INDIAN FOOD PROCESSING INDUSTRY
Brewing Exciting Opportunities
About the Outlook

This Outlook focuses on the exciting opportunities, as well as the recent changes, in the food processing industry, and also highlights the key enablers. Of primary concern is the shift in attention, of late, towards consolidation. Through this Outlook, we have tried to weave together the factors influencing the industry’s growth, which are supported by such key drivers as cold chain, food packaging and retailing. Also, we summarize specific opportunities for sectors like bakery, value-added dairies and gourmet foods, poised for exponential growth in India.

Food Division Services

Business Strategy
- Opportunity assessment
- India entry strategy / Market entry strategy
- Competitive assessment
- Business plan development
- Business expansion plan

Supply Chain Assessment
- Supply chain strategy
- Inventory, Warehouse and Logistics management
- Process re-engineering

Performance Audit
- Revitalize business positioning
- Evaluate product, price, market & location strategy
- Address opportunities for improvements
- Conduct & establish plant audit process

Turnkey Solutions
- Feasibility studies, business planning
- Technology / machinery selection
- Product selection & development
- Implementation support

Sector Opportunity Scan
- Industry / sector specific snapshot
- Define processing mix or crop mix
- Marketing and procurement planning
- Equipment, machinery & infrastructure planning
- Land use planning
- Develop detailed business plan

Implementation Assistance
- Project Management Consulting (PMC)
- Construction management support

Partner Search
- Business Strategy for the local market
- Identify & Shortlist prospective partner
- Schedule meetings
- Signing of MoU and Partner selection

Sector/ Consumer Insights
- Trend & consumption insights
- Segmentation studies
- Product testing
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**Introduction:**

The Indian Food Processing Industry

India can be defined clearly as a “Land of Gaps” and thus, a “Land of Opportunities”. These gaps and the aligned opportunities are two sides of the same coin which has a vital impact on the production of food, and on ecosystem security. It is clear that the country’s much-vaunted production potential is still unrealized. The contrast between actual production and processing capabilities always offers an array of opportunities thanks to which food processing is one of the fastest evolving sectors in India. The opportunity in the food processing industry is vast, but so are the challenges; the need of the hour is to improve technology and productivity in order to be competitive globally.

Recently compiled government statistics underline the faster growth of the food processing sector compared to the agriculture sector. However, this growth is as yet unable to counter the annual tentative perishables loss, which is in the range of USD 7 billion to USD 9 billion. This wastage has attained a threshold at which a population of ~175 million can be fed annually (Exhibit 1).

### Annual F&V Production and Wastage Level

<table>
<thead>
<tr>
<th>Incentives</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>F&amp;V Production 2010-11 (mn tons)</td>
<td>215</td>
</tr>
<tr>
<td>Wastage (%)</td>
<td>12</td>
</tr>
<tr>
<td>Wastage (mn tons)</td>
<td>26</td>
</tr>
<tr>
<td>Per capita per day F&amp;V Consumption (kg)</td>
<td>0.4</td>
</tr>
<tr>
<td>Wastage (mn kg)</td>
<td>25,800</td>
</tr>
<tr>
<td>Annual per capita consumption (kg)</td>
<td>146</td>
</tr>
<tr>
<td>Population which can be fed (mn)</td>
<td>177</td>
</tr>
</tbody>
</table>

*Source: MoFP, NMHW, ICMR, Technopak Analysis*
In 2010-11, the export of commodities related to Indian food processing clocked a remarkable USD 9 billion. Foreign Direct Investment, or FDI, inflows also supported the attractiveness of the sector, touching the USD 2.7 billion mark for the period from April 2000 to November 2011. The domestic consumption of processed food is expected to grow by 10-15%, while the export market is also seeing high potential and is expected to growth at a CAGR of 18-20%. The major markets for Indian processed food are Europe, the Middle East, Japan, Singapore, Thailand, Malaysia and Korea. The food processing industry, which was primarily driven by exports in the past, is now witnessing rapid growth in the domestic market as well.

In addition to the changes on the demand side, there are also changes occurring on the supply side with growth in organized retail, increasing FDI and new product introductions supporting the industry’s growth. Moreover, the central government has given priority status to all agro-processing businesses. Government incentives in the field of mega food parks, cold chain, research and development, etc., supported by exports, are also playing an important role in promoting food processing, but come with their own challenges.

By mapping the perishability, processing level and organized segment penetration it can be seen that there is a clear need for improvement across the supply chain to uplift the penetration of organized processing (Exhibit 2). Specifically in key sectors such as Fruits & Vegetables, Dairy, Seafood and Marine Products, the perishability index is high and supply chain improvements represent enormous investment opportunities.

Food Processing Segments

![Exhibit 2](image-url)
Analyzing the high wastage level clearly reveals that the extant state of our infrastructure is incapable of coping with crop surpluses. This leads to price reduction due to logistical challenges impairing market access. Food processing is one of the solutions poised to solve crop surplus issues as perishability can be countered through processing and price realization can be maintained while assuring quality.

Apart from infrastructural challenges, the cost associated with middlemen also emerges as one of the major obstacles in India’s food processing arena. The middleman tends to be one of the most important links between farmers and food processors. If policies eliminate middlemen from the supply chain, farmers will be the first to incur huge losses followed by food processors and retailers. At an operational level, middlemen play a very crucial role in the success of any perishable’s supply chain. The recommendation of removing middlemen from the supply chain does exist in many policy papers; however, the actual reality contradicts this. The importance of middlemen can only be understood by food processors and farmers, however the costs associated with these stakeholders needs a reality check to ensure that the producer is getting the due benefit. Considering middlemen as supply chain enablers, the other challenges are as illustrated in Exhibit 3.

Supply side constraints are more crucial to the processed food value chain and need immediate attention. There is also a clear need for effective and implementable action points as these constraints will result in blockages in the food processing growth story.

This segment concentrates on the different, crucial enablers of the food processing industry. The progress and importance of, and the challenges associated with, these enablers directly impact the industry’s development. Among the various influencers, the most crucial ones are cold chain, packaging and retailing. This section unravels the criticality and the challenges connected with various food processing enablers.

### Constraints Matrix for Food Processing in India

<table>
<thead>
<tr>
<th>Supply</th>
<th>Preservation and Processing</th>
<th>Distribution and Consumer Interface</th>
</tr>
</thead>
</table>
| • Small land holdings across farming community  
• Less experimental in nature and high dependence on agrarian basic crops such as grains and pulses  
• Lack of awareness of market information in terms of prices and arrivals followed by distortion of prices by government MSP  
• Low penetration of agricultural and allied credit  
• Inappropriate extension services leading to a disconnect between research labs and field operations  
• Absence of food traceability | • Inappropriate storage and preservation facilities  
• Clear need for upgrading existing storage infrastructure  
• High cost associated with storage and preservation, supporting low adaptation for perishables  
• Lack and disconnect of proper research and development outcomes  
• High import duties on processed food and processing machinery  
• Preference for fresh food over preserved/packaged food | • Non-uniform applicability of APMC act  
• Weak logistical infrastructure  
• Lack of execution of scheme and assistance from the government and concerned bodies |
| Demand |  
• Absence of food traceability |  
• Preference for fresh food over preserved/packaged food |  
• Consideration of processed food as being unhealthy  
• Low awareness of benefits of processed food |

Source: Technopak Analysis
Key Food Processing Influencers

This segment concentrates on the different, crucial enablers of the food processing industry. The progress and importance of, and the challenges associated with, these enablers directly impact the industry’s development. Among the various influencers, the most crucial ones are cold chain, packaging and retailing. This section unravels the criticality and the challenges connected with various food processing enablers.

Cold Chain: Crucial, Yet the Missing Link

The entry into the Indian market of global technological logistics majors viz. Kuehne + Nagel and Gateway Distriparks, induced a wave of improvements in the Indian cold chain industry. Apart from the entry of these foreign majors, Indian players are also consolidating their strength in terms of capacity expansions. The recent past has witnessed activities like takeover of Kausar by Gati; capacity expansion by Devbhumi and Crystal followed by the entry of MJ Logistics into the cold chain space. All these international and domestic activities support the growth and importance of cold chain and controlled surface transportation in India’s food ecosystem.
Currently, India has close to 27 million metric tons of cold storage capacity with close to 5,800 cold storage units. However, over 65% of this capacity is used solely for potato storage. The cold storage market in India can be estimated at ~ USD 2.5 billion and has grown at an annual rate of 15% over the past 4-5 years. The growth in the cold storage market has been driven by a shift from single product cold storages to multi-product cold storages which have higher utilization. Multipurpose cold storages are successfully reaping benefits for investors and gaining popularity among users such as food service players, pharmaceuticals and F&V transporters.

Similarly, in terms of transportation, more than 3/4th of the temperature-controlled transportation capacity is utilized only for milk and allied products. As per estimates, India has close to 28,600 refrigerated/temperature controlled trucks. Further, the industry is primarily dominated by unorganized players although organized players such as Radhakrishna Food Land & Snowman have grown significantly in the last few years.

The refrigerated transportation capacity in India has grown at a rate of 5-6% per annum and is expected to reach 38,000 trucks by 2015, with capacity addition expected in the non-dairy segment. Organized companies own −10-15% of the non-dairy reefer vehicles. Leading players like Snowman and Radhakrishna Foodland alone own a fleet of over 250 trucks.

While the limited presence of organized players is the biggest challenges faced by the Indian cold chain landscape, other major challenges are illustrated in Exhibit 4.

### Cold Chain Sector Challenges

**Operational Challenges**

- Seasonal variability of crops
- Lack of knowhow and technical protocols

**Business Challenges**

- High investment and long gestation periods
- High operational costs, e.g. labor, fuel, power, etc.

Source: Technopak Analysis

The cold storage market in India can also be split into three major categories on the basis of players:

- **Integrated Players** are primarily companies which not only have storage capabilities but have also developed back-end capabilities through connections with farms. These companies are capable of value addition though grading, sorting and primary processing. They primarily concentrate on product procurement, processing, storage and distribution and outsource their transportation requirements. This segment has only evolved in the past 3 to 4 years and is seeing increased interest from such corporate sector entities as Adani Agri Fresh, Bharti Field Fresh, Fresh and Healthy (Concor) etc. Most of the integrated players are currently focusing on fruits like apples, bananas, mangoes, besides imported products.

- **Standalone Cold Storage Companies** mainly thrive by storing potatoes and high value fruits like apples, pears and different berries. Most of the standalone players also act as wholesalers in the product categories they store. This segment is highly unorganized with more than 2500-3000 players. Most of these standalone players have single product cold storages with a capacity of 4,000-4,500 metric tons.

- **3PL Service Providers** can provide end-to-end cold chain solutions including warehousing and transportation. They can store and transport multiple product categories and some of them can also provide value addition in terms of sorting, grading, bulk breaking, etc. Most of these are presently working with large FMCG companies and pharmaceutical companies to provide cold chain solutions.
The most advanced arrangements evolving in the cold chain sector are 3PL service providers. These arrangements allow cold chain service clients (retailers/food service players/food processors) to deploy single point storage, sorting and distribution responsibilities. Further, these also help in better management and better concentration on core business activities. These players are also incorporating additional services like cash collection and reverse logistics in their service offerings.

The importance of cold chain needs no validation; perishability has a direct impact on business economics in the food space and cold chain can bridge the gap. The cold chain market presents significant opportunities for international and Indian companies primarily on account of the various growth drivers on the demand as well as supply side. The cold chain sector has seen a few positive improvements in the recent past but addressing the full potential offered by the sector is still a long way away.

**Food Packaging: The First Customer Connect**

Food packaging is one of the major sales influencers. Moreover, it enhances quality and extends the shelf life of food products. It acts as a consumer platform for product detailing in terms of nutritional content, traceability and certification. At the manufacturer’s end, it helps draw the customer’s attention towards that packaged food. The packaging of food products & FMCG grabs the customer’s attention, highlights the product advantages and delivers brand authenticity. Indian food processors are investing intensively in state-of-the-art packaging infrastructure & technology. Recent technologies and improved packing materials are rapidly capturing the organized segment of the Indian food processing sector.

Currently, the majority of the organized food processing segment has established or is in the process of installing “hands free packaging” which is synonymous with “aseptic packaging”, which serves as the primary level of improved packing in the food processing space and ensures the safety and security of consumable products.

Apart from a preliminary level of improved packaging, the industry is also witnessing innovations at secondary level which address more refined technology and machinery. Some of the recent trends under the secondary level of improved packaging cover:

**Perforated packaging**

Their usage is limited to the organized and gourmet retailers specific to high value perishable products, e.g. lettuce, strawberries, dwarf beans and niche bakery products like pies & pasties. The material facilitates the products’ natural respiration mechanism and secures freshness while maintaining the equilibrium of nutritive contents.

From the processors’ point of view, there is an array of packaging materials available in the market. The range varies as 1/4/8/32/160/360 holes per square inch of packing material, depending on the perishability and nature of the product. More perishable products like vegetables correspond to fewer holes per sq. inch vis-à-vis more holes per sq. inch for bakery products.
Killer paper
The innovative killer paper technology can overcome food poisoning issues, especially in meat products involving chicken, fish or red meat. The packing material works using the mechanism of innovative sensor packaging film which changes its color from yellow to blue to indicate the spoilage of packaged content. Further, killer paper helps preserve food by fighting the bacteria that cause spoilage. The paper contains a coating of silver nanoparticles, which act as powerful antibacterial agents. The commercial usage of killer paper for food product packing is not feasible as yet. Firms dealing with this technology are working on costing and perhaps, changing the shape of silver nanoparticles will be an affordable compromise.

Odor absorbent packaging
In addition to preserving the freshness of packaged food, odor absorbent packaging is another new direction. The usage of flavor and odor absorbent films and sachets reduces the permeation of aroma or flavor across the components of packaged food. The usage of the technology is not restricted to perishables but also expanding towards FMCG products.

Ripeness Indicators
This digital technology helps in monitoring the ripeness of fruits and other packaged food products. The technology is still in testing stage and it’s too early for Indian processors to utilize the same.

Defining the role of food packaging will primarily involve protecting the quality and freshness of the product in addition to ensuring convenience and safety. It also has to provide and enhance merchandising value for the product when displayed on the retail shelf. Food packaging therefore, is being seen holistically as a system providing all the factors for improving the product’s life as well as enhancing its brand appeal. Marketers take a lot of interest in designing the appropriate packaging size and system. There is a very thin line between customers and consumers and marketers have to satisfy both these entities. The former help in converting sales while the latter enable convenience and repeat purchases.

On the development curve, India has seen a slew of advanced packaging solutions but this phase is yet to become widely established. Attractive packaging can generate curiosity in the minds of the consumers, motivating them to try out the product. It is thus correct to say that the packaging acts as the first touch point for the customer.

Food & Grocery Retailing: Drivers to penetrate Processed Food

Food and Grocery, or F&G, retailing serves as the link between consumers and manufacturers. In recent years, these retailers have witnessed a clear paradigm shift (need-convenience-comfort-quality-premium) in the Indian consumer’s habits. Today, the consumer is more aware and prefers a comparison-based product purchase. The expectations from organized retailers in terms of product knowledge, offers and overall ambience have increased as the same cannot be expected from the unorganized shopkeeper down the lane. New categories are penetrating the sector and being accepted by the large consumer base.

F & G Retail Market (USD bn)
Organized retail largely depends on food retailing in India, but the reverse is not true. Food retail is not dependent on the organized segment but the growth thereof is directly proportional. The expansion is mutual but food retail is also absolute within its own orbit. The mutual growth of food retail & organized segment has fomented “food-specific organized retail” formats - the previous year witnessed an appreciable growth in such formats. Outlets like Godrej’s Nature’s Basket and Le Marche Sugar & Spice have grabbed a hold on the Delhi NCR market. Serving to a niche segment, almost ~80% of the space in these outlets is allocated for food and grocery articles.

Going into the nitty-gritty of organized retail formats, food retailing has served as the backbone in the past and will continue to do so in the future. With an estimated market of USD 343 billion, the food and grocery segment is the single largest retail category and accounts for nearly 70% of the total retail market (2012). The organized retail segment for food & grocery is estimated at USD 10 billion and accounts for 30% of all organized retail. For organized formats, India serves as a land of opportunities with a population in excess of a billion, and supporting a sizeable high & middle income segment.

The opportunity may be huge, but so are the challenges. Presently, a food retailer deals with high rentals and a lack of skilled manpower. Apart from these operational challenges, the wide geographical spread and varied local preferences also play a crucial role in satisfying the consumer’s needs across the nation.

Some small-scale retailers have unlocked the local preference puzzle; however they are unable to capitalize on the expansion opportunity. The wide demographics and democracy are key Indian assets but catering to this demography is the biggest challenge confronted by food retailers. The huge consumer base is in actuality a challenge as the majority is in the rural sphere. Percolating traditional supply chain practices, patchy logistics and undulating support infrastructure adds to the problems in this space.

In a typical product value chain, food retail is considered as the endpoint. However, it is time to view it as an initiation point so as to enable better future interventions for food retail. Food retailers in India deal with an array of challenges and the need of the hour is to seek “comprehensive steps” towards holistic solutions, as a “single challenge at a time” approach will not serve the purpose.
Value-Added Dairy Market

Consumption of milk is synonymous to “healthy drinking” in India and has been the regular consumption habit for centuries. In the past five decades the traditional milking business has witnessed a turnaround and now acts as a pillar for the growth of Indian agriculture. Dairy farming comprises about one-third of Indian agriculture’s contribution to India’s GDP. 15% of the world’s population of milking animals is sheltered in India and contributes to ~17% of the global milk production. India ranks as the largest liquid milk producer as well as consumer with 121 million tons of production and negligible exports in 2011.

Comparing India’s performance with other top milk producing nations it can be clearly stated that the Indian dairy sector lacks productivity and also that its huge production potential is only partially utilized. The productivity of New Zealand is almost thrice the current Indian average and portrays a clear opportunity of productivity level improvement. With high domestic consumption, per capita milk availability in India stands at 101 kg/year, which is in sync with the world average of 103 kg/year. The average per capita availability for developing countries, however, stands at 69 kg/year compared with 234 kg/year for developed economies.

The dairy industry in India has its base in small holders and marginal farmers. As the organized segment only accounts for 20% of the total milk production, it can be concluded that modern processing infrastructure has yet not propagated throughout India. However, the good news is that there is a clear shift towards the organized sector which is evident from the statistics available: the 13% share of the organized segment in 2005 increased to 20% in 2011. This is driven by an increasing demand for packaged milk and value-added products. On the supply side as well, farmers prefer organized channels due to higher price realization.
**Dairy Comparisons: Top Nations (~45% of World Production)**

![Graph showing milk production and productivity in top nations]

Source: Food & Agriculture Organization (FAO), Technopak Analysis

**Structure of the Indian Dairy Industry**

![Diagram showing structure of the Indian dairy industry]

Source: FAO, Technopak Analysis

**Wholesale Price Rise (YoY) Base Year 2004-05**

![Graph showing wholesale price rise]

Source: Ministry of Commerce and Industry
On the consumer front, nearly half the Indian population still follows vegetarianism and dairy products remain the major source of protein and other essential nutrients. Due to their high nutritional value and easy availability, dairy products have successfully managed to secure a footing as a staple in a typical Indian diet. The demand for milk is also relatively price inelastic since it is a primary source of nutrition for children. Thus, despite the steep increase in price over the past 2 years, the demand for milk is increasing faster than production.

Another trend being witnessed by the dairy sector is that health and safety concerns have added to the increased consumption of value-added products and packaged milk. India as a county has been consuming dairy products - especially milk and curd, in loose form from time immemorial.

The third important consumption trend is that, with increasing awareness, health consciousness and changing lifestyles, there is a consumption shift towards newer categories of value-added products. The changing consumer lifestyles, needs, and convenience-seeking behavior has motivated dairy companies to introduce innovative offerings. Products such as dahi which were predominantly “made at home” earlier are getting branded now. Variants such as Lassi, Raita, and flavored or low fat Dahi are further additions to the product line and consumers are accepting them for an array of reasons like health benefits, convenience and time poverty.

Apart from the branding of commoditized product spaces, marketers are also making continuous efforts to educate consumers about other value-added products. For example, in the past decade the cheese market has undergone a paradigm shift beyond blocks and slices. Now urban consumers understand the difference between Mozzarella and Gouda and are adopting cheese preparations beyond pizzas and pastas.

The health consciousness indices have pushed the acceptance of margarine & probiotics and the modern taste buds are only satisfied through flavors other than the standard vanilla or chocolate. Changing consumer preferences and growing competition has pushed even traditional cooperative players such as GCMMF (Amul), KMF (Nandini), etc. to expand their portfolio to include cheese packs, paneer, dahi, lassi, flavored milk drinks, probiotics, spread tubs, etc.

Beyond new product introductions, processing & packaging technology innovations are pushing away the perishability of dairy products, enabling convenience and availability. For instance, UHT milk is gaining popularity primarily because of the convenience it offers to retailers, transporters & consumers. While urban consumers adopt it for convenience, it is witnessing high growth in northeastern India and hilly areas where fresh milk is not easily available.

The increase in consumption is also resulting in the entrance of major global dairy players in India. Apart from new entrants, domestic players have also received private equity investments to take advantage of the untapped market opportunity.

Despite the size and reach of the dairy industry and the continuous support it gets from the government, there are a lot of areas which need improvement. These are concerns related to the grassroots level, supply chain and processing. If these concerns are addressed this industry can grow at a faster rate than at present and also diversify and grow into other sectors which have lower production today, e.g. cheeses, flavored milks and liquid milk supplements etc.

To summarize, it can be said that Indian dairy landscape portrays ample opportunities though there are some alarming issues and major loopholes

**Challenges Pertaining to Indian Dairy Sector**

- Unhygienic conditions for animals
- Unaffordable good quality animal feed
- Lack of animal healthcare
- High production costs
- Lack of automation at farm level
- Lack of financial assistance
- Lack of chilled storage & transport unit
- Absence of quality standards like HACCP, Codex etc.
- Seasonality of production and fluctuating supply
- Adulteration and food safety issues
- Lack of infrastructure & trained manpower
in the value chain of dairy and allied products. With a huge consumer base and a favorable sentiment toward dairy products, the acceptance level will never be a challenge for manufacturers and retailers. It is the supply side of the equation which needs to be concentrated on through better product development and greater price parity for success. India as a country has a huge consumer base and dairy will always form a substantial share of the billion consumption baskets.

**Bakery Products**

Bakery products in India have gone from being a sick man's diet to an essential everyday food item for the masses. Like other eating-out formats, the bakeries in India are undergoing a transformation because of rising awareness, health consciousness and an increase in disposable income of the consumers. Indian bakeries are dominated by the small-scale sector with an estimated 60,000 small and medium-size players, along with 15-20 players in the organized sector. The estimated size of the bakery segment is around USD 1.8 billion, with a growth rate of 10%. The per capita consumption of bakery products in India is 4 kg per annum as compared to the US, where it is 25 kg per annum.

The organized sector caters to the medium and premium segments, which are relatively less price-sensitive. The organized sector is unable to compete at the lower price range due to the excise advantage enjoyed by the informal sector. Now bakeries in India are beset with new challenges and need to update their technology, products, services and hygienic conditions to meet the changing needs of the Indian consumer.

Biscuits and bread are considered to be the major bakery products and account for 80-82% of all bakery production in the country. The unorganized sector accounts for about half of the total biscuit production, an estimated 2.1 million tons. It also accounts for 80% of the total bread production and around 90% of the other bakery products like pastries, cakes, buns, rusks and others.

**Breads**

The total bread production in the country is estimated to be 4.5 million tons annually growing at a rate of about 8%. The organized sector is growing at a slightly higher rate of 10%. Increasingly, bread is finding popularity as an item consumed in breakfast in lieu of the more traditional chappatis and parathas. Riding on the high demand from consumers, the manufacturers have also introduced
many bread variants. Health and wellness is the new key to the bakery industry with companies bringing out healthier, fortified products. The new category of multigrain breads and biscuits is a big hit in the metros and Tier I cities. Multigrain and brown bread constitute almost 20% of the total bread market. In comparison, white bread accounts for about 77% and fruit bread for 3%.

**Biscuits**

Biscuits have always enjoyed a high acceptance in India across all socioeconomic categories and age groups. India’s biscuit industry, worth USD 3 billion and the third largest in the world after the US and China, is witnessing a major transition as consumer preferences are changing. Now, with higher disposable incomes and changing tastes, consumers want more than just glucose and Marie biscuits. Indian consumers are looking for newer, healthier and more innovative products.

Biscuit manufacturers are also ensuring that they provide just that. In the past year alone, there have been over 20 launches of both new biscuit brands as well as variants. While United Biscuits India launched a number of products under the McVitie’s brand in 2010, Cadbury India introduced Oreo in March 2011, and PepsiCo brought out Quaker Oats cookies. Similarly, Parle, Britannia, ITC (through its Sunfeast brand) and GlaxoSmithKline (through Horlicks) all launched new products across the mid and premium biscuits segments.

As Indian biscuits buyers experiment with flavors and textures, they’re also becoming more conscious of their health. And, rather than turn away from biscuits citing all that fat, sugar and refined flour, they are demanding healthier options, a language biscuit companies are eager to speak.

**Jams, Sauces & Ketchups**

In the past decade, the Indian consumer has started accepting the innovative products and international flavors that have been introduced in the processed fruits and vegetables (F&V) space. Many major international F&V processors entered the Indian market with an understanding of the unique Indian taste buds and consumption habits. The market witnessed new pulpy ketchups and sauces and also acknowledged innovative products such as pre-mix purees, marmalades, and canned F&V among others. The processed F&V market in India is valued at USD 1.7 billion and is growing at a CAGR of 15-18%. The key categories under processed F&V include jams, jellies, juices, sauces and ketchups.
Jams, as an overall market, have not witnessed any promising new entry or product innovation in the recent past. However, last year, Safal, a unit of Mother Dairy, introduced a peach jam with original fruit pieces as an added attraction. The zero involvement of artificial colors, flavors & preservatives are some of the common consumer engaging indices for this product category. Apart from few market entries and product innovations, organized retailers operating in India have graduated the art of offering competitive jams under their private label offerings. At an overall level, domestic brands like Kissan (HUL) and international brands like Dana hold the leading market position.

Sauces and ketchups are among the high activity categories. With the entry of international majors the Indian processors are enduring some challenges. The Indian ketchup market is valued at USD 110 million to USD 120 million, supported by growth at a CAGR of 12-15%. New flavors like mustard and barbeques are widely accepted across nation and marketers are experimenting with the product sizes and convenience packing to increase penetration.

The Indian ketchup & sauces market is dominated by tomato preparations and usage of carrot and pumpkins as adulteration is a common activity across regions. After tomato, mustard sauce occupies a significant share of the remaining market. Apart from new players like Del Monte, the Indian consumer enjoys mustard sauce and other ketchups from local brands, e.g. Chordia in Maharashtra, MPS Foods in West Bengal, Indira Foods in Karnataka, etc. at the low price band as well as the high-end imported range. The segment also witnessed introduction and acceptance of hot variants in terms of Chinese sauces with familiar taste like soya, red chillies and green chillies.

Indian consumers, specifically in metros, are continuously seeking additional benefits and convenience from these categories of products. The plain tomato sauce still dominates the category but is no more an attraction as the consumer is looking beyond that at complete products like pasta and pizza sauces. Greater time poverty and increased spending power is supporting this trend. Apart from retail interventions, the penetration of specific categories such as mayonnaise and ketchups is also aligned with the growth of the Food Service market in India. The deep penetration of international dishes like pastas and other noodles has boosted the regular consumption of sauces and ketchups across all ages. Many institutional players have secured a considerable quantum of business from food service back-end operations while major players like Cremica have managed to secure an annual turnover of ~USD 125 million with an average annual growth rate of 30%. However, the majority of the unorganized food service sector in India, comprising street stalls and mobile vendors largely depends on homemade ketchups & sauces for food preparation. This is one area which remains a highly cost sensitive, albeit untouched, opportunity for back-end players in all states.

To conclude, it can be said that India as a country loves snacking (at home as well as at food service joints) which is quite habitual. Going forward smaller Indian towns will see the maximum activity in terms of increasing penetration of the food service industry. It is high time that marketers start understanding and identifying the target market to capitalize on these opportunities by introducing/ expanding retail and institutional offerings.

Gourmet Foods

The gourmet retail space has witnessed rapid expansion in last five years and seen a strategic shift from traditional, low cost products to premium upgrades. The space is expected to grow manifold over the next few years. The size of the gourmet food market in India is USD 1300 million, growing at a CAGR of 20%. The market is set to cross USD 2800 million by 2015.
In the past, premium segment-branded F&B products sold only in niche markets in India. They are now increasingly acceptable to the more than a half-billion middle income consumers. The key drivers in the F&B business, viz. awareness, acceptability, availability and affordability, are rapidly pushing up the demand for premium products including olive oil, cheeses, imported processed meats and vegetables.

An increasingly health conscious consumer segment has propelled the olive oil market in India. Brands like Leonardo, ColaVita, Bertolli and Fragata etc. which were only known to five star hotels a couple of years ago are today easily available through retail outlets. The olive oil market is around USD 80 million in value now, and is expected to grow at a rate of 45%-50% annually for the next five years. The import of olive oil in fiscal 2010-11 was 3988 metric tons and in fiscal 2011-12 it has grown to 5938 metric tons. While the increase in import is around 49% the per capita consumption in India is still well below the international average.

Health attributes, such as the absence of cholesterol, has increased the consumption of olive oil by affluent Indian households. The consumption of Extra Virgin olive oil has increased by 35% and of Pomace olive oil has increased by 14% in past one year.

Given their rising aspiration for the finer things in life, urban Indians are also scouting for ways to get a taste of the world in their own kitchens. A revolution is taking place across the country in terms of the eating habits of consumers. For instance, the growing popularity of gourmet cheese in India is largely due to the increasing exposure to the world. Gourmet cheeses, along with olive oil, have truly arrived in the Indian market and are well accepted by the affluent and middle class. The imported cheese market in India is growing at a rate of 30%, from 1200 metric tons in fiscal 2010-11 to 1600 metric tons in fiscal 2011-12. Cheeses like Parmigiano Reggiano, Stilton, Provolone, Mozzarella, Roquefort, Gruyere, Camembert, Feta etc. can be easily spotted in retail outlets across the metros.

Pasta is one of the most popular items in the gourmet foods category along with olive oil and cheeses. The universal popularity of Italian cuisine and the emergence of organized retail have boosted the consumption of imported pasta in India. The market size of pasta stood at 10000 metric tons in 2011-12 and is expected to grow by 25-30% annually. Barilla, De Cecco and San Remo are the most popular brands of imported pastas in the USD 14 million to USD 15 million-worth Indian market.

With rapid urbanization and change in eating habits, sauces and condiments have occupied a substantial shelf space in the Indian gourmet outlets. While mayonnaise, ketchup and olives are the most popular, others such as chilli, soya, gherkins etc. have also gained wide acceptance. The growing demand for sauces and condiments comes from both individual customers as well as institutions such as hotels, restaurants and clubs. Heinz, Tabasco, Remia, Barilla, Prego are some of the famous imported brands.
After cricket and movies, food is the next big activity which unites India. Within the food industry, there is no disagreement that food processing is the next big revolution waiting to happen. It can lead to inclusiveness, support better farm income, reduce wastage levels, utilize crop surpluses and improve nutritional and economic returns while ensuring national food security.

From the demand side, the higher awareness level among consumers is diluting the preconceived notions regarding the unhealthy nature of processed food day by day. Consumers are proactively accepting processed and packaged food as healthy food; even diet charts have included many processed foods as potent ingredients. Increased spending power and lower availability of food preparation time has supported the growth of the industry.

Processed food has gained more shelf space in a majority of retail formats; this is poised to increase further in future. Also, processed food is not restricted only to imported segments in a retail store but has also spread to staples, FMCG, F&B, Dairy, Frozen & Meat categories. Retailers are stepping out and extensively launching specific processed foods as private labels. The wide acceptance is boosting the quality of offerings. The benefits associated with processed food still need to percolate to the consumer level; this will enable consumption across the masses. Improvements and better reach of food retail will be the key driver to speed up the penetration of processed food.

From a supply perspective, it can be clearly said that there is need for adequate infrastructure across storage, transportation and processing. There is a clear need for technology-intensive storage and transport infrastructure followed by an improvement in existing storage capabilities. The Indian government has identified food processing as one of the priority sectors and enabled assistance across processing, preservation and research streams.

There are some specific processed food sectors such as dairy, bakery and breakfast cereals witnessing a higher growth rate and higher acceptance among consumers. These have seen ample activity and investment opportunities across procurement, processing and distribution levels. Apart from these brighter segments, there is a range of other non-core processing support functions offering numerous opportunities. These include supply chain intervention, infrastructure support, logistics and transportation facilities followed by third party account management.

To sum, India as a nation is shifting towards consolidation, improving from a situation of excessive wastage. Food processing is an imperative and will sustain India’s growth story. There are ample investment opportunities across supply and demand interventions. India as a country can feed other nations, the production parameters are in place and food processing can act as the delivery interface. The stage is all set to invite food processors from different geographies: buying power is elevated and infrastructure is improving. For food processors & consumers the good times have just begun.

**Conclusion**

**Consolidating the Indian Food Processing Industry**
About
Technopak

India’s leading management consulting firm with more than 20 years of experience in working with organizations across consumer goods and services.

Founded on the principle of “concept to commissioning”, we partner our clients to identify their maximum-value opportunities, provide solutions to their key challenges and help them create a robust and high growth business models.

We have the ability to be the strategic advisors with customized solution during the ideation phase, implementation guide through start-up and a trusted advisor overall.

Drawing from the extensive experience of more than 150 professionals, Technopak focuses on four major divisions, which are Fashion (Textile & Apparel), Retail, Consumer Products & E-tailing, Education and Food & Agriculture.

Our key services are:

Business Strategy
Assistance in developing value creating strategies based on consumer insights, competition mapping, international benchmarking and client capabilities.

Start-up Assistance
Leveraging operations and industry expertise to ‘commission the concept’ on turnkey basis.

Performance Enhancement
Operations, industry & management of change expertise to enhance the performance and value of client operations and businesses.

Capital Advisory
Supporting business strategy and execution with comprehensive capital advisory in our industries of focus.

Consumer Insights
Holistic consumer & shopper understanding applied to offer implementable business solutions.
Our Other Divisions

Retail, Consumer Products & E-tailing

Technopak aids retailers and consumer product companies in formulating growth strategy and performance enhancement mandates. Over the past two decades, we have worked on various facets such as entry into the Indian market, development of new category, activation of new retail formats, channel development, product extension, region expansion etc. One key reason why Technopak is considered the industry leader is the relentless focus on the Indian Market. We help clients understand the market dynamics in India and help them arrive at the best method to grow business in India. Our Retail and Consumer product expertise helps gain a competitive edge by providing execution capabilities and corporate strategies.

Fashion (Textile & Apparel)

With almost 20 years of experience in delivering end-to-end solutions to the entire gamut of the textile industry, right from fibre to retailing, the Fashion & Textile division at Technopak assists the textile and apparel organizations in optimizing their profits through enhancement and expansion. Many leading Indian and international Textile manufacturers and Apparel brands have benefited from our offerings in the areas of business planning and strategy, apparel operations, supply chain management and strategic alliances. Our team consists of top calibre advisors who have worked closely with a diverse group of clients comprising textile manufacturers, apparel retailers, garment manufacturers and exporters, apparel sourcing organizations, trade promotion councils, industry associations, international development bodies, and financial institutions as well as central and state governments.

Education

Technopak Education division has a vast understanding of the sector in terms of industry environment, growth potential, regulation and policy, which has enabled us to become a thought leader in the sector. Technopak caters to all the education segments – K-12, Higher Education, Vocational Training and ancillaries. Innovative business models and government thrust on privatization has led to assertive participation by private organizations. Such participation spans various levels of investment and operational scale, be it organization planning for expansion in the country or foreign institutions aiming to foray into the Indian education sector.

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