SIAL 2026

BIZ@INDIA

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Issue No. 54, October 2026



INDIA SHOWCASES DIVERSITY AT SIAL 2026

HARYANA, PUNJAB
Basmati Rice

RAJASTHAN
Edible Oil, Millets

BIHAR
Makhana

ASSAM
Tea

GUJARAT
Edible Oil, Millets

MARKET ANALYSIS
Indian food processing industry: Limited appetite for value-added exports

Food Processing

START-UP
Indian food start-ups eye global markets at SIAL Paris 2026

Marine Fish

Spices

FOOD SAFETY
Indian Market flooded with poor quality, unhealthy foods amidst weak regulation, low awareness

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CONTENT

BIZ@INDIA | SIAL 2026

06 **INTERVIEW**
Jawed Ashraf
Chairman, ITPO

16 **FOOD SAFETY**
Indian Market flooded with poor quality, unhealthy foods amidst weak regulation, low awareness

20 **INTERVIEW**
Prachi Pandit
Founder and Director, Arbuza Regenerate

22 **TRADE**
EU-India FTA: Unpacking Indian Food Processing Sector

28 **SUSTAINABILITY**
The global mirage of **sustainable farming**

32 **TECHNOLOGY**
From calorie counters to AI: Indian consumers turn to apps to track food intake

36 **START-UP**
Indian food start-ups eye global markets at **SIAL Paris 2026**

40 **SUPERFOOD**
From fasting staple to global snack: **Makhana** moves up value chain

44 **SUPERFOOD**
Rising demand for Indian **millet-based** exports

48 **CONVENIENCE FOOD**
Speed over safety: Indian consumers continue to pick **ready-to-eat** food

52 **BEVERAGE**
From IMFL to single malt: **Indian Whisky** moves higher in value chain

56 **PROTEIN**
Protein mania grips Indian consumers

08 **MARKET ANALYSIS**



INDIAN FOOD PROCESSING INDUSTRY: LIMITED APPETITE FOR VALUE-ADDED EXPORTS

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32
TECHNOLOGY
From calorie counters to AI: Indian consumers turn to apps to track food intake



INDIAN FOOD PROCESSING
INDUSTRY NEEDS TO UP THE ANTE

The Indian food processing industry, one of the largest sectors in the country, has so far been guilty of chasing very low ambitions in the global marketplace, content to cater to the domestic market. But with increasing competition from foreign food makers, thanks to a flurry of Free Trade Agreements signed by India, the Indian industry is facing the heat in its own backyard, competing against more aspirational global brands.

In this SIAL Paris 2026 Special Issue, *Biz@India* examines the barriers limiting the shift towards processed and higher-value food products, including food safety requirements, technology, changing consumption patterns and access to overseas markets.

Food safety remains a major concern in India where weak enforcement and limited consumer awareness continue to raise questions about the quality and nutritional value of products. As Indian and multinational companies compete for a larger share of the market, we look at the gaps in regulation and consumer protection that allow poor-quality and unhealthy foods to find their way onto Indian shelves.

Instead of following the tighter nutritional norms in their home markets, global food giants are guilty of dumping substandard, unhealthy products loaded with sugar, oil and salt, while the Indian food regulator looks on, seemingly powerless.

Encouragingly, some Indian food start-ups that will display at SIAL are using home-grown advantages like millets and makhana or foxnuts, both of which are the latest superfoods to hit the global market, in order to chase markets outside.

The search for convenience is also reshaping the food industry. Ready-to-eat products are gaining ground among urban consumers, but their growing popularity raises questions about nutritional quality, processing standards and food safety. We also look at the mirage of sustainability in farming, examining the gap between global commitments and the actual situation in a farm.

Technology is changing not only how food is produced and marketed but also how consumers understand their diets. We analyse how nutrition apps and AI-powered tools allow users to track meals, monitor portions and assess nutrient intake, while concerns over accuracy and misleading recommendations grow. Another challenge in India is the rising protein mania, especially amongst the youth, who are turning to consuming so-called protein-fortified products without paying attention to the amount of sugars and oils that the supplements may slip to them in each serving.

Another positive note from India comes from its growing whisky industry, that is moving from focus on volume to high value drinks with home-grown premium and single malt brands, which offer a bigger opportunity in the global market.

Read this issue of *Biz@India* for these and several other reports and interview examining how India's food industry is responding to changing consumers, new markets and the challenge of creating greater value across the food supply chain.



Jawed Ashraf

Our key objective at SIAL is to help Indian food exporters develop global markets

As 'Country of Honour' at SIAL Paris 2026, India will showcase over 148 exhibitors in India Pavillion of over 1,900 sqm, seeking to expand food exports, strengthen global market access and promote value-added products. Jawed Ashraf, Chairman, ITPO, tells *Biz@India* that the unified India Pavillion will help exporters connect with international buyers and build long-term commercial partnerships.

Ranvir Nayar

What is the scale of India's participation at SIAL Paris 2026?

India's presence at SIAL Paris as 'Country of Honour' marks one of its largest participations ever. Spearheaded by India Trade Promotion Organisation (ITPO) and Agricultural and Processed Food Products Export Development Authority (APEDA) under a unified India branding, the pavillion encompasses a total exhibition area of 1,900 sqm distributed strategically across Halls 3 for savoury food, 5A for the Start-up Village, 7 for organic wellness and alternative food, and 8 for pulses, grains and fruits. This substantial footprint will accommodate over 148 exhibitors representing the nation's diverse industry capabilities.

What are ITPO's key objectives at SIAL this year?

ITPO's primary objective is to expand international market access for Indian exporters and contribute to the growth of India's food exports by connecting Indian businesses with global buyers, distributors, importers and international retail chains. SIAL Paris provides an important platform for high-value B2B matchmaking, enabling Indian companies to establish long-term commercial partnerships, understand evolving global consumer preferences and align their products with international market requirements.

Another key objective is to encourage Indian exporters to move beyond traditional bulk commodity exports towards value-added, branded and innovative food products. This includes ready-to-eat foods, organic and health-focussed products, functional foods and sustainably packaged offerings.

ITPO also aims to facilitate the integration of Indian enterprises, particularly MSMEs, into global food supply chains and help them identify new markets, distribution channels and potential business partners. Ultimately, our objective is not merely to increase the volume of food exports, but to enhance their value, competitiveness and global reach while building internationally recognised Indian food brands and positioning India as a reliable, innovative and competitive global food-sourcing destination.

Which Indian food and beverage categories, including innovations, will be showcased?

At SIAL Paris, the unified "Brand India" Pavillion will present the country's diverse agricultural, food-processing and food-innovation strengths across multiple halls. Halls 3 and 8 will showcase a wide range of processed foods, GI-tagged Basmati rice, pulses, grains and other agro-commodities, offering international buyers and visitors a comprehensive view of India's food and agricultural capabilities. The India Pavillion will also feature a diverse range of alcoholic and non-alcoholic beverages, including mango pulp, smoothies and an assortment of tea flavours.

Adding an experiential dimension to the showcase, the 'Bistro by India' at the India Pavillion will host live culinary demonstrations and tastings, allowing visitors to experience the richness and diversity of Indian cuisine. The Government of Uttar Pradesh will further strengthen India's state-level representation by showcasing products such as honey, chocolates and frozen vegetables.

With a strong focus on health, quality and sustainability, Hall 7 will feature rigorously tested, pesticide-free and organic brands, including Safe Harvest, highlighting India's growing capabilities in responsible and sustainable food production. A specially curated Start-up Village will further spotlight India's rapidly expanding food innovation ecosystem, bringing together emerging enterprises and innovative products that reflect the next generation of India's food and agri-business landscape.

How is ITPO helping MSMEs and exporters connect with global buyers?

ITPO acts as an important bridge between Indian MSMEs and the global marketplace by facilitating India's participation in leading international trade fairs such as SIAL Paris.

Through unified India Pavillions, ITPO provides Indian MSMEs and exporters with a professionally presented, high-visibility platform to showcase their products and engage directly with international buyers, importers, distributors and retail chains. This is particularly valuable for smaller enterprises that may not have the resources or international networks to participate independently in major global exhibitions. Such platforms help them identify prospective buyers, understand evolving market requirements, explore distribution partnerships and develop long-term commercial relationships.

ITPO's role extends beyond providing exhibition space. By bringing Indian companies together under a common national identity, it strengthens the visibility and positioning of Indian products in international markets. A cohesive presence also allows individual enterprises to benefit from the wider recognition and credibility of the Brand India platform.

How important are sustainable and health-focussed foods in India's showcase?

Sustainability, health and wellness

are becoming increasingly important themes in global food markets, and Indian exporters are responding to these evolving consumer preferences. India has a strong advantage in its rich agricultural diversity and traditional food heritage. Products such as millets, pulses, *makhana*, turmeric, organic foods and plant-based proteins offer significant potential in health-conscious international markets. Indian companies are increasingly transforming these traditional strengths into value-added products such as millet-based foods, healthy snacks, ready-to-eat meals, functional beverages and plant-based alternatives.

At the same time, sustainability extends beyond the product itself. Sustainable sourcing, traceability, responsible production, reduced food waste and environmentally conscious packaging are becoming important considerations for international buyers. Platforms such as SIAL Paris provide Indian exporters an opportunity to showcase these innovations, understand emerging consumer trends and connect with global buyers seeking differentiated food products.

What are the key market-access and regulatory challenges faced by Indian food exporters?

Access to European markets requires Indian exporters to meet stringent requirements relating to food safety, sanitary and phytosanitary measures, pesticide-residue limits, traceability, labelling, packaging and quality standards.

For agricultural and food products such as rice, spices, tea and other commodities, compliance with EU requirements can be particularly demanding. Differences between domestic production practices and international regulatory requirements can create challenges for exporters, particularly MSMEs.

Therefore, improving testing, traceability, compliance capabilities and awareness of destination-market regulations is critical. At the same time, stronger institutional support and greater engagement between industry and regulatory authorities can help Indian exporters address these challenges.

The objective is to move from reactive compliance to proactive preparedness, enabling Indian exporters to meet international standards consistently, minimise shipment rejections and build long-term credibility with European buyers.

Which emerging global food trends offer the biggest opportunities for Indian companies?

Several emerging global food trends offer significant opportunities for Indian companies, particularly in health and wellness, convenience foods, plant-based nutrition, ethnic flavours and sustainable food products.

First, the growing demand for healthy and nutritious foods creates opportunities for India's millets, pulses, *makhana*, nuts, seeds and traditional ingredients. These can be developed into breakfast cereals, protein-rich snacks, ready-to-cook mixes and other innovative products. Second, the demand for convenience foods and ready-to-eat meals is creating opportunities for Indian companies to offer packaged Indian meals, sauces, spice mixes and regional food specialities tailored to international consumers. Third, the growth of plant-based diets and alternative protein sources offers considerable potential for pulses, lentils, chickpeas and innovative plant-based products. India's rich culinary heritage can also help popularise vegetarian and vegan food options globally.

Another important trend is the growing interest in ethnic cuisines, authentic flavours and premium food experiences. Indian spices, regional delicacies, traditional beverages and speciality foods can help exporters differentiate their offerings in international markets. Finally, sustainability, organic products, responsible sourcing and environmentally conscious packaging are increasingly influencing purchasing decisions among consumers and international buyers.

What outcomes does ITPO expect from India's participation?

ITPO expects India's participation to generate both immediate business opportunities and long-term strategic benefits.

The immediate objective is to facilitate meaningful B2B engagements between Indian exporters and international buyers, distributors, importers and retail chains. We also expect participating companies, particularly MSMEs, to identify new markets, understand evolving consumer preferences and gain insights into international quality, packaging and regulatory requirements.

Another important outcome is to promote value addition, product innovation and the development of globally competitive Indian food brands, rather than relying predominantly on bulk commodity exports. The participation will also provide Indian companies with valuable insights into international consumer preferences, quality standards, regulatory requirements, product innovation and competitor strategies.

What key events and business activities will ITPO organise at SIAL Paris?

India's participation at SIAL Paris extends well beyond product display and includes a range of business, knowledge-sharing, innovation and culinary initiatives.

A dedicated start-up showcase is being organised at the entrance of Hall 5A with the support of the Department for Promotion of Industry and Internal Trade (DPIIT). It will provide Indian food start-ups an opportunity to showcase innovative products on a rotational basis, with a particular focus on health, nutrition and wellness-orientated innovations. The showcase will include categories such as: Superfoods and superfood mixes, millet-and jaggery-based products, ready-to-eat oats, microgreen powders, innovative functional and wellness foods.

India will also participate in SIAL for Change, providing a platform for discussions on the social, environmental and economic transformations taking place across the global agri-food sector.

Sessions will focus on themes such as: *France–India: Responding to India's Evolving Consumer Needs*, *From Farm to Future: Building India's Global Plant-Protein Ecosystem*, *New Frontiers in Indian Agriculture: Sustainable and Women-Led Development.*

Adding a strong culinary dimension to India's participation, ITPO is also organising Bistro by India, a daily culinary experience throughout SIAL Paris. The initiative will feature culinary master chef classes and live demonstrations, giving international visitors an opportunity to experience the diversity, innovation and contemporary potential of Indian cuisine and food products. ■

INDIAN FOOD PROCESSING INDUSTRY: LIMITED APPETITE FOR VALUE-ADDED EXPORTS

A growing population, with fatter wallets, has whipped up the appetite for food processing industry in India, making it one of the fastest growing industries in the country. It is not just Indian companies that are salivating over their prospects, a large number of foreign companies have also been queueing up with their wares hoping to get the Indian consumers hooked to their products.

Ranvir Nayar







With a growth of 7.8 pc in its nominal Gross Domestic Product reported in the first quarter of the current fiscal year, that ended on June 1, the headline figures of the growth in the Indian economy continue at a blistering pace. While the growth has been attributed to a variety of factors, one of the key reasons is the rise in household consumption, which in turn is driven by food that accounts for nearly half the amount spent every month by an average Indian household, especially in the rural areas.

According to several reports, the size of the Indian food processing industry in FY25 was estimated to be around USD 383 billion, with a steady growth of about 7.2 pc annually in the recent few years. One of the main motors of this rapid growth is the rising population in India, which has grown now close to 1.5 billion and is set to grow to close to 1.7 billion in the next two decades.

The second reason behind the growth is the rising disposable income, more so in certain urban households, which has allowed Indian families to spend on money not just on essential or basic food materials but also in discretionary purchases of different kinds of food products, including imported foods.

Moreover, a section of the more aware consumer is increasingly seeking a mix of quality, convenience, health and experience. This shift is giving rise to a value-led, consumer-focussed food economy and is projected to create a nearly USD 600 billion processed food opportunity by 2030, says a report jointly released by the Federation of Indian Chambers of Commerce and Industry (FICCI) along with Deloitte, a leading consultancy firm.

As a result of the broad-based growth in the domestic demand, the sector plays an increasingly important role in the national Gross Domestic Product (GDP), employment generation, and industrial investment.

One of the key components of the food processing sector is milk, of which India is not only the world's largest producer but also the biggest consumer. Milk production has grown at a Compound Annual Growth Rate (CAGR) of 5.41 pc and stood at 248 million tonnes in 2024-25. Currently, the dairy industry is worth USD 247 billion and is projected to grow to about USD 600 billion by 2034, an annual growth rate of 11.8 pc.

Besides milk, India is also the world's largest producer of spices, as total spice production is estimated at approximately 12 million tonnes, with exports valued at USD 4.7 billion for









exports of about 1.8 million tonnes. India is also the world's second largest producer of vegetables, fruits and eggs, and is fifth in meat production.

India has access to several natural resources that provides it with a competitive advantage in the food processing sector. Due to its diverse agro-climatic conditions, it has a wide-ranging and large raw material base suitable for food processing industries.

But its large population, the biggest in the world and close to 1.5 billion currently, means that an overwhelming share of Indian production of food, whether in its natural form or processed, is consumed domestically.

Hence, it is no surprise that India's food and grocery market is one of the largest globally, supported by a retail market exceeding USD 1.1 trillion in 2025, with food and grocery accounting for approximately 60–70 pc of total retail consumption, almost double the share of averages recorded in developed economies and in line with low-income nations.

At home, the Indian food processing industry accounts for around 32 pc of the country's total food market. The food processing sector contributes about 7.9 pc to the Gross Value Added (GVA) by the country's manufacturing sector and about 8 pc to agricultural GVA, while









The size of the Indian food processing industry in FY25 was estimated to be around USD 383 billion, with a steady growth of about 7.2 pc annually in the recent few years

accounting for close to 13 pc of India's total exports and nearly 6 pc of industrial investment.

According to government data, the GVA in India's food processing sector has increased from USD 24.6 billion to USD 27.06 billion in the past eight years.

Top processed food categories in India

In the domestic market in India, the largest categories of processed foods include milk, edible oils, savouries, snacks, staples and rice as well as tea and coffee.

According to industry estimates, dairy products including milk, *ghee*, *paneer* or cottage cheese, curd and butter account for about USD 140 billion of the total market of USD 1.2 trillion. This is also one of the fastest growing categories, with an average annual growth rate of between 8-10 pc, with cooperative brands like Amul, Mother Dairy leading the charge as many other smaller start-ups and players seek to find their place in this lucrative market with various value added products such as flavoured milk, curds or other derivatives.

The second largest category of the food processing sector in the domestic market is edible oil, most of which comes through imports as India is severely deficient in meeting the huge demand of cooking oils and imports almost 60 pc of its total consumption.

India brings in about 16 million to 17 million tonnes of vegetable oil annually. Of this, palm oil accounts for the largest share of about 56 pc of imports, sourced mainly from Indonesia and Malaysia, while India also imports about 5 million tonnes of soyabean oil, imported largely from Argentina and Brazil. Another key oil, sunflower oil, accounts for about 3.5 million tonnes annually and is imported mainly from Russia and Ukraine.

The total market size, including domestic production, is about USD 120 billion. It has been growing about 8 pc each year and in the domestic market the leading refiners include Adani Wilmar and Emami Agrotech, which both have a very high penetration in both rural and urban kitchens.

Next biggest component of the Indian processed foods market are savoury snacks, that are estimated to be about USD 5.2 billion and which has been growing at a fast clip of nearly 14 pc year-on-year. Though it has millions of companies, big, small and micro enterprises, the market leaders include Haldiram's and Bikanerwala.

Closely aligned is the segment of sweet biscuits and bakery items that has a market size of USD 4.6 billion and growing at nearly 11 pc, with leading domestic names like Parle and Brittania, besides numerous imported brands.









The next largest segment is packaged tea and coffee, which together account for USD 3.6 billion in sales and a growth rate of about 9 pc. The sector, again fragmented, is led by Tata Consumer Products, Hindustan Unilever and a handful of other domestic brands. In the recent past, some imported coffee brands have also entered the Indian market though they exclusively cater to the high-end niche market.

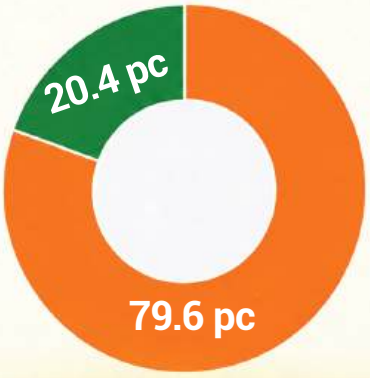
Another major product segment comprises staples and processed rice, such as branded wheat flour, packaged Basmati or other rice as well as lentils and other similar products. This market is valued at about USD 3.1 billion, with an annual growth rate of nearly 10 pc. This segment is highly fragmented with dozens of brands competing for the consumers. Within this segment, some companies are also pushing 'organic' products, though Indian process for certification of organic products remains highly lax, with little credibility attached.

Valued at over USD 5.6 billion, the market for spices and condiments is also growing at a fast clip of close to 12 pc. A highly fragmented market, some brands like MDH, Everest and Catch have been trying to establish a loyal customer following. However, poor quality controls and lax standards governing residual presence of pesticides and chemicals has impacted some of these brands which have seen their products banned in overseas markets.

An emerging segment of processed foods, which is also perhaps the fastest growing is the market for Ready-to-Eat (RTE) and

Low ambitions limit export opportunities

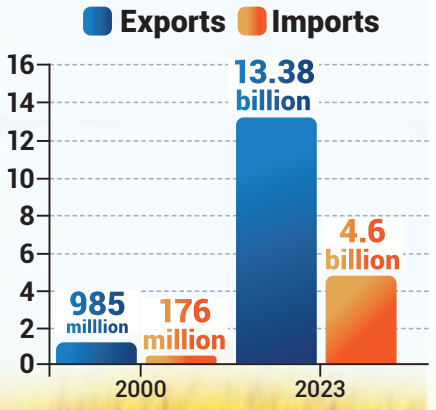
India's Agricultural Exports
(FY2024-25)



Processed food (value added products) **20.4 pc**

Raw or unprocessed products **79.6 pc**

India's Processed Food Trade
(Values in USD)



India's Processed Food in Global Markets

Indian processed foods are largely limited to ethnic **Indian and South Asian stores abroad** and are mostly absent in mainstream retail chains

Competitors like China, Vietnam and Thailand have moved beyond ethnic stores **to mainstream supermarkets and households globally**

There is a **huge opportunity** for India to scale up value-added food exports and expand its presence in global markets







Convenience Meals. This segment is currently valued at close to USD 1 billion, with an annual growth rate of about 18 pc and comprises ready to eat meals, almost entirely Indian cuisine, catering to the urban working professionals and singles. The market leaders here include food and tobacco giant ITC and MTR, a foods company, though the segment's growth has attracted a number of other players also.

Almost half the size of the RTE and convience meals is the segment of instant noodles and pasta, which is about USD 5.9 billion, with an annual growth of 12 pc. The heavyweight in this segment is the Indian wing of Swiss foods giant Nestlé.

Finally, another rapidly growing segment, which is also bigger than instant noodles and pasta, is the market for health drinks and nutritional supplements, encompassing malted milk drinks, protein powders and functional wellness beverages. It is estimated to be catering to a market that is currently worth USD 8.2 billion and registering a growth rate of up to 15 pc per year.

According to Deloitte-FICCI report, categories such as nutrition and functional foods are already growing two times faster than the broader food market, underscoring the increasing importance of value-added products and consumer-centric innovation.

Low ambitions limit export opportunities

While the domestic market offers ample opportunities, Indian food processing companies have also betrayed extremely low ambition to scale up their exports, especially of the value added products. As a result, an overwhelming share of Indian food exports remain raw materials such as cereals, notably rice and Basmati rice,







Top Processed Food Categories in India

CATEGORY	MARKET SIZE (USD BILLION)	ANNUAL GROWTH RATE
Dairy products (milk, ghee, paneer, butter)	140	8-10 pc
Edible oils	120	8 pc
Health drinks & nutritional supplements	8.2	15 pc
Instant noodles & pasta	5.9	12 pc
Spices & condiments	5.6	12 pc
Savoury snacks	5.2	14 pc
Biscuits & bakery items	4.6	11 pc
Tea & coffee	3.6	9 pc
Staples & processed rice	3.1	10 pc
Ready-to-Eat (RTE) & convenience meals	1.0	18 pc





spices, tea, vegetables and marine products. The share of processed food in total exports is still less than a fifth.

According to the MoFPI, processed food accounted for approximately 20.4 pc of India's agricultural exports in FY2024–25, meaning 79.6 pc of Indian exports are with zero value addition, leaving a big gap and an equally huge potential to scale up the overall size of the food processing industries in India. Processed food exports have grown 10 pc year-on-year, with categories such as processed fruits and vegetables, cereal preparations and dairy and poultry products showing strength.

The second and even bigger issue with Indian producers and exporters is their near-total focus simply on the ethnic Indian and South Asian populations in markets around the world.

From Paris to Philadelphia and from Sydney to San Francisco, Indian foods are totally absent from hypermarkets or even Mom and Pop grocery stores, except those catering almost exclusively to the diaspora and ethnic communities. At best, stores like Lidl in Europe or Walmart's in the United States would keep the ubiquitous Basmati rice as the sole

Indian product on their shelves, while the shops catering to the diaspora would have over 90 pc of shelf space for semi-processed foods like rice, lentils or spices.

Meanwhile their rivals from countries like China, Vietnam or Thailand have made a steady headway, moving from their own ethnic shops to the mainstream stores and on to the dinner tables in a European or American household.

This low ambition is reflected in the relatively modest growth in exports of Indian processed foods, that rose from USD 985 million in the year 2000 to USD 13.38 in 2023. On paper, it may sound an impressive growth of about 13.5 times in 23 years, but contrast that with the value of food imports into India and the puff disappears rapidly as India's imports of foreign food products rose from a mere USD 176 million at the turn of the century to USD 4.7 billion, a rise of almost 27 times in 23 years.

With India signing a flurry of Free Trade Agreements and the rising appetite for imported foods once again amongst Indian consumers, one can only expect the gap between Indian food exports and imports to reduce rapidly over the years. It should be no surprise to anyone if within a decade, India imported more processed foods than it exported.



Rampant rejections

Besides the low ambitions of the Indian processed food producers in expanding their market beyond the Indian and South Asian diaspora, one of the primary reasons behind relatively modest presence of Indian foods on shelves of grocery stores overseas is the high risk of rejection of their products by stringent quality controls conducted at the borders or ports as the case may be.

The biggest culprits behind this are contamination by pathogens like Salmonella and mold-based mycotoxins, presence of chemical residues, notably pesticides such as Ethylene Oxide or Triclazole and banned veterinary antibiotics exceeding strict Maximum Residue Limits (MRLs).

The Indian producers and exporters are also fairly regularly guilty of mislabelling in terms of nutritional, ingredient, and allergen documentation discrepancies, playing little heed to the fact each country may have a different rule governing labelling requirements.

One of the biggest impacts of rejection of Indian products can be witnessed in the European Union, where over 51 pc of Indian spice exports, valued at USD 2.2 billion, were rejected last year, indicating the poor quality controls by the producers, exporters and especially Indian food safety regulator, Food Safety and Standardisation Authority of India (FSSAI), which is amongst the most lax bodies in enforcing its already weak standards.

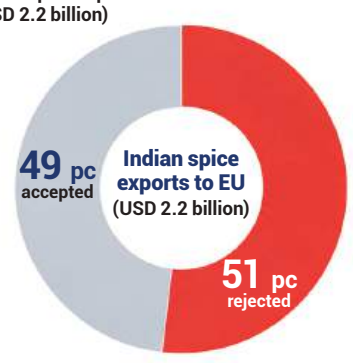
As a result, ever since 2010 under European Commission Decision 2010/381/EU, Indian aquaculture shipments have been subjected to continuous emergency mandates, requiring 100 pc pre-export screening in India and a mandatory 50 pc re-testing rate upon arrival at EU ports due to lingering antibiotic concerns.

India is the world's largest or amongst the largest producers of many, if not most food products. Logically, it should be also one of the largest exporters of value-added products. But the poor appetite of Indian businesses to invest in Research and Development, Innovation, quality controls and market development means that the world's foods heavyweight is left watching the action in the global foods markets from the sidelines or in the 'best' case see its raw materials being turned into high-value products by innovators and businesses around the world. ■

Rampant rejections

Over half of Indian spice exports rejected in the EU

Indian spice exports to the EU (USD 2.2 billion)



Key reasons for rejection of Indian food products

- **Pathogens** eg. Salmonella
- **Mycotoxins** Mold-based contamination
- **Chemical residues** Pesticides such as Ethylene Oxide or Triclazole
- **Banned veterinary antibiotics** Exceeding Maximum Residue Limits (MRLs)
- **Mislabelling** Nutritional, ingredient and allergen documentation discrepancies

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FREE FOR TRAVEL TRADE PROFESSIONALS

INDIAN MARKET
flooded with poor quality, unhealthy foods amidst weak regulation, low awareness

Profiting from weaker regulation and lower consumer awareness, food companies, both Indian and multinationals, continue to dump poor quality and unhealthy products on Indian consumers.

Varsha Singh



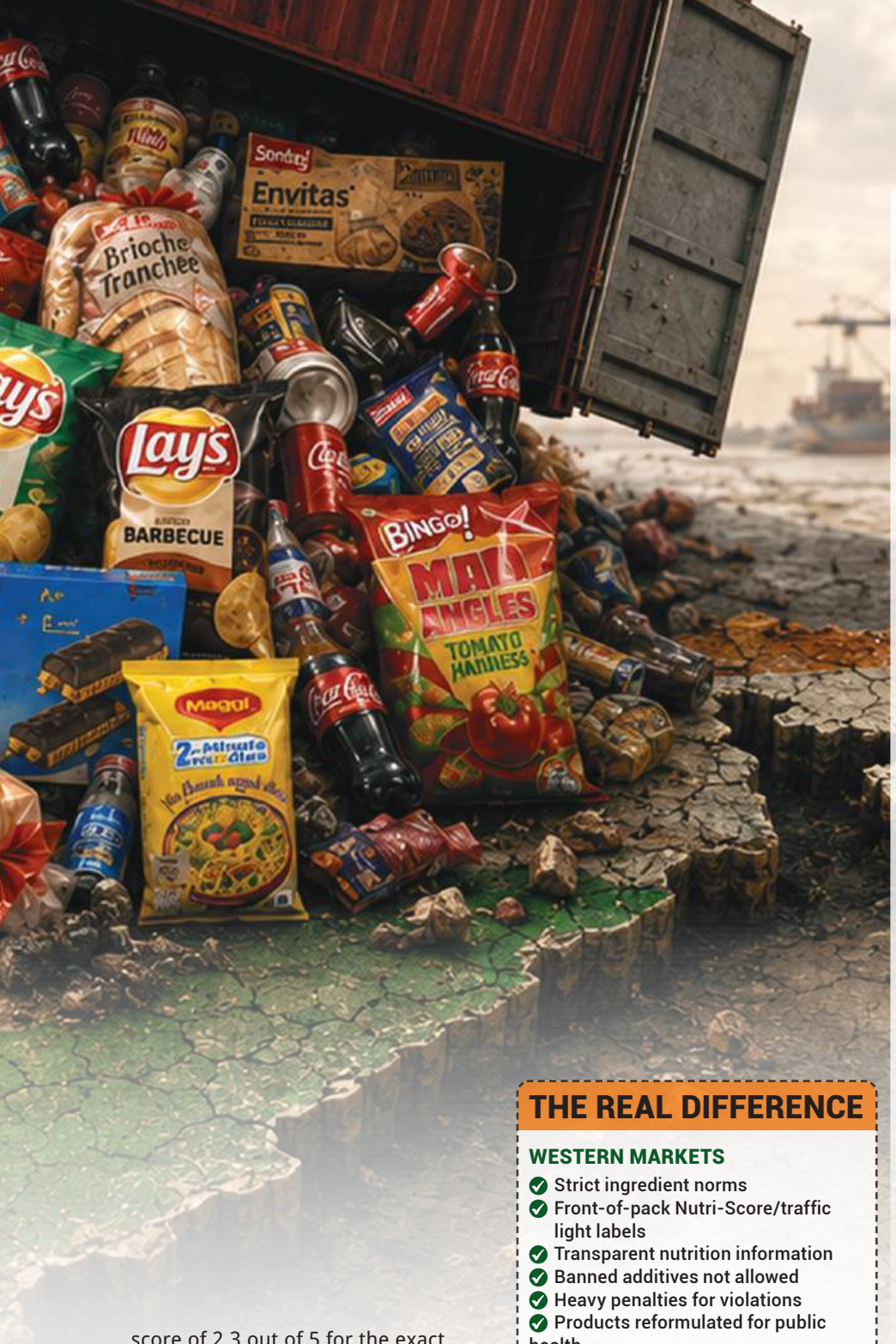
The branding, the packaging and the visuals are identical, right down to the shade of the colours. On face of it, a Kit Kat, a popular chocolate brand manufactured by Swiss food giant Nestlé in India is precisely like the one made and sold by the same company in its home ground, Switzerland. The same is true of a can of Fanta, an orange-flavoured carbonated beverage manufactured by American giant Coca Cola and countless other products manufactured by global food multinationals that one can find on the shelves of almost every grocery store.

But moment you turn the pack over and look at the ingredients used in the product that you realise that two are as similar as chalk and cheese. A Fanta sold in a European country like France has 6.3 gm of sugar for each 100 ml of the beverage, while the same Fanta in India has more than double the amount of sugar, with 13.7 gm of sugar per 100 ml or 45 gm sugar in each 330 ml can of the beverage. Thus a can of Fanta in India has twice the daily limit of sugar recommended by nutritionists.

It is not just sugar. Whether unbranded, a domestic brand or a global multinational brand, food products sold in India have far higher amounts of salt, oils, added chemicals and preservatives than those sold in tightly regulated markets of the developed countries or even developing nations like China.

Two years ago, a study by the Access to Nutrition Initiative (ATNI) revealed that major multinational companies, including Nestlé, Coca Cola, PepsiCo and Unilever, score significantly lower on nutritional health ratings in low-income and developing countries like India.

It said that products sold by these companies in low-income nations averaged a Health Star Rating of 1.8 out of 5, compared to an average



score of 2.3 out of 5 for the exact same or similar brands sold in high-income Western countries, where a score above 3.5 is considered a healthier choice.

The reports added that everyday items like chocolates, cereals, soft drinks and infant nutrition products frequently use more sugar, cheaper vegetable oils, and lower amounts of key ingredients, such as cocoa or milk, in India than they do in Europe or Australia.

According to nutritionists, this disparity stems from various factors, namely the tendency of companies to follow the lowest possible standards rather than adopting the higher standards that they are obliged to follow in developed countries. Another key factor is poor implementation of the regulations governing food products, mainly due to the lack of adequate capacity and punitive powers for the food safety regulator, the Food Safety Standards Authority of India (FSSAI) and finally the low level of awareness amongst consumers in India.

Prachi Pandit, Founder and Director, of Arbuza Regenerate, a company focussed on nutrition, is a nutrition scientist translating complex science into behaviour change, better health, and lasting impact. Pandit has long campaigned for improving nutrition and awareness about nutrition in India.

"Food quality has three parts. There is the rule book on what standards exist. There is the checking, whether anyone enforces them. And there is the buyer, what we, as consumers, actually demand. On the rule book, the gap is smaller than people think. India's standards are largely aligned with Codex Alimentarius. That is the international food code set up by the FAO and WHO, and most countries use it as their reference. In some areas we have moved early, for example capping trans fats in oils and fats. The checking is where we fall behind. When I say enforcement, I mean something very simple. Someone picks a packet off a shop shelf and sends it to a lab. If it fails, the penalty is big enough that the company does not do it again. FSSAI's own data shows that about one in four food samples failed between 2014–15 and 2024–25. But only about 170,000 samples were tested in 2024–25, for 1.4 billion people. And in 2024, Hong Kong and Singapore suspended some Indian spice blends. That showed our producers can meet strict standards when a foreign buyer insists on it," Pandit tells *Biz@India*.

Pandit also blames the buyers for the poor choices made by them when choosing what to buy. "As buyers, we also have to take responsibility. In my clinic, clients bring me "no added sugar" snacks sweetened with dates or fruit concentrate. They bring protein bars with nearly as much sugar as a chocolate bar, and "baked not fried" *namkeen* full of salt and fat. The claim is on the front and the

THE REAL DIFFERENCE

WESTERN MARKETS

- ✓ Strict ingredient norms
- ✓ Front-of-pack Nutri-Score/traffic light labels
- ✓ Transparent nutrition information
- ✓ Banned additives not allowed
- ✓ Heavy penalties for violations
- ✓ Products reformulated for public health

NUTRI-SCORE A B C D E

INDIA - THE DUMPING GROUND

- ✗ No front-of-pack indicators
- ✗ Consumers in the dark
- ✗ Higher sugar, salt, trans fat and additives
- ✗ Banned in West, sold in India
- ✗ Weak penalties, poor testing
- ✗ Profits over people

NO FRONT LABEL GUIDANCE

High in Sugar | High in Salt
Added Flavours | Refined Oil

truth is on the back, and very few of us turn the packet over. We choose on price, taste and convenience, and we rarely complain. Companies give us what we reward. So the rule book is not the main problem. The checking is weak, and as buyers we reward the wrong things," says Pandit.

One of the reasons behind the companies' tendency to push lower-quality products in India is the extremely price-sensitive nature of the market. And to keep retail prices low and affordable for mass consumption, corporations swap out expensive ingredients, like real cocoa or dairy for cheaper alternatives like refined sugar and palm or vegetable oils.

Pandit says that companies tend to follow the lowest possible standards in India for purely commercial reasons.

"India is one of their fastest-growing markets, and warning labels work, so they would hit their core products. Some products are also made differently here. In 2024, Public Eye reported that Nestlé's Cerelac in India had nearly 3 g of added sugar per serving, while versions sold in Germany and the UK had none. Companies follow the minimum a market enforces, not the best they already meet elsewhere," says Pandit.

"So my take is simple. If a company already knows how to make a product with less sugar or salt for one market, it should not need a law to offer the same to Indian consumers. One product, one standard. Biology does not change at the border. If anything, research from Pune, including studies I worked on, shows Indians develop diabetes younger and at a lower body weight. Our need is greater, not smaller," she adds.

DUMPED ACROSS INDIA

LOW QUALITY, HIGH RISK PRODUCTS REACH CORNER

USD 2.5 billion
value of substandard imported food sold annually

15-20 pc
cheaper than quality products of the same category

70 pc
consumers unaware of poor ingredient quality

Minimal enforcement
weak testing, outdated standards, low penalties

*Industry estimates

A weak-kneed, weak-willed regulator

One of the biggest challenges in improving the quality of food sold in India and how it is packaged is the current state of the FSSAI, the national food regulator, which is perceived to be weak in enforcing rules or even bringing in rules that would make a significant impact on the manufacturing companies and force them to sell healthier products.

But FSSAI has historically lacked adequate capacity to deal with the immense size of the market, which has millions of unregistered, informal producers and tens of thousands of registered Small and Medium Enterprises (SME) along with several large companies, Indian or foreign.

For over two years, the FSSAI has been trying to push through a regulation requiring front of packaging labels to warn consumers, if certain products have extremely high levels of salt, sugar or preservatives etc.

In a meeting called on March 19 this year, the FSSAI is said to have faced an onslaught from the MNCs which pushed back against the warning labels, alleging that they were ineffective. Instead, the companies urged FSSAI to focus on encouraging portion control. According to reports leaking the details of the meetings, in that meeting, Mili Bhattacharya, a senior executive of Coca Cola is said to have dismissed the need for front of packaging labels. "It is very simplistic to believe that a consumer who does not already read ingredient lists, will be so informed by seeing a symbol or an icon on the label that their diet significantly improves," Bhattacharya reportedly said.

She added that warning labels were pointless because they would not prevent consumers from otherwise having sugary and salty foods. And finally, she added, Indian doctors had done a good job teaching their patients what food should be avoided, she said.

According to the reports, after this meeting, the FSSAI told the Supreme Court of India that it was "difficult" to match international standards on packaging, echoing the industry position. The court had earlier said India can consider Israel-style labelling, where a red label is applied even if one among salt, sugar or fat is high.

FSSAI's admission to the top

WESTERN MARKETS - WHAT YOU GET



Coca-Cola (France)

NUTRI-SCORE A B C D E

Reformulated lower sugar



Lay's Saveur Barbecue

NUTRI-SCORE A B C D E

Potatoes, vegetable oils (sunflower, rapeseed, maize, in varying proportions)



Maggi Fine Béchamel Sauce

NUTRI-SCORE A B C D E

contains 90% semi-skimmed milk

court led to a huge backlash from consumer groups, nutritionists and activists who all slammed the industry for failing to make healthier products and they also attacked the FSSAI for giving in to the industry, instead of getting them to follow the best practices from around the world and also of ignoring the severe damage that these products are inflicting upon the health and well-being of Indian consumers.

According to the World Health Organisation, more than 1 billion people on the planet are living with obesity, with 70 pc of the population residing in low-and-middle-income countries. The number of obese and diabetic people has been on an alarming increase in the past two decades and according to scientists, Indians ought to be even more careful about what they consume than people from around the world, as they are highly prone to obesity and diabetes.

Fast food and snacks such as potato chips, cola beverages have been found to be contributing factors in propelling the obesity epidemic globally and in India. According to British medical journal, *The Lancet*, around 450 million Indians could be obese or overweight by 2050.

Caught off-guard by the sharp backlash, FSSAI went back to the Supreme Court and said it had proposed front-of-pack warning labels on packaged food and drinks, reversing its position. The FSSAI has proposed a red-coloured hexagonal shape for food products which are high in any two or more nutrients-saturated fat, sugar or salt. The mechanism will "facilitate informed food choices, particularly in relation to children and other vulnerable groups of the population," it added.

Pandit says that while labels will help in informing or warning the consumers, they need to be made with the average consumer in mind.



PRACHI PANDIT

"In my clinic, clients bring me "no added sugar" snacks sweetened with dates or fruit concentrate. They bring protein bars with nearly as much sugar as a chocolate bar, and "baked not fried" namkeen full of salt and fat. The claim is on the front and the truth is on the back, and very few of us turn the packet over. We choose on price, taste and convenience and we rarely complain."

"A label alone would not change a habit. Still, the case for it is clear. ICMR's INDIAB study estimates that 101 million Indians have diabetes and another 136 million have prediabetes. A WHO–ICRIER analysis found that retail sales of ultra-processed foods grew about 13 pc a year between 2011 and 2021. The nutrition panel on the back does not work for most people. It is small, usually in English, and you have to do per-100 g arithmetic to use it. In my field work in low-income urban settlements, I saw mothers buying INR 5–10 packs of biscuits and *namkeen* for their children every day, trusting the packaging and the advertisements, never the label. A clear warning on the front reaches those households. After Chile brought in warning labels, purchases of high-sugar drinks fell by about a quarter, and many companies changed their recipes," says Pandit.

"My Fair Trade work has shown me that a small, clear symbol on a pack can change what people pick up. FSSAI's proposed red warning symbol, modelled on Canada's, is the right direction. Let's make it simple enough for a child to read, and appealing enough that people want to read it," she adds.

Pandit says that FSSAI needs to review its consulting processes as investigative reporting found that industry representatives outnumbered consumer groups about six to one in FSSAI's labelling consultations, and that industry pushed for star ratings over warnings.

She says that FSSAI should include more consumer groups as well as involving clinical nutritionists, doctors and researchers, who hold that evidence of what processed food is doing to the health of Indian consumers.

For a healthier eating, what India needs is an all-round approach of creating greater consumer awareness as well as firm and independent regulator, that is not only well-equipped but also well-informed but is also regularly in contact with various stakeholders, and not just the industry. It would also help if there was greater societal pressure on companies to apply the highest standards that they follow anywhere in the world, not the lowest, when catering to the world's largest market.

With processed foods here to stay for the foreseeable future, it is critical that they become healthier and more nutritious. The USD 140 billion question here is whether FSSAI lead the industry on this path? ■

INDIA - WHAT YOU ACTUALLY GET





Coca-Cola (India)

Higher sugar, no front label indication



Lay's Chile Limon

Seasoning (sugar, Iodised salt, spices, red chili, garlic powder & onion powder)



Maggi 2 Noodles (India)

High sodium, preservatives, added flavour

Better consumer awareness key to improving quality of food in India

Several factors, ranging from poor consumer awareness and the tendency of companies to follow the lowest-possible quality standards, are responsible for the relatively poor quality of processed food in India, Prachi Pandit, Founder and Director, Arbuza Regenerate, a company working on promoting science-based nutrition, tells *Biz@India*. Pandit adds that front-of-pack labelling should be tailored to Indian requirements.

Varsha Singh



Prachi Pandit

Do you think that the quality control standards on food products in India are lower than in the western nations? Are these properly enforced?

On the rule book, the gap is smaller than people think. India's standards are largely aligned with Codex Alimentarius, the international food code set up by the FAO and WHO and most countries use it as their reference. In some areas we have moved early, for example capping trans fats in oils and fats.

The checking is where we fall behind. When I say enforcement, I mean something very simple. Someone picks a packet off a shop shelf and sends it to a lab. If it fails, the penalty should be big enough that the company does not do it again. About one in four food samples failed between 2014–15 and 2024–25. But only about 170,000 samples were tested in 2024–25, for 1.4 billion people.

As buyers, we also have to take responsibility. In my clinic, clients bring me 'no added sugar' snacks sweetened with dates or fruit concentrate. They bring protein bars with nearly as much sugar as a chocolate bar, and 'baked not fried' *namkeen* full of salt and fat. The claim is on the front and the truth is on the back, and very few of us turn the packet over. We choose on price, taste and convenience, and we rarely complain. Companies give us what we reward. So the rule book is not the main problem. The checking is weak, and as buyers we reward the wrong things.

What do you think of the need for front of package labelling on food products?

Yes, front-of-pack labelling will help. But to make it work, we first have to ask: Who is the Indian consumer? There isn't one. For some families, a INR 5 packet is how they exercise their right to eat. It is affordable, filling and available at the corner shop. For others, it is a treat, a small reward at the end of a hard day. For many, packaged food is aspiration, the brand a child sees on TV, the snack that says 'we have arrived'. In India, food is aspirational, so aspiration, not the nutrition panel, decides what goes into the basket. So, the label itself has to be aspirational, not preachy.

Then look at how we actually choose. Most of us decide in a few seconds, at a shop shelf or on a quick-commerce app. Picture a young techie in one of our IT hubs at at midnight, tired and frustrated after a long day, with no time to cook. In 10 minutes, chips and a soft drink arrive at the door. At the other end, packaged snacks have reached deep into rural India, where a INR 5 or INR 10 packet is often cheaper than a piece of fruit. And what we eat is shaped far more by culture, ritual and habit than by any number on a packet, namkeen with evening *chai*, a biscuit in the tiffin, *mithai* at every celebration. A label alone would not change a habit.

The nutrition panel on the back does not work for most people. It is small, usually in English, and you have to do per-100 g arithmetic to use it. In my field work in low-income urban settlements, I saw mothers buying INR 5–10 packs of biscuits and *namkeen* for their children every day, trusting the packaging and the advertisements, never the label. A clear warning on the front reaches those households. After Chile brought in warning labels, purchases of high-sugar drinks fell by about a quarter, and many companies changed their recipes.

But let us use this chance to make labelling cool, not another frustrating list of warnings and slogans. When people are flooded with data and information, they freeze. That is not how you reach a consumer. You reach them in their own vocabulary, with something they can act on. Keep the warning, but add a simple cue beside it, 'have it less, have it smaller, have it with'. *Namkeen*? A small bowl, with roasted *chana* or cucumber. Biscuits? Two, not the whole packet, with a glass of milk. And think of our techie at midnight. If a 'high protein' snack also says on the front 'best as an evening snack, not as dinner', or 'eat it with a fruit', it makes his life easier, not more guilty. That is a label people will actually use.

My Fair Trade work has shown me that a small, clear symbol on a pack can change what people pick up. FSSAI's proposed red warning symbol, modelled on Canada's, is the right direction.

Why do multinational companies resist front of package labelling in India when they are complying with the same in Europe?

In Europe, front-of-pack labels such as Nutri-Score or the United Kingdom traffic lights are mostly voluntary. The better comparison is Chile, Mexico and, since January 2026, Canada. In those countries the same multinationals print mandatory warnings and still sell well.

They resist in India for commercial reasons, not scientific ones. India is one of their fastest-growing markets, and warning labels work, so they would hit their core products. Some products are also made differently here. Nestlé's Cerelac in India had nearly 3 g of added sugar per serving, while versions sold in Germany and the UK had none. Companies follow the minimum standard a market enforces, not the best they already meet elsewhere.

Industry representatives outnumbered consumer groups about six to one in FSSAI's labelling consultations, and industry pushed for star ratings over warnings.

Should MNCs be forced to adopt the best standard that exists worldwide? What should the regulator do?

I am not a product company, but I do advise companies on product development, so I see both sides of the table. On one side, I see how hard it is to reformulate in terms of taste, cost, shelf life, and a price point that has to work for a INR 10 pack. On the other side, in my clinic, I see the adult at the end of that chain: someone in their thirties or forties with diabetes or fatty liver, who has spent a lifetime inside this food system. That person is the real learning.

If a company already knows how to make a product with less sugar or salt for one market, it should not need a law to offer the same to Indian consumers. One product, one standard. Biology does not change at the border. Indians develop diabetes younger and at a lower body weight. Our need is greater, not smaller. The regulator should not have to chase this product by product. Set clear limits and labels, apply them equally to Indian and multinational companies, and make the best existing standard on the floor, not the exception.

Do you think FSSAI is doing its job properly?

Partly yes, partly no. Let us first zoom out on what FSSAI is asked to do. It sets science-based food standards. It licences food businesses, from a street stall to a multinational. It runs a network of testing labs, and it educates consumers. All of this covers one of the largest and most informal food systems in the world. That is a big job.

It has done a good deal of it well. It capped industrial trans fats, it built the Eat Right India movement, put mobile testing labs on the road and trained food handlers. It also moved licensing and complaints online. Few regulators of its age have done this much.

> **About one in four food samples failed between 2014–15 and 2024–25. But only about 170,000 samples were tested in 2024–25, for 1.4 billion people**

But the ground is shifting under everyone. Consumers are changing: more aware, more aspirational, ordering food in 10 minutes on an app. Products are changing just as fast with protein snacks, 'healthy' ready-to-eat foods, new sweeteners, health claims on every pack. Regulation that takes a decade, as front-of-pack labelling has, cannot keep pace. The process began in 2013, went through a draft warning label and then a star rating, and a final framework is only now taking shape with the Supreme Court's push.

A labelling rule touches every packet in the country, from a small local *namkeen* maker to the largest multinational, so FSSAI chose to consult. That was reasonable. What went wrong is that the consultation became a loop. The debate kept returning to whether we need warnings at all, when it should have moved on to how to bring them in. I would not say FSSAI was pushed around, but industry clearly had a louder voice in that room than public health did.

Canada took about 10 years from consultation to enforcement, and Chile passed its law four years before its labels appeared. Regulators everywhere take time. The difference is whether the regulator holds firm on the science while it takes that time.

What is not working, I think, is the system around FSSAI more than FSSAI itself. Clinics see the effects of food first: rising diabetes, fatty liver in young people, children with high blood pressure. Clinical nutritionists, doctors and researchers hold that evidence. Yet there is no regular channel for it to reach the regulator. Industry has a seat at the table, and it should. But the clinic needs one too. Even in Mumbai this festive season, adulteration was caught through raids, not prevented through routine checks.

What recourse does a consumer have? What is your advice?

Consumers have more power than they think, but they have to use it. There are many formal routes. As a practitioner, though, I think the bigger lever is how we eat. Food is functional, we eat because we are hungry. But it is also emotional. We eat to celebrate a festival, to welcome guests, to comfort ourselves after a bad day or a heartbreak. Those happiest and saddest moments are when packaged and adulterated food gets us. My advice is not to fight that, but to plan for it: Turn the packet over. Read the first three ingredients. If sugar, *maida* or oil comes first, that is mostly what you are eating. 'No added sugar' can still mean date paste or fruit concentrate.

For festivals, buy mithai and ghee from a source you know and check its FSSAI licence number, or make one sweet at home.

For comfort eating, keep the treat but change how you eat it: on a plate, not from the packet, and with someone. Have it less often, have it smaller, have it with.

Complain. A complaint is data, and regulators respond to numbers.

Finally, buying together has more force than buying alone. A parent who writes to the school about the canteen, or a housing society or a university that only uses licensed vendors, moves the market faster than one shopper reading labels. ■

EU-India FTA:

UNPACKING INDIAN FOOD PROCESSING SECTOR

Agricultural and food products are amongst the biggest items in the basket of Indian exports to the European Union and the EU has been increasingly pressuring India to open its own food market to imports from the EU.

Sunil Prasad

After nearly 18 years of protracted negotiations, India and European Union in January this year concluded the landmark Free Trade Agreement (FTA) in New Delhi. The FTA is set to transform India's trade and economic relations with 27 European Union countries.

On paper, the Indian food processing industry is going to be one of the biggest beneficiaries of the FTA. This is supposed to come through easing market entry and eliminating steep tariffs on value-added goods. India stands at a pivotal moment in its agri-food journey and as one of the world's largest producers of food grains, fruits, vegetables and dairy, the country has immense potential to lead the global food market.

The FTA seeks to reshape the EU–India trade through more predictable regulatory procedures, improved market-access provisions and deeper supply-chain linkages. While lower tariffs will reduce transaction costs, additional provisions will lower compliance burdens and create new commercial opportunities for Indian food processing sector.

The landmark FTA comes at a critical time for both economies, offering an opportunity to deepen economic cooperation amid growing global uncertainty and disrupted global food supply chain. By reducing barriers across goods and services, the agreement can help the EU diversify its partnerships and strengthen its presence in one of the world's fastest-growing markets, while enabling India to expand exports, attract investment, upgrade industries and integrate more deeply into global value chains.

The demand for Indian food products in Europe is growing at roughly 10 pc annually, moving far beyond traditional ethnic grocery niches into broader consumer markets. Demand is shifting past traditional Indian diaspora hubs into mainstream European households. Indian food has in fact emerged as a soft power influencing and enhancing European households and lifestyle.

Top items in Indian exports, besides the traditional rice, lentils and spices, dehydrated onion and garlic, are superfoods like







makhana and millet-based products and private-label processed foods. The Netherlands has so far been the primary entry point and major destination for EU-bound Indian agricultural and fishery goods, but with the agreement coming into force early next year, all EU countries will be connected directly with the Indian exporters.

For last two decades India's food processing industry has undergone a profound structural transformation, anchored in a strong agricultural base, a rapidly expanding consumer market and sustained policy support by the government. Once viewed primarily as a supplier of raw agricultural commodities, India has emerged as a reliable global source of value-added food products and modern logistics solutions. This paradigm shift also presents compelling opportunities for European investors seeking scale, resilience, and long-term value in a high-growth emerging Indian food processing sector.

India is uniquely positioned to lead the next phase of global agri-food transformation. With one of the largest and most diverse agricultural ecosystems in the world, India ranks as one of the top producers across a wide spectrum of commodities, including fruits and vegetables, dairy, cereals, millets, pulses, livestock, fisheries, tea, and spices. This abundance of raw material provides a robust platform for processing, value addition and supply chain optimisation.

AT A GLANCE: INDIA-EU PARTNERSHIP IN AGRI-FOOD

- Nearly **2 billion** people across India and EU market
- Close to **1/4 th** of global GDP
- **10 pc** annual growth in demand for Indian food products in Europe
- **USD 382 billion** Indian food processing sector value (approx)
- **USD 689 billion** Projected value of Indian food processing sector by 2034

Regulatory hurdles and compliance

However, if India's processed food producers think that the FTA has opened the doors to easy fortune for them, they are living in an illusion. They must know that European market is very regulated and is highly standardised. Key challenges and EU regulatory hurdles including safety standards, will remain a challenge for India. Strict Sanitary

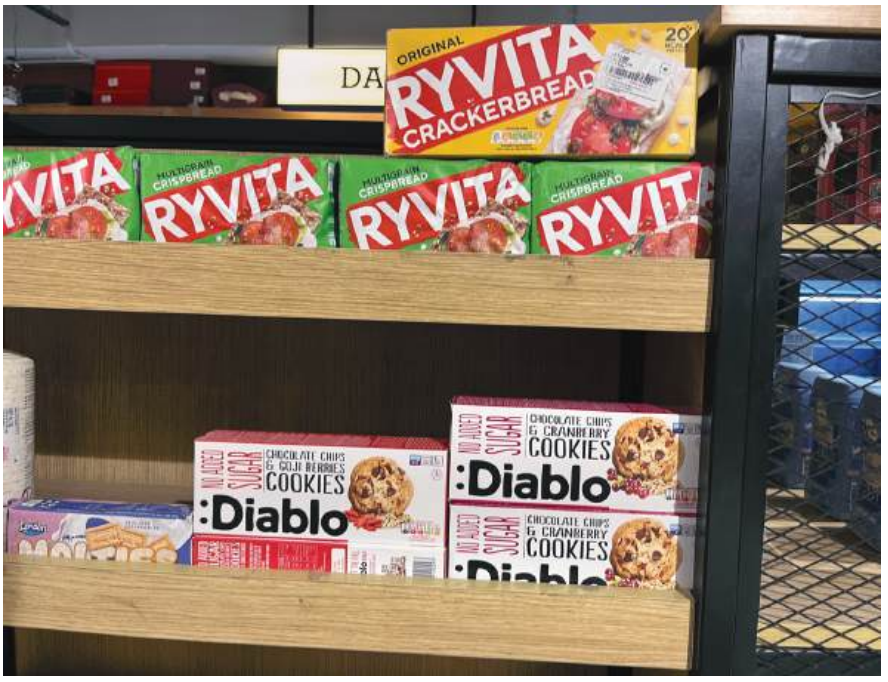




and Phytosanitary (SPS) measures often lead to cargo rejections or delays. Navigating multi-layered EU certifications and testing standards is expensive and slow.

The EU has very stringent, science-based standards to protect human, animal and plant health. All products imported from India under the agreement will have to respect these standards. The EU will conduct Impact Assessments to analyse potential alignment of production standards between domestic and imported products, notably on pesticides and animal welfare. It will also increase the number of food safety audits reinforcing measures to strengthen EU border controls on imported food, animal and plant products.

Already, Indian exporters frequently face EU border rejections due to stringent Sanitary and Phytosanitary regulations, pesticide residue limits, such as tricyclazole or ethylene oxide and traceability requirements. While exports of grain and dairy processing are robust, fruit and vegetable processing penetration remains low, of under 5 pc, limiting processed exports like juices or ready meals compared to regional competitors.







INDIAN FOOD EXPORTS TO EUROPE

Indian agri-food export to the EU are diverse and growing, driven by quality, authenticity and rising European demand



RICE & BASMATI RICE
Premium quality rice in high demand



SPICES & CONDIMENTS
Spices, seasonings and essential oils



TEA & COFFEE
Strong demand for Indian tea and coffee



FRUITS & VEGETABLES
Mangoes, Grapes, Onions, Pomegranate & more



MARINE & SEAFOOD
Simp, Fish and other Seafood products



MILLETS & HEALTH FOODS
Makhana, Quinoa, Millets and Plant-based foods



PROCESSED FOOD PRODUCTS
Ready-to-eat meals, Snacks, Sauces & Confectionery

KEY BENEFITS FOR INDIA

ELIMINATION OF HIGH TARIFFS
On key agri-food products improving price competitiveness

BETTER MARKET ACCESS
Simplified customs procedures & transparent regulatory framework

INCREASED EXPORTS
Projected boost across value-added, processed & organic food categories

INVESTMENT & TECHNOLOGY
European investments to strengthen processing cold chain & sustainability

JOB CREATION
More opportunities across farming, processing, logistics kretal

TARIFF RELIEF HIGHLIGHTS (SELECTED PRODUCTS)

PRODUCT CATEGORY	CURRENT AVERAGE TARIFF IN EU	POST-FTA TARIFF	IMPACT
Processed fruits & vegetables	10-20 pc	0 pc	Significant cost & advantage
Spices & Seasonings	8-15 pc	0 pc	High competitiveness
Rice	7-12 pc	0 pc	Boost in exports
Marine products	6-18 pc	0-5 pc	Stronger market access
Ready-to-Eat foods	10-30 pc	0 pc	Growth in value-added exports

Not a pandora's box, a measured market access

The FTA has reduced or zeroed out duties on key value-added items, organic inputs, and processed marine products. But a large share of Indian exports is raw or semi-processed commodities rather than high-margin finished goods.

Under the FTA, the EU has also protected its most sensitive agricultural sectors. Official summaries confirm that products such as beef, chicken meat, rice, sugar, and other politically sensitive farm goods have been excluded from liberalisation under the FTA.

The agreed framework of the FTA is a deliberate political and trade balance and not a blanket free trade. For businesses, while the agreement offers clearer rules and phased access, for governments, it preserves policy space to manage domestic priorities.

Indian exporters will, however, have to face a plethora of challenges, despite imports from the EU of several considerable quantum elements from India. The most notable are non-pricing obstacles such as strict limits on pesticide residues called the Maximum Residue Limits (MRL), health and phytosanitary standards, traceability and hygiene. Other problems, such as the limited acceptance and recognition of Indian certification organisations, add to the cost and the burden of compliance affecting the overall competitiveness of exporters.

Navigating EU's green wall

Another point of concern for Indian exporters would be that the





EUROPEAN FOOD IMPORTS TO INDIA

The FTA will make high-quality European food products more accessible and affordable for Indian consumers

KEY BENEFITS FOR INDIA

WIDER CHOICE & PREMIUM QUALITY
Access to world-class European food products

LOWER PRICES
Reduced tariffs bring high-quality products within reach

FOOD SAFETY & STANDARDS
EU's rigorous quality & safety standards strengthen trust

SUPPLY CHAIN RESILIENCE
Diversified sources ensure year-round availability of key food items

CONSUMER WELLNESS
More nutritious, sustainable & exclusive food options

OLIVE OIL
Premium extra Virgin Olive oil from Spain, Italy & Greece



FRESH FRUITS
Apples, Pears, Berries & Cherries from France, Italy & Spain



DAIRY PRODUCTS
Cheese, Milk, Butter & Yogurt from top EU producers



BAKERY & CONFECTIONERY
Artisan Bread, Biscuits, Chocolates & Pastries



WINE & BEVERAGES
Fine Wines, craft Beers & premium beverages



PROCESSED & GOURMET FOODS
Pasta, Sauces, Soups, Cereals & Gourmet items



EU's Carbon Border Adjustment Mechanism (CBAM) remains fully in force. The CABM imposes tax on import of products that are produced by industries that are carbon intensive, such as steel, aluminium, cement and fertilisers. What this means, in practice, is that if the carbon emissions are not reduced on production in India, then Indian products would be priced higher in the European market because of the imposition of taxes, leading to a major hit to Indian exports.

A critical question for Indian policymakers and exporters is whether the FTA will provide additional leverage to India or whether India will be subjected to the same stringent carbon costs as the other global trading partners. Therefore, without rapid decarbonisation, Indian products are at a risk of being priced out of the European market.

There is a comprehensive work plan with separate provisions under the EU-India free trade agreement to address concerns over the European Union's carbon tax, and it is hoped that Indian Small and Medium Enterprises (SMEs) will not face any problems due to that measure. As India is also developing its own carbon pricing mechanism.

The CBAM does not directly target processed food items, but it indirectly increases operational and packaging costs for India's food processing industry through the supply chain. As food processing relies heavily on metal cans, tinplate, aluminium foils, and machinery components, the packaging cost inflation will come as indirect supply chain pressure.

Direct food items are not in the initial CBAM phase, but energy-intensive packaging, fertilisers, and cold-chain logistics face future indirect cost pressures. Moreover, SMEs will face complex emission-tracking and verification demands.

Mainstream and niche consumer demands

India's agricultural exports to the EU reached EUR 3.8 billion in 2025, establishing the country as the EU's fifth-largest food and agri-commodity supplier by value, but a large share of that caters to the Indian diaspora, which itself has grown significantly in the last decade or so. Historically, the EU has accounted for about 12 pc of India's total processed food exports, which translates to about EUR 1 billion or USD 1.15 billion.

To make real gains from the FTA, the Indian exporters will need to expand beyond the diaspora market. They will have to move past traditional ethnic grocery stores by introducing authentic Indian flavours, spices, tea, and ready-to-eat meals to mainstream European supermarket chains. They must focus on health and convenience too. They will need to promote organic lines, healthy snacks, and convenient packaged foods that match fast-paced European lifestyles.

Data shows that 1.8 pc of Indian agricultural consignments entering Europe were subject to border rejection or enhanced checks in 2025, primarily due to pesticide residues, which accounted for 41pc of rejections, aflatoxin levels in spices, that caused 28 pc of rejections and documentation non-compliance which made for 31 pc of rejections.

Buyers working directly with unvetted spot-market suppliers face material risk of rejected shipments, demurrage costs, and inventory write-downs. The problem with Indian exporters is that in their rush to make 'quick money' in the European market, they tend to forget that once they are blacklisted after repeated alerts, their future in EU market will be fully terminated.

In order to deepen access for the Indian SMEs on food in the EU market, the Indian government will need to support them through financial assistance for modern machinery, packaging infrastructure and cold-chain facilities.

EU cracks open Indian food market

India is rapidly emerging as a market of choice for global food businesses, supported by evolving consumer preferences and increasing demand for organic and value-

added products. The FTA could also double EU exports to India within five years of its entry into force, although businesses would need to convert the agreement's provisions into commercial partne-rships. The bilateral agri-food trade currently stands at around EUR 5 billion and could double by 2032.

The opportunity unfolds across segments at different speeds. For European food and beverage producers, the most immediate impact appears in categories that previously struggled to achieve viable price positioning in India. Wine, Spirits, Beer, Olive oil and select packaged foods move closer to commercial scale as tariff barriers ease. The shift influences portfolio economics, brand architecture, and route-to-market choices, particularly in premium and urban consumption channels. Most of these products are already being sold in the Indian grocery stores and not just the ones catering to the wealthy consumers, many Mom and Pop stores too now offer these 'exotic' products to Indian buyers who are lapping them up.

The FTA is set to ease the entry of not just a lot more of these products but also newer products in the Indian market. The trade deal, which could eliminate up to EUR 4 billion in tariffs on EU exports, has sparked mixed reactions from the Indian Food and Beverage industry.

Agricultural tariffs currently averaging more than 36 pc will be reduced. Tariffs on Wine will fall from 150 pc to 75 pc at entry into force, eventually reaching 20 pc. Tariffs on Olive oil will be phased out from 45 pc to zero over five years. Tariffs of up to 50 pc on processed goods, such as Bread and confectionery, will be eliminated entirely.

And as the EU food safety standards are already by far the world's most rigorous, these products will face little difficulty at the Indian Customs, quite unlike the struggle of Indian food exporters catering to the European market to move their products from ports to shop shelves.

Dairy industry disruption?

European agricultural sectors, such as dairy, Beef, Chicken, Rice, and Sugar, have been excluded from the pact. However, these sectors are concerned by longer-term market

India's agricultural exports to the EU reached EUR 3.8 billion in 2025, establishing the country as the EU's fifth-largest food and agri-commodity supplier by value, but a large share of that caters to the Indian diaspora

shifts, potential regulatory issues, and the risk of future liberalisation that could expose them to more competition. While dairy is not expected to face tariff cuts, related sectors, such as processed foods and ingredients, like milk powders or dairy-based products, could benefit from reduced tariffs, leading to increased competition from Indian dairy-based imports in the European market. But here, too, non-tariff barriers, such as food safety regulations and quality standards, could complicate market access for Indian dairy products.

The dairy industry is also a politically delicate sector for New Delhi, supporting around 80 million smallholder farmers. Liberalising dairy imports could undermine livelihoods and destabilise this delicately balanced value chain. There are concerns that opening the sector in future trade talks could result in greater exposure to international market fluctuations and reduce the leverage that India has over its domestic dairy market. Furthermore, the potential future liberalisation of these sectors may not only increase competition but also prompt a reassessment of subsidies and support mechanisms for European and Indian producers, raising questions about the sector's sustainability in both regions.

Potential impact

Indian exporters often treat overseas expansion as a branding exercise. That route suits distinctive products and patient capital. Yet FTA may create an equally valuable opportunity in contract manufacturing and private label. EU retailers, foodservice distributors and challenger brands need suppliers that can combine cost, innovation and continuity; India brings raw-material depth, modern processing capacity and multiple price points.

For a capable processor, supplying a recognised EU label can build plant utilisation and foreign-currency revenue faster than creating consumer awareness from zero. The same platform can later support contract manufacturing for volume, an owned brand for margin, and ingredient supply for diversification. Joint ventures also become more compelling since an EU partner can bring product development and market access, while the Indian partner brings sourcing, manufacturing economics and incentive-supported capacity.

Capitalising on the EU food processing shift

As Chinese food processing export to EU is yet to recover from the Covid-19 shock, the FTA offers India's processed food producers a strategic economic opportunity to capture EU market. Under the FTA, Indian fisheries, organic goods, and specialty foods have gained streamlined, duty-free entry into European markets. By contrast, China faces worsening trade friction, structural supply strain, and a looming 'China Shock 2.0' pushback from European regulators. But to displace China, India must mandate stringent, internationally accredited laboratory testing and adopt rigid compliance models to satisfy European food safety agencies. As European buyers look to diversify from China via "China Plus One" supply chains, India possesses a massive window of opportunity to position itself as the primary alternative for processed foods.

This provides India with a unique window to transition from an exporter of raw agricultural commodities into a primary global hub for value-added processed food. In short, the EU-India Free Trade Agreement has the potential to act as a massive catalyst. Whether the Indian industry is capable of capitalising on this opportunity is quite another story. ■

(Sunil Prasad is the Secretary General of Brussels based Europe India Chamber of Commerce. The views expressed here does not reflect those of Biz@India).



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THE GLOBAL MIRAGE OF SUSTAINABLE FARMING



Thirty-eight years after the Food and Agricultural Organisation, the food agency of the United Nations, defined it, the world still cannot say how much of its farmland and farming is sustainable. But whatever the real picture, it is far from pretty as farms continue to guzzle water and chemicals, paying lip service to sustainability and environmental protection.

Rajendra Shende

The octogenarian United Nations ended the general debate of the 81st UN General Assembly session on September 28. It produced many important observations on peace, artificial intelligence, war and the future of the United Nations. Hardly any dealt directly with food security or sustainable farming. Acute crises and geopolitical interests crowded out sustainability issues. The week's high-level meetings also covered climate, sea-level rise and pandemics, but none was devoted to how the world grows its food. That silence raises a vital question, what has the world actually done to make farming sustainable?

From limits to inputs

For about 10,000 years, farming depended on what a family, a field and a season could produce. Soil and water set the limits, and the damage was localised. In the 20th century, those limits got blurred, lifted and even vanished.

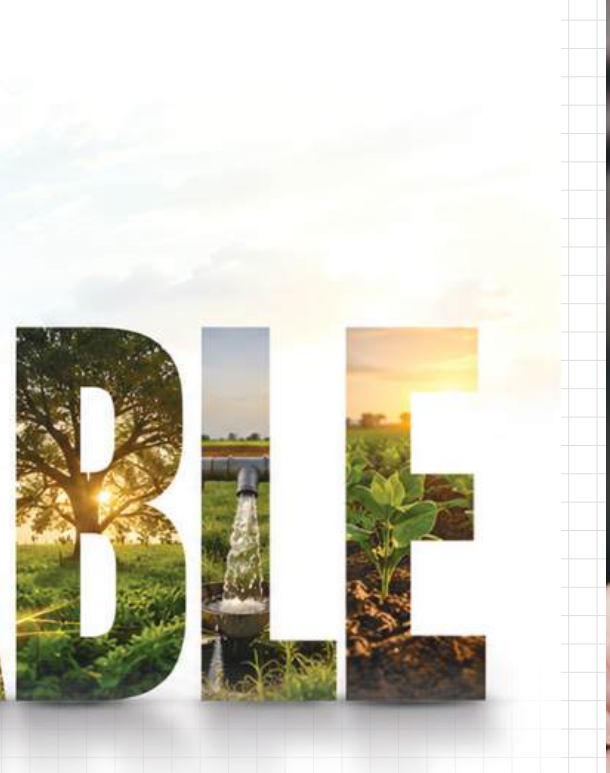
Faced with famine in the 1960s, countries such as India adopted high-yielding wheat and rice, along with a generous dose of chemical fertilisers and large-scale irrigation networks. It worked. Between 1960 and 2000, cereal output in developing countries tripled while cultivated land grew by only about 30 pc. Wheat yields alone roughly tripled.

But the change carried a hidden price on ecology. Use of synthetic nitrogen fertiliser has grown eight-fold since the early 1960s, and crops now absorb a smaller share of what is applied. Farming moved from working within natural limits to crossing them.

Why the pressure kept building

Four drivers pushed the global farming industry in the same direction. The first was people, or more specifically many more of them each year. The world had fewer than 3.7 billion in 1970, nearly 9 billion now and is heading towards 10 billion by 2050. The second was land. More than 95 pc of our food grows on land, little new land is available for farming, and the land used per person fell by a fifth between 2000 and 2017.

The third was money. Governments spend roughly USD 540 billion a year supporting farmers. A 2021 assessment by three UN agencies found that about 87 pc of that support distorts prices or harms nature and health. In short, public policy rewarded more output. Better care of soil and water was secondary. The fourth was wasteful behaviour and infrastructure. The food produced was wasted on farms, in transit, in storage and in plates . As per FAO, about 14 million sqkm of agricultural land, roughly 28 pc of the world's total agricultural area and an area as large as the size of the US and India combined, are used to grow food that goes uneaten. Of the waste occurring at the consumer stage, approximately 60 pc happens in households, 28 pc in food service





Producing more food was supposed to mean healthier people. The numbers tell a different story. A healthy diet now costs about USD 4.28 per person per day, up from USD 3.44 in 2021. Adult obesity has climbed from 12.1 pc in 2012 to 16.2 pc in 2024. About 150 million children under five remain stunted, and anaemia among women of reproductive age is getting worse

namely restaurants, hotels or canteens, and 12 pc at retail.

The bill lands

The costs are now hard to ignore. The Food and Agriculture Organisation (FAO) estimates that more than 16 million sqkm of land, over a 10th of the planet's land area, has been degraded by unsustainable farming practices. Agriculture accounts 72 pc of the freshwater that humans withdraw, about 64 pc of farmland is at risk of pesticide pollution. FAO also warns that soil erosion alone could cut crop production by 10 pc by 2050.

When FAO tried to add up the damage to health, nature and society that never shows up in food prices, it arrived at USD 10 trillion a year, no less than 10 pc of global GDP every year.

Thirty-eight years of promises

The world did notice the rising consumption of resources by agriculture which had become increasingly unsustainable. In 1988, 16 years after the Stockholm Conference on Human Environment, FAO's Council formally defined sustainable agriculture as farming that conserves land, water and genetic resources while staying economically viable and socially acceptable.

In 1991, a conference at Den Bosch in the Netherlands, attended by about 120 countries, called for fundamental change. The Rio Earth Summit in 1992 carried the idea forward, and in 2021 UN Food Systems Summit followed, and by 2025 some 128 countries had drawn up national plans for their food systems. Under the global biodiversity framework, governments have also agreed to cut at least USD 500 billion a year in harmful subsidies by 2030. Definitions, declarations, targets and summits were in plenty. Results were seen wanting!

What the scorecard says

There is good news, and it should be stated plainly. About 645 million people faced hunger in 2025, which is 14 million fewer than the year before and about 43 million fewer than at the 2022 peak. That was substantial The number of people who cannot afford a healthy diet fell from 2.97 billion in 2021 to 2.69 billion, a progress that made chins smile a bit.

On sustainability itself, though, the evidence is even thinner. The official indicator for the share of farmland that is productive and sustainable still lacks enough country data, so the UN uses a stand-in measure. It places the world at a moderate distance from the goal and only slightly better off than in 2015. The Food Systems Countdown Initiative found that just 20 of 42

food system indicators are moving in the right direction, and none fast enough to reach the 2030 goals.

A system that feeds but does not nourish

Producing more food was supposed to mean healthier people. The numbers tell a different story. A healthy diet now costs about USD 4.28 per person per day, up from USD 3.44 in 2021. Adult obesity has climbed from 12.1 pc in 2012 to 16.2 pc in 2024. About 150 million children under five remain stunted, and anaemia among women of reproductive age is getting worse.

FAO's analysis shows that more than 70 pc of the hidden costs of our food systems come from unhealthy diets. A farming system that cannot deliver nutritious food at an affordable price is not sustainable, whatever it does for yields.

The road to 2030 and beyond

The year 2030 is the milestone year in the human calendar of sustainability as that is the year by when the 17 Sustainable Development Goals are targetted to be achieved. SDG number 2 is about ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture. On current trends, around 512 million people will still be undernourished in 2030, and more than half of them will live in Africa.

About 645 million people faced hunger in 2025, which is 14 million fewer than the year before and about 43 million fewer than at the 2022 peak. That was substantial The number of people who cannot afford a healthy diet fell from 2.97 billion in 2021 to 2.69 billion

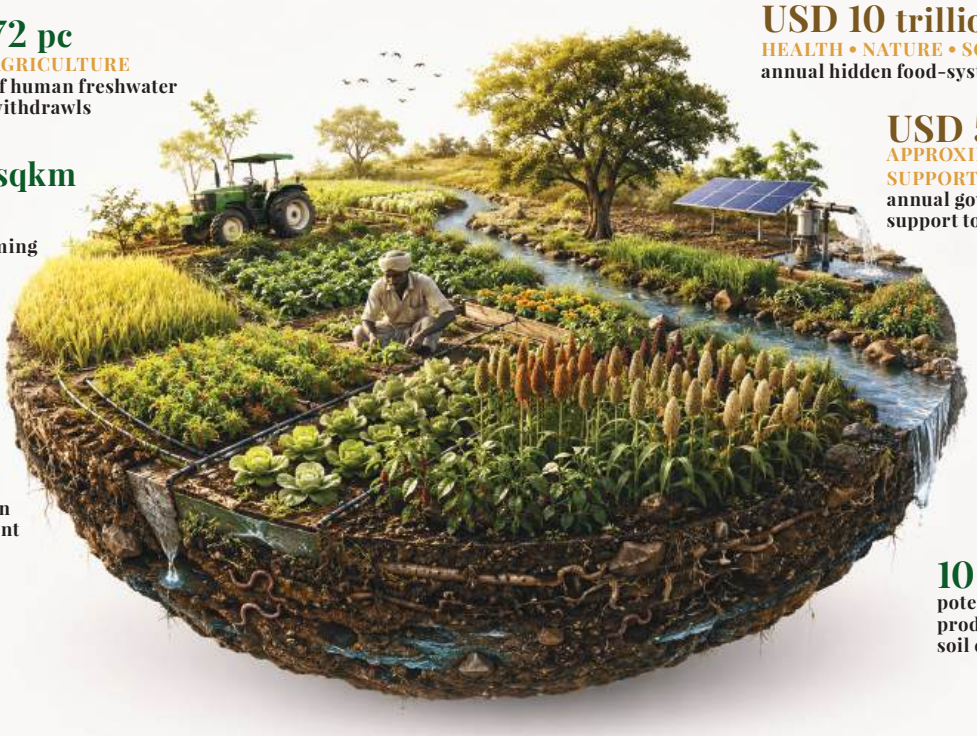
Feeding a population near 10 billion could require 50 pc more food by 2050. Using today's methods, that could raise farm water withdrawals by as much as 35 pc. Meanwhile, if present trends continue, government support to farmers could reach USD 1.76 trillion by 2030. Pouring more money into the same methods will not change the outcome. The task is not a better forecast but changing the course. Unfortunately, the window for changing the course is closing fast.

A revised map

The old map relied on declarations and voluntary national plans. A better one should rest on three foundations.

The first is honest measurement. Countries need funding to collect farm-level data, so that the world can track sustainability instead of estimating it. The second is the way the money flows. The UN does not propose ending farm support. It proposes moving it from harmful payments towards research, infrastructure and rewards for good practice, as the UN's own subsidy report notes was done in Andhra Pradesh, in India, with natural farming, and in China, with cuts in fertiliser and pesticide use. The third is true cost accounting, so that the USD 10 trillion hidden in the system appears in public budgets, procurement and corporate reporting.

SUSTAINABLE FARMING



72 pc
AGRICULTURE
of human freshwater withdrawls

16 million sqkm
FAO ESTIMATE
land degraded by unsustainable farming

28 pc
of agricultural land is used to grow food that goes uneaten

87 pc
of farmer support in a 2021 UN assessment distorted price or harmed nature & health

USD 10 trillion
HEALTH • NATURE • SOCIETY
annual hidden food-system costs

USD 540 billion
APPROXIMATE CURRENT SUPPORT
annual government support to farmers

64 pc
of farmland is at risk of pesticide pollution

10 pc
potential crop-production loss from soil erosion by 2050

1960s
High-yield wheat & rice; fertiliser & irrigation

1988
FAO formally defines sustainable agriculture

2021
UN Food Systems Summit

2023
SDG milestone; sustainability gaps remain

2050
~50 pc more food may be required; water withdrawals could rise



Each step needs a date and a public review. The UN has estimated that the transition needs an extra USD 300 billion to USD 400 billion a year. That is large, but modest beside the hidden costs we have long been paying.

What is still missing

To make farming really sustainable, there are several missing elements and the biggest gap of them all is capital, both financial and human capital. The people who actually farm are far away from learning about sustainability. Financial capital hardly goes in developing the human capital in the agricultural universities. Agriculture education and food processing technologies receive only a small fraction of global climate finance. Farmers with small land holdings, who are not just an overwhelming share of global agricultural workforce but also produce the majority of the food in developing countries, remain cut off from awareness about sustainable practices.

Higher education in most countries does not include education about sustainable farming. One recent commentary also notes that the global target to cut harmful subsidies says nothing about how those subsidies could be diverted to raise human capital. Network of Universities of Agriculture for sustainable farming is unheard of.

The gaps between regions are just as wide. Africa now has more hungry people, about 309 million, than Asia, with 292 million. In 2025, 56.6 pc of Africans faced moderate or severe food insecurity, against 20.3 pc in Asia and 8.7 pc in North America and Europe. Two in three Africans could not afford a healthy diet, more than double the share in Asia or Latin America. Asia and Latin America have improved steadily, while Africa's rise in hunger has only just stopped.

Sustainability also means different things in different places. In some regions the task is to cut excess fertiliser and water. In others, especially across Africa, it is to rebuild soils and raise yields so that farmers can earn a living.

What is also being missed is true sustainable farming, based on 'climate-friendly practices' that tackle greenhouse gas emissions. Agriculture accounts for roughly 40 pc of global human-induced methane emissions, which translates to about 10-12 pc of total global greenhouse gas (GHG) emissions when measured in carbon dioxide equivalents (CO_2e). That includes methane from animal-cattle stocks, manure and other sources.

Flooded rice paddies are the only crop that creates anaerobic or oxygen-free conditions where bacteria produce methane. Moreover, that contributes to only 8 pc of methane generated from the entire agri-sector. That too can be reduced by moving away from flooded paddy fields and use 'Alternate Wet and Dry (AWD) method, which has additional advantage of reducing water usage for paddy, without any way not affecting the yield.

Universities that are now obsessed with AI and digital technologies, however, are overlooking these opportunities to conduct research in agricultural practices to reduce GHGs from farming to reduce methane emissions from cattle, manures and biochar.

Overall, a single global prescription will not work. But a singular question remains, whether sustainable farming will always be just a target, an illusion, like lasting peace? But while gauging the price of missing peace is a complicated process, the cost of unsustainable farming is very clear and visible in our daily lives. We can count hungry people, measure degraded soil, estimate hidden costs and redirect subsidies. Hunger has now fallen three years in a row, which shows that coordinated action works.

Yet almost 40 years after sustainable farming was first defined, there have been far too many slippages on the route to achieve the targets set by UNSDGs. We are still stuck in geopolitics and hoping to track sustainability with AI, without realising that small farmers who get less than 1 pc of climate finance cannot be funded by AI! What is missing is the constructive partnership. Until that is forged , the world's efforts at sustainable farming will deserve the title of this article! ■

Rajendra Shende is a former Director UNEP, Founder Director Green TERRE Foundation, coordinating lead author, IPCC that won Nobel peace prize, Prime Mover SCCN, IIT Alumnus. The views expressed here do not necessarily reflect those of Biz@India.

FROM CALORIE COUNTERS TO AI: INDIAN CONSUMERS TURN TO APPS TO TRACK FOOD INTAKE

From calorie counters to AI-powered meal recognition, technology is changing how people understand what they eat. Nutrition apps now let users log meals, track portions, monitor weight, exercise, and receive personalised insights within seconds. But as food tracking becomes easier and more widespread, questions over accuracy and its impact are also growing.

Masrat Nabi



For decades, keeping track of what people ate meant maintaining a food diary, reading nutrition labels or referring to calorie-counting books. Today, the same exercise can be done within seconds on a smartphone. A user can type in a meal, scan a barcode, photograph a plate or, increasingly, ask an artificial intelligence-powered tool to estimate what is on it.

The growing use of nutrition and fitness apps is turning the smartphone into a digital food diary, bringing calorie counting, portion tracking, exercise monitoring and personalised diet recommendations into everyday life. In India, this shift is visible through platforms such as HealthifyMe, while globally, apps such as MyFitnessPal, Lose It!, Noom and MyNetDiary have made food logging a mainstream digital habit.

The technology, however, is not entirely new. Calorie tracking existed long before smartphones. Australian dietitian and health educator Allan Borushek published a calorie, fat and carbohydrate counter in 1973, while CalorieKing eventually took its database online. By the late 1990s and early 2000s, websites were allowing users to search food databases and record what they ate.

The smartphone transformed that relatively cumbersome process. MyFitnessPal, founded by Mike and Albert Lee, launched in 2005, initially as a web-based service. It later moved into mobile applications as smartphones became mainstream. Lose It! followed in 2008, while a number of other nutrition-tracking applications emerged around the same period. A 2026 review of calorie-counting apps identifies MyFitnessPal among the earliest widely studied platforms, dating back to 2005.

What was once a notebook and a calorie table became an always-available digital record. The scale of the change can be seen in the user numbers. MyFitnessPal says its platform now has more than 280 million users, with a database containing more than 20.5 million foods. HealthifyMe, which describes itself as having launched India's first online calorie tracker, says it crossed 10 million users in 2018, 20 million in 2020 and 31 million in 2022. According to HealthifyMe, it now has more than 45 million users, alongside more than 1,500 coaches.

The appeal is straightforward. Instead of having to calculate the nutritional value of every meal manually, users can search for food in a database and receive an estimate of calories, carbohydrates, proteins and fats. Some apps can also track water, exercise, weight, sleep and other lifestyle indicators.

The latest generation is going further. MyFitnessPal, for example, now allows users to photograph food for meal recognition and use voice logging, while AI-powered systems are increasingly being incorporated into nutrition platforms.

HealthifyMe has also moved beyond basic calorie counting. Its AI coach *Ria* was launched in 2018, and the company says its technology is





ZAINAB TARIQ

"I have been using these apps for a few years now, since I became conscious about myself and what I eat. I calculate my calories every day and it has made my life much easier. Earlier, for every meal, I would have to check Google to find out how many calories a particular food or portion contained. Now these apps can do almost everything for me."

THE SCALE OF CHANGE

280 mn
MyFitnessPal users worldwide

20.5 mn
Foods in MyFitnessPal database

45 mn
HealthilyMe users (and growing)

1,500
HealthifyMe coaches

now powered by hundreds of millions of food logs and millions of messages.

For users, this can make the idea of understanding food intake less intimidating.

Zainab Tariq, a gym trainer based in Kashmir who has been using food-tracking apps for several years, says the technology has changed the way she monitors her daily food intake.

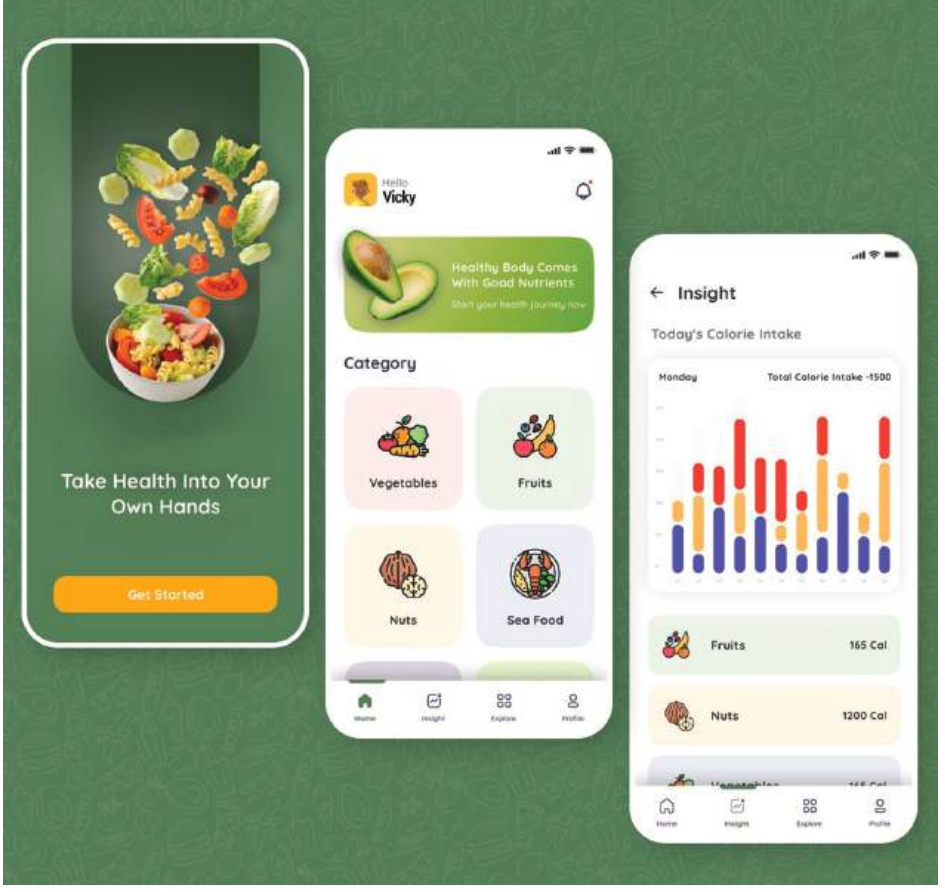
"I have been using these apps for a few years now, since I became conscious about myself and what I eat. I calculate my calories every day and it has made my life much easier. Earlier, for every meal, I would have to check Google to find out how many calories a particular food or portion contained. Now these apps can do almost everything for me. They analyse my food intake and show me where I may be falling short. For example, if I have taken less protein on a particular day, the app highlights it, which helps me understand what I need to improve," Tariq tells *Biz@India.*

She adds that the biggest thing is that these apps also track her water intake, which is particularly useful because she says she usually forgets to drink enough water. "The reminders keep me on track. Overall, these apps have made managing my food and daily habits much easier," says Tariq.

That convenience is one of the biggest reasons behind the growth of food-tracking technology. Instead of calculating every meal manually, users can see a running picture of their calorie and nutrient intake. For people who want to lose weight, gain weight, increase protein consumption or simply become more conscious of their eating habits, the information can provide a sense of control.

The apps are also increasingly becoming broader lifestyle platforms rather than simple calorie counters.

Amit Bidhuri, another user of food-tracking technology, based at Sarita Vihar in South Delhi says the ability to bring food, exercise and weight information together has made monitoring his progress easier.



A study examining five popular nutrition-tracking applications found that several of them underestimated energy and some nutrient intakes compared with a reference nutrition-analysis system. Researchers also found that between 17 pc and 22 pc of foods entered could not be matched closely to the appropriate food description or amount in the apps

"These apps have made my life much easier because I can track not only my food but also my exercise and weight in one place. The apps also make suggestions based on what I record, which is helpful because I do not have to keep calculating everything myself. One of the biggest advantages for me is the way they track my weight over time. Whenever I update my weight, I can see what my weight was when I first joined and how it has changed since then. The app creates a graph of everything, which makes it much easier to understand my progress rather than just looking at individual numbers. I also like that many of these features are available for free, so I can use them without having to pay for every basic function," Bidhuri tells *Biz@India.*

The growing dependence on such apps, however, raises a basic question that how accurate are the numbers being displayed?

Food is not a standardised product. A bowl of *dal* can contain different amounts of oil depending on who prepares it. A restaurant's 'one serving' may be considerably larger

A BRIEF TIMELINE OF FOOD TRACKING

1973 Allan Borushek publishes a calorie, fat & carbohydrate counter

1990 Websites launch food databases for users

2005 MyFitnessPal is launched

than a standard serving in a nutrition database. A homemade *paratha* can vary in size and the quantity of oil or *ghee* used. These differences can make precise calorie calculations difficult.

Research has repeatedly highlighted this problem. A systematic review and meta-analysis of 14 validation studies found that dietary-record apps tended to underestimate energy intake compared with traditional dietary assessment methods. Across 11 studies included in the energy analysis, the pooled difference was about 202 calories per day. The review also noted that portion-size estimation was an important source of error.

Another study examining five popular nutrition-tracking applications found that several of them underestimated energy and some nutrient intakes compared with a reference nutrition-analysis system. Researchers also found that between 17 pc and 22 pc of foods entered could not be matched closely to the appropriate food description or amount in the apps.

Portion size is particularly important. A review of dietary self-report studies found that omissions and incorrect portion-size estimates were among the most frequently reported contributors to inaccurate estimates of food and beverage intake.

This is where dietitians say users need to understand the limitations of the technology.

Dietician Saqib Khurshid views calorie-counting applications as useful awareness tools but warns against treating their calculations as exact.

"I view calorie-counting apps as helpful awareness tools, but they are often inaccurate and can trigger obsessive habits. They are quite useful if used accurately, particularly when users understand portion sizes and enter the size of the portion they actually consumed. The purpose should be to develop awareness about food and eating patterns rather than becoming obsessed with every calorie," Khurshid tells *Biz@India.*

He adds that the accuracy problem could become even more complicated as AI becomes more involved. "An AI system may be able to recognise a plate of *biryani* from a photograph, but identifying the dish is not the same as knowing exactly how much rice is on the plate, how much oil was used or what ingredients went into its preparation," says Khurshid.

At the same time, advances in digital portion assessment are attempting to narrow that gap. A 2024 pilot study evaluating a smartphone portion-size application found that its estimated gram intake was equivalent to estimates obtained through digital photography, although its energy estimates were not equivalent and tended to be higher. The researchers concluded that further improvements were needed.

"For someone trying to understand eating patterns, an app can provide useful information that might otherwise be difficult to collect. A week's worth of records can show how frequently a person eats outside, how much protein they consume or whether they regularly forget to drink water. Weight and exercise graphs can also make longer-term changes easier to see. But the numbers should not become an end in themselves," says Khurshid. ■



SAQIB KHURSHID

"For someone trying to understand eating patterns, an app can provide useful information that might otherwise be difficult to collect. A week's worth of records can show how frequently a person eats outside, how much protein they consume or whether they regularly forget to drink water. Weight and exercise graphs can also make longer-term changes easier to see."



2008 Lose It is launched

2010 Smartphones make food tracking mainstream

2020 AI-powered meal recognition and voice logging emerge

Indian food start-ups eye global markets at SIAL PARIS 2026

From pesticide-free agricultural products and fruit-pulp juices to peanut butter, *makhana* and protein snacks, Indian start-ups are using SIAL Paris 2026 to find international buyers and build their presence in overseas markets.

Masrat Nabi



Indian food start-ups are taking their products to SIAL Paris 2026 as they seek to turn their domestic success into international business. With 64 Indian companies participating, the exhibition offers emerging brands access to buyers across markets and categories, from pesticide-free product and organic rice to peanut butter, protein snacks, fruit beverages and food ingredients, while exposing them to the challenges of global trade.

Indian food start-ups are arriving at SIAL with products designed for a changing global food market, but their ambitions extend beyond simply displaying what they make. For several emerging Indian businesses, the exhibition is an opportunity to find distributors, test products with international buyers and explore markets where demand for health-focussed, convenient and value-added foods is growing.

The exhibition will bring together around 8,000 exhibitors, 650 start-ups and 400,000 products across 280,000 sqm. About 295,000 food professionals are expected to attend the event.

For Indian companies still building their export networks, the opportunity is significant. But so are the challenges, particularly around product adaptation, sourcing standards, pesticide residues and logistics.

Wingreens World

Wingreens World, based in Gurugram, Haryana is taking a broad portfolio to SIAL, combining pesticide-free agricultural products with health-focussed beverages, protein snacks, sauces and mayonnaise.

Jitendra Kukreja, General Manager, Export, Wingreens World, says that the company is using the exhibition to present products across several food categories.

"At SIAL 2026, we are exhibiting our range of pesticide-free agri-products, health-focussed juices made without refined sugar and containing real fruit pulp, protein snacks, as well as sauces and mayonnaise prepared with sunflower

WINGREENS WORLD
Gurugram, Haryana



Pesticide-free agri-products, fruit-pulp juices, protein snacks and sauce

HEEVA
Ahmedabad, Gujarat



6,000 MT
Annual Production Capacity

Peanut butter, flavoured *makhana* (fox nuts), pop chips and muesli



RAINBOW EXPOCHEM COMPANY
Gujarat



Fruit and vegetable powders for beverage, non-alcoholic drink and bakery items

DAS SUPERFOODS / PINTOLA
Pune, Maharashtra

Peanut butter, nut butter, high-protein muesli, oats, rice cakes and peanut butter powder

SARVESHWAR FOODS
Jammu



Premium organic rice products with immediate focus on the USA market

JITENDRA KUKREJA

"At SIAL 2026, we are exhibiting our range of pesticide-free agri-products, health-focussed juices made without refined sugar and containing real fruit pulp, protein snacks, as well as sauces and mayonnaise prepared with sunflower oil."

oil," Kukreja tells *Biz@India.*

The portfolio reflects some of the categories attracting attention among international food buyers, particularly products positioned around health, convenience and cleaner ingredients.

Wingreens World already exports to the Middle East and parts of Southeast Asia. At SIAL, however, the company is looking to widen that footprint.

"While we currently export to the Middle East and parts of Southeast Asia, our primary intent for participating in SIAL is to enter the European market particularly the United Kingdom and France," says Kukreja.

The company is also using the exhibition to respond to enquiries from North America.

"We are also addressing inquiries from the United States and Canada," he added.

The move towards Europe brings another set of challenges. For an Indian food company, having a product that works in the domestic market does not necessarily mean it will automatically work overseas.

Kukreja says understanding local tastes is one of the issues the company has to address as it expands.

"The main challenges we face in expanding internationally are understanding and tailoring our offerings to local taste profiles," he says.

Heeva

Heeva, based at Ahmedabad in Gujarat, is approaching the international market through a portfolio that combines familiar global food products with Indian ingredients. Ankit Mackwan, Brand Head at Heeva, says that the company has built significant production capacity around its portfolio.

"Our core product lineup for SIAL includes peanut butter, flavoured *makhana* (fox nuts), pop chips, and muesli, backed by an annual production capacity of around 6,000 metric tonnes," Mackwan tells *Biz@India.*



ANKIT MACKWAN

"The biggest hurdle we face in taking an Indian food brand to European markets is meeting the strict quality and pesticide standards.The issue becomes particularly important when Indian brands use agricultural ingredients sourced locally."

Peanut butter is among the products with strong international demand, but Europe is the company's principal export focus for the coming years.

"While peanut butter enjoys strong global demand, our primary export focus over the next few years is to expand into Europe," says Mackwan.

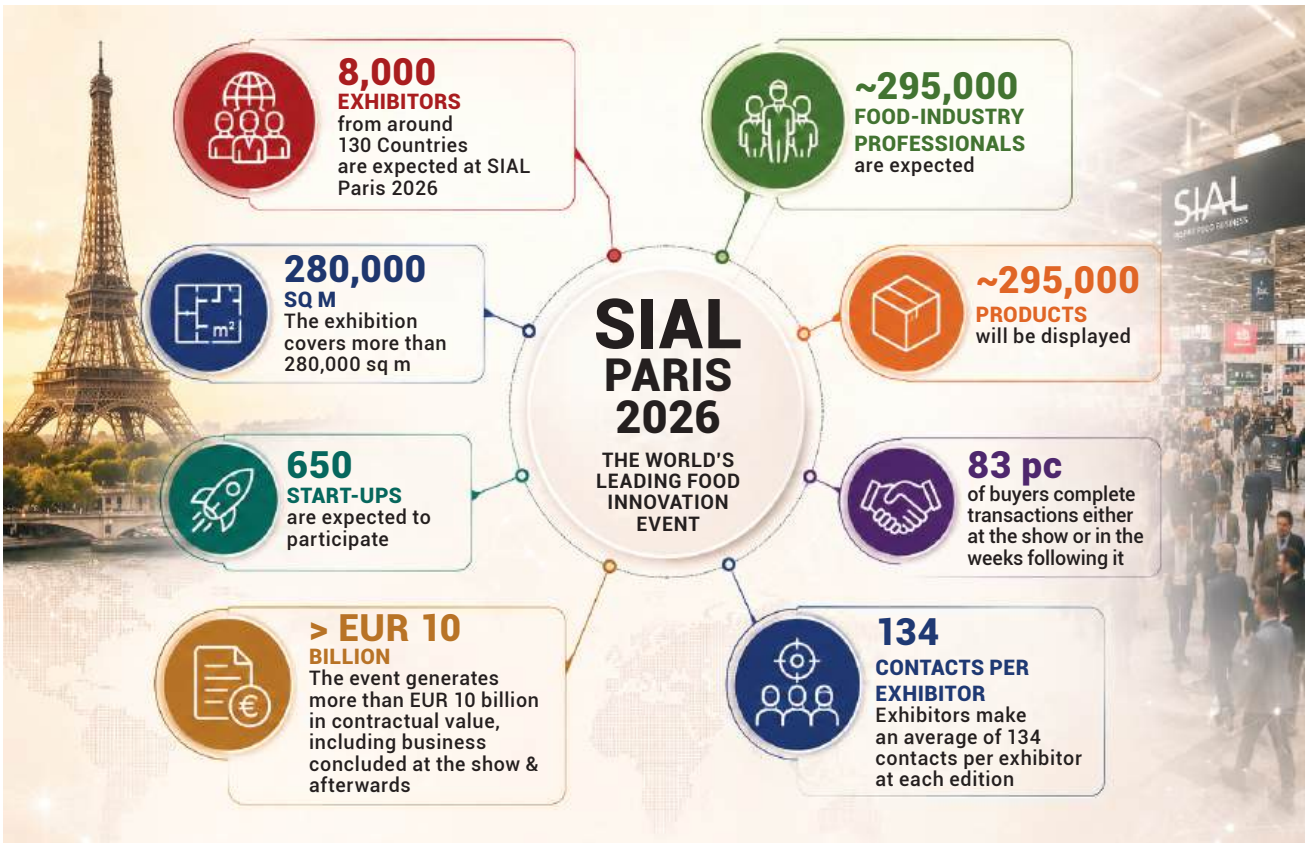
The company's experience also highlights one of the biggest barriers facing Indian food start-ups entering developed markets: sourcing raw materials that meet stringent quality requirements.

"The biggest hurdle we face in taking an Indian food brand to European markets is meeting the strict quality and pesticide standards. The issue becomes particularly important when Indian brands use agricultural ingredients sourced locally," says Mackwan.

"Raw materials sourced locally often carry high pesticide residue, whereas European buyers demand organic-grade inputs making quality sourcing our primary operational concern," he added.

For food start-ups, therefore, export readiness begins well before a product reaches an international buyer. Ingredient sourcing, testing and traceability can determine whether a product meets the standards required by overseas retailers and distributors.

Among the other emerging Indian



food businesses at SIAL is Das Superfoods, the company behind Pintola.

The company is showcasing a portfolio centred on peanut butter and other nut-based and protein-focussed products. Its range includes peanut butter, nut butter, high-protein muesli and oats, rice cakes and peanut butter powder.

Pintola represents a different stage of international expansion from some of the newer start-ups at SIAL. The brand has already built a presence beyond India and is looking to strengthen its position in international markets.

Its product portfolio also illustrates how Indian food businesses are moving beyond traditional export categories.

Peanut butter is a processed consumer product rather than a commodity, allowing the company to build a brand around an ingredient that has growing relevance among consumers interested in protein and convenient food.

The same strategy can be seen across several Indian food start-ups, which are increasingly developing packaged products that combine Indian ingredients with international food formats.

Sarveshwar Foods

While Europe remains an important destination for Indian food exporters, some companies at SIAL are using the exhibition to strengthen their position in the United States and other markets beyond Europe.

Sarveshwar Foods, based in Jammu, is using its presence at SIAL to promote its organic rice portfolio as it looks to expand its international footprint.

Deepak Sharma, Export Manager at Sarveshwar Foods, says the company's immediate focus is the US market.

"As we look beyond European markets, our primary focus is expanding our presence in the USA. At SIAL, we are proud to showcase our premium range of organic rice products as part of our global growth strategy," Sharma tells *Biz@India.*



DEEPAK SHARMA

"As we look beyond European markets, our primary focus is expanding our presence in the USA. At SIAL, we are proud to showcase our premium range of organic rice products as part of our global growth strategy. While navigating international expansion can present its obstacles, our main operational focus right now is managing international shipping freight costs effectively."

The company sees SIAL as a platform to present its products to buyers while continuing to navigate the operational challenges involved in international trade.

"While navigating international expansion can present its obstacles, our main operational focus right now is managing international shipping freight costs effectively," he adds.

Freight costs remain a recurring concern for Indian food exporters, particularly when products are being shipped to distant markets. For companies competing with suppliers from different parts of the world, transport costs can influence the final retail price and, consequently, their ability to win and retain overseas buyers.

"We are also managing current sea freight issues, including container shortages and high freight costs," says Kukreja.

For emerging food businesses, freight can have a direct impact on export margins. A product may find buyers in a new market, but high shipping costs can make it difficult to maintain competitive prices.

Sarveshwar Foods' focus also underlines the continuing importance of rice within India's food-export sector, even as newer companies move into processed and branded categories.

Rainbow Expochem

Another Indian company at SIAL is Rainbow Expochem Company from Gujarat, which is presenting fruit and vegetable powders aimed at international food manufacturers.

Paresh Pateliya, Founder of Rainbow Expochem Company, says the company is targetting multiple global food-industry segments with its products.

"At SIAL 2026, we are showcasing our versatile range of fruit and vegetable powders. Our goal is to cater to key global sectors including the beverage, non-alcoholic drink, bakery, and ice cream industries by providing high-quality, natural ingredients," Pateliya tells *Biz@India.*

Unlike consumer-facing brands that are primarily looking for retail distribution, ingredient suppliers can use exhibitions such as SIAL to connect with food manufacturers and other businesses that require inputs for their own products.

For Rainbow Expochem, the exhibition is part of a longer-term international expansion strategy.

"As we expand our international footprint over the next two to three years, our strategic focus is on strengthening our presence globally, with a strong emphasis on markets across Europe, Australia, Canada, and the United States," Pateliya adds.

SIAL Paris provides an important platform for this transition because of its scale and international buyer base. For Indian companies seeking to move from domestic sales to international distribution, the exhibition offers access to potential importers, distributors, retailers and food manufacturers in one location. ■

Indian food start-ups are arriving at SIAL with products designed for a changing global food market, but their ambitions extend beyond simply displaying what they make. For several emerging Indian businesses, the exhibition is an opportunity to find distributors, test products with international buyers and explore markets where demand for health-focussed, convenient and value-added foods is growing

From fasting staple to global snack:

MAKHANA MOVES UP VALUE CHAIN

Indian *makhana* industry is shifting from traditional and loose consumption towards branded, flavoured and ready-to-eat products. With India accounting for around 90 pc of global production and domestic demand rising, the industry is now looking at whether value-added *makhana* can become a larger export opportunity.

Sanvi Choudhary





For generations, *makhana* or fox nuts or Lotus seeds has been associated with fasting, festivals and traditional Indian households, particularly in Bihar. Today, the aquatic seed is increasingly being positioned as a healthy and convenient snack, finding space alongside nuts, chips and other packaged foods.

India accounts for around 90 pc of global *makhana* production, with Bihar contributing around 90 pc of the country's output, according to an Indian Council for Research on International Economic Relations (ICRIER)-Agricultural and Processed Food Products Export Development Authority (APEDA) study. Bihar's cultivation area rose from 130 sqkm in 2012-13 to 350 sqkm in 2021-22, while popped *makhana* production increased from 9,400 tonnes to 23,700 tonnes.

The growing supply has been matched by rising domestic demand. Credit Rating Information Services of India (Crisil) data available through APEDA show the market growing from USD 6-6.6 billion in 2021-22 to USD 9.6-10.2 billion in 2024-25, with projections of USD 13.3-14.5 billion by 2029-30.

Makhana is also moving beyond traditional consumption, with brands such as Haldiram's, Too Yumm, Farmley, Shakti Sudha and Mr *Makhana* selling roasted, flavoured and ready-to-eat variants. Monthly consumption of popped *makhana* stands at 3,000-3,500 tonnes and rises to nearly 5,000 tonnes during festive periods, with organised fast-moving consumer goods channels accounting for 1,800-2,000 tonnes a month.

However, the demand is not limited to processed products. Sonu Jha, Manager at Mallah Makhana, a B2B distributor based in Darbhanga, Bihar, says raw *makhana* continues to see strong bulk demand from markets across India.

"This year, the demand for raw *makhana* is very high. Roasted *makhana* is also ordered in bulk, but raw material demand is stronger, with buyers from Mumbai, Kolkata, Andhra Pradesh, Bengaluru and other markets," Jha tells *Biz@India*.

Jha says his company sells around 50 tonnes of *makhana* a month, highlighting the scale of domestic bulk demand. He also points to the nutritional positioning of *makhana,* including its protein content and sugar-free nature, as factors supporting consumer interest.

Prices have also risen sharply, with the average domestic price increasing from around INR 500 per kg in 2020 to approximately INR 1,250 per kg in 2025.

However, farmers say the rise in consumer prices does not necessarily translate into a similar increase in their earnings. Vijay Jha, a *makhana* farmer from Raghopur in Supaul, Bihar, says farmers still depend heavily on traders and do not capture the full value created through processing and branding.

"The demand for *makhana* has definitely increased and it is now being sold as a healthy snack throughout the year. But we do not get the price that consumers pay for packaged products. Most of the processing and value addition happens after we sell the crop, so farmers get only a part of the value," Jha, tells *Biz@India*.

Digambar Choudhary, another farmer from Biraul in Darbhanga, offers a more specific view of the price gap. He says farmers can receive around INR 700-900 per kg from traders, while better-quality processed and packaged *makhana* can reach INR 1,200-1,500 per kg.

"The price has increased, but the increase is not the same at the farm level. Better-quality, larger *makhana* can get around INR 1,000-1,200 per kg, but the bigger margins come after roasting, flavouring and packaging," Choudhary tells *Biz@India*.

Choudhary says direct access to exporters remains limited because individual farmers often cannot supply the 1-2 tonnes of uniform-quality produce required by buyers.

"Most farmers sell to local traders because they collect the crop and pay immediately. If farmers can form groups and aggregate 10-20 tonnes, it can help us deal directly with processors or exporters," he says.

He identifies labour and harvesting costs as the biggest constraints and says a 10-15 pc improvement in farm-gate returns could encourage farmers to bring more ponds under cultivation.

The shift towards value-added products is also visible among processors. Sayed Faraz, Co-Founder of Darbhanga-based Shhe Foods, says the company started as a B2B business and now supplies more



SAYED FARAZ

"In raw makhana, it is difficult to save even 4-5 pc profit because there is a lot of competition. We have a good margin in value-added products such as cookies and flavoured makhana. We also make macaroni pasta and plant-based protein powder from makhana and these products give us better margins."

than 250 brands on a white-label basis, including brands serving markets in Europe, the US, Canada, Australia, the Gulf and other regions. Incorporated in 2021, the company recorded revenue of around INR 140 million in the last financial year, with monthly revenue averaging INR 15-18 million.

Faraz says demand has changed particularly over the past two years as companies increasingly position *makhana* as a snack rather than only a traditional food or superfood.

Shhe Foods now makes cookies, flavoured *makhana,* pasta and plant-based protein powder. Its Maket cookies have been in the market for around 1.5 years and the company sells around 25-30 tonnes of cookies a month.

"People are not accepting *makhana* as a superfood in the market. Brands are showing it as a snack and then people accept it. We have made value-added products such as cookies, and our *makhana* cookies have been in the market for around 1.5 years," Faraz tells *Biz@India*.

The company also illustrates the growing domestic demand. Faraz says around 50 pc of its revenue now comes from general trade and distribution, with Maharashtra, Gujarat, Karnataka, Telangana, Madhya Pradesh and Delhi among the markets showing strong traction.

"We have a very good demand, so we buy more than 60 pc of our *makhana* from farmers. We can grow only around 40 pc ourselves. The demand is increasing and farmers are also trying to increase production," Faraz says.

The raw *makhana* market remains highly competitive, with Faraz putting the market price at around INR 400-1,200 per kg, rising to INR 1,300-1,400 per kg depending on quality and market. He says margins are much stronger in processed products.

"In raw *makhana*, it is difficult to save even 4-5 pc profit because there is a lot of competition. We have a good margin in value-added products such as cookies and flavoured *makhana.* We also make macaroni pasta and plant-based protein powder from *makhana* and these products give us better margins," he says.

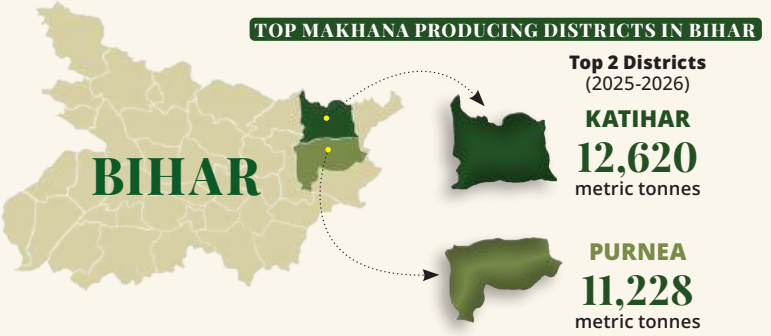
This domestic transformation is creating a potential export opportunity. According to the Ministry of Commerce, more than 7,000 tonnes of *makhana* and value-added products were exported in FY2025-26 to more than 20 destinations, including the United States, Middle East and Africa.

The US, Canada, United Arab Emirates (UAE) and United Kingdom are among the major markets. Crisil

THE RISE OF MAKHANA IN INDIA

From the ponds of North Bihar to kitchens across the world, makhana is emerging as India's next superfood







VIJAY JHA

"The demand for makhana has definitely increased and it is now being sold as a healthy snack throughout the year. But we does not get the price that consumers pay for packaged products. Most of the processing and value addition happens after we sell the crop, so farmers get only a part of the value."

THE MAKHANA VALUE CHAIN



CULTIVATION
Grown in water-filled ponds (dabas) in North Bihar



HARVESTING
Pods handpicked from ponds



DRYING & SHELLING
Sun-dried and seeds extracted from pods



POPPING
Seeds roasted at high temperature to pop into makhana



GRADING & PACKING
Sorted, quality checked & packed for markets



CONSUMPTION & EXPORT
Reaching kitchens across India and the world

data indicates that the US accounted for around 40 pc of exports in 2025, followed by Canada at 20 pc, UAE at 17 pc and the UK at 10 pc.

However, India's production advantage has not yet translated into a proportionate export presence. The ICRIER-APEDA study estimates that only around 12,000 tonnes of production is currently of export-grade quality. Inconsistent grading, moisture levels, fragmented supply chains, labour-intensive harvesting and inadequate post-harvest infrastructure remain constraints.

Faraz says the industry is still not fully commercialised and that awareness remains one of the biggest challenges to taking *makhana* to global markets. He says the market began showing a noticeable shift from 2023 onwards, after limited growth during the company's first three years.

"We started in 2020 and incorporated the company in 2021. For the first three years, there was very little growth in the market. But since 2023, we have seen a slight boom, particularly in 2023-24. In the last two years, we have seen very good demand," Faraz says.

He also says greater awareness and promotion are needed.

"The government is doing a lot through events and promotions, and we are also invited to many places to display our products. But we have to do it better so that *makhana* gets proper recognition. If there is awareness, the product will sell automatically," he says.

The price has increased, but the increase is not the same at the farm level. Better-quality, larger makhana can get around INR 1,000-1,200 per kg, but the bigger margins come after roasting, flavouring and packaging

For farmers, the export opportunity will depend on whether this growing demand creates a more direct link with producers.

"If exports increase, it can create a bigger market for farmers, but we need better access to exporters and processors. If buyers pay a better price for good-quality *makhana*, we will also have more incentive to improve quality and production," Jha, a farmer says.

Value addition could provide a way forward. Rather than exporting only popped *makhana* in bulk, Indian companies can target international consumers with flavoured snacks, ready-to-eat products, flour and other processed products.

The government has also begun strengthening the sector. The Union Budget 2025-26 announced an allocation of USD 120 million for setting up Makhana Board, while a separate central sector scheme has an outlay of around USD 573 million for 2025-26 to 2030-31, covering research, planting material, harvesting, post-harvest management, value addition, branding, export promotion and quality control.

The Geographical Indication (GI) tag awarded to Mithila Makhana in August 2022 could strengthen its identity overseas, while the APEDA facilitated its first commercial sea shipment of 18 tonnes from Bihar to Australia in August this year. The industry's next phase will depend on consistent quality, organised supply chains, processing, food-safety standards, packaging and branding to expand India's global *makhana* exports. ■

DID YOU KNOW?

India exported more than **7,000 tonnes** of makhana and value-added products in **FY 2025-26** to over **20 destinations**

The US accounted for around **40 pc** of India's makhana exports in 2025, followed by Canada at **20 pc** and the UAE at **17 pc**

The **Mithila Makhana** GI tag was awarded in **August 2022,** strengthening the product's regional identity for global markets

India's first commercial sea shipment of Mithila makhana to Australia was **18 tonnes**, facilitated by APEDA in **August 2026**

Monthly consumption of popped makhana reaches nearly **5,000 tonnes** during festive periods, compared with **3,000–3,500 tonnes** normally

MAKHANA PRODUCTION SNAPSHOT (2025-26)

BIHAR LEADS INDIA

410 sqkm
Area under cultivation

36,000 MT
Estimated production (popped makhana)

INDIA AT A GLANCE

80,590 MT
Estimated production (2.34 MT/sqkm)

350-400 sqkm
Estimated area under cultivation

DIFFERENT ESTIMATES, DIFFERENT DEFINITIONS

BIHAR HORTICULTURE DIRECTORATE
(Sept 2025)
410 sqkm
36,000 MT
(popped makhana)
Target 2030-31
820 sqkm & 1,83,024 MT

UPSTOX & KHAN GLOBAL STUDIES
(Second Advance Estimate)
80,590 MT
(2.34 MT/sqkm)
Of which Bihar
~60,000 MT
(-2.0 MT/sqkm)

APEDA/CRISIL DASHBOARD
(Dec 2025)
350-400 sqkm
SEED - 120,000 MT
Gives 55,000 - 60,000 MT of popped makhana

RISING DEMAND FOR INDIAN MILLET-BASED EXPORTS

A growing demand for healthier and gluten-free foods across the world is opening new markets for Indian millets, with exporters reporting growing interest in value-added products across Germany, Australia and the United States.

Masrat Nabi



Indian millets, the latest global hit in the superfoods category, are gaining traction in overseas markets, with exporters reporting growing demand for healthier grains, gluten-free alternatives and convenient millet-based products in markets including Germany, Australia and the United States. The focus is now shifting from creating awareness to building sustained demand and making millets part of everyday diets far beyond the Indian shores.

According to the Agricultural and Processed Food Products Export Development Authority (APEDA), the statutory authority under the Ministry of Commerce and Industry responsible for promoting exports of agricultural and processed food products, India is the world's largest millet producer, with production estimated at 18.59 million tonnes in 2024-25. Millet exports stood at 138,690 tonnes, valued at INR 5.43 billion, in 2025-26, according to data from the Directorate General of Commercial Intelligence and Statistics (DGCI&S), the Government of India's nodal organisation for collecting, compiling and disseminating trade statistics.



HEMANTH KUMAR S

"At Dhatu, we offer a millet menu at our restaurants at both Whitefield, Bengaluru and Mysore locations so that customers can experience how good the millet can taste. We offer millet dosas, millet pulao, millet noodles and other products."



MILLET

PROSO MILLET

SORGHUM (JOWAR)

"Demand is definitely there, and is rising. Health-conscious families, sports people and new parents are looking for healthy forms of grains and want to know more about it. For *Dhatu*, *ragi* (finger millet) continues to be the strongest millet, followed by *jowar* (sorghum) and *bajra* (pearl millet). Sprouted millet flours, porridge mixes and ready-to-cook products are seeing particularly good interest. Among the minor millets, foxtail millet and little millet take the lead in demand," Hemanth Kumar S, Managing Director of Dhatu Organics and Naturals, a millet-based foods manufacturer and exporter based in Bengaluru, tells *BIZ@India*.

The company's experience points to a market that is expanding beyond traditional millet consumption. Rather than selling only whole grains, Indian companies are increasingly developing products that can be used directly by consumers, including flours, mixes and ready-to-cook products.

Dhatu is already seeing interest from international markets. The company says it is receiving orders and enquiries from Germany, Australia and the US across both B2B and B2C channels, with demand linked to consumer interest in gluten-free alternatives, ancient grains, organic foods and minimally processed products.

The challenge, however, is to turn that interest into regular consumption.

"The biggest challenge is making millets part of everyday cooking rather than an occasional 'health food'. Consumers need simple recipes, better taste familiarity, convenience and clear education on how to use different millets. At Dhatu, we offer a millet menu at our restaurants at both Whitefield, Bengaluru and Mysore locations so that customers can experience how good the millet can taste. We offer millet *dosas*, millet *pulao*, millet noodles and other products," says Kumar.

For Indian exporters, this consumer education is particularly important in markets where millet is not part of the traditional food culture. While awareness of the grain has increased globally, knowing about millets does not necessarily mean consumers know how to cook them or incorporate them into their diets.

Anoop Agarwal, Founder of Bansal Group, a food manufacturer in Bhopal, has seen this transition through the company's overseas business. Bansal Group has been working with pearl millet and roasted *bajra* products for around 30 years and also makes flakes and products based on *ragi* and *jowar*. Agarwal says the company currently supplies products directly and indirectly to over a dozen countries, including Canada, Australia, New Zealand, Fiji, the United Kingdom and Switzerland, while a recent shipment also went to Singapore.

"Ever since millets were promoted, a bit of awareness spread among people that there is something called millets. For instance, kodo or other small millets, nobody even knew about them. But now, some people have started learning about them and recognising that yes, that is an item too. There were certain things we were already eating, but people didn't know they were made of millets or called millets. So there are products like *kangni* (foxtail millet) and similar items

TOP 5 COUNTRIES WHERE INDIA IS EXPORTING MILLETS (by quantity)

UNITED ARAB EMIRATES

RANK 1

Share of India's millet exports (pc) 22.40 pc

Quantity (approx) 31,070 tonnes

SAUDI ARABIA

RANK 2

Share of India's millet exports (pc) 12.70 pc

Quantity (approx) 17,610 tonnes

NEPAL

RANK 3

Share of India's millet exports (pc) 7.80 pc

Quantity (approx) 10,820 tonnes

UNITED STATES OF AMERICA

RANK 4

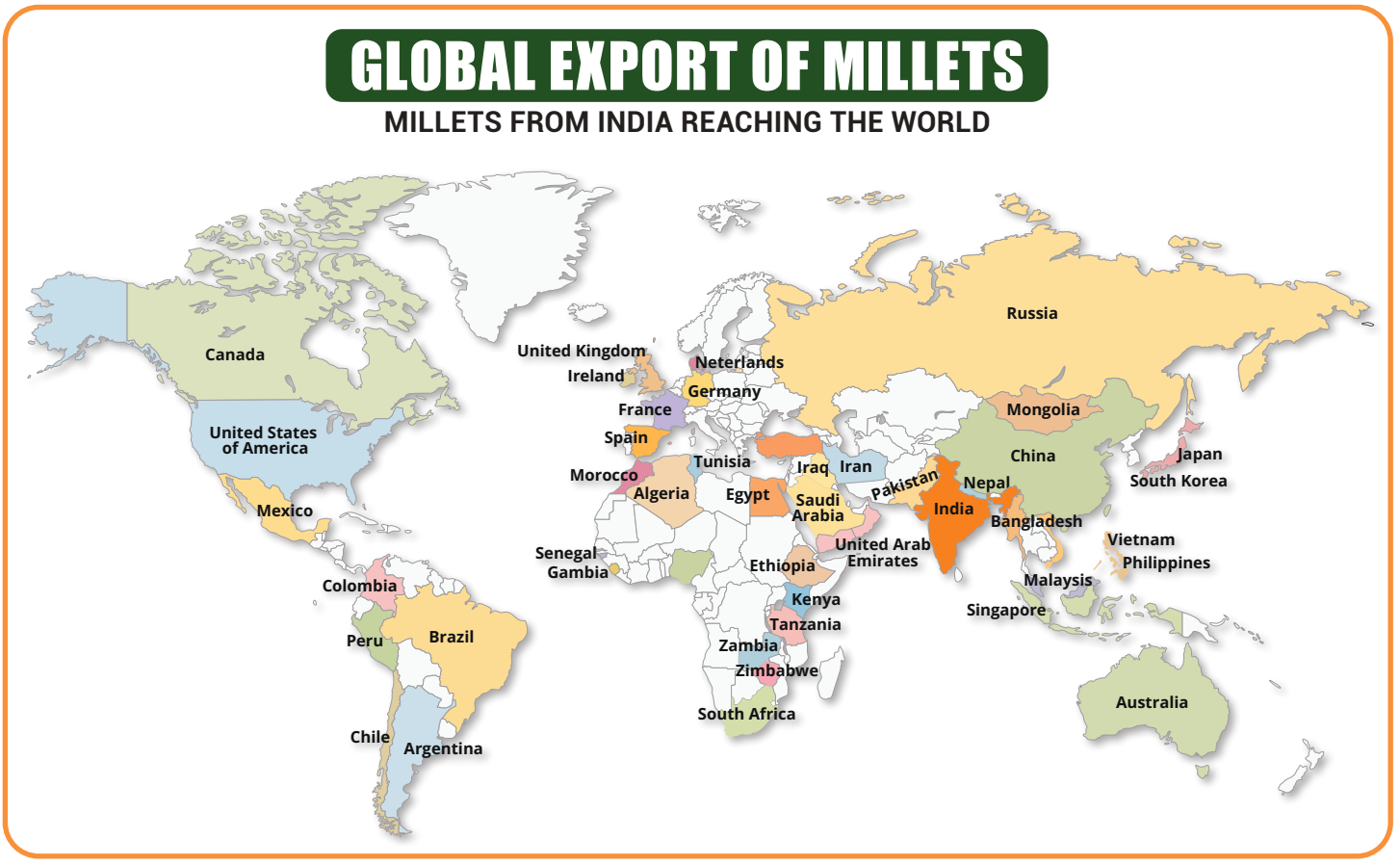
Share of India's millet exports (pc) 6.70 pc

Quantity (approx) 9,290 tonnes

MOROCCO

RANK 5

Share of India's millet exports (pc) 3.80 pc



people didn't even know about. At least now people have become aware," Agarwal tells *Biz@India.*

He says the initial surge in interest has now settled into more gradual growth rather than disappearing.

"The initial huge surge that came when millets were pushed in 2021 that sudden spike is not there now, but the business has not slowed down either. It is not like 100 pc of the market has suddenly shifted to selling only millet items today. But if I sold one tonne of goods in a year back then, it has not dropped below one tonne today. It has grown beyond one tonne. It is just not doubling overnight like that initial surge. Now it grows steadily like 1.25 tonnes next year, then 1.35 tonnes, then 1.5 tonnes. It has grown, not reduced," he says.

For Agarwal, international exhibitions and trade promotion programmes have been important in introducing millet products to buyers who have heard about the grain but have not experienced the products.

"Regarding Indian millets, we display our products abroad through APEDA or Trade Promotion Council of India (TPCI). Mostly Indian store owners approach us. In Japan, there was a company named Kobe Bussan. They have quite a large presence. When we told them these are millet items, they had heard the name but had never tasted them. So we gave them a sample to taste, and they liked it a lot. Once people tasted it, or when we participated in exhibitions, or when APEDA promoted us, only then people realised that millets exist as a category," says Agarwal.



ANOOP AGARWAL

"Ever since millets were promoted, a bit of awareness spread among people that there is something called millets. For instance, kodo or other small millets, nobody even knew about them. But now, some people have started learning about them and recognising that yes, that is an item too. There were certain things we were already eating, but people didn't know they were made of millets or called millets."

Agarwal, however, sees an important distinction between overseas demand from the Indian diaspora and demand among local consumers.

"For me, the international market does not mean that an Indian sitting in France or anywhere else in the world is eating my product. That is not the real international market. Until foreigners or French, or German start eating our products, the demand cannot increase significantly. Those consumers are still not very aware of millets. TPCI, World Food India and APEDA, as well as the Government of India, have invited foreign buyers to India and organised B2B meetings. But mostly Indians attend these meetings. Around 70 pc to 80 pc of the importers who come are Indian, while foreign importers are still not coming in sufficient numbers," he says.

At the same time, the ability to fulfil larger orders will become increasingly important as international demand grows.

Agarwal says production capacity, rather than machinery, is a constraint because much of the processing remains labour-intensive.

"The challenge that we face more is not coming for export. It

is coming for production. We don't get labour. We are giving skilled workers INR 350,000 to INR 400,000 a year, but if they don't work, then how will we expand the business? Kobe Bussan from Japan gave me a tentative order that was so large I could not supply it for a year. The reason is not machinery; our work is labour-oriented and automation is not there yet. If we take a large order, then how do we supply? That is where the challenge comes for us," he says.

While Dhatu and Bansal Group point to demand and capacity, another exporter identifies logistics as the factor affecting export viability.

Vasant Visaria of Amar International, a food exporter based in Mumbai, which exports to North Africa, South America, the Middle East and the Far East, says millet exports have been affected by higher freight costs in 2026.

Millet exports stood at 138,690 tonnes, valued at INR 5.43 billion, in 2025-26, according to data from the Directorate General of Commercial Intelligence and Statistics (DGCI&S), the Government of India's nodal organisation for collecting, compiling and disseminating trade statistics

"Millet exports are currently not viable because freight costs are too high. The cost of the freight per kilogram is almost the same as the cost of the millet itself, which makes the product too expensive for buyers. As a result, export demand has slowed," Visaria tells *Biz@India.*

He says the situation was different when freight costs were lower. "In 2024 and 2025, the freight was very reasonable, so export was good. But now, in 2026, export is not going as well. It has been badly affected because of the shipping freight," he says.

The contrast in experiences shows that India's millet export opportunity is being shaped by several factors at the same time. Consumer demand is increasing in some international markets, but exporters still need to address processing capacity, consistency, traceability and logistics to turn that demand into larger and repeat orders.

For Dhatu, standardisation is particularly important as the company works with organic and value-added millet products.

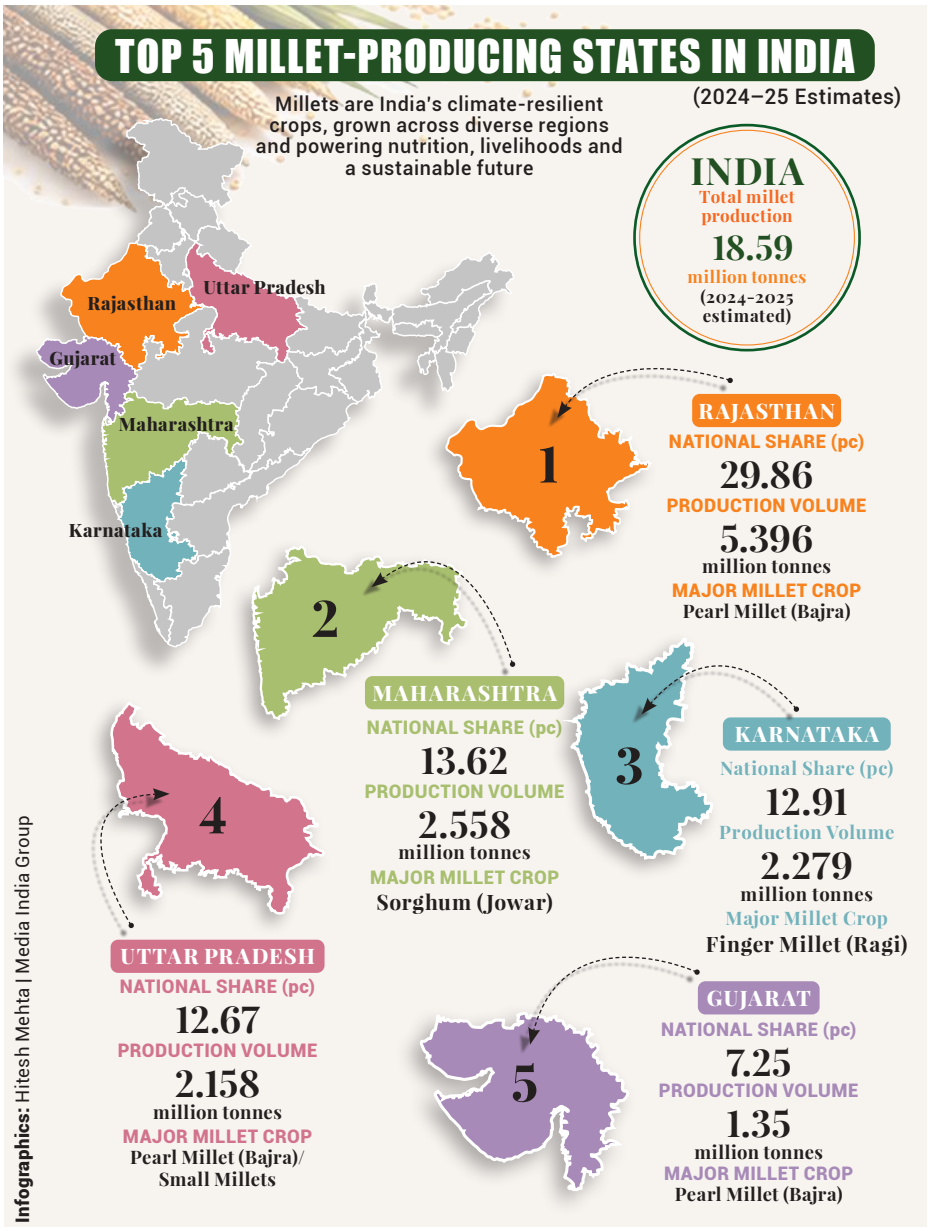
"Consistency is a major challenge for us from grain variety, within the single millet family there are varieties, and seasonal quality to moisture, cleanliness and processing behaviour. For organic products, traceability is paramount, and it is difficult to maintain the records at farmers level. They need help," says Kumar.

Kumar see's the next phase of growth requiring stronger infrastructure and systems.

"Our strong suggestions are focussing on becoming a strong millet value-added and branding ecosystem, along with standardisation, processing infrastructure, traceability, internationally recognised certification and stronger quality systems," he says.

For Agarwal, sampling remains one of the most effective ways of changing perceptions.

"Once people taste the products, they understand millets differently. Many had heard of millets but had never tasted them. Exhibitions and product sampling help change that perception," he says. ■



Infographics: Hitesh Mehta | Media India Group



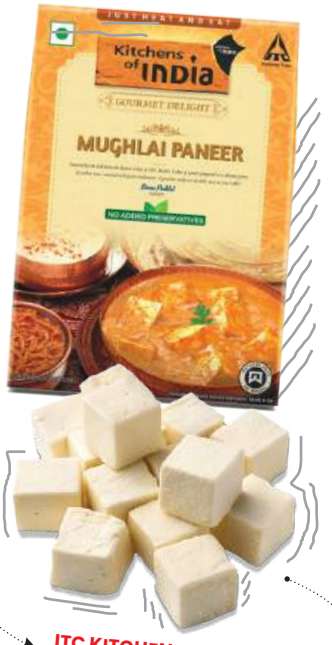


SPEED OVER SAFETY: INDIAN CONSUMERS CONTINUE TO PICK READY-TO-EAT FOOD



MTR FOODS: Instant Gulab Jamun Mix





ITC KITCHENS OF INDIA: Paneer Butter Masala





MTR FOODS: Rava Idli Instant Mix



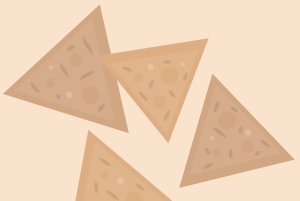
Indian ready-to-eat food industry is expanding as urban consumers increasingly pay for convenience, but the rapid growth of sector is also exposing gaps in consumption data, nutritional transparency and regulation.

Sanvi Choudhary

For India's Ready-to-Eat (RTE) food industry, the biggest product being sold is no longer simply *dal,* curry, rice or poha. It is time. As urban households become busier and quick commerce makes packaged meals available within minutes, convenience is becoming a bigger part of how Indians eat.

The wider food-processing industry provides a clearer indication of this shift than standalone RTE market estimates. A joint study by Federation of Indian Chambers of Commerce and Industry (FICCI), a leading chamber of commerce, and Deloitte, a consultancy, says India's food-processing sector has







GITS: Gits breakfast mix Rava Doas



GITS: Gits breakfast mix Rava Doas



"We export to the United States, Finland, Canada, Dubai, Australia, New Zealand and exports currently account for around 10-15 pc of the company's sales, with the domestic Indian market still contributing to the majority of revenue."

Brijesh Savaliya

a potential market opportunity of USD 600 billion by 2030, with rising demand for ready-to-eat, nutritious and branded foods among urban consumers. The report also says health and functional food categories are growing at 15-20 pc annually, while online retail and quick commerce are widening access to processed and value-added foods.

The shift towards convenience is also visible in adjacent categories. Kantar data cited by FICCI shows ready-to-cook was the only packaged-food segment to double in volume over the previous two years, adding 18 million households and growing 58 pc in 2024, compared with 8 pc growth for the overall packaged-food market. While the figure relates to ready-to-cook rather than ready-to-eat products, it highlights the broader movement towards convenience-led food consumption.

The direction of the market is clear. PwC India Consumer Survey, an annual research report by PricewaterhouseCoopers (PwC) India that analyses changing consumer behaviour, spending patterns, found that 46 pc of respondents buy RTE meals. Quick commerce is further strengthening the category by removing one of its biggest barriers, the need to plan a purchase in advance.

Meenal Uppal, Founder of Shaffu Foods, a B2B ready-to-eat product distributing firm, says the category is now moving beyond its traditional urban niche.

"The category has moved well beyond a niche urban product. India's ready-to-eat market was estimated at about USD 1.1 billion in FY2024 and is projected to reach USD 3.41 billion by FY2032, implying a 16.4 pc CAGR," Uppal tells *Biz@India*.

She says the strongest movement at the distribution level is coming from ready-to-heat meals, rice-based meals, frozen foods and convenient Indian meal formats, with organised retail, e-commerce and quick commerce taking these products deeper into Tier II and Tier III markets.

The growth is also visible at the company level. Brijesh Savaliya, E-commerce Manager at Bowlful Foods, Gujarat-based manufacturer of freeze-dried food products, says the company has seen its ready-to-eat business expand sharply. "In the last five years, we have seen a growth of 100 times in our sales and our business. The company currently operates at around 1 tonne per day of food-manufacturing capacity and is expanding its factory," Savaliya tells *Biz@India*.

Government policy is also supporting the expansion of food processing. The Production Linked Incentive scheme for food processing has an outlay of INR 109 billion and includes ready-to-eat and ready-to-cook food among its targetted segments. For companies, this creates an opportunity to move Indian food from kitchens and restaurants into scalable, export-oriented formats.

The government is also looking to increase the overall level of food processing in India. At the FICCI Foodworld India Conference in July 2026, Avinash Joshi, Secretary, Ministry of Food Processing Industries (MOFPI) of the Union government said the country's food-processing level had risen from around 10 pc in 2010-11 to 17 pc in 2023 and that the government wants to take it to 25 pc by 2031.

Indian brands are already building that network. Orkla India, which owns MTR and Eastern, operates across more than 40 countries and reported exports contributing 20.6 pc of its revenue in FY2025. Haldiram's, a leading fast-food chain, says its products are available in more than 80 countries, while Gits exports to more than 40 countries. These businesses demonstrate that Indian ready-to-eat food has moved beyond the domestic convenience market and into the global packaged-food economy.

Bowlful's business also reflects the growing export potential of the category. "We export to the United States, Finland, Canada, Dubai, Australia, New Zealand and exports currently account for around 10-15 pc of the company's sales, with the domestic Indian market still contributing to the majority of revenue," Savaliya says.

But the shift is not only about bringing new consumers into the category. Repeat consumption is becoming an equally important driver.

"It is both, but repeat consumption is becoming increasingly important. Consumers are moving from trying a



product to keeping it at home as a backup meal. Quick commerce is accelerating this behaviour because a ready-to-eat can now be ordered almost as easily as a snack or a beverage," Uppal says.

According to Uppal, the role of ready-to-eat food is also changing from an occasional convenience product to a regular part of household purchasing. "Earlier, ready-to-eat food was largely an emergency or travel option, now it is becoming a planned part of the weekly grocery basket. The real business shift is from occasional consumption to repeat purchase," she says.

The scale of India's broader packaged and processed-food expansion is already visible in official data. The Economic Survey 2025-26 said ultra-processed food retail sales surged nearly 40-fold, from USD 900 million in 2006 to nearly USD 38 billion in 2019. The survey, citing Euromonitor data, also noted that this rise occurred alongside a sharp increase in obesity.

The wider food-processing industry has also become a major part of India's manufacturing economy. According to the MoFPI, the sector's GVA increased from INR 1.34 trillion in 2014-15 to INR 2.24 trillion in 2023-24, while processed food's share in agri-exports rose to 20.4 pc in FY2024-25.

Health is becoming a purchasing filter, but convenience still wins. The market is splitting between conventional RTE products and alternatives positioned around clean labels, higher protein, lower sodium and minimal processing. Consumers are not rejecting packaged food, they are demanding better formulations and clearer information

Hidden cost of RTE

While the consumers continue to lap up ready-to-eat foods for their convenience and speed, most of them remain blissfully unaware of the huge cost in terms of health that they are paying by preferring ready-to-eat foods.

For nutritionists, however, the concern is not simply whether a product is ready-to-eat, but how frequently it is consumed and what goes into it.

Priyanka Jaiswal, a Nutritionist and Co-founder of Diet2Nourish, Delhi-based nutrition counselling firm, says the convenience offered by ready-to-eat products is increasingly influencing food choices.

"Mostly 60 pc of the population are trying to use the ready-to-eat food products because it reduces their energy and time and it provides them variety of foods," Jaiswal tells *Biz@India*.

However, she cautions against making such products a regular replacement for freshly prepared meals.

"We have to understand that this is not to be consumed on daily basis or very regularly. These are the products

READY-TO-EAT PRODUCTS

Top 5 companies in India

RTE MARKET SIZE (INDIA, 2024)
INR **480** billion (approx)

EXPECTED CAGR (2024-2030)
9.5 pc

Convenience meets tradition. India's ready-to-eat (RTE) markets is growing fast, bring authentic flavours to modern lifestyles – at home & on the go



MTR
Good Food. Great Life



PRODUCTS
- Rava Idli Instant Mix
- Instant Gulab Jamun Mix

EST. PRODUCTION
12,500 metric tonnes

EST. CONSUMPTION IN INDIA (ANNUAL)
9,800 metric tonnes

ITC Kitchens of India
ITC Limited
Authentic Indian. Ready When You Are.



PRODUCTS
- Dal Makhani
- Paneer Butter Masala

EST. PRODUCTION
9,800 metric tonnes

EST. CONSUMPTION IN INDIA (ANNUAL)
7,500 metric tonnes

Haldiram's



PRODUCTS
- Dal Tadka
- Dum Biryani

EST. PRODUCTION
10,200 metric tonnes

EST. CONSUMPTION IN INDIA (ANNUAL)
8,100 metric tonnes

Gits
Since 1963
Trust for Generations



PRODUCTS
- Gits Instant Gulab Jamun
- Dessert & Gits Breakfast & Snack Mixes (Specifically Rice Idli & Khaman Dhokla)

EST. PRODUCTION
7,600 metric tonnes

EST. CONSUMPTION IN INDIA (ANNUAL)
5,900 metric tonnes

Tasty Nibbles



PRODUCTS
- Light Meat Tuna Flakes in Water
- Pavakka Theeyal

EST. PRODUCTION
4,300 metric tonnes

EST. CONSUMPTION IN INDIA (ANNUAL)
3,200 metric tonnes

meant to be used during the time of emergency," Jaiswal says.

Nidhi Sawhney, a dietitian and nutritionist in Delhi, says the concern begins when convenience food becomes a regular replacement for home-cooked meals. "Once these foods start replacing home-cooked meals regularly rather than being used for occasional convenience, they become a nutritional concern," Sawhney tells *Biz@India*.

Ready-to-eat food, however, should not automatically be treated as ultra-processed food. A packaged *dal* or vegetable curry cannot simply be placed in the same category as a sugary beverage or highly processed snack. The real issue is formulation, how much sodium, sugar, saturated fat and fibre a product contains, what additives are used and how frequently it is consumed.

Uppal says health concerns are beginning to influence purchasing decisions without eliminating demand.

"Health is becoming a purchasing filter, but convenience still wins. The market is splitting between conventional ready-to-eat products and alternatives positioned around clean labels, higher protein, lower sodium and minimal processing. Consumers are not rejecting packaged food, they are demanding better formulations and clearer information," she says.

Jaiswal points to some of these formulation concerns, saying, "They have a lot of starch which can cause a lot of insulin resistance in the body and can cause a lot of high levels of sugar. They have sodium and preservatives which directly affect the level of your blood pressure," She adds.



Priyanka Jaiswal

"Mostly 60 pc of the population are trying to use the ready-to-eat food products because it reduces their energy and time and it provides them variety of foods."

Sawhney identifies sodium, added sugar, saturated fat and low fibre as key concerns. "The bigger problem is often the overall nutritional profile. These foods can be calorie-dense while providing less fibre and micronutrient diversity than a varied diet based on minimally processed foods," she says.

For companies, however, the processing method itself is becoming part of the health and product-positioning argument. Savaliya says Bowlful uses freeze-drying rather than conventional preservation methods.

"Freeze-dried is a technology where you do not add any preservatives in food. So whatever you are eating, whatever food you are making is 100 pc natural. Just like we make at home in the kitchen, we prepare food in our kitchen and freeze-dry it," he says.

He contrasts freeze-drying with retort processing, a heat-based preservation method in which food is sealed in packaging and sterilised at high temperature and pressure to make it shelf-stable. "Retort in comparison to freeze dried is very cheap. But then retort contains far too many preservatives to ensure long shelf life," Savaliya says.

That distinction will become increasingly important as consumers and regulators demand greater transparency. Companies that have built their proposition around shelf life and convenience will face greater pressure to demonstrate nutritional value rather than simply making broad health claims.

Savaliya says consumer attitudes towards ready-to-eat food are also changing. "Earlier customers used to say that ready-to-eat is full of preservatives. But now it is changing. People test it first and then order a lot," he says. According to him, demand has been particularly strong during summer and festive periods, when the company has faced running out of stocks. But the nutritionists believe that the consumers are hardly well-informed about the contents of the ready-to-eat food that they are eating as neither the labels contain adequate information and even the little that they provide is not fully understood by most of the consumers.

"No, food labels don't provide sufficient information for consumers. Most of the people don't even read these labels," says Jaiswal, adding that consumers without a science background may struggle to understand technical ingredient names and often have to search for their meaning.

Sawhney says clearer labelling and tighter oversight are needed. "The government needs to move beyond simply asking consumers to 'eat healthy'. There should be stronger front-of-pack nutrition labelling, stricter regulation of health and nutrition claims, and clearer disclosure of high levels of sodium, added sugar and saturated fat," she says.

Advertising further complicates that picture. "The biggest thing is that advertisement plays a big role. Whatever advertisement shows, people believe it. They don't realise how harmful these things can be for us," Jaiswal says.

India has the agricultural base, processing capacity and diaspora market to turn ready-to-eat food into a major global business. But the next phase of growth will depend on whether convenience can be delivered without making nutrition an afterthought. ■



From IMFL to single malt:

INDIAN WHISKY

moves higher in value chain



Indian whisky industry is moving beyond its traditional volume-driven model as homegrown premium and single malt brands expand production, command higher prices and build export markets, even as mass-market brands continue to dominate domestic consumption.

Sanvi Choudhary

For decades, the Indian whisky market has been dominated by domestically-produced concoctions bundled together under a rather bureaucratic sounding name of Indian Made Foreign Liquor (IMFL), with home-grown brands like Royal Stag, McDowell's No 1 or Officer's Choice, which commanded over 99 pc of all whisky market by volume and about 97 pc by value.

However, in the past decade and a half, with rising disposable incomes as well as more global travel bringing higher exposure to world's top whisky brands, including the Scotch whisky, have led to a spike in the consumption of imported brands which now hold about 5 pc of total market by value terms and it is a share that is set to continue to rise rapidly.

Besides the imported brands, the last five years have seen the sudden emergence of several new Indian brands such as Amrut, Rampur, Indri, Paul John, Godawan and Longitude 77, that are positioned in the premium whisky segment.

According to Uday Balaji, Founder of the Whisky Advisor, a whisky advocacy and consulting firm based in Coimbatore, Tamil Nadu, the emergence of Indian single malt as a global category began when Amrut shifted from producing largely for the IMFL market to bottling an Indian single malt.

"Since then their initial hard work along with that of Paul John, Rampur, Indri and others has really built what we can genuinely call a category of Indian Single Malt in the world of whisky. Producers have adopted better production processes and developed world-class cask programmes while retaining distinct Indian characteristics," Balaji tells *Biz@India*.

Gagan Sharma, Director of Indulge India, an experiential beverage education collective based in New Delhi and a certified sommelier, says the premium whisky movement actually began taking shape in the 2000s.

"Three major things happened Younger generation took over family businesses and had the vision to make an exceptional brand and put India on the map, the consumers too wanted to drink better than their previous generation; and there was higher disposable income. The timing was right to take the leap for both, the market and the creators," Sharma tells *Biz@India*.

Wider alcoholic-beverage exports from India reached USD 364.68 million in FY2025-26, compared with USD 353.13 million in FY2024-25, according to Agricultural and Processed Food Products Export Development Authority (APEDA). Export volume stood at 225,705 tonnes in FY2025-26. These figures cover all alcoholic beverages and not whisky alone. India ranks 40th globally in alcoholic-beverage exports, highlighting the gap between its enormous domestic consumption and relatively small international presence.

The premiumisation trend is becoming visible in domestic consumption. International Wine and Spirits Record (IWSR) data shows Indian beverage alcohol market grew 7 pc in volume in the first half of 2025, while premium-and-above products grew 8 pc. Indian whisky also recorded 7 pc growth during the period.

At the mass end, Royal Stag sold 32.6 million nine-litre cases in 2025, followed by McDowell's at 31.9 million, Officer's Choice at 20.7 million and Imperial Blue at 20.3 million cases.

A nine-litre case is an industry-standard way of measuring whisky volume. It means the total quantity of whisky equals 9 litres, regardless of bottle size. For example, 12 bottles of 750 ml each make one nine-litre case.



UDAY BALAJI

"Indian malts can lose around 10-12 pc of their volume to evaporation each year, compared with around 2 pc in Scotland, meaning that several years of maturation in India can result in losses. Limited releases can also command higher prices because of their scarcity and demand among whisky collectors distinct Indian characteristics."

THE BUSINESS OF FINE SPIRITS

INDIAN SINGLE MALT SALES IN 2025

500K

NINE-LITRE CASES A 22 PC GROWTH OVER 2024

INDIAN COMPANIES' ESTIMATED SHARE

92 pc

OF INDIAN SINGLE MALT SEGMENT

INDIAN WHISKY CONSUMPTION (H1 2025)

>130M

NINE-LITRE CASES 7 PC GROWTH YoY

EXPORT FOOTPRINT

60+

COUNTRIES ACROSS USA, UK, EUROPE, AUSTRALIA & ASIA

Single malt remains a fraction of this market but is growing rapidly. Confederation of Indian Alcoholic Beverage Companies (CIABC) data shows Made-in-India single malt sales increasing from around 350,000 nine-litre cases in 2023 to 400,000 in 2024 and around 500,000 in 2025, a 22 pc annual increase. Indian companies account for around 92 pc of the segment. Imported single malts added around 350,000 cases, taking

the overall single malt market to about 850,000 cases.

The premium segment is also generating substantially higher realisations. Indian single malts generally range from around INR 2,300 to INR 8,000, depending on brand and expression, while limited editions can command much more. Godawan's limited 173-bottle collector's edition, for instance, was priced at around INR 500,000 per bottle. State taxes mean retail prices can vary considerably across India.

Balaji says the higher prices of Indian single malts reflect several factors, including production costs and scarcity.

"Indian malts can lose around 10-12 pc of their volume to evaporation each year, compared with around 2 pc in Scotland, meaning that several years of maturation in India can result in significant losses. Limited releases can also command higher prices because of their scarcity and demand among whisky collectors," says Balaji.

Sharma, however, says consumers should view the pricing more positively, pointing to taxes and regulatory costs as major components.

"The cost of production is not high, the licences, registration, excise are the bigger part of what the consumers are paying for. The Made-in-India tag is "a matter of pride, not a way to seek premiumisation," he says.

IMFL remains the foundation of India's whisky market, with mainstream and premium Indian-made spirits accounting for the overwhelming majority of domestic consumption. The shift within this category is increasingly towards higher-priced products.

Radico Khaitan, one of the oldest manufacturers of IMFL, saw its Prestige & Above portfolio reach 13 million cases in FY2025, representing 46.1 pc of its own IMFL volume but around 69 pc of IMFL value sales, with Rampur as the company's flagship premium whisky brand.

This shift towards higher end of the market shows that even within the broader IMFL market, companies are generating a growing share of revenue from premium and luxury products rather than relying only on volume growth.

Balaji says the shift towards premium Indian whisky is being supported by changing consumer preferences.

"Covid-19 pandemic definitely accelerated a premiumisation push that was already under way due to a better travelled, exposed and discerning Indian customer. What has also been building over the past decade and has further accelerated the premiumisation push for Indian single malts is a genuine growing pride for all things Indian," he adds.

Sharma also sees the trend as a broader change in consumer behaviour. "They want to drink quality liquids, know the provenance of their spirits, and have the understanding for them too," he says, adding that as consumers and the trade become

PRICE COMPARISON: DOMESTIC vs EXPORT (750ml)

BRAND	DOMESTIC PRICE (INR)	EXPORT PRICE (INR)
Godawan	3,200-4,500	4,000-6,000
Rampur	4,000-6,000	5,000 - 7,500
Paul John	3,500-5,500	4,500 - 6,500
Amrut	3,000-4,500	4,000-6,000





more informed, the demand for premium spirits will only grow further.

Production capacity is expanding alongside demand. Piccadily Agro Industries increased Indri's malt production capacity from 12,000 litres per day to 30,000 litres per day. Indri sold 124,000 cases domestically and 46,000 cases overseas in 2024, taking total sales to 170,000 cases, with exports accounting for around 27 pc.

John Distilleries doubled Paul John's Goa capacity to 3 million litres annually from around 1.5 million litres after investing about INR 1 billion. The company has around 40,000 barrels and is targetting 75,000-80,000 barrels. Industry estimates put Paul John's FY2023-24 domestic sales at around 72,000 cases and exports at close to 30,000 cases, with the brand sold in more than 50 countries.

Amrut has expanded annual production capacity towards 1.3 million litres and exports around 5 pc of its revenue

Multinationals are also entering the segment. Godawan of Diageo is sold in India and international markets, while Pernod Ricard's Longitude 77 is distilled in Dindori, Nashik. This has increased competition between Indian-owned producers and global spirits companies seeking a share of India's premium whisky market.

International demand for Indian single malts is being driven by several factors, according to Balaji. Awards and critics recognition, curiosity about new-world whiskies, the Indian diaspora and a flavour profile that stands apart are among the drivers, he says.

Sharma also identifies curiosity as a major driver of international interest, noting that premium Indian whiskies are improving with each new release. He pointed to the accolades received by Amrut, Paul John, Indri and other Indian brands, while noting that India's warmer climate gives its whiskies a distinct character compared with those from traditional whisky-producing regions.

However, Balaji adds that the category must maintain quality as it expands.

"It is imperative that not only do the leading players continue working hard to build the category but also that they ensure no low-quality players threaten the perception of the category. A clear definition of what an Indian single malt is, widely accepted by Indian malt producers," he adds.



"The cost of production isn't high, the licences, registration, excise are the bigger part of what the consumers are paying for. The Made-in-India tag is "a matter of pride, not a way to seek premiumisation."

GAGAN SHARMA

The government has also formalised the category. Food Safety and Standards Authority of India, the apex food safety regulator of the nation, notified definitions for single malt and single grain whisky in 2023, while the Indian Malt Whisky Association has sought a Geographical Indication tag based on criteria including 100 pc barley, a single distillery and copper pot stills.

The international opportunity is becoming more competitive. The India-UK CETA, which came into force on July 15, reduced the tariff on Scotch whisky from 150 pc to 75 pc initially, with a further reduction to 40 pc over 10 years. India was Scotch's largest export market by volume in 2025, at around 220 million bottles.

Balaji says the changing trade environment could increase pressure on Indian producers "the real question is how Indian producers hold their ground as FTAs bring more foreign whiskies in at more affordable prices."

He also pointed to India's tax structure as a challenge. "Indian producers, already battling rising costs, pay GST on their inputs but get no credit for it, since alcohol is one of only two product categories in India kept outside GST. This puts them at a considerable disadvantage," he adds.

For Indian producers, the challenge now is to convert strong domestic premiumisation into sustained global demand. Higher production capacity, ageing inventories, competitive pricing, consistent quality and stronger distribution will determine whether Indian whisky can move from being a successful domestic premium category to a significant global spirits export. ■

PROTEIN mania grips Indian consumers

No other nutrient has become as popular as protein in India, thanks mainly to its association, often misplaced, with fitness and strength as millions of Indians, mainly Gen Z and other youth, turn to various products with added proteins in their attempt to lead what they believe is a healthier lifestyle. However, nutritionists are ringing alarm bells about increasingly uninformed intake of proteins.

By Our Correspondent



Historically, Indians have been told that their diets lack adequate proteins, mainly due to the carbohydrate-driven diets in most households, with proteins and other nutrients coming in as afterthoughts in the form of a small bowl of lentils, an egg or an occasional glass of milk.

However, with increasing popularity of gyms and rising awareness about fitness has led to a massive rise in consumption of protein, in various forms, either as part of the regular meal or through products with protein-fortified foods such as bars, beverages, snacks and *atta* (wheat flour) and even protein powders, making protein a key selling point in everyday diet as consumers now make it a point to get products high in protein.

The growing attention is translating into a larger market for protein supplements. According to IBEF, a government trust established by the Ministry of Commerce and Industry, India's protein supplement market was valued at INR 74.61 billion in 2024 and is projected to reach INR 131.86 billion by 2033, while the whey protein market is expected to reach INR 10.78 billion by 2030.

Dieticians and nutritionists are watching this transition with great attention and a significant amount of worry.

"India does have a protein gap, particularly in many vegetarian diets. But that does not automatically mean everyone needs a protein powder, protein bar or a protein-fortified version of every food. May be get it from food first. For most healthy adults, the requirement is nowhere near the amounts being marketed on social media. A reasonable target for many adults is around 0.8–1 g/kg/day, while people who are older, physically active, trying to preserve muscle during weight loss, or doing substantial resistance training may benefit from something closer to 1.2–1.6 g/kg/day, depending on the individual. More is not automatically better," Prachi Pandit, Founder and Director of Arbuza Regenerate, a nutrition-focussed firm, tells *Biz@India.*

"And this is where I think consumers need much better education. Someone eating 80 or 100 grams of protein because an influencer or 'expert' told them to does not necessarily know whether that is appropriate for their body, age, activity or health status," Pandit adds.

Shreya Arora, a Delhi-based dietician says the growing interest in protein reflects a wider change in how Indians approach health and fitness.

"Protein has become one of the biggest health and fitness trends today. From protein shakes and bars to high-protein diets and packaged foods, people are increasingly focussing on their protein intake, and that is actually a positive sign," Arora tells *Biz@India.*

Arora says the trend shows that people are becoming more aware of nutrition, fitness, muscle health and overall well-being. However, she stresses that understanding individual requirements is as important as recognising protein's importance.

"However, knowing that protein is important is only the first step. Understanding how much protein your body actually needs and where it should come from, is equally important," she adds.

Divya Gandhi, another Delhi-based nutritionist, however, says that the growing focus needs to be viewed alongside the actual nutritional gap in Indian diets.

"Many Indians do not get enough good-quality protein. Our meals are often heavy on rice, *roti* and other cereals, with smaller portions of *dal*, milk, eggs or other protein foods. So the gap is real, especially among women, children, older adults and lower-income families," Gandhi tells *Biz@India.*

At the same time, Gandhi cautions against assuming that adding protein to processed foods automatically addresses that gap.

"But adding a few grams of protein to biscuits, chips or chocolate does not fix that gap. Often it just makes a processed food look healthy. The real answer is better everyday meals, not 'protein-added' snacks," she adds.

The question of how much protein people actually need is therefore becoming increasingly important as products and marketing around the nutrient expand.

"For a healthy Indian adult, Indian Council of Medical Research – National Institute of Nutrition recommends about 0.8 grams of protein per kg of body weight per day, or roughly 50 grams for a 60 kg person. Requirements vary by age



and life stage, with higher needs for children, pregnant and breastfeeding women, older adults, and active people," says Gandhi.

"Many Indians may meet their overall protein requirement, but the bigger concern is protein quality and distribution, with many people getting most of their protein from cereals and consuming little protein at breakfast," she adds.

As protein moves into products traditionally not associated with the nutrient, the market is expanding beyond supplements to protein-rich *atta*, breakfast products, snacks, bars, shakes and beverages. The plant-based protein market in India was valued at around INR 85.94 billion or USD 900 million in 2025 and is projected to reach INR 116.25 billion by 2030. The alternative protein market was valued at INR 68.53 billion in 2023 and is expected to reach INR 126.58 billion by 2030.

Gandhi points to traditional Indian meals as an example of how protein can already be incorporated into a balanced diet without relying heavily on specialised products.

"A simple trick is to add protein to every meal. *Dal* and *roti* or rice together give better-quality protein than either one alone. Packaged products are only useful in specific cases, such as athletes with very high needs, some older adults, or people with medical conditions, and ideally under a dietitian's guidance," says Gandhi.

But as more products compete on protein claims, Gandhi says consumers also need to look beyond the front of the package.

"A lot of protein things which are being sold are loaded with sugar. Like, if you talk about these protein bars, they say 'no added sugar.' That does not mean that it does not have any sugar and sweet in it. So it might be having honey or dates. They have sugar substitutes. Not artificial sweetener, not added sugar, but they have sugar substitutes, which are equally harmful for the body," says Gandhi.

Gandhi also says consumers should look beyond the words "high protein" on a package and consider the complete ingredient list and their own nutritional requirements.

"An awareness among people is just educating them a bit about the fact that every high protein product is not good for you. You should first read the label, what it has, and then see whether you need it or not," says Gandhi.

The concern becomes more significant as protein products increasingly reach younger consumers. Gandhi says teenagers are among those adopting protein bars and supplements, making nutrition education important at an early stage.

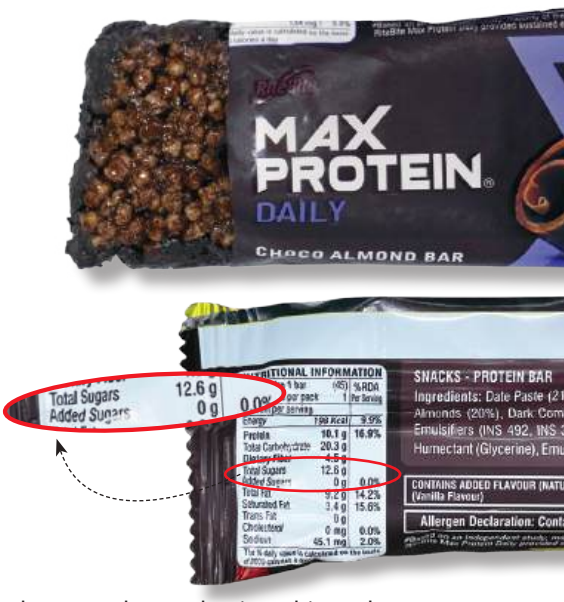
"We need some awareness at the ground level. These high protein content products target children more these days, like teenagers who take these protein bars or protein supplements. At school level, kids and teachers, everybody should be educated," adds Gandhi.

Arora similarly argues that public awareness should focus on understanding individual protein requirements rather than simply following the commercial growth of the category.

"To raise genuine public awareness, the focus should be on educating people on their actual daily protein requirements. You should not frame it around commercial growth; instead, highlight how ultra-processed foods are harmful and do more damage to your health than any perceived benefit," says Arora.

Gandhi also cautions that the growing focus on protein should not come at the expense of other macronutrients.

"Added sugar is on top of it in all these protein products and consuming protein is not the only thing, there are other macronutrients also. People need to have carbohydrates; they are so psyched up about having so much of protein which their body may or may not need. So I would say that we need to educate people in a better way,



because the market is so big and, everybody is into protein these days," says Gandhi.

Arora says the longer-term shift should therefore be towards informed nutrition rather than simply following a market trend.

"People are gradually rediscovering traditional millets and whole foods. So why rely on processed, preservative-laden supplements instead? If the goal is adopting healthier habits, move toward real food," she says.

According to Gandhi, the pursuit of higher protein can become counterproductive when consumers start replacing other foods with bars, shakes and supplements. She also says consumers need to pay attention to calories when choosing products marketed around protein.

"At times, in just a phase of taking high protein, you are consuming a lot of calories. So maybe the exact number of calories should be there on the back of that particular product, be it a protein supplement also how many calories that protein supplement has, or a protein bar, or maybe a high-protein cereal," says Gandhi.

The expanding protein category therefore reflects two parallel shifts in India: greater awareness of protein as part of everyday nutrition and a growing market of products built around that awareness.

Arora says the focus should ultimately return to individual nutritional needs and the quality of the overall diet.

"The high-protein diet may be trending today, but proper nutrition education should always come before following a trend. Protein is important to the body but only protein is not important. Eat a balanced plate. Understand your requirements. Choose real food whenever possible. Do not just follow the protein trend. Understand your nutrition," says Arora. ■

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