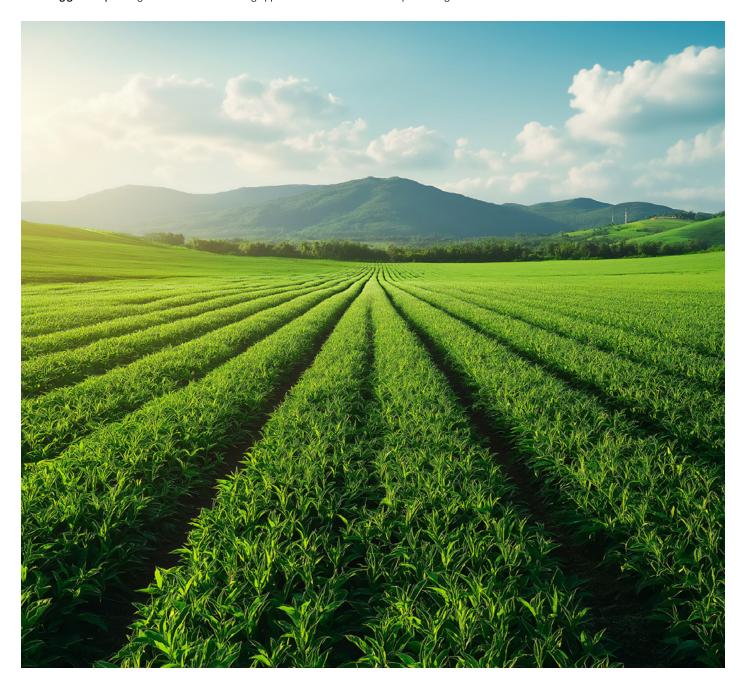
Energy-efficient freezing techniques: Al optimises temperature settings based on production demand, ambient conditions and energy tariffs. Smart sensors monitor efficiency, lowering energy costs and reducing environmental footprint.



Biometric monitoring for worker well-being: Wearable sensors track heart rate, hydration levels and stress indicators. Real-time alerts prevent fatigue or overheating. Wellness programmes encourage exercise breaks and mindfulness.



Eco-friendly packaging innovations: Frosty Delights pioneers edible cones, biodegradable cups and reusable containers. Smart labels indicate freshness, reducing food waste. Packaging becomes an extension of the brand's commitment to the environment.

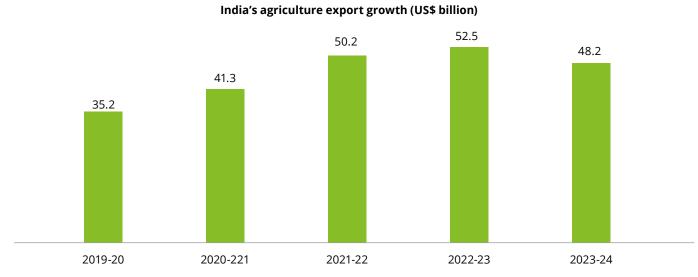


India's potential as the food basket for the world

India's agricultural export performance has steadily risen over the past few years, underpinned by a strong production base and a widening trade footprint. In FY2023–24, India exported US\$48.2 billion¹¹¹ worth of agricultural goods led by staples such as rice (US\$10.4 billion), marine products (US\$7.3 billion), spices (US\$4.3 billion), bovine meat (US\$3.7 billion) and sugar (US\$2.8 billion). Together, these five categories dominate the country's agri-export basket.

Indian products today reach over 100 countries, with key markets spanning the US, Canada, China, Gulf countries, ASEAN and SAARC. India's export momentum is supported not only by its deep production base but also by its strategic geographic location, offering efficient access to Western and Eastern countries.

Figure 17: India's agriculture export growth



Source: IBEF

Limited global share and the need for greater value capture

Despite India's progress in agriculture exports and strategic location, it accounts for only 2 percent¹¹³ of the global agricultural trade. This is particularly striking given the country's status as one of the world's largest producers of several agricultural commodities. The gap highlights a broader opportunity: while excelling in production, it captures relatively limited value from exports, primarily due to the dominance of primary and unprocessed commodities in its export basket.

¹¹¹ https://www.ibef.org/exports/agriculture-and-food-industry-india

¹¹² Department of commerce: https://www.commerce.gov.in/about-us/divisions/export-products-division/export-products-agriculture/

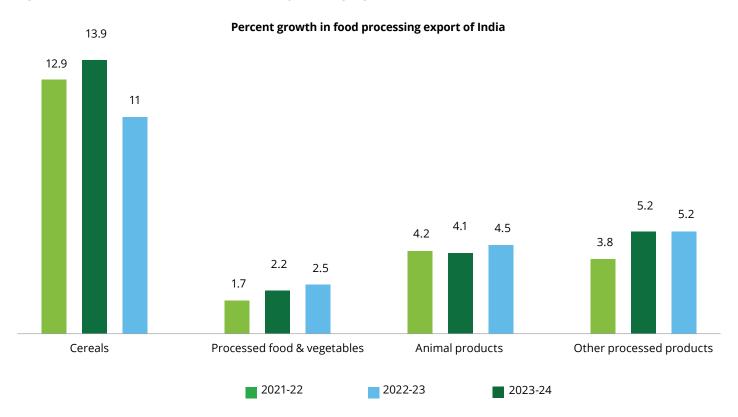
¹¹³ https://agriexchange.apeda.gov.in/International/Home/globalanalytical

India's food processing landscape and untapped potential

India's processed food exports were valued at ~US\$8 billion¹¹⁴ (16 percent of agriculture exports) in FY2023–24, though this segment has been growing steadily. There is a strong economic rationale for accelerating this shift. According to the Reserve Bank of India estimates,¹¹⁵ manufacturing prepared meals adds around 30 percent in value, while meal processing contributes an additional 12.7 percent. This suggests that aligning India's export strategy with this trend could unlock greater long-term value.

Focusing on processed food exports would not only enable India to move up the value chain but also generate broader ecosystem benefits, from reducing post-harvest losses and enhancing employment to delivering better returns to farmers without requiring higher acreage. India's current processed food exports already show promise in select categories, indicating the potential for further scale with the right investments and policy support.

Figure 18: Growth of commodities in india's food processing exports



Source: APEDA

¹¹⁴ https://apeda.gov.in/ProcessedFoods

¹¹⁵ https://www.ibef.org/blogs/an-overview-of-the-indian-food-processing-sector

Global peers demonstrating the power of food processing

Crucially, even smaller or land-constrained agricultural economies have demonstrated how value-driven export strategies can yield significant returns.¹¹⁶

Figure 19: Comparison of select countries on agri export value and share of processed food

Agri exports, share of food processing and key commodities









Agri exports*

Share of food processing in agri exports

Key food processing export commodities

India

US\$48 billion



Thailand

US\$49 billion



Prepared packaged fish, seafood, poultry, dog & cat food, bakery ingredients, beverages

Malaysia

US\$34 billion



Palm oil, vegetable & animal fats/ oil, food preparations, babassu oil, bread, bakery, and confectionery products & cocoa butter, and oil

Netherlands

US\$153 billion



Beverages, processed and preserved fruits and vegetables, natural fats and oils, preparations based on cereals, flour and milk

Source: United States Department of Agriculture, Government of Canada – Agriculture, Statistics Netherlands *Fig for FY2023, except Malaysia (for FY2022)

These examples underscore the opportunity for India to reorient its strategy from volume to value by embracing food processing as a priority.

¹¹⁶ https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Food%20Processing%20Ingredients%20Annual_Bangkok_Thailand_TH2024-0023.pdf;

https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Food%20Processing%20Ingredients%20Annual_Bangkok_Thailand_TH2024-0023.pdf;

https://agriculture.canada.ca/en/international-trade/market-intelligence/reports/market-overview-malaysia-1#c;

https://apps.fas.usda.gov/newgainapi/Report/DownloadReportByFileName?fileName=Food%20Processing%20Ingredients%20Annual_The%20Hague_Netherlands_NL2024-0004.pdf;

 $https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName? fileName=Food \% 20 Processing \% 20 Ingredients \% 20 Annual_The \% 20 Hague_Netherlands_NL2025-0006.pdf;$

https://www.cbs.nl/en-gb/news/2024/10/dutch-agricultural-exports-worth-nearly-124-billion-euros-in-2023.

Indian food products shaping global demand

Today, Indian cuisine is widely appreciated in restaurants and homes worldwide. The next frontier could be making Indian-branded processed products a mainstream global phenomenon. An illustrative example is the Korean case study, which shows how strategic efforts successfully globalised K-food and embedded it in global pop culture and consumer habits.

Figure 20: Case study highlighting the globalisation of Korean food

Korea's soft power playbook: From pop to pantry

Hallyu wave: Expansion through entertainment

- Exported K-pop, dramas, films, games and food; gained traction in Asia, then globally
- A tourism boom followed, boosting the popularity of local cuisine

Economic impact grew from US\$2 billion (2004) to US\$12 billion (2019)

More than 50 percent of inbound tourism was Hallyu-linked

K-Food virality: Pop culture to pantry staples

- Food in lyrics, shows, films (e.g. Chapaguri in Parasite)
- Viral trends such as Buldak ramen challenge, Dalgona coffee, Mukbang shows drove buzz

Home cooking during COVID-19 drove condiment exports to US\$300 million in 2020

K-Beauty: Cosmetic innovation goes viral

- Took off with BB creams and sheet masks in 2010
- Driven by product innovation and social media virality

Became the third-largest cosmetics exporter by 2023

Globalisation strategy: Tailoring for taste and shelf

- Local twists on global snack formats (chips, biscuits, cakes)
- Reinvented staples for broader appeal: kimchi versions as seasoning, vegan, probiotic-rich
- Stronger push for icon items

Buldak Ramen in 100+ countries

Organic Property

Strategic government push: Hansik campaign

Launched in 2009, with an aim to make K-food one of the world's top five cuisines

Studied foreign cultures to identify relevant Korean product fit and promoted them through cultural festivals, PR campaigns

Built K-Culture Valley to showcase all aspects of Hallyu

Positioned restaurants as cultural hubs, trained chef as ambassadors, standardised recipes, aired food documentaries

6 in 10 people in 16 major global cities now recognise K-food

Source: United States Department of Agriculture, Government of Canada- Agriculture, Statistics Netherlands

With rising global interest in health-conscious eating, origin-based products and culturally rich food experiences, India stands at a strategic juncture. The next phase of export growth lies in globalising Indian food, not just as cuisine served in restaurants, but as packaged and branded products on supermarket shelves worldwide. This can be achieved by tapping into three key opportunity areas:

Health-forward Indian ingredients in modern formats

Indian agricultural native ingredients such as millets and makhana offer a unique combination of health benefits and culinary versatility, making them ideal for today's global wellness trends. A few potential options are:

Millets

Millets are gaining attention as ancient grains for the modern plate. India produced 154 Lakh MT¹¹⁷ of millets in FY2024, 38 percent of the global output, yet exported just 2 Lakh MT (US\$71 million¹¹⁸), primarily as whole grain with minimal value addition. Global awareness is nascent but rising in health-conscious circles, drawn to millets' protein, fibre, micronutrients and gluten-free, low-GI profile. India is uniquely placed to lead this shift. Per APEDA, ¹¹⁹ over 200 Indian start-ups have started producing milletbased value-added products such as cereals, cookies, dosa mixes, noodles and pasta, with ~20 already exporting. Early traction¹²⁰ in the UAE, Saudi Arabia, Nepal and the US offer a strong base. With branding, innovation and consumer education, millets can become India's flagship superfood export, rooted in tradition yet built for the future.

Makhana (Fox nut)

India produces 23,650 MT¹²¹ of Makhana annually (FY2021–22), nearly 90 percent of global supply, yet exports only 2 percent (200 MT,¹²² US\$2.3 million), showing strong untapped potential. GI-tagged and rooted in Indian tradition, Makhana is rich in minerals, protein and fibre, while low in salt, sugar and calories — ideal for health-conscious consumers and those with diabetes or heart issues. While its demand in APAC is rising, the US and Europe remain largely untapped. The global market is projected to post a 7 percent CAGR (2019–23), with online channels rising faster at 15 percent CAGR (2019–25). India can lead through value-added formats such as roasted snacks, Makhana-based flour and cookies. With focused branding, innovation and outreach, Makhana can become a flagship clean-label export.

Similar to millets and makhana, other native Indian produce, such as amla, moringa and jackfruit, also hold potential for value-added exports, especially when aligned with wellness trends and supported by the right innovation and market positioning.



- 117 https://apeda.gov.in/IndianMillets
- 118 https://apeda.gov.in/IndianMillets
- https://apeda.gov.in/sites/default/files/annual_report/APEDA_Annual_Report_English_2023-24.pdf
- 120 https://apeda.gov.in/IndianMillets
- ¹²¹ https://horticulture.bihar.gov.in/MainSite/Documents/Publication/Makhana.pdf
- 122 https://horticulture.bihar.gov.in/MainSite/Documents/Publication/Makhana.pdf
- 123 https://www.makhana.org/food-professional/makhana-global-growth-prospects

Value chain upgrade: From raw commodities to refined global products

India produces several agricultural commodities in large volumes but exports them mostly in raw or minimally processed forms. This presents a major opportunity to move up the value chain. A few potential commodities to be explored are:

Groundnuts

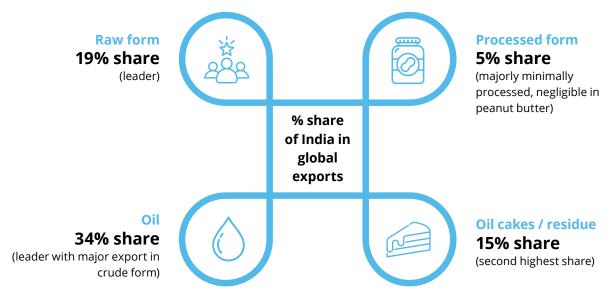
India is the world's second-largest groundnut producer (87 lakh MT124 in FY2023-24) and the top exporter, contributing 20 percent¹²⁵ of global exports (7 lakh MT, US\$861 million), ¹²⁶ mainly in raw or minimally processed forms, such as blanched, roasted, raw edible nuts or crude oil. However, higher-value derivatives such as peanut butter remain under-exported, despite global

demand rising at 7.5 percent CAGR (2022-30),127 projected to reach US\$7.9 billion by 2030.

Countries such as the US and the Netherlands, despite lower production, have captured a major share in this category¹²⁸ (US\$156 million and US\$183 million exports in FY2023, respectively), showing the value of productisation and branding. India can replicate this success by expanding into value-added formats — peanut butter, flavoured nut mixes, protein snacks, cookies and edible-grade oil — backed by quality certification, packaging and health-led marketing to shift groundnut from commodity to premium export.

Figure 21: India's Groundnut Export Breakup

India exporting groundnuts in unprocessed or minimally processed forms



Source: TRADEMAP

Bakery and namkeen - cereal-based products

India was the second-largest producer of wheat (3,567 lakh MT129) and rice (1,378 lakh MT130) and the fifth-largest producer of maize (356 lakh MT¹³¹) in FY2023-24. It leads global rice exports (30 percent share¹³²) and ranks among the top in wheat (2 lakh MT*¹³³) and maize (14 lakh MT¹³⁴) exporters.

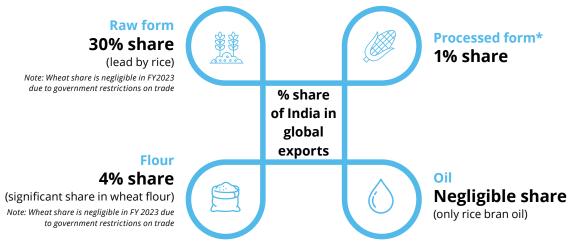
- https://apeda.gov.in/GroundNutsWorldtopexports
- 126 https://apeda.gov.in/GroundNuts
- https://aws.amazon.com/marketplace/pp/prodview-qlbmficktgio2#overview
- 129 https://apeda.gov.in/Wheat
- Economictimes: https://economictimes.indiatimes.com/news/economy/agriculture/indias-foodgrain-production-hits-record-332-22-mn-tonne-in-2023-24govt/articleshow/113664323.cms?from=mdr
- https://apeda.gov.in/Maize
- 132 Trademap
- *Wheat quantity for exports affected due to trade restrictions by the Indian government
- 133 https://www.apeda.gov.in/Wheat
- 134 https://apeda.gov.in/maize

However, most exports are in raw or minimally processed form, while India's share in processed categories such as bakery, snacks and oils is less than 1 percent¹³⁵ of global exports. This contrasts with the global processed food boom. Bakery, 78th most traded product globally,¹³⁶ was valued at US\$512 billion¹³⁷ in FY2023, posting a 6.7 percent CAGR through 2028; biscuits and cookies, expected to hit US\$132 billion¹³⁸ by 2028, are consumed weekly by two-thirds¹³⁹ of global consumers. Yet, India's export share remains under 1 percent, far behind Germany (10 percent share¹⁴⁰), Italy and Canada.

The snacking segment shows similar potential. With 91 percent¹⁴¹ of global consumers snacking daily, the US\$94 billion market (2023) is witnessing at a 7 percent CAGR.¹⁴² Cereal-based snacks, such as puffed and roasted grain products, offer a natural extension of India's grain strength, yet remain an underutilised export category for the country. Indian brands can bridge this gap by developing wellness-aligned products — whole grains, reduced sugar, functional ingredients — and reimagining traditional snacks such as namkeen for global appeal. With strong production, cultural relevance and government support, India is well-positioned to scale in global bakery and snack exports.

Figure 21:India's cereal Export breakup

India exporting cereal (wheat, rice and maize) in unprocessed or minimally processed forms



Source: Trademap

Transitioning from primary processed exports to branded, value-added offerings can significantly enhance India's export earnings while building global product equity.

Brand India: Marketing provenance and quality to the world

Many of India's existing processed products have the potential to compete on the global stage but remain underutilised due to limited branding, awareness and storytelling.

Product categories gaining traction globally

As global trends shift towards premium, health-conscious and experience-driven consumption, India has growing headroom to expand its existing exports by branding them better and positioning them right. The country already produces high-quality offerings across several categories; the challenge and opportunity lie in scaling its global presence. We illustrate this through two promising products: chocolate and coffee.

- 135 Trademap
- 136 https://oec.world/en/profile/hs/baked-goods
- ¹³⁷ MoFPI sector report on Bakery
- 138 MoFPI sector report on Bakery
- ¹³⁹ Mondelez Snacking Global Consumer Survey 2024: https://www.mondelezinternational.com/assets/stateofsnacking/2024/2024_MDLZ_stateofsnacking_report.pdf
- 140 Trademap
- 141 https://www.mondelezinternational.com/stateofsnacking/
- ¹⁴² Globalnewswire: https://www.globenewswire.com/news-release/2024/12/13/2996639/0/en/Healthy-Snacks-Market-Share-to-Rise-At-7-0-CAGR-To-Reach-USD-201-17-Billion-by-2034-PMR.html

^{*} Processed form includes bakery products (such bread, biscuits, pastry, pasta) and namkeens

Chocolate

Chocolate offers strong export potential for India, with the global market valued at US\$119 billion¹⁴³ in 2023 and posting a 4 percent CAGR (2023–30). Demand is rising, especially for health-conscious variants such as vegan and sugar-free, 73 percent¹⁴⁴ of global consumers say they cannot imagine a world without chocolate, and two-thirds145 eat biscuits, cookies or chocolate at least once a week. Yet, India holds just 0.3 percent¹⁴⁶ of global exports in chocolate, while Germany and Belgium together account for over 27 percent. India is already showing promise upstream, as it was among the top 20147 cocoa butter exporters globally in FY2023 (24 percent YoY value growth), setting the stage for highvalue chocolate exports. With global cocoa supply tightening, a 100,000 MT¹⁴⁸ shortfall expected in FY2024-25 and prices touching historic highs of US\$10,000 per MT, creating a strategic window for emerging origins such as India to capture share. India is now at an inflection point: on one hand, focused efforts on yield improvement (2.5-5 kg/tree vs. global 0.25 kg¹⁴⁹) and driving quality through bean-to-bar models, which emphasize uniqueness by retaining complete control from bean sourcing to product finish; on the other hand, international awards are building global credibility, with brands such as Paul & Mike, Manam and Bon Fiction gaining recognition. With global supply tight, domestic production improving and international awards validating quality, India is now well-positioned to become a credible exporter of premium chocolate. Furthermore, GI tagging native varieties such as Kerala's Mankuva cocoa will further strengthen India's global story and support brand-driven export growth.

Coffee

Coffee is fast evolving into a lifestyle product globally, driven by younger consumers who see it as energising and aspirational. Demand is rising globally — even in markets that have not traditionally consumed coffee — driven by its versatility and popularity across flavours, milk alternatives and occasions. ¹⁵⁰ The at-home (US\$97 billion by 2025) and out-of-home (US\$377 billion) segments are growing, supported by café-style convenient formats such as pods, instant mixes and RTD drinks. India, the seventh-largest producer ¹⁵¹ and the eighth-largest exporter, ¹⁵² shipped coffee worth US\$1.29 billion ¹⁵³ in FY2023–24, mostly unroasted beans with a 63 percent ¹⁵⁴ share (1.8 percent global share), while instant and extract-based products made up a 37 percent share (6.4 percent global share). However, advanced processed formats remain nascent with (0.2 percent global share

vs. Malaysia/Indonesia's 11–12 percent). As climate change hits major producers such as Brazil and Vietnam, global roasters are turning to Robusta, a variety preferred for its affordability, resilience and blend compatibility, sparking a global shift. India, the fifth-largest Robusta producer (72 percent¹⁵⁵ of its crop), is well-placed to benefit. Rising yields (+20 percent¹⁵⁶) under policy support, export schemes to incentivise high-value products and markets and growing instant coffee share (one-third of exports) signal an uptick in the value chain. Meanwhile, India's speciality coffee — defined by traceable origin, refined cultivation, artisanal roasting and distinct brewing techniques — is gaining global traction and helping reposition India as a premium coffee origin.

Chocolate and coffee illustrate how India can move up the value chain and build a premium export footprint by aligning with global demand shifts, improving domestic capabilities and building strong brand narratives. Beyond these, other product categories are also ripe with potential, creating a broader roadmap for India's food processing exports to scale new frontiers.

GI-tagged products

Strategic branding around GI-tagged and region-specific products can position India as a trusted source of premium, value-added goods. GI foods such as basmati rice, Darjeeling tea and alphonso mangoes reflect India's rich culinary heritage and have strong potential as global brands. Government bodies such as APEDA, DPIIT, FIEO and IBEF promote these through GI fairs, trade pavilions, campaigns and trial shipments to raise global awareness. Industry participation can enhance this push — Indian F&B brands already use GI-tagged inputs such as Sharbati wheat to build trust. This model can expand to value-added formats such as Darjeeling RTD tea, millet snacks with Uttarakhand's mandua, or jams from GI-tagged fruits. With the proper marketing, these can move from niche to premium exports by combining authenticity with innovation.

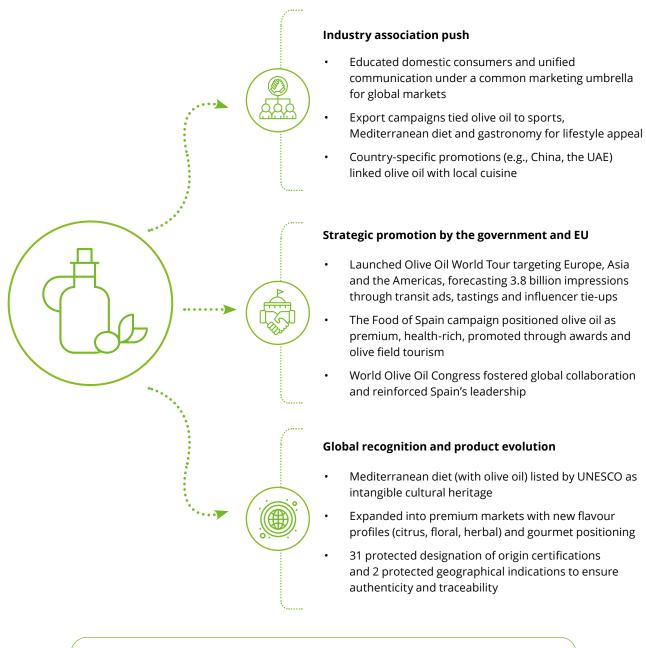
To further demonstrate this potential, we draw on global case studies, showing how consistent national-level branding and storytelling have helped other countries successfully scale their signature products.

An illustrative example highlighting how global markets were developed for olive oil from Spain, drawing lessons for India's food branding ambitions.

- ¹⁴³ Grand view research: https://www.grandviewresearch.com/industry-analysis/chocolate-market#:~:text=The%20global%20chocolate%20market%20 size,key%20driver%20of%20the%20market.
- $^{144}\ https://www.mondelezinternational.com/assets/stateofsnacking/2024/2024_MDLZ_stateofsnacking_report.pdf$
- $^{145}\ https://www.mondelezinternational.com/assets/stateofsnacking/2024/2024_MDLZ_stateofsnacking_report.pdf$
- ¹⁴⁶ Trademap
- 147 Trademap
- https://www.jpmorgan.com/insights/global-research/commodities/cocoa-prices
- https://www.bbc.com/news/articles/c62g03ln7z4o
- 150 https://www.gourmetpro.co/blog/coffee-market-trends-expert-insights
- 151 https://economictimes.indiatimes.com/news/economy/agriculture/india-seventh-largest-coffee-producer-in-the-world-government/articleshow/117403142.cms?from=mdr
- 152 https://www.ibef.org/exports/coffee-industry-in-india
- 153 https://economictimes.indiatimes.com/news/economy/agriculture/india-seventh-largest-coffee-producer-in-the-world-government/articleshow/117403142.cms?from=mdr
- cms/from=mgr 154 www.trademap.org/
- 155 https://www.ibef.org/exports/coffee-industry-in-india
- ¹⁵⁶ https://economictimes.indiatimes.com/news/economy/agriculture/india-seventh-largest-coffee-producer-in-the-world-government/articleshow/117403142.cms?from=mdr

Figure 22: Case study highlighting global recognition of olive oil by Spain

Spain's global playbook: Marketing olive oil beyond borders



Olive oil became Spain's second-biggest export; Share of exports outside Europe grew from 28 percent (2014) to 40 percent (2024)

Source: Trademap

Together, these three trends highlight a clear path for India to elevate its food processing exports by aligning with global health preferences, moving up the value chain in high-volume commodities and better marketing its unique provenance and product stories. With the right push, India can move beyond diaspora-driven appeal and position its processed food offerings as competitive, desirable and globally relevant.

Challenges in promoting exports

While India has strong potential to grow its food exports, certain challenges need to be addressed to unlock greater opportunities:

- Compliance with global standards: Indian agricultural exports frequently encounter challenges in aligning with international quality, sanitary and phytosanitary standards. Instances of pest contamination in consignments and lapses in adherence to safety regulations have periodically restricted access to key global markets. For example, the EU enforces particularly stringent Sanitary and Phytosanitary (SPS) norms, which require rigorous compliance to ensure food safety. For instance, the UK's Food Standards Agency intensified scrutiny of Indian spice imports¹⁵⁷ following the detection of ethylene oxide, a carcinogenic pesticide. Similarly, the US FDA has previously rejected shipments from India due to salmonella contamination.¹⁵⁸ These regulatory complexities necessitate enhanced domestic quality control measures and robust supply chain protocols to improve India's export competitiveness.
- Cold chain and post-harvest practices: Cold chain logistics and post-harvest handling remain critical bottlenecks in preserving the quality and shelf life of Indian agricultural exports. Inadequate infrastructure, fragmented supply chains and inefficiencies in temperature-controlled storage and transportation systems often result in product degradation, compromising quality standards.⁵⁹ These limitations not only inflate operational costs but also adversely affect the global competitiveness of Indian agri -produce. Addressing these gaps is essential for ensuring compliance with international market requirements and enhancing value realisation across the export ecosystem.

- Competitive disadvantages in innovation and branding: Indian processed food exporters often lag their global counterparts in product innovation, packaging sophistication and strategic branding. This deficiency poses a significant challenge in appealing to international consumers, who increasingly value product quality, aesthetics, convenience and compelling brand narratives.
- Lack of testing infrastructure: India's limited food testing capacity hinders its ability to export food products globally. Despite the growing demand for Indian food exports, the country struggles to meet stringent international food safety standards due to inadequate testing infrastructure. India only has 218 FSSAI-notified, NABL-accredited food testing laboratories with valid accreditation. 160 This shortfall affects the quality and safety of food products and leads to frequent rejections by importing countries. Enhancing food testing capabilities is crucial for India to improve its export performance and ensure compliance with global food safety regulations.

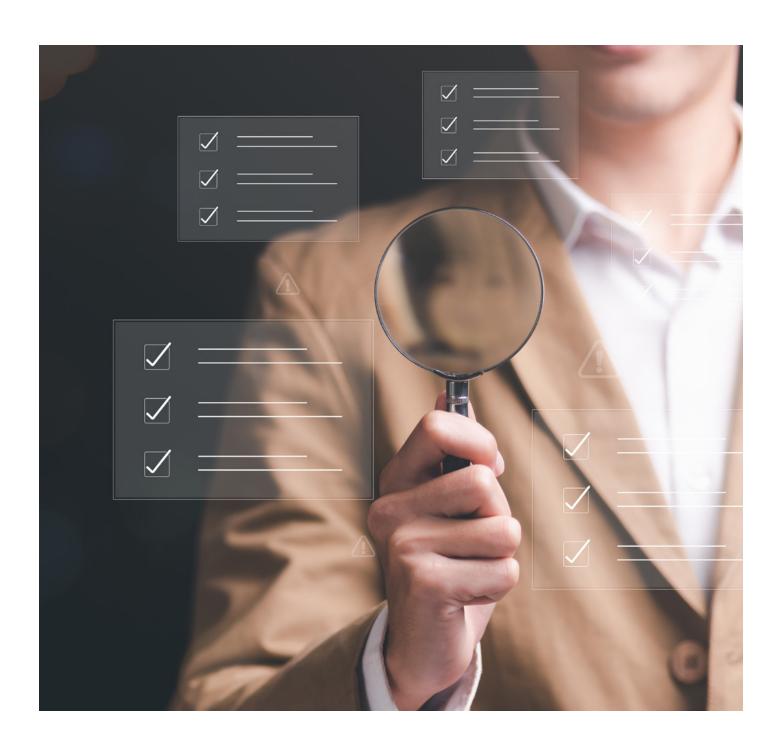
India's processing challenges can be effectively addressed by using advanced technology and systems to enhance manufacturing quality, streamlining logistics and promoting testing and compliance with global standards to boost demand. Additionally, collaboration between the government and industry is crucial to developing supportive policies, investing in infrastructure and driving innovation to overcome these obstacles.

¹⁵⁷ https://www.reuters.com/world/india/uk-tightens-scrutiny-all-indian-spice-imports-amid-contamination-allegations-2024-05-16/

¹⁵⁸ https://www.reuters.com/world/india/uk-tightens-scrutiny-all-indian-spice-imports-amid-contamination-allegations-2024-05-16/

¹⁵⁹ https://blog.pazago.com/post/india-agriculture-export-policy-objectives-challenges#:~:text=Compliance%20with%20Global%20Standards%3A%20 Indian,safety%20regulations%20hinder%20market%20access.

https://www.legalitysimplified.com/fssai-publishes-latest-list-of-accredited-food-testing-laboratories-2/



Policy and regulatory framework

Regulatory landscape governing India's food processing industry

The food processing industry is governed by several legislations, ancillary regulations, and guidelines within different ministries and regulators. The Food Safety and Standards Authority of India (FSSAI) is the nodal food regulator under the Ministry of Health and Family Welfare (MOHFW). The government legislated the Food Safety and Standards Act¹⁶¹ in 2006 to bring together several laws under one roof to ensure ease of access to food safety and standards legislation. Under the framework, Food Business Operators (FBOs) - manufacturers, packers, importers, distributors and retailers - must obtain FSSAI licences or registrations and comply with regulations on packaging, labelling, hygiene and product standards. FSSAI's role as the food regulator is conceptualised to lay down science-based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption. Its scope of work also covers overseeing food labelling and display regulations, fostering transparency and aiding consumers in making informed choices. Alongside **FSSAI's regime**, other key regulators contribute to the oversight of packaged foods in India:

- The Legal Metrology Department (Department of Consumer Affairs)¹⁶² enforces laws on weights and measures, requiring accurate declarations on pre-packaged goods to protect consumers from misrepresentation.
- The Central Pollution Control Board (CPCB), 163 under the Ministry of Environment, Forest and Climate Change, administers rules on plastic waste management and Extended Producer Responsibility (EPR) for packaging waste, reflecting India's sustainability commitments. The State Pollution Control Board (SPCB) or Pollution Control Committees (PCCs) at the State/UT government level are the statutory bodies constituted to implement the mandates as delegated by CPCB and are responsible for the implementation and monitoring of compliance at a local level.
- The Central Consumer Protection Authority (CCPA)¹⁶⁴ was established under the Consumer Protection Act, 2019. It regulates matters related to the violation of consumer rights, unfair trade practices and false or misleading advertisements that are prejudicial to the interests of consumers and the public. The CCPA periodically issues guidelines and advisories to ensure compliance with consumer protection norms and to promote responsible business practices.

Together, these regulators enable a regulatory framework governing packaged and pre-packaged foods. The following sections detail some important regulations and recent developments/amendments (including draft guidelines) across packaging and labelling requirements, licensing, sustainability compliance and related areas.

I. Key regulations under FSSAI

- Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011,¹⁶⁵ which mandates that food business operators, including processors, to obtain appropriate licences or registrations to operate legally. The regulation also incorporates Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) requirements to ensure food safety throughout the supply chain.
- Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011, 166 which sets maximum permissible limits for contaminants such as heavy metals (lead, arsenic), pesticide residues, mycotoxins and other harmful substances in food products. The aim is to protect public health by preventing exposure to toxic substances that may enter the food supply during production, processing or packaging. Regular updates and testing protocols are included to align with global food standards.
- Food Safety and Standards (Advertising and Claims)
 Regulations, 2018, 167 aims to encourage responsible
 advertising practices and hold food businesses accountable
 for the claims made about their products. The General
 Principle under the regulations explicitly prohibits food
 that is deceptive to consumers and mandates that claims in
 advertisements must be consistent with the information on
 the food or beverage label and should not be misleading,
 thereby supporting consumer understanding and informed
 decision-making. The regulations uphold the importance of
 conspicuous and legible declarations made on advertisements
 and ensure that advertisements do not undermine the
 importance of healthy lifestyles.

¹⁶¹ https://fssai.gov.in/cms/food-safety-and-standards-act-2006.php

¹⁶² https://lm.doca.gov.in/index.html

¹⁶³ https://cpcb.nic.in/

¹⁶⁴ https://doca.gov.in/ccpa/#:~:text=Previous-,National%20Consumer%20Helpline%20(NCH),Download%20NCH%20APP

https://www.fssai.gov.in/cms/food-safety-and-standards-regulations.php

https://www.fssai.gov.in/upload/uploadfiles/files/Contaminants_Regulations.pdf

https://fssai.gov.in/upload/uploadfiles/files/Compendium_Advertising_Claims_Regulations_04_03_2021.pdf

• Food Safety and Standards (Labelling and Display)
Regulations, 2020: Notified in 2020,¹⁶⁸ overhauls labelling requirements for pre-packaged foods. It mandates a comprehensive label on every food package, which must include, inter alia, the name and description of the food, the ingredients list and any allergen declaration, the nutritional information per serving, veg/non-veg symbol, etc. To further strengthen these standards and respond to evolving health considerations,

FSSAI, on 20 September 2022, released the **draft Food Safety and Standards (Labelling and Display) Amendment Regulations, 2022**¹⁶⁹ for the inclusion of definitions for Frontof-Pack Nutrition Labelling (FOPNL) and High Fat, Sugar, Salt
(HFSS) foods; a new requirement to declare the percent of
fruits, vegetables, nuts, legumes and millets (if present) in the
ingredient list; the addition of dietary fibre to the nutritional
information; and the requirement to display the Indian
nutrition rating, along with its corresponding reference
values and display formats for certain food categories. Every
packaged food, except those exempted from nutritional
information under the regulations, must display the
prescribed format (Indian nutrition rating) on the front of the
pack. The draft guidelines are yet to be finalised.

· Food Safety and Standards (Packaging) Regulations, 2018: These regulations set out standards for food packaging materials and articles. It requires that packaging material intended to contact food is of "food-grade quality" and does not alter the food's composition or safety. In 2022, an amendment was issued under Section 16 (5) of the FSS Act to operationalise the Draft Food Safety and Standards (Packaging) Amendment Regulations, 2022,¹⁷⁰ specifically addressing the use of recycled plastics. This amendment focuses on the recycling process of transforming post-consumer PET bottles, used for food packaging, into food-grade recycled PET resins suitable for making bottles and packaging materials. It outlines the acceptance criteria for using food-grade recycled PET resin material in bottling or packaging operations. Notably, this guideline does not apply to industrial rejected PET bottles or the production of resins for non-food-grade consumer applications.



Indian Nutrition Rating Go For More Stars

- FSSAI also regulates nutraceuticals under the FSS (Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, Functional Foods and Novel Foods) Regulations, 2016.¹⁷¹ Furthermore, recognising the potential of the nutraceutical sector, the Council of Scientific and Industrial Research (CSIR) established a dedicated task force in November 2021 under the chairmanship of the principal scientific adviser to the Government of India.¹⁷² The task force has been entrusted with recommending policy interventions, addressing regulatory challenges and advancing alignment with global standards, including the Harmonised System of Nomenclature.
- FSSAI issued an advisory in December 2024, 173 mandating licenced food manufacturers, including repackers, relabellers and importers, to submit quarterly reports on FSSAI's FoSCoS portal with details on the quantity of rejected food items, quantity of expired products and actions taken with rejected/ expired food items. The new provision seeks to ensure that such products are not rebranded and reintroduced into the human food chain.¹⁷⁴ However, there are concerns regarding potential challenges associated with these measures, including increased food waste, financial burdens on businesses, environmental implications and heightened compliance requirements. The Jan Vishwas (Amendment of Provisions) Act, 2023¹⁷⁵ amended the FSS Act to decriminalise certain minor offences and increase monetary penalties (as an ease-of-business measure), but serious violations (such as manufacturing unsafe food or repeated non-compliance) continue to attract stringent action.

 $^{^{168}\} https://fssai.gov.in/upload/uploadfiles/files/Comp_Labelling.pdf\#: \sim :text=, consist \% 20 of \% 20 a \% 20 green \% 20 colour for the property of the p$

https://fssai.gov.in/upload/uploadfiles/files/Draft_Notification_HFSS_20_09_2022.pdf

¹⁷⁰ https://www.fssai.gov.in/upload/advisories/2022/01/61ea5c8e8713cDirection_Recycled_Plastics_19_01_2022.pdf

 $^{^{171}\} https://fssai.gov.in/upload/uploadfiles/files/Nutraceuticals_Regulations.pdf$

https://pib.gov.in/PressReleaselframePage.aspx?PRID=2071412

¹⁷³ https://www.fssai.gov.in/upload/advisories/2024/12/6773d3d6a50f3Advisory-expired-rejected%20food.pdf

¹⁷⁴ https://economictimes.indiatimes.com/news/india/fssai-asks-food-biz-operators-to-submit-data-on-expired-food/

https://egazette.gov.in/WriteReadData/2023/248047.pdf

II. Legal metrology department - Packaging declarations

- Legal Metrology Act, 2009:¹⁷⁶ Implemented from 1 April 2011, the Act establishes and enforces standards of weights and measures, regulates trade and commerce in weights, measures and other goods sold or distributed by weights, measures or number, to ensure fairness in commercial transactions. Compliance with the Act is mandatory for manufacturers, packers and traders in India. For FBOs, the Act, along with the Legal Metrology (Packaged Commodities) Rules, 2011, as captured in the subsequent section, form the key pillars of the regulatory framework for legal metrology in the food sector.
 - i. Legal Metrology reforms under the Jan Vishwas
 (Amendment of Provisions) Act, 2023 ("Amendment
 Act"): 177 The government introduced the Amendment Act
 to decriminalise and rationalise the offences to further
 enhance trust-based governance for ease of doing business.
 It revised several provisions of the Legal Metrology Act, 2009,
 to decriminalise minor offenses. Imprisonment clauses for
 these violations have been removed, focusing instead on
 monetary penalties.
- Legal Metrology (Packaged Commodities) Rules, 2011¹⁷⁸ (often called the LMPC Rules) states provisions for pre-packaged retail commodities, covering domestically manufactured and imported packaged goods. Under these rules, every pre-packaged commodity must bear key mandatory declarations including the name and address of the manufacturer, packer or importer; the net quantity; the MRP; and the date of manufacture or packing. For food products, which FSSAI Rules and Regulations primarily govern, the three key declarations MRP, net weight and consumer care details are to be made per the provisions of Legal Metrology (Packaged Commodities) Rules, 2011. These rules have been updated recently to modernise and simplify compliance and extend consumer protection. Some of the recent amendments include:

- i. In 2022, the government notified amendments ¹⁸⁰ to the Packaged Commodities Rules. One amendment eliminated the old standard pack size requirements for certain commodities. Previously, some foods (such as baby food, tea, edible oils and soft drinks) could only be sold in predefined quantity packs (such as 100g, 200g and 500g). The amendment removed these restrictions, allowing manufacturers to pack in any size and eliminating the need to label non-standard sizes as such.
- ii. In October 2023, the Ministry of Consumer Affairs, Food and Public Distribution notified the **Legal Metrology (Packaged Commodities) Amendment Rules, 2023**¹⁸¹ to amend the Legal Metrology (Packaged Commodities) Rules, 2011 by introducing new definitions of packages "combination package", "group package" and "multi-piece package" and exempt these new categories from the requirement to declare the unit price. However, it maintained that the provisions of the Food Safety and Standards Act, 2006 and the rules made thereunder for packages containing food articles shall apply.

The Legal Metrology Department also regularly issues **advisories for specific industries** (for example, standardising how e-commerce platforms should display mandatory product info online or guidelines for declarations on readymade garment packages, etc.). For food e-commerce, it is now compulsory that online listings of food products show the same key information (ingredients, net quantity, etc.) as the physical label, so consumers shopping online get all requisite details before purchase. ¹⁸²

III. Central Pollution Control Board (CPCB) - Plastic Packaging and EPR

• The Plastic Waste Management (PWM) Rules, which were first introduced in 2016, 183 provide the overarching statutory framework for managing plastic waste in an environmentally sound manner. The Rules seek to enhance the regulatory framework by emphasizing segregation, recycling and minimising plastic use. Over the years, these rules have undergone several amendments to address emerging challenges and enhance their effectiveness.

 $^{^{176}\} https://consumeraffairs.nic.in/acts-and-rules/legal-metrology/the-legal-metrology-act-2009$

¹⁷⁷ https://egazette.gov.in/WriteReadData/2023/248047.pdf

¹⁷⁸ https://consumeraffairs.nic.in/legalmetrologyactsandrules/legal-metrology-packaged-commodities-rules-2011

¹⁷⁹ https://consumeraffairs.nic.in/sites/default/files/file-uploads/latestnews/LM_FAQs.pdf

¹⁸⁰ https://consumeraffairs.nic.in/sites/default/files/file-uploads/latestnews/GSR226.pdf

¹⁸¹ https://consumeraffairs.nic.in/sites/default/files/uploads/legal-metrology-acts-rules/2023.10.6%20amendment%20in%20PCR.pdf

¹⁸² https://consumeraffairs.nic.in/sites/default/files/file-uploads/latestnews/LM_FAQs.pdf

¹⁸³ https://thc.nic.in/Central%20Governmental%20Rules/Plastic%20Waste%20Management%20Rules,%202016.pdf

Key amendments include:

- The Plastic Waste Management Amendment Rules, 2021¹⁸⁴ implemented a phased prohibition on specific single-use plastic items with low utility and high littering potential. Effective 1 July 2022, these items' manufacture, import, stocking, distribution, sale and use are banned nationwide.
- The Plastic Waste Management (Amendment) Rules 2022 introduced Schedule II¹⁸⁵ to the PWM Rules 2016 provisions, notably focusing on Extended Producer Responsibility (EPR),¹⁸⁶ recycling targets, the reuse of rigid plastic packaging

and the incorporation of recycled plastic content. It enforces a mandate upon Producers, Importers and Brand Owners (PIBOs) to manage the end-of-life disposal of plastic products, ensuring collection and recycling in alignment with specified targets. The amendment set phased targets for recycling plastic packaging waste, across key categories, for PIBOs. The table below highlights the mandatory use of recycled plastic in plastic packaging as a percentage of manufactured plastic for the year:

Plastic packaging category	2025–26	2026-27	2027-28	2028–29 and onwards
Category I Rigid plastic packaging, primarily used for durable packaging.	30	40	50	60
Category II Flexible plastic packaging, including single-layer/multilayer plastics, plastic sheets, covers, carry bags, sachets and pouches.	10	10	20	20
Category III Multilayered plastic packaging comprising both plastic and non-plastic materials.	5	5	10	10

IV. Central Consumer Protection Authority (CCPA)

- The Consumer Protection Act, 2019¹⁸⁷ is the principal legislation in India that governs consumer rights and safeguards them against unfair trade practices, defective goods, deficient services and misleading advertisements. It institutionalises the CCPA as the apex regulatory body to protect consumers' rights and address unfair trade practices.
- The Guidelines on Prevention of Misleading
 Advertisements and Endorsements for Misleading
 Advertisements, 2022¹⁸⁸ were issued by the CCPA to prevent
 consumers from being misled by unverified claims, exaggerated

promises or misinformation. Such advertisements undermine key consumer rights, including the right to information, the right to choose and the right to safety. Under "Children targeted advertisements," the guidelines emphasise that advertisements for food products must not make health or nutritional claims without adequate and scientifically validated evidence. The guidelines also prohibit advertisements from exaggerating the features of food products in ways that could create unrealistic expectations for children. Additionally, the use of celebrities in advertisements for products that require health warnings or are unsuitable for children is restricted.

¹⁸⁴ https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1745433

¹⁸⁵ https://cpcb.nic.in/uploads/plasticwaste/EC_Regime_PWM.pdf

¹⁸⁶ https://cpcb.nic.in/uploads/plasticwaste/PWM-Amendment-Rules-2022.pdf

¹⁸⁷ https://doca.gov.in/ccpa/act-and-rules.php

¹⁸⁸ https://consumeraffairs.nic.in/sites/default/files/CCPA_Notification.pdf

Some challenges being faced by the industry based on stakeholder consultations

I. Practicality of baseline references - HFSS and FOPNL

While the proposed draft FSS (Labelling and Display)
Amendment Regulations, 2022¹⁸⁹ on FOPNL and the classification of High Fat, Sugar, Salt (HFSS) foods are intended to promote healthier dietary choices, enhance transparency and enable consumers to make more informed decisions, one of the primary concerns relates to the baseline reference values proposed under the draft amendments. Per the FOPNL requirements, the standard reference values used to display nutritional information are measured and reported per 100 grams of solid products or per 100 millilitres of liquid products. Concern emerging from this approach is the use of a 100g/100 ml benchmark to assess nutritional thresholds. The Indian nutrition rating, according to the industry, does not accurately reflect real-world consumption patterns and a consumer-aligned basis for evaluation.

II. Management of post-expiry food

Managing expired and rejected food items is an increasing concern for regulators and the food processing industry. To address this priority, FSSAI has laid down a framework under the FSSAI Act, 2006,¹⁹⁰ designed to ensure that food safety risks are minimised through proper storage, clear segregation and effective inventory management. However, comprehensive guidelines are absent to address and manage the concerns of post-expiry food.

III. Implementation of EPR mandate

The Extended Producer Responsibility (EPR) under the PWM Rules, 2016, mandates PIBOs to manage the end-of-life disposal of plastic products, ensuring collection and recycling in alignment with specified targets. While the EPR aims to enhance accountability among producers, industry stakeholders have raised concerns regarding its implementation.

For instance, for achieving the phased targets (25 percent, 70 percent and 100 percent) as laid down in the framework, substantial upgrades are required in waste collection and recycling infrastructure, which currently remains underdeveloped in many areas. Another challenge lies in the

limited availability of high-quality recycled plastic, which hinders compliance with mandated usage norms. Moreover, setting up efficient post-consumer plastic waste collection systems is logistically complex and financially intensive, particularly in regions with weak or informal waste management networks. **Existing recycling facilities, often constrained by limited capacity and outdated technology,** will require significant investments to effectively scale up and meet the new compliance requirements.¹⁹¹

IV. Pesticide residue compliance: Industry concerns and regulatory alignment

Industry stakeholders have proposed changes to provisions related to default tolerance limits for non-registered pesticides and the applicability of Maximum Residue Limits (MRLs) for currently banned pesticides. The proposal also bases MRL considerations on raw agricultural commodities rather than processed food products to better reflect residue presence at the source level. Furthermore, the industry has urged FSSAI to align the FSS (Contaminants, Toxins and Residues) Regulations, 2011, with international standards, enhance residue tracking, strengthen controls at the farm level, and, in some instances, implement MRLs solely for monitoring and surveillance purposes.

V. Regulatory realignment of nutraceuticals

Amid ongoing efforts to streamline and strengthen the nutraceutical sector, concerns have arisen about the potential reclassification of certain products, particularly those with pharmaceutical compositions currently regulated as food, under the jurisdiction of the Central Drugs Standard Control Organisation (CDSCO). To assess the implications of this proposal, FSSAI constituted an inter-ministerial committee, which has submitted its report to the ministry for further consideration. If adopted, this regulatory shift could significantly affect the nutraceutical industry, resulting in changes to licensing procedures, compliance frameworks and overall market dynamics.

¹⁸⁹ https://fssai.gov.in/upload/uploadfiles/files/Draft_Notification_HFSS_20_09_2022.pdf

¹⁹⁰ https://fssai.gov.in/upload/uploadfiles/files/FOOD-ACT.pdf

¹⁹¹ https://www.linkedin.com/pulse/changing-landscape-plastic-waste-management-india-gunturu-dopkc

Some suggestions to address highlighted concerns

To address the key challenges outlined in the previous section, here are some suggestions from the industry:

- I. Adoption of serving size-based approach for HFSS: A more comprehensive definition of HFSS (High in Fat, Sugar and Salt) tailored to Indian dietary patterns would be essential. Nutrient thresholds should be calibrated using evidence-based methods aligned with Indian consumption trends and regulatory priorities. Adopting a serving size-based approach, instead of the 100g/100ml benchmark, will better reflect actual eating habits. This shift would ensure that FOPL and health star ratings meaningfully guide consumer choices while maintaining global comparability.
- II. Flexibility in EPR compliance: While the industry supports the government's objectives on plastic waste management, meeting EPR mandates remains challenging due to limited availability and infrastructure for high-quality recycled plastic. For the food processing sector, additional complexity arises as food-grade safety of recycled packaging falls under the MoEFCC and FSSAI. To enable effective compliance, a phased implementation with gradually increasing recycled content targets is recommended. This approach would provide the industry with the necessary time, regulatory clarity and operational flexibility to meet obligations without compromising food safety or supply chain stability.
- III. Practical guidelines for post-expiry food disposal: It is recommended that FSSAI develop practical, outcome-oriented guidelines for disposing of post-expiry food, considering operational challenges, financial implications for businesses and environmental sustainability. The industry also urges FSSAI to consider allowing the diversion of expired but safe-to-consume food for use as cattle feed as an alternative to mandatory incineration. This would help reduce food wastage while supporting circular economy objectives.
- IV. Harmonisation pesticide residue regulations: To address industry's concerns regarding pesticide residues and Maximum Residue Limits (MRLs), it is recommended

- that MRL evaluations be based on raw agricultural commodities rather than processed foods, as processing may alter residue levels. This approach would provide a more accurate assessment of pesticide application at the farm level and streamline compliance and enforcement.
- V. Streamlining regulatory framework for effective compliance (FSSAI-CPCB): To facilitate compliance, efforts should focus on minimising overlapping regulations. A more streamlined regulatory framework can enhance clarity and facilitate more effective implementation. For example, FSSAI allows the use of recycled polyethylene terephthalate (rPET) for packaging, but its application is restricted to a limited set of food products. 192 Currently, there are no defined standards or guidelines for the use of reused plastics in food packaging, creating regulatory limitations on the broader adoption of non-virgin plastics for packaging. In contrast, CPCB, through its EPR framework, encourages the use of recycled and reused plastics, leading to a divergence in regulatory approaches for the food industry.
- VI. Capacity building for scientific risk assessment and enforcement: It is recommended that efforts be intensified to build institutional and technical capacity in scientific risk assessment, particularly in specialised areas such as infant nutrition and therapeutic foods. This may include structured training programmes, in-house capability building and collaborations with academic and research institutions. Simultaneously, to ensure effective on-ground enforcement of food safety regulations, it is essential to equip field-level officials with the necessary technical knowledge and tools. Addressing the current gaps in training and awareness among enforcement personnel will be critical to ensuring consistent and science-driven regulatory implementation.

¹⁹² https://fssai.gov.in/upload/notifications/2025/04/67eb83b000a58FSS%20_Packaging_Amendment%20Regulations,%202025%20related%20to%20 recycled%20plastics.pdf

Addressing tariff and non-tariff barriers through FTAs

India's burgeoning food processing industry is increasingly at the crossroads of trade policy shifts and broader geopolitical developments. As global trade policy undergoes rapid evolution, through imposition of heightened tariffs, negotiation and renegotiation of FTAS, imposition of regulatory barriers and realignment of supply chains, processed food manufacturers are witnessing heightened uncertainty around market access, input costs and regulatory compliance. An example of how FTAs may be used under evolving geo-political uncertainties is the recent push by the Indian government for the early conclusion of the US-India Bilateral Trade Agreement, as the US imposes heightened tariffs, disrupting global supply chains. It is imperative for the Indian food and processed food industry to advocate for the protection of its product lines and business interests through the framework of the FTAs and bilateral agreements. In this context, it is important to note that the coverage of food products in the current FTAs signed by India is underwhelming.¹⁹³ India, one of the largest exporters of food products, stands to benefit greatly from FTAs with effective clauses for reducing non-tariff barriers. 194 If future FTAs provide for greater tariff concessions on food inputs, offer better market access or grant harmonisation of standards, they could partially offset such vulnerabilities.

Market access barriers in developed countries

Exporters in India encounter a spectrum of tariff and nontariff barriers in key markets, notably the EU and the US. The EU, while a lucrative destination for Indian processed foods, imposes stringent standards related to pesticide residues, food additives, front-of-pack labelling and health claims. Similarly, the US has raised concerns over India's high tariffs and non-tariff barriers, calling for their reduction to facilitate a more balanced trade relationship. However, public domain discourse so far and stakeholder consultations have revealed that the Indian food industry largely believes that the tariff and non-tariff protection is essential to shield domestic processors from subsidised imports and to provide a level playing field, particularly for smaller enterprises navigating volatile commodity markets and rising input costs.

Using Free Trade Agreements (FTA) for the Indian food processing industry

India's FTA regime has become an increasingly significant aspect of its international trade policy, especially considering recent global developments and India's ambitions to integrate deeper into global value chains. Over the last two decades, India has signed several FTAs with countries and regional blocs across Asia, Europe, the Middle East, Latin America and Oceania. Meanwhile, India has recently concluded negotiations with the European Free Trade Association and is actively negotiating with the EU, the UK and the Gulf Cooperation Council. These agreements aim to reduce tariff and non-tariff barriers, facilitating investment flows and enhancing cooperation across several sectors. India's FTA strategy holds considerable implications for the food processing industry, which operates at the intersection of agriculture and manufacturing, ranging from market access opportunities to competitive pressures from imported goods.

¹⁹³ EXIM Bank's Working Paper Series, 'Working Paper No. 61 – International Trade in Processed Foods: An Indian Perspective,' Export Import Bank of India (March 2017) (Accessed at - 79file.pdf)

¹⁹⁴ Divesh Pandey and Meera Unnikrishnan, 'Free Trade Agreements by India: Review and Implications for Future,' IIM Ahmedabad Misra Centre for Financial Markets and Economy (2023) (Accessed at - https://www.iima.ac.in/sites/default/files/2023-03/MCFME_FTAs.pdf)

¹⁹⁵ Adrija Chatterjee, 'US raises concerns over India's high tariffs and non-tariff barriers in a new report,' Money Control (April 01, 2025) (Accessed at - https://www.moneycontrol.com/news/business/economy/us-raises-concerns-over-indias-high-tariffs-and-non-tariff-barriers-in-a-new-report-12981687.html)
196 Soutik Biswas, 'Trump wants India to buy US corn – but here's why it probably won't,' BBC (March 31, 2025) (Accessed at - https://www.bbc.com/news/articles/c204q6n0lzvo)

¹⁹⁷ Sandip Das, 'Why India needs non-tariff barriers in agricultural trade,' The Financial Express (April 10, 2025) (Accessed at - https://www.financialexpress.com/policy/economy/why-india-needs-non-tariff-barriers-in-agricultural-trade/3804724/)

It is observed that, of late, the government has adopted a more cautious approach to FTAs following its decision to exit the Regional Comprehensive Economic Partnership negotiations in 2019. It has since shifted towards balanced and fair agreements that consider the sensitivities of Indian producers while seeking better access for Indian exports. For the food processing industry, this nuanced strategy could translate into better-calibrated rules of origin, investment incentives in food parks and greater inclusion of processed

agri exports in tariff liberalisation schedules. However, concerns around cheaper imports, such as dairy, under new FTAs remain a point of contention. 198

The following table provides an indicative list of India's existing FTAs and ongoing negotiations¹⁹⁹ that are likely to have direct or indirect implications for the Indian food processing sector:

Partner country	Status	Key features	
ASEAN	In effect	Tariff cuts on select processed food items, rules on SPS	
SAFTA (SAARC Region)	In effect (Partial)	Tariff preferences on agricultural and food products; political limitations ²⁰⁰	
Japan	In effect	Tariff elimination for tea, seafood; SPS and TBT cooperation	
South Korea	In effect	Liberalised tariffs on food additives, sauces	
Singapore	In effect	Strong investment protections, zero duties on most food items	
UAE	In effect	Elimination of tariffs on food exports; investment facilitation	
Australia	In effect	Duty-free access for Indian processed foods; dairy excluded	
EFTA	Concluded (Pending ratification)	Focus on sustainability, including food standards, provisions for the promotion of investment	
EU	Negotiations are ongoing	Tariff concessions expected; tight SPS and traceability norms	
UK	Negotiations are ongoing	Potential for tariff reduction in processed food, spirits	
US	Negotiations are ongoing	Initial talks underway; processed food, poultry, beverages in focus	
Gulf Cooperation Council	Negotiations are ongoing	Initial talks underway; processed food, poultry and beverages in focus	
Oman	Negotiations are ongoing	Several food products already have duty-free access to Oman, and the expansion of the list is expected	
Canada	On hold	Discussions paused	

¹⁹⁸ Anwesha Basu, 'The India-EU FTA and its potential impact on India's dairy sector: A Quantitative Analysis,' Foreign Trade Review, SAGE Journals (December 6, 2021) (Accessed at - https://journals.sagepub.com/doi/abs/10.1177/00157325211050763?download=true)

¹⁹⁹ Trade Agreements, Department of Commerce, Ministry of Commerce and Industry (Accessed at - https://www.commerce.gov.in/international-trade/trade-agreements/)

²⁰⁰ Nasir Iqbal, 'Why has SAFTA failed to boost Pakistan-India trade?' East Asia Forum (March 19, 2016) (Accessed at - https://eastasiaforum.org/2016/03/19/why-has-safta-failed-to-boost-pakistan-india-trade/)

India's participation in the South Asian Free Trade Area (SAFTA) continues to shape the core of its regional trade strategy, particularly for the food processing industry. Under SAFTA, which includes Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Pakistan and Sri Lanka, India extends tariff concessions and preferential access for various agricultural and processed food products. Indian food processors, especially small and midsized firms, have indicated during consultations that SAFTA is a free trade agreement of interest, as it provides a stable and familiar export destination, i.e., South Asia, compared with Western markets.

However, despite its potential, trade under SAFTA has not reached optimal levels due to non-tariff barriers,²⁰¹ and inconsistent application of rules of origin across member states. For instance, Nepal imposes around 100 Sanitary and Phytosanitary (SPS) standards on Indian products; on the other hand, agricultural products from Nepal, such as maize, pickle, tomato juice, mixed fruit juices, turmeric and ginger face non-tariff barriers imposed by India. Nevertheless, for many Indian food processors, the South Asian region remains a natural and cost-effective export base that offers scale

without the high regulatory overhead associated with markets such as the EU or the US.

Achieving harmonisation through the adoption of globally recognised standards

Stakeholders across India's food processing ecosystem have sought prioritisation of mutual recognition of standards and conformity assessment procedures in ongoing FTA negotiations, particularly with the EU and the US. These discussions aim to address non-tariff barriers disproportionately affecting small and midsized enterprises, seeking mutual recognition of regulatory systems and alignment in labelling norms. For instance, Codex Alimentarius standards serve as a global benchmark for food safety and quality under the WTO framework. Indian negotiators have increasingly advocated for their adoption as a basis for regulatory harmonisation in ongoing FTA negotiations. Such harmonisation not only helps prevent arbitrary regulatory discrimination but also makes Indian food exports more competitive by reducing the cost and complexity of meeting multiple divergent standards.

Future outlook

While India's food processing sector grows rapidly, there is considerable potential for even faster expansion by aligning more closely with changing consumer trends, exploring rural market opportunities and transitioning towards value-added agricultural exports. Companies may benefit from refining their strategies, with a greater focus on cost management and innovation to drive sector growth. Industry associations could play a key role in collaborating with the government to create a supportive regulatory environment that fosters sustainable development. A few suggestive recommendations to help drive the next growth phase in the food processing sector are outlined below.

Continued focus on innovation

Innovation remains a core growth lever for India's food processing industry. Companies may look beyond operational

improvements and explore initiatives such as reformulation, packaging innovation and rapid prototyping of localised offerings. The rise of global R&D hubs and regional innovation accelerators has made it possible to tailor products to Indian tastes while keeping pace with health trends and regulatory shifts.

Meanwhile, India's agile food start-up ecosystem appears to be setting new benchmarks in consumer-centric innovation, particularly in clean labels, allergen-free formats and modern adaptations of traditional ingredients. To stay competitive, large incumbents and emerging players may consider building structured, continuous innovation pipelines that respond swiftly to evolving consumer expectations. Collaboration between industry players, government bodies and academic institutions can further drive innovation.

²⁰¹ Chandan Kumar and Nalin Bharti, 'Post-SAFTA NTMs for Agricultural Trade: Revelations from the India-South Asia Approach,' Foreign Trade Review (October 27, 2020) (Accessed at - https://journals.sagepub.com/doi/abs/10.1177/0015732520961309)

Tapping rural India for growth

Food processing companies may focus more closely on rural markets to drive long-term growth, moving beyond urban-centric strategies. With rural India emerging as a key consumption driver, firms can focus on developing affordable premium products tailored to local needs. Offering smaller, value-driven SKUs that balance quality, nutrition and price sensitivity could be important in meeting rising rural aspirations.

In parallel, companies might focus on building localised supply chains that reduce costs and improve responsiveness. Strengthening rural distribution networks and using regionspecific insights for product development and communication could enhance relevance and brand resonance. By aligning innovation, pricing and outreach with the rural consumer's evolving expectations, food processors can unlock the next phase of sustainable, high-potential growth.

Prioritising health and Indian superfoods

Health and wellness are no longer niche; they are mainstream drivers of food consumption. Food processors may benefit from prioritising reformulation to reduce sugar, salt and trans fats, while integrating functional ingredients that support digestion, immunity and general well-being. There appears to be growing consumer demand for clean-label, plant-based and gluten-free products, especially among Gen Zs and millennials.

Additionally, India's rich portfolio of superfoods, such as millets, lentils, turmeric and amla, offers a powerful opportunity to create differentiated, culturally relevant products with strong health narratives. Companies that blend nutrition with taste and familiarity may be able to succeed across urban and rural markets. Scientific validation of health claims and educating consumers about the benefits of these ingredients will be crucial in driving demand and trust. Using local superfoods could also contribute to sustainable agriculture and support local farmers. Furthermore, modern food processing technologies can enhance the nutritional profile and accessibility of health-focused products, ensuring they meet evolving consumer expectations.

Public-private collaboration for ease of doing business

To unlock the full potential of India's food processing sector, stronger public-private collaboration could play an essential role. Efforts could focus on creating a single-window system for clearances to ease regulatory burdens, while harmonising laws and standards across states to reduce fragmentation. Equally important may be expanding the scope of reforms to include unorganised and small-scale processors, offering them technical support and market access to create a more level playing field. Public-private partnerships can also promote joint R&D initiatives between private players and food research institutions to drive innovation in product development, food safety and sustainable processing technologies. Investment in critical infrastructure such as cold chains, testing labs and integrated processing parks, particularly in underserved areas, could be accelerated. Finally, a stable and transparent policy environment can be key to attracting sustained private investment, especially around exports, taxation and incentives. Together, these measures could build a more dynamic, efficient and inclusive food processing ecosystem in India.



Exports as a strategic mission/initiative

India may consider prioritising value-added food exports to increase earnings and global relevance, as current agriculture exports primarily focus on unprocessed or minimally processed commodities. There appears to be a strong opportunity to make Indian food a global sensation by aligning with emerging health and lifestyle trends. One path could be reimagining traditional Indian ingredients into modern, wellness-forward formats that appeal to a broader international audience. Another could be to move up the value chain in segments where India is already a production or export leader, converting scale into premium by offering processed, packaged goods. Focusing on improving India's branding—tapping into global consumption shifts or marketing origin-based stories around GI-tagged products—could also be key. Government support and private sector

innovation can together build this premium narrative. This may require investment in processing, packaging and storytelling. With the right push, India could further redefine its role in global food trade.

Using technology as a value creator

Food processing companies can consider embedding technology across the value chain to drive agility, efficiency and sustainability. Adopting Industry 5.0 principles—through AI, IoT and automation—can enhance forecasting, streamline production and improve quality while reducing waste. Smart factories, digital sourcing and cold chain innovations could help optimise operations and strengthen responsiveness. By using tech not just for efficiency but also for sustainable and human-centric growth, companies can future-proof their operations and stay ahead of evolving market demands.

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Connect with us

Anand Ramanathan

Partner and Consumer Industry Leader Deloitte South Asia ranand@deloitte.com

Avinash Chandani

Partner
Deloitte India
achandani@deloitte.com

Contributors

Goldie Dhama

Gulzar Didwani

Hardik Shah

Harsheen Anand

Khush Patel

Somya Agrawal

Shivam Pathak

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Deloitte

Ankita Vaiude

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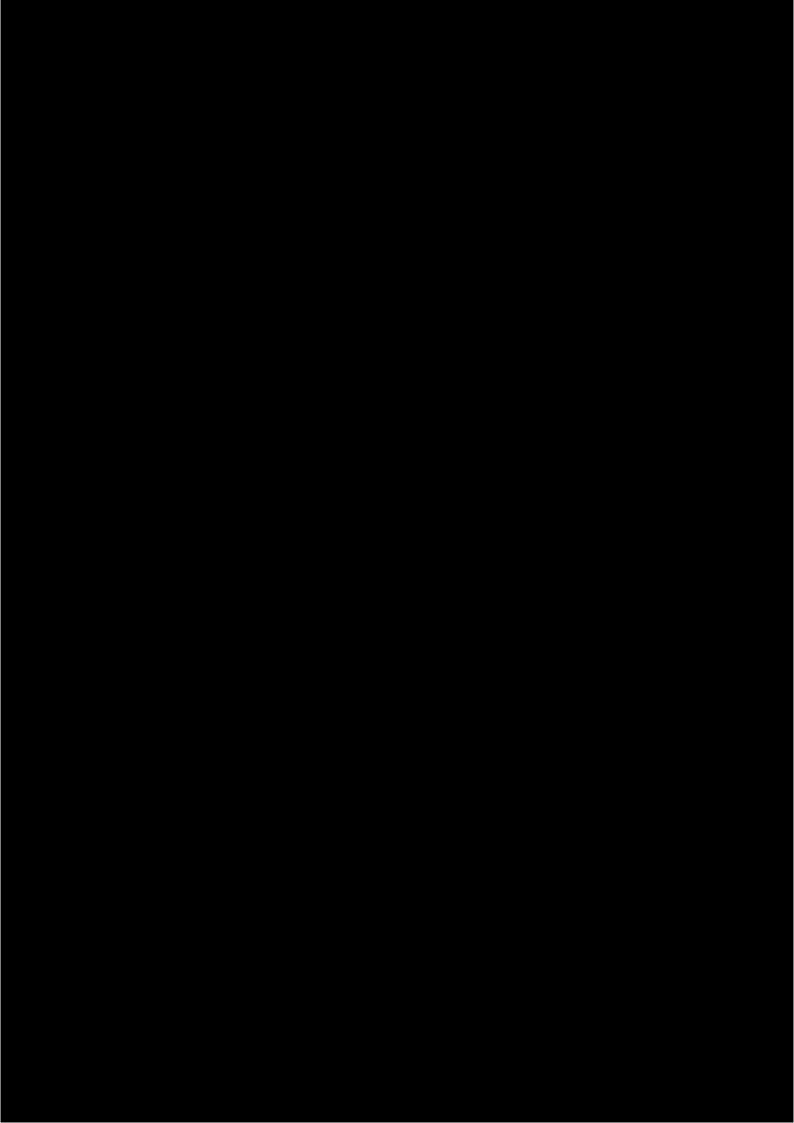
Rahul Dhuria

Shweta Kushe

FICCI

Jyoti Vij

Hemant Seth



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