



### India's Food Sector Cashing in on Forthcoming Opportunities

REPORT BY

technopak



शरद पवार

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सत्यमेव जय

कृषि एवं खाद्य प्रसंस्करण उद्योग मंत्री भारत सरकार MINISTER OF AGRICULTURE & FOOD PROCESSING INDUSTRIES GOVERNMENT OF INDIA

3 8d, October, 2013

### MESSAGE

I am glad to know that the PHD Chamber of Commerce and Industry is organizing "India FARM 2 FORK" – 2 Days International Conference cum Exhibition on 29<sup>th</sup>-30<sup>th</sup> November, 2013 in New Delhi

In view of the abundant agricultural resource base in India, Indian Food Processing Industry has immense potential. To cater to the demands of the rising population there is a dire need to develop this sector and reduce post harvest losses. Also there is immense scope for collaborations and technological exchanges with developed companies.

Such programmes should be a regular feature by organizations like PHD Chamber. I am sure the platform would be useful to all stakeholders of the sector.

The initiative being taken by PHD Chamber in this area is commendable and I wish them all success.

(SHARAD PAWAR)

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MINISTER OF STATE Agriculture & Food Processing Industries Government of India

Dated 10.10.2013

### <u>MESSAGE</u>

It is a matter of pleasure to note that PHD Chamber of Commerce and Industry is organizing "India FARM 2 FORK" International Conference cum Exhibition on 29th -30th November, 2013 at New Delhi.

Post harvest storage, processing and distribution is an area where a lot of work has to be done both by the Government and the private sector. Often it has been observed that it is not lack of production but inefficient distribution which leads to high prices for the consumer. PHD Chamber of Commerce and Industry has rightly taken this initiative to bring all stakeholders of the food supply chain together at this Conference.

I am sure the discussions at the Conference shall be fruitful in giving the new ideas to resolve the bottlenecks faced in the food supply chain.

I wish the Conference great success.

(TARIQ ANWAR)

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D.O.NO .: 0 SD(MI/34676 Dated: 19.09.2013

### MESSAGE

I am glad to know that PHD Chamber of Commerce & Industry, New Delhi is organizing India FARM 2 FORK 2013-an International Conference cum Exhibition on 29<sup>th</sup> & 30<sup>th</sup> November, 2013 at New Delhi. It gives me added pleasure to know that a knowledge report is also being brought out on this occasion.

The efforts made by the PHDCCI, from time to time, in organizing various conferences/exhibitions in the direction of economic growth, are praiseworthy. I am sure that the PHDCCI would continue to strive hard with same mission & vigour to achieve its aims & objectives.

My best wishes for the success of the Exhibition cum Conference.

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(SHEILA DIKSHIT)



PROGRESS HARMONY DEVELOPMENT

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Mr. Suman Jyoti Khaitan President, PHD Chamber of Commerce and Industry

The importance of agriculture to our economy can hardly be over-emphasized. It is the most important source of raw materials to our industries, and it provides employment to about 70% of our total labor force. It also contributes more than 40% to our total national income. Again, it is one of the major foreign exchange earners for our economy.

I hope that required guidance, technical updates, better policies and implementation and the introduction of scientific methods will certainly revolutionize Indian Agriculture.

It is a matter of great pleasure that this subject is being pondered over at the PHD Chamber through the International Conference cum Exhibition, India Farm 2 Fork, which is being organized on November 29 and 30, 2013, at PHD House, New Delhi.

This paper, brought out by the PHD Chamber in association with Technopak Advisors presents the various aspects of the Agriculture and Food processing sector, and also suggests measures that can help enhance various agriculture projects across the country. I sincerely hope that this report will benefit all stakeholders.

I wish the Conference all the success.



Mr. N.M. Kejriwal Chairman, Agribusiness Committee, PHD Chamber

The PHD Chamber of Commerce and Industry operates through its various Expert Committees to bring out, relevant issues and deliberate the same with all the stakeholders which enable and benefit the Industry. Agribusiness, is one of the Committees of PHD Chamber of Commerce & Industry. The objective of this Committee is to sensitize, suggest solutions, and to take up the industry's issues with the appropriate authorities, not only at the Central Government level but also with the respective State Governments.

The PHD Chamber, in association with Technopak Advisors, is bringing out this knowledge paper to recognize the challenges, and identify possible corrective actions, which would enable the agriculture sector in accelerating delivery.

I am sure that the International Conference-cum-Exhibition - India Farm 2 Fork 2013, will be a huge success, with the guidance and support of all the stakeholders.



**Tarun Jain** Vice President – Agriculture and Food Services Technopak Advisors

Agriculture sector continues to remain the economy's backbone, even though India is moving towards a services-led economy. Agriculture and food processing, being one of the priority sectors, the Indian Government has backed it up through adequate policy frameworks, financial support, and other initiatives at various levels.

The food processing sector has a huge business potential and presents varied opportunities for investment across the entire food value chain. It also offers tremendous growth potential in the areas of value-added processing and food retailing. The sector has registered growth in investment over the past few years, and we firmly believe that the sector has much more to offer to domestic and international investors, in all aspects of growth and business.

Again, there is a lot that needs to be done to ensure the sector's sustainable growth and development. This report addresses some of the key interventions that are necessary to ensure a sustained impetus for the sector's growth, both at the farm level and the processing level. It also highlights key sectors within food processing for which a rapid growth is anticipated in the years to come; key business opportunities within these sectors are also spelt out. This report also focuses on the investment potential and stresses on the key challenges that need to be addressed.

Technopak is committed to assisting all stakeholders in harnessing strategic business opportunities in the food sector. We are confident that this publication will facilitate a better understanding of the sector specific opportunities available for investors and, therefore, will be instrumental in designing their action plans.

We thank PHD Chamber for providing us this opportunity to participate and suggest our thoughts on fostering growth in the food processing sector, through this knowledge partnership.

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### Foreword

India has successfully managed to achieve self-sufficiency in food, with a marginal surplus, with 260 million tons of food grain production in 2012-13. Additionally, the agriculture sector offers many opportunities in food processing, food retailing, and exports. The Indian food processing market is growing rapidly at a CAGR of 8.5% and this is expected to rise to 12-15% in the next five years.

Value-added processing has registered an accelerated growth, thanks to changing lifestyles and consumption patterns. Consumers' behavior vis-à-vis food consumption has undergone significant changes primarily as a result of the heightened awareness about different value-added food products, brands, and cuisines, and also their greater willingness to experiment and ability to pay. Consequently, food businesses are undergoing a noticeable shift. Besides the resetting of the demand equation, production capacities and government policies are also playing a major role in transforming food businesses.

Many such sectors as dairy, health foods, ready-to-eat, organic foods, fruit juices, and other packaged foods have recorded a high growth over the years. In 2012, even the exports of major food items posted an annual growth of 40%, over the previous year. Some food items like processed vegetables, dairy products, fresh F&V, and non-basmati rice have witnessed a significant growth in exports. This growth in the sector has been aided by significant improvements in product and packaging quality, alongside the increased investment and participation by the private sector.

The Government of India's policy thrust, alongside revised investment guidelines, has facilitated the growth in Foreign Direct Investment (FDI) inflows into the agriculture and food processing sectors, resulting in a CAGR of 37%, over the past five years. India has witnessed an increase in investments into domestic companies engaged in dairy and meat processing, and confectionaries, among others. Despite all this, the challenges are still intact - production capability, lack of quality produce, and inadequate marketing, storage, and processing infrastructure still need to be tackled in order to unleash the true potential of the sector.

While the huge gap in output between agriculture and food processing is a major cause for concern, the government has increased its expenditure towards these sectors. This is expected to raise the value of output, the sector's share in the global processed food market, and also boost rural income levels. The Ministry of Food Processing Industries (MoFPI) has planned an outlay of INR 15,000 crore into the sector vide the 12<sup>th</sup> Five Year Plan, which is about three times the outlay approved under the 11<sup>th</sup> Five Year Plan. Again, about 66% of this investment will be directed towards food infrastructure development. This is expected to generate significant investment opportunities within the sector, for both domestic as well as international food players.

Thus, the Indian food processing industry is poised for phenomenal growth in the years to come. There is the expectation of enhanced investment and the participation of domestic and international players within the sector which will further contribute to its growth and development, will create new capital infrastructure, better technology, and improved product quality. At the same time, India needs to gear up to investor expectations by ensuring the necessary support infrastructure and adequate policy backing.

## Overview of India's Agriculture and Food Processing Sector



### Indian Agriculture: An Overview

The agriculture sector contributes 14% of the nation's GDP and 11% of its exports. About 50% of India's population depends on agriculture for their primary source of income. India has successfully managed to gain self-sufficiency in food, with a marginal surplus in production, and is among the leading global producers of cereals, fruits & vegetables, and dairy products.

Exhibit 1

### Percentage Share of Agriculture and Food Processing in India's GDP

Industry	Share of GDP (%)	CAGR (%)
Agriculture	14%	3.8%
Manufacturing	15.7%	7.6%
Food Processing Industries	1.5%	8.4%
Industry	42.6%	14.4%

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Source: Ministry of Food Processing Industries, Gol

## India, with 2.4% of the world's geographical area and 4% of its water resources, supports about 17% of the world's human population and 15% of the livestock

With 260 million tons of food grains and 227 million tons of fruits & vegetables produced annually, India is the top producer of many such agricultural products as bananas, mangos, guavas, rice, and wheat, and occupies a very important place in the world's total production basket (*Exhibit 2*). The country's major crops include rice, wheat, sugarcane, oilseeds, pulses, jowar, bajra, ragi, tea, coffee, coconut, cashew, spices, cauliflower, onion, cabbage, mango, banana, sapota, acid lime, etc. Farm production has, however, been shifting towards horticulture crops from coarse cereals and oilseeds as these achieve better returns. Other major reasons for such a shift include changing lifestyles, shift in food consumption habits and needs, and higher disposable incomes.

The agriculture sector generates export opportunities for many products including basmati rice, guar gum, buffalo meat, jaggery, groundnut, and fresh fruits & vegetables. Between fiscal 2008-12, India's exports of processed food and related products increased at a CAGR of 27%. The main export destinations for Indian food products have been the Middle East and Southeast Asia.

Over the past decade, the growth of the agriculture sector has slowed to 3.6% from 6%. This downfall can be attributed to the continuous breaking of land holdings into smaller pieces, a shift from agriculture to other sources of income, degradation of soil quality, and increasing urbanization and industrialization.

Accelerating the growth of agriculture production is therefore necessary not only to achieve an overall GDP target and meet the rising demand for food, but also to increase the incomes of those dependent on agriculture and thus ensure inclusiveness. Growth in the agriculture sector will also ensure that the urban-rural divide does not widen any further.

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	Production (MT), FY'12	Global Share	Global Rank
Milk	127	17%	1
Pulses	7	18%	1
Buffalo Meat	3	43%	1
Banana	30	28%	1
Mango and Guava	15	39%	1
Теа	1	23%	2
Rice	156	24%	2
Sugarcane	278	24%	2
Wheat	94	10%	2

### Exhibit 2

### Indian Agricultural Production and Global Share

Source: IBEF, Technopak Advisors

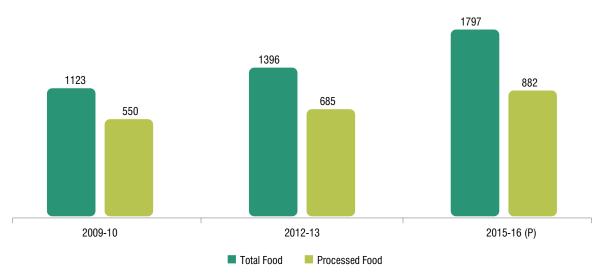


### Food Processing Sector: An Overview

In India, most food is consumed in fresh form and only a small quantity is processed for value addition. However, with this trend changing gradually, the market for processed food products is expanding in India. Increased mobility and aspirations, the exposure to and the availability of a wider range and products, easily available credit facilities, and higher disposable incomes have resulted in greater spending and consumption.

Among the affluent and middle-income classes, the share of expenditure on food vis-à-vis other consumption categories has declined, despite the fact that the total expenditure on food has increased across all classes. Initially, food expenditure was concentrated on basic items like grains, vegetable oils, and sugar. However, there is now an increase in the inclusion of fruits & vegetables, eggs, meats, beverages, and processed foods, thanks to both increased availability and affordability. There has been an accelerating shift from food security to nutritional security and convenience foods in the recent past.

According to the MoFPI, Government of India (GoI), the Food Processing Industry (FPI) contributes 1.5% of India's GDP and provides direct employment to 13 million people. The industry is dominated by many small scale enterprises and involves limited value addition. The FPI has grown at a CAGR of 8.5% over the past five years, whereas registered food processing units are growing at 11%.



Market Size of Indian Food Sector (INR '000 cr)

Source: Technopak Advisors, P: Projected

Exhibit 3

Currently, the Indian food industry is worth INR 13.96 lakh crore which is anticipated to reach INR 17.96 lakh crore, by 2016. The Indian processed foods market is worth about INR 685,000 crore, or about 49% of the total food industry. A large part of the Indian food market is dominated by unorganized players (42%) and the small scale sector (33%), leaving only around 25% with the organized players.

Food processing activities can be broadly classified into two categories:

- Commodity-based Processing which includes primary processing of commodities like wheat, rice, sugar, spices, etc.
- Value-added Processing including such secondary and tertiary processing as done for bakery items, milk products, honey, Ready-To-Eat (RTE)/Ready-To-Cook (RTC), etc.

Commodity-based processing currently makes up nearly 66% of the processed food market. Value-added processing, although currently low, is experiencing faster growth, at a CAGR of 10%. The high growth sectors are dairy, health foods, RTE, organic foods, fruit juices and convenience foods, among others.

### Sector-specific Opportunities

Among the various agricultural products, staples are the largest contributor to sector size, with a 45% share, followed by dairy (18%); meats, fish and poultry (12%); fruits & vegetables (12%); and packaged foods (4%). The remaining three sectors, viz. beverages, bakery, and dry fruits are relatively small in size at present. The growth rate and some of the key products in each of these sectors are listed below.

Key Sectors of the Indian Food Industry Fxhibit 4 Sectors Products Staples/Commodities Wheat and Rice, Sugar, Pulses, Spices, Oils, etc. Milk Powder, Condensed Milk, Flavored Milk, Ice-Cream, Butter, Ghee, Cheese, Infant Milk Food, Dairy Malted Milk Food, etc. Fruits & Vegetables Fresh Fruits & Vegetables, Cut, Dried, Frozen, and Dehydrated Vegetables, etc. Frozen and Canned Meat Products, Sausages, RTC Products, Eggs, Egg powder, etc. Meat, Fish, Poultry RTE: Jams, Pickles, Ketchup, Soups, Snack Foods, Noodles, Pasta, RTC, Biscuits, Pulps, **Convenience Foods** Concentrates, Honey, etc. Dry Fruits Packaged Dry Fruits, Coated and Value-added Dry Fruits, etc. Bakery Bread, Biscuits, Cornflakes, Cakes, Buns, etc. Tea, Coffee, Juices, Carbonated Soft Drinks etc. Beverage

Source: Technopak Advisors

### Staples/Commodities

The total market size for staples was INR 6.25 lakh crore in 2012-13; this is expected to grow at a CAGR of 5% over the next five years. Processed commodities account for about 60% of the total staples market, which comprises rice, wheat, flour, sugar, pulses, spices, and oils. The staples category is expected to register broader distribution and wider production. Secondary processed products such as wheat flour and rice products are also part of India's staple diet; this category is largely dominated by unorganized players. Further, the tertiary processed category is both underdeveloped and underpenetrated in India. Therefore, there is a huge potential waiting to be tapped in both these categories. Also, the high growth of organized retail channels has encouraged retailers to create their own private labels. There will be focus on cost reduction, bringing in economies of scale into production, new product development (particularly with the health and wellness positioning), and branding. Marketing campaigns will increasingly work on the lifestyle positioning and thus strive to create brand loyalty among consumers.



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### Fruits & Vegetables

India is today the world's second-largest producer of Fruits & Vegetables (F&V) with a total output of 227 million tons, and accounts for 15% of the global production of fruits and 10% of the global production of vegetables. The current F&V market in India is worth about INR 1.70 lakh crore which is expected to grow at a CAGR of 10%. Processed F&V accounts for less than 2% of the total F&V market. The growing health awareness, coupled with the time-impoverished lifestyles of urban consumers, is resulting in the migration of consumers from traditional, unprocessed F&V to fruit and vegetable based processed food products. Specific categories that have shown impressive growth in the processed F&V sector are fruit juices, pulps, dehydrated frozen fruits, and vegetable products, pickles, processed mushrooms, vegetable spices, and curried vegetables. Relatively newer categories like fruit-based beverages, nectars, and juices are growing at 15% per annum and have seen increased participation by various organized players. In comparison, traditional fruit based processed items like sauces and pickles are growing at 8%, and also involve participation by semi-organized regional players, besides various unorganized players.

### Dairy

India is the largest milk-producing country in the world with production quantity totaling 128 million tons in 2012. The burgeoning of private investment in dairy processing facilities and the increasing demand for processed dairy products are expected to boost further India's milk production, in the years to come. The size of India's dairy industry is INR 2.53 lakh crore. Key dairy products include processed/packaged milk, UHT milk, milk powder, and other dairy-based, value-added products like butter, cheese, curd, etc. While the overall dairy industry is likely to grow at a CAGR of 8% over the next five years, processed dairy products are likely to grow at a faster rate, of 15%. Further, processed dairy products, which currently account for 24% in value terms of the dairy industry, are expected to contribute 30%, by 2016. The organized dairy market accounts for 30% of the total market, and is dominated by a large number of cooperative players.

### Meat, Fish, and Poultry

At present, the total meat, poultry and marine market is valued at INR 1.63 lakh crore.

### Meat

India is the fifth-largest producer of meat in the world, and accounts for about 2% of the total worldwide meat production. Buffalo meat and poultry account for a majority of the meat produced in India. Buffalo meat production is mainly exportsdriven, with about 75% of the total production being exported. Mutton and lamb are relatively small segments wherein demand outstrips supply, resulting in high prices in the domestic market. Meat consumption per head per annum in India is relatively low, at around ~5 kg as compared to the world average of ~47 kg. Processed meat products constitute around 16% of the total market. The meat industry is likely to grow at a CAGR of 8% over the next five years, while the processed meat industry is growing much faster, at about 20%. The meat sector in India is largely unorganized, with small meat traders following primitive methods and using outdated implements for the slaughter and processing of meat. Key challenges for the industry thus include organization of the meat sector in terms of meeting global quality standards, overcoming regulatory bottlenecks, and increasing the number of organized market players. Establishing disease-free zones for rearing animals is another area of concern.

### Fish

India is the third-largest producer of fish, and second-largest producer of inland fish, in the world, with the fish segment contributing around 1% to India's GDP. Processing is a huge untapped opportunity for marine products. Currently, fish processing is mostly carried out for export markets. Processed marine products exports include conventional block frozen products, individual quick frozen products, and minced fish



products like fish sausages, cakes, cutlets, pastes, etc. Over the past few years, a number of facilities have been developed for processing marine products. With a number of processing plants, freezing units, and cold storages, the seafood processing sector provides employment to a sizeable population in the country. The availability of such new technology as retort pouches has also popularized processed marine foods, e.g. fish protein concentrate, dried products, and fish paste-based products. Such technological interventions also create a wide and unexplored field for investment.

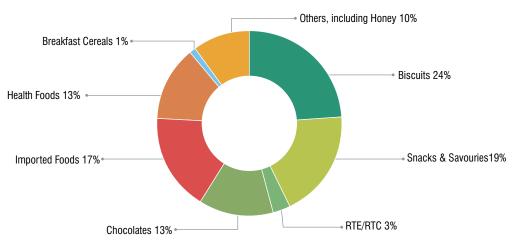
### Poultry

India is the ninth-largest producer of poultry meat in the world. Poultry meat, being the most popular animal protein in the country, is the fastest growing segment in the domestic market with a CAGR of 15%. With such poultry processes as breeding, hatching, rearing, and processing receiving significant boost through investments, the poultry sector in India has been transformed tremendously. The popularization of hybrid poultry breeds have brought in more profits via ensuring more rapid growth and better feed conversion. This has been brought about, by and large, thanks to both private sector and government sector initiatives. When compared to developed countries, the per capita availability of eggs in the country is still very low. Again, whereas eggs are an item of daily use in other countries, Indians have not completely adapted to consuming eggs. Also, vast regional variations are extant within the poultry industry, and independent, small-scale producers account for most of the production. Large regional firms have reported an increase in egg demand and are investing further in scaling up their capacities.

### **Convenience** Foods

Exhibit 5

The increase in the number of educated nuclear families, growing disposable incomes, change in lifestyles and food habits, and a greater number of working women have led to the emergence and growth of convenience food in the past decade. The sector is expected to grow at a CAGR of 12% in the next five years.



### Convenience Foods- Percentage Break-up

Source: Technopak Advisors

### Biscuits

The biscuits industry has grown significantly and emerged as the biggest category under this segment, with a 24% share. The current size of the biscuit industry is estimated to be INR 12,805 crore, which is expected to grow at a CAGR of 8% in the next three years.

### Snack & Savories

The market for snacks in India is estimated to be about INR 10,000 crore. The sector is expected to register a CAGR of 8%, over the next three years. A number of existing companies like Frito-Lay, Parle Agro, and ITC Foods have taken note of this segment, and are targeting consumers through new product offerings.

### RTE/ RTC

The increased penetration of organized retail is expected to significantly increase the size of this nascent category, currently estimated at about INR 2,000 crore. It is expected to grow at a CAGR of 25% over the next three years. The entry of large international companies like Tyson Foods, McCain, etc. has played a significant role in the growth of this market.

### Chocolates

The chocolate sector has grown significantly with the presence of various multinationals such as Cadbury, Nestlé, etc. At present, the chocolate market is estimated to be one of the highest growing categories with an anticipated CAGR of 15%.

### Imported Foods

Today, various imported food products have hit modern retail stores in India, including beverages, spreads, olive oils, cheeses, canned fruits & vegetables, and canned meat and fish, among others. The imported foods segment is estimated at INR 9,700 crore and is growing at an impressive 10%.

### Health Foods

The health focused snack foods category, driven by higher health consciousness among consumers, is estimated to be worth INR 8,500 crore. The ever-increasing demand for healthy food is expected to help this segment register a significant growth, at CAGR of 15%.

### Honey

The branded honey market is growing at a CAGR of 10%, with a current market size of INR 700 crore. India produces 7,000 million tons of honey, out of which 50% is being exported, annually. Major players include Dabur, Jhandu, and Kejriwal Honey.

### Breakfast Cereals

At present, this category is estimated to be worth INR 560 crore, growing at a CAGR of 15%.

### List of Key Players in the Food & Agriculture Sector

Segment	Key Players
Contract Farming	PepsiCo, McCain, ITC, Cargill India, Ion Exchange Enviro Farms, The Global Green Company, Ken Agritech, HUL
Fertilizers	IFFCO, Coromandel Fertilizers, Deepak Fertilizers, DSCL, Mosaic India (Cargill), Chambal Fertilizers
Pesticides	Bayer Crop Sciences, PI Industries, UPL, Dupont, BASF, Monsanto
Seeds	Mahyco, Monsanto, Namdhari, Emergent India, JK Seeds, Raashi, Nunhems, Nuziveedu, Bayer Crop Sciences, Proagro, NSC, Advanta
Farm Machinery	John Deere, Mahindra, New Holland
Allied Technologies	Thomson Reuters, RMSI India
Juices & Packaged Convenience Foods	PepsiCo, Glaxo-SmithKline (GSK), MTR, Mapro Foods, HLL, Dabur, Parle, Nestlé
Milk and Milk Products	Nestlé, Mother Dairy, GCMMF, Dynamix Dairy
Eggs & Poultry	Godrej Agrovet, Venky's, Suguna
Meat & Meat Products	Allanasons, Hind Agro Industries, Al Kabeer
Marine and Aquatic Products	ITC-IBD, Allanasons, Suvarna Rekha
Grain and Cereal Products	ITC Foods, Cargill, Shakti Bhog Foods
Confectionary and Bakery Products	Cadbury, Nestlé, Perfetti, Joyco, ITC Foods, Parry's, Nutrine, Ravalgaon, Britannia, Surya Foods, Mrs. Bector's Foo Specialties
Snack Foods	Frito-Lay, Haldiram's, SM Foods, Monginis Food, ITC Foods

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Exhibit 6

### Key Players in the Agriculture and Food Processing Sector

Source: Technopak Advisors

Note : The above list is indicative, but not exhaustive

### Key Influencers

In India, as well as overseas, consumers' behavior as regards food consumption has undergone significant changes primarily as a result of heightened awareness - about different value added products, brands and cuisines, etc. and a greater willingness to experiment. Consequently, food businesses are undergoing a noticeable shift. Besides the resetting of the demand equation, production capacities and government policies are playing their part in transforming the food business.

### **Huge Production Potential**

Thanks to the diversity in climate, India has the potential for, and produces, a variety of crops, throughout the year. Many of its produce have achieved a worldwide popularity, with the likes of basmati rice, cashews, coriander, tea, apart from vegetables and curries, becoming household names everywhere.

### **Rapid Urbanization**

India witnessed a rapid urbanization thanks to robust economic growth as well as strong private consumption. Further, the urban population is expected to total nearly 37% of India's population by 2025. Again, a noticeable growth in personal disposal incomes has pushed the per capita income above INR 75,000 per annum. The top 20 Indian cities, accounting for only 10% of the country's population, are generating as much as 60% of its surplus income and 31% of its disposable income. The consistent rise in middle class incomes has resulted in a consuming class with change in their basic lifestyle, increasing life aspirations, and higher disposable income.

### **Changing Food Habits and Lifestyles**

Today's consumers display considerable complexity in consumption, given their preference for convenience foods, nutritious, health-conscious diets, and, simultaneously, their adherence to local cuisines as well as a search for new tastes. Again, a multiplicity in the cuisines chosen is no longer seen only when eating-out, these options are now available in everyone's kitchens thanks to the proliferation of RTE and RTC brands as well gourmet food products.

### Huge Production Base

- Abundance of raw material
- Wide variety of produce

### Changing Consumers

- Increasing disposable income
- Increasing health & quality consciousness

### Changing Face of Food Retailing and Food Services

- >2500 super markets have come in to existence in the past two years
- Indian organized Food & Grocery retailing accounts for ~ 69 % of total organized retail

### Momentum in International Trade

- Rising production with increased marketable surplus
- Increased exports

### **Enhanced Government Support**

- Infrastructure Focus
- National Mission for Food Processing
- Financial support in terms of subsidy
- 100% FDI in food manufacturing sector

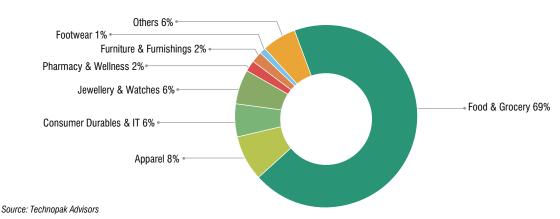




### Growth in Organized Retail and Food Services Sector

India's middle class today represents a burgeoning group of people who are also steadily seeing an upsurge in their disposable incomes. The new age, "modern" retail, comprising shopping malls, departmental stores, and supermarkets, are thus accommodating these new consumers in ever greater numbers. As a result, the Indian retail market is today worth about INR 30 lakh crore of which corporatized retail accounts for around 8%. This is set to grow to 24% of Indian retail market by 2013. Additionally, the food service industry, growing at a CAGR of 10% and worth INR 2.97 lakh crore in 2013, is also propelling the growth of the agriculture and food processing sectors.

Food & Grocery accounts for about 69% of the total retail pie. The proliferation of organized retailing in India is also altering food consumption patterns, promoting imported foods, branded foods, processed foods, and a wider assortment thereof.



Percentage Share of Food in Total Retail

### **Growing Export Opportunities**

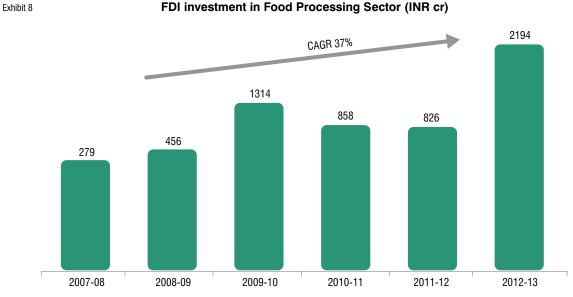
Exhibit 7

The increasing exposure of Indian exporters to global markets and their more frequent interactions with global importers has increased the capability of Indian producers in terms of producing quality food products. The heightened willingness of Indian farmers and exporters to embrace global standards like CODEX and Global GAP, the adoption of new technologies and greater governmental focus strengthens India's case as an exporter of agricultural and processed food items.

In 2012, the value of exports of major food items was INR 1.16 lakh crore and witnessed an annual growth of 40% over the previous year. Food items such as processed vegetables, dairy products, fresh F&V, and non-basmati rice have witnessed significant growth in export. This growth in exports has been aided by significant improvements in product and packaging quality, alongside the increased participation of the private sector.

### **Rising FDI Inflows**

India's economy is second only to China's in terms of being attractive for Foreign Direct Investment (FDI). Further, the food processing sector has only attracted FDI inflows comprising less than 2% of the total FDI inflows into the country. However, thanks to the Indian Government's policy thrust and framing of investment guidelines, FDI inflows into India's FPI have registered a CAGR of 37%, over the past five years. India has been witnessing an increase in investments into companies engaged in dairy and meat processing, and confectionaries, among others.



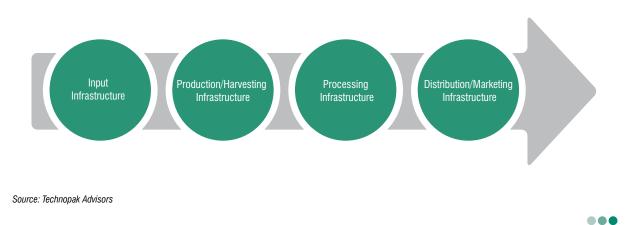
Source: Ministry of Food Processing Industries, Department of Industrial Policy & Promotion

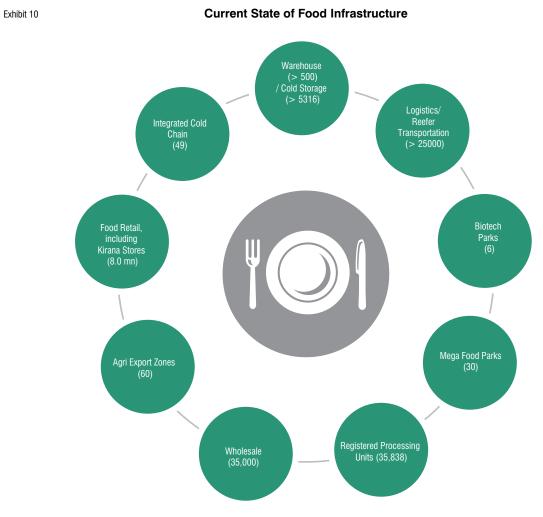
### Infrastructure Support

The creation of adequate food infrastructure remains the major challenge in India's food processing sector. As a result, most of the investments have also been directed towards the food infrastructure segment, from both public as well private sectors.



### Infrastructure across the Food Value Chain





Source: Technopak Advisors

### Favorable Regulatory Environment and Government Support

Establishing the necessary food infrastructure is a major thrust area for the GoI, which has declared agriculture and food processing a priority sector, and introduced a number of policy incentives and progressive measures to set up and modernize food processing units, create infrastructure, enhance investments, and support research and development, and human resource development. The government is inviting private participants and also encouraging public private partnerships to promote the growth of the food processing industry.





### Notable Trends

### Higher Consumption of Horticulture Crops

There is a surge in demand for fruits & vegetables as a result of a shift in consumption. Accordingly, Indian farmers are also shifting production towards horticulture crops to cash in on the growing demand.

### **Emphasis on Healthier Ingredients**

Food processing companies are serving health and wellness as a new ingredient in processed food, given that healthconscious consumers prefer food products with lower carbohydrate content and with low cholesterol edible oils. E.g. zero-percent transfat snacks and biscuits, slim milk, whole wheat products, etc.

### Packaging as a Purchase Influencer and Communicator

Food packaging has enabled today's consumers to look for various options, and compare the value offerings thereof, before making a purchase. From the manufacturer's point of view, such packaging helps in enticing the customer towards packaged food, besides increasing shelf life and aiding product education. In a nutshell, packaging grabs the customer's attention, highlights the product's advantages, and delivers brand authenticity. Packaging has also helped enhance 'carry ability' of products and increase their shelf life.

### A Shift from Usefulness in Processing to Usefulness to Consumers

Product innovation is always needed as consumers not only prefer safe ingredients and additives but also useful ones. The emphasis on usefulness has slowly shifted from being useful in processing, or useful for the manufacturer, to being useful for consumers. This creates opportunities mainly in product innovation, specialized products, and product extensions for the various existing food processors as well as new entrants. Consumers have become aggressive in demanding better, safer, and convenient food products and are willing to pay a higher price for health and convenience.

### **Frozen and Processed Goodness**

Frozen processed foods offer both convenience and nutrition. The increase in spending capacities and the concurrent time-paucity has led to the continuous development of such frozen processed food products as frozen vegetables (e.g. peas, potato, corn, etc.) and such non-vegetarian products as chicken, fish, and meat products.

### Sensible Snacking

Domestic consumers are now tuned in to the greater variety of foods available, thanks to both wider variety in offerings as well as their own international exposure. A case in point is the preference for fully baked snacks over fried snacks.

### **Entry of International Food Processing Companies**

India has whetted the appetites of international food processing majors in the wake of liberalization, and the emergence of organized retail. Again, India's vitality as a sourcing hub is also fast gaining traction, bolstered by such factors as the size of its agriculture sector, the domestic population of livestock, and the competitiveness India offers in terms of costs.

### Product Innovation as the Key to Expansion

It is now the norm for food processing companies to offer value-addition; those who hitherto offered solely milk have now added other dairy products to their repertoire. Here as well, there is competition worldwide, with different companies capturing geographies through innovating to meet local demands in terms of taste. This helps the processors to not only reduce wastage, but also expand uses and realize higher returns.

### Strengthening Procurement via Direct Farmer-Firm Linkages

Contract farming has been operational in India for a long time now; however, the experience of the private sector players involved therein has been a mixed bag of successes and failures. Largely, it has helped both the processing companies, via increasing sales and therefore augmenting their incomes, as well as providing access to better technology and fetching better prices by securing an assured market for Indian farmers. Examples include Nestlé, PepsiCo, Venky's, Milkfed, and Mahagrapes, among others.

### Rising Demand for Indian Products in the International Market

A strategic geographic location and the continuous increase in raw materials production helps India supply cheaper products to other countries. India's exports of processed food and related items rose at a CAGR of 27% between fiscal 2008-12. Also, companies like Haldiram's and Bikarnervala have a presence in over 70 countries, whereby they provide Indian snacks.



### Investment Opportunities

The huge potential offered by both agribusiness as well as the food market has led to a number of Private Equity (PE) investments and also Mergers & Acquisitions (M&A) in the past few years. Within the food sector, while PE investments have grown to 3.8% of total investments in 2012, from 0.2% in 2008, during the same period Venture Capital (VC) investments went up from 0.2% to 1.6%. The dairy sector, sugar, and processed foods, among others, are the key investment-seeking sectors.

### Foreign Direct Investment (FDI)

Exhibit 11

FDI has been growing within the food processing sector and has witnessed a CAGR of 37% over the past five years. From 2010-13, the food processing sector has received FDI inflows of about INR 4,000 crore.

Flow of FDI into the Food Processing Sector

		5	
Year	~INR (cr)	USD (mn)	Annual Growth (%)
2008-09	456	102.7	46%
2009-10	1314	278.8	172%
2010-11	858	188.6	-32%
2011-12	826	170.2	-10%
2012-13	2194	401.4	136%

Source: Department of Industrial Policy and Promotion (DIPP), Gol

The impact of FDI is not limited to magnifying the capabilities of domestic capital infusion; it also enables the inculcation of global best practices within the food sector industry, besides providing an avenue whereby better technology can be acquired.

### Exhibit 12 Private Equity Investments in the Food and Agriculture Sector (2010- 2013)

Company	Investor	Type of Business	Deal value ~(INR cr)
Milltec Group	Multiples Private Equity	Rice Processing	250
VKL Seasonings	India Value Fund	Seasonings	240
Bush Foods Overseas	Hassad Food	Rice	800
Kohinoor Foods	Al Dahra Hordings	Rice	115
Godrej Agrovet	Temasek	Agribusiness	578
Prakash Snacks	Sequola Capital	Snacks	165
Parag Milk	IDFC	Dairy	160
Prabhat Dairy	Rabo Equity	Dairy	140

Source: IBEF, Technopak Advisors

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In addition to the above, Lactalis Group has finalized the acquisition of a 70% stake in Tirumala Milk Products, valued at ~INR 1,800 crore. Some of the M&A's which had happened in the sector are highlighted below.

Exhibit 13

M&A Activities in the Food Processing Sector (2010 to 2013)

Company	Acquirer	Type of Business	Deal value~(INR cr)
United Spirits	Diageo	Liquor	5200
GMR Industries	EID parry	Sugar	633
Jay Mahesh Sugar	NSL Sugars	Sugar	230
Olam International	Hemarus Industries	Sugar	340
Eastern Condiments	McCormick & Co.	Seasoning, Sauce	193
Krishidhan Seeds	Summit Partners	Agricultural Seeds	170
Associated Distilleries	Globus Spirits	Liquor	77
Taraori Rice Mill	Ebro Foods	Food & Beverage	77
Candico India	Keventer Agro	Candy items	61

Source: IBEF, Technopak Advisors

### **Key Investments**

Apart from FDI, there are major investments being made or planned by companies already operating in India, including:

- PepsiCo plans to invest ~INR 33,000 crore by 2020 as it ramps up manufacturing capacity and expands into new products
- Coca Cola anticipates investing up to -INR 30,000 crore by 2020 in order to expand its India operations
- Cadbury India's outlined investment of over ~INR 1,000 crore in the first phase of a Sri City, Andhra Pradesh-located manufacturing plant with 134 acres of land leased for this plant
- Tierra Food India has plans of investing ~INR 7 crore towards product line expansion, at its facility in Kinfra Park, Adoor
- Ruchi Soya Industries and Japan-based J-Oil Mills and Toyota Tsusho have entered into a JV which is expected to supply products to institutional customers by 2014



### Institutional Framework and Government Support



The Indian government has recognized the potential of the food processing sector, and has accordingly put forward several initiatives to boost the quantity and quality of the sector's output. There are various ministries and departments that govern and facilitate the growth of the Indian food and agriculture sector, as listed in *Exhibit 14*.

Exhibit 14

### Institutional Framework in the Indian Food Industry

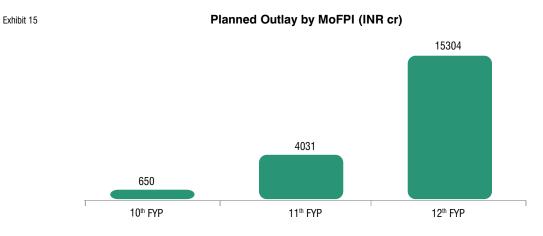
Governing Ministry	Bodies/Boards	Schemes/Acts	Institutions
Ministry of Agriculture	NHB, TMOP, TMNE, SFAC, CDB, NDDB	Post-harvest development, Cold storage capital investment subsidy, Technology development, MIS for horticulture, etc.	NDRI, IIPR, NRCM, ICAR
Ministry of Food Processing Industries	IGBP, NMPPB	Technology upgrading/ modernization, HR, Quality assurance (FPO) and Codex, Strengthening nodal agencies, Backward and forward integration, Infrastructure development (food parks, cold chain)	IICPT, NIFTEM
Ministry of Commerce	APEDA, MPEDA, Spices Board, Tea Board, Coffee Board, EIC, CEPC	Export market development, Infrastructure, AEZ's, Quality, R&D, Transport assistance, etc.	IIP
Ministry of Science and Technology			CFTRI
Ministry of Consumer Affairs, Food and Public Distribution	Directorate of Vanaspati, Directorate of Sugar	Public Distribution System (PDS)	
Ministry of Health and Family Welfare	Food Safety and Standards Authority (FSSA)	FPO, MFPO, VOPO, MMPR, Edible Oil Packaging	FTĽs, NIN
Ministry of HRD	Food and Nutrition Board	National Nutrition	

Source: Technopak Advisors

### Government Focus on Infrastructure Creation (12th Five-Year Plan)

The government is implementing various policies and schemes of food infrastructure development through the  $12^{th}$  Five-Year Plan. The MoFPI will be focusing on three main areas, viz.:

- 1. Infrastructure Development Schemes
  - » Mega Food Parks
  - » Cold Chain, Value Addition, and Preservation Infrastructure
  - » Spillover of Modernization of Abattoirs approved under 11<sup>th</sup> Plan
- 2. Strengthening of Institutions
  - » National Institute of Food Technology Entrepreneurship and Management (NIFTEM)
  - » Indian Institute of Crop Processing Technology (IICPT)
  - » Indian Grape Processing Board (IGPB)
  - » National Meat & Poultry Processing Board
- 3. Quality Assurance, HACCP, R&D, and Promotional Activities



Source: MoFPI

Exhibit 16

### Planned Outlay under the 12th FYP

Figure Vege	Amount Allocated (INR cr)			
Fiscal Year	Infrastructure Development	Food Processing Facilities	R&D, Safety and Quality	Total Plan Outlay for MoFPI
2012-2013	787	546	112	1900.1
2013-2014	1075	959	132.5	2820
2014-2015	1074	1506	160	3258
2015-2016	1115	1723	183	3563
2016-2017	1175	1799	203.5	3763

Source: MoFPI

Considering the importance of infrastructure creation and development in the sector, INR 10,300 crores are allotted towards the same, which is about 66% of the total outlay. This is expected to generate significant investment opportunities within the sector.

### Financial Assistance Provided by MOFPI

Exhibit 17	Financial Assistance Provided by MOFPI
Scheme	Grant Details
Mega Food Parks (MFP)	<ul> <li>Grant in aid@50% of the eligible project cost in general areas and @75% in difficult areas (a maximum of INR 50 cr per project)</li> </ul>
Cold Chain, Value Addition, and Preservation of Infrastructure (ICC)	<ul> <li>Grant in aid @50% of the CAPEX in general areas and @75% in difficult areas (a maximum of INR 10 cr per project)</li> </ul>
Setting Up/ Modernization of Abattoirs	<ul> <li>Grant in aid @50% of the CAPEX in general areas and @75% in difficult areas (a maximum of INR 15 cr per project)</li> </ul>
Technology Upgrading/ Establishment /Modernization of Food Processing Uunits	• Grant in aid@25% of the CAPEX in general areas (a maximum of INR 50 lakh)and @33.33% in difficult areas (a maximum of INR 75 lakh)
Setting Up/Upgrading of Quality Control/ Food Testing Laboratory	• Grant in aid @25% of the CAPEX in general areas and @33.33% in difficult areas)
R&D Programs	<ul> <li>Grant @50% or 70% of equipment cost in general areas and difficult areas respectively</li> <li>Grant @100% of equipment cost to any government organization</li> <li>100% grant in Ministry-sponsored projects</li> </ul>
Quality Certification	<ul> <li>Reimbursement of expenditure @50% subject to a maximum of INR 15 lakh and 75% in difficult areas up to a maximum of INR 20 lakh</li> </ul>
Human Resource Development (HRD)	<ul> <li>Creation of infrastructure facility in academic institutions up to a maximum of INR 75 lakh</li> <li>Food Processing and training centers – grant @ INR 4 lakh of plant and machinery, and INR 2 lakh as seed capital for a single product lines. For multiproduct lines, grant @ INR 11 lakh and INR 4 lakh for capital assistance</li> <li>Entrepreneurship Development Program</li> </ul>

Source: Ministry of Food Processing Industries, GOI

### National Mission on Food Processing (NMFP)

The outlay planned for the National Mission on Food Processing (NMFP) is 45% of the total Plan outlay. The key schemes under the NMFP, which will be implemented by the various state governments through the remainder of the  $12^{\text{th}}$  FYP, are:

- Scheme for technology upgrading/establishment/modernization of food processing industries
- Scheme for cold chain, value addition, and preservation infrastructure for non-horticulture products
- Setting up/modernization/expansion of abattoirs
- Scheme for Human Resource Development (HRD)
- Scheme for promotional activities
- Creating primary processing centers/ collection centers in rural areas
- Modernization of meat shops
- Reefer vehicles
- Food parks

### National Food Security Mission (NFSM)

The government has approved an allocation of INR 12,350 crores under the NFSM, as against an outlay of INR 4,882 crore in the 11<sup>th</sup> FYP.



### **Fiscal Incentives**

In addition, the GoI has been very supportive of private sector participation and has offered rebates in taxation and also subsidies and grants. Some examples are listed below:

- FDI: The GOI has allowed 100% FDI under the automatic route in the food processing sector, in agri-products, milk and milk products, and marine and meat products
- Income Tax Relief: 100% tax exemption is also allowed for up to an initial five years, followed by a 25% tax exemption for the next five years, for new agro-processing industries
- Service Tax: Nil
- Custom Duty: Uniform assessment at a concessional basic custom duty @ 5% for all goods relating to food processing as a part of the project
- Central Excise Duty: Reduced or no excise duty on the majority of food products, equipment, and machinery

While the huge bridge in output between agriculture and food processing is a major cause for concern, the government has increased its spend within this sector to help raise the value of output, the sector's share of the global processed food market, and provide a boost to rural income levels.

### Key Issues and Challenges

The potential of the Indian Agriculture and Food Processing Industry for growth cannot be disputed. However, certain challenges need to be tackled in order to unleash this potential; these include:



### Key Challenges in Agriculture

- Decreasing size of Land Holdings
   Poor Market Linkages
- Inadequate Infrastructure for Storage and Primary Processing



### Key Challenges in FPI

- Lack of Processable Produce
- Processing Equipment and Technology
- Lack of Adequate Manpower
- Inadequate Infrastructure and Supply Chain
   Slower Growth of SMEs

### **Decreasing Land holdings**

The continued decline in the average size of land holdings has put Indian agriculture under immense duress. India's 140 million hectare-wide farmlands are now worked upon by 14 crore farmers, up from 7 crore farmers forty years ago. The costs associated with necessary inputs and bank loans have also shot up in this period, making it difficult to sustain livelihoods purely through agriculture.

### **Poor Market Linkages**

A fragmented supply chain, along with inadequate forward integration, has resulted in suboptimal quality, lower prices, and high wastage of produce at the farm level. For smaller and distant farmers, it is still a stiff challenge to directly access markets and get the desired price for their produce.

### Inadequate Farm and Marketing Infrastructure

The lack of adequate storage and market infrastructure like weighting, auction platform, and packaging has added to the complexity of the problems facing Indian agriculture.

### Lack of Processing-worthy Produce

Indian agriculture is still dominated by the practice of production-driven market supply instead of market-driven production, which leads to an inconsistency in the quality of produce and the supply thereof. Thus, there is a severe need to focus on processing-worthy varieties of produce and ensure a year-round supply of the same.



### **Processing Equipment and Latest Technology**

The quest is on to discover newer methods, technology, and machinery for the food processing industry, with least impact on sensory qualities - color, texture, etc. Therefore, technological progress is necessary for the growth of the food processing sector. The development and diffusion of quality-enhancing and yield-increasing technologies remains a key challenge.





### Lack of Adequate Manpower

At each level in the food processing value chain, there are marked deficiencies in technical knowhow and support. Further, in comparison to the amount of research carried out in this field, there is still a gap in the transference from laboratory to industry. Knowledge flows from academic centers to the centers of commercial manufacturing are very critical.

### Inadequate Infrastructure and Supply Chain

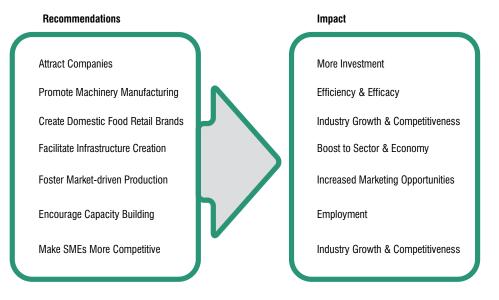
The non-availability of such core infrastructure as high-tech controlled production facilities, grading and packaging units, cold chain logistics, warehousing and integrated processing units, besides an inefficient supply chain, poor transportation, and erratic power supply, are major concerns across the food value chain. The lack of specialized distribution companies for perishable produce and processed food products is another problem that the sector urgently needs to address.

### **Growth of SMEs**

SMEs provide the essential link between the agricultural and industrial segments of the economy by enhancing the value of agricultural production. The main challenges faced by SMEs are the increasingly rigorous quality standards demanded by export markets, and a shortage of technical grade manpower. In addition, SMEs are also facing survival challenges given the highly competitive market environment.

### Our Suggestions

The Indian food processing industry is poised for phenomenal growth in the years to come, given that India is continuously registering increase in production of food grains, fruits & vegetables, and other fresh produce. At the same time, meeting the increasing and varying demands of consumers remains a major challenge.



### Capital Infusion/Investment into the sector

There is a strong need for further capital infusion into the sector. At present, the food processing industry receives low levels of investment as compared to other sectors and accounts for only 1.6% of the total FDI inflow into the country. International manufacturers need to be invited to set up processing facilities and supply chain and distribution infrastructure in India. Multinational food companies who are already in India, e.g. PepsiCo, Unilever, Nestlé, Del Monte, Conagra, Tyson, etc. should be encouraged to put in more investment. Also, there is need to attract visionary and bold entrepreneurs who can invest in the food processing sector. Large Indian corporates have not been taking any interest in the government's flagship schemes like MFP, ICC, etc. There is an urgent need to understand their reservations against investing, and develop measures to attract investment from them into the sector. However, with the government's outlay of INR 15,000 crore for food infrastructure creation over the next five years, the sector is bound to generate huge investment opportunities, making it ripe for private sector participation.

### Market-driven Production Planning

Given that agricultural production in India is still supply-driven rather than market-driven, collective endeavors are needed from all stakeholders, right from the R&D organizations, extensions, market players, and governmental agencies. Farmers will also have to play an active role in the adoption of new technologies shared by the public and private extension systems.

### Strengthening Food Infrastructure

In order to eliminate the extant shortcomings within the Indian food value chain, it is imperative that the necessary infrastructure be created forthwith. Such creation should primarily seek to redress the shortfall in:

• Production Infrastructure: With the target being the ramping up of processing-worthy production, such fundamental needs as quality germplasm, seed multiplication facilities, agricultural inputs (e.g. seeds, plant nutrients, and plant protection chemicals), irrigation infrastructure, controlled production facilities, farm mechanization, etc. must be met all year-round.



- Processing infrastructure: It is also mandatory to have farm-level, post-harvest facilities like cool chambers, grading and sorting facilities, storages, pack houses for back-end support, and integrated industrial processing units for processing and value addition.
- Distribution infrastructure: Finally, supply chain infrastructure including warehouses and cold chain logistics need to be bolstered, with the objective of ensuring perennial usage across the commodity spectrum without any compromise in utilization efficiency

### Manufacturing and Technology Impetus

Most foreign machinery manufacturers are raring to set up operations in India, including providers of cold chain technologies, advanced processing technologies, commercial kitchen equipment, etc. Such manufacturers must be welcomed and encouraged to set up base. This will help achieve cost and operational efficiency in food processing. However, this should not be done at the cost of domestic machinery suppliers, who also need to be protected.

### **Create and Develop Indian Food Services Retail Brands**

Modern Indian food retail is going through a challenging phase, but is working towards building a robust supply chain network. There are many successful examples of multinational food services players such as McDonalds, KFC, Domino's Pizza, etc. As the food processing and food services industries are interrelated, there is need to encourage and develop domestic expertise, including suppliers, entrepreneurs, and retailers in food services retailing.

### **Capacity Building**

Technology transfer, capacity building, and skill upgrading are critical for the growth of the industry. Strong linkages need to be built to transfer technologies developed in isolation, at different public and private research organizations to the targeted beneficiaries. Manpower training needs to evolve from being simply about increasing production, to educating workers about bringing in efficiencies into businesses. By 2022, the food processing industry requires a total of 178 lakh workers, with an annual skilled manpower demand of about 74 lakh.

### Making SMEs More Competitive

Currently, SMEs lack the financial muscle to compete seriously with other players in their sectors. They require significant support in such areas as skill upgrading, certification, capacity building, establishing market linkages, etc.

### Conclusion

India's reputation as a land of contradictions is perhaps best evidenced by the gap between its production capabilities and processing abilities. The country's much-vaunted production potential is still unrealized. The opportunity in food processing industry is vast, but so are the challenges that ail the sector. These challenges are not new ones, nor are the solutions unknown.

There is enhanced investment and participation by domestic and international players within the sector which adds to its growth and development by creating space for new capital infrastructure, better technology, and improved product quality. At the same time, India needs to gear up to investor expectations by ensuring support infrastructure and policy backing.

While the export market has always been critical in terms of quality and hygiene, the domestic market should no longer be taken for granted. Encouragement and support to domestic food services brands will strengthen all food processing units, including SMEs. Due to globalization and the adoption of international food safety norms, there is an increased need for food processing units to adhere to quality standards in both the domestic as well as export markets.

To sum, the agriculture and food processing sectors need to become self-sustainable and viable as business propositions so that stakeholders are not left to the uncertainties of financial resources, policies, and markets.

# 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 five major divisions, which are Fashion (Textile & Apparel), Retail, Consumer Products & E-tailing, Education, Food Services & Agriculture, and Healthcare.

### 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 and 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 and shopper understanding applied to offer implementable business solutions

### **Our Other Divisions**

### Food Services & Agriculture

Technopak's Food Services & Agriculture team comprises of established domain experts who build and enhance the business performance of organizations which are either working in the segment or are willing to enter it. Our end-to-end solutions are customized as per the business's requirements and capabilities. We continuously strive to create strong industry relationships and work for a global footprint by delivering a wide range of services to organizations that operate or wish to operate in the Food and Agriculture sector, in India as well as internationally.

### 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 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's 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.

## About PHD Chamber

The PHD Chamber as one of the prestigious Chambers. Being 108 years old it is one of the oldest Chamber's in the country. We have had the milestone opportunity of working with the business houses, Government in the centre State, Communities, International bodies and also reaching the smallest industrial clusters with our programmes on technology transfer and information sharing. Since development is an area we are closely working with the stakeholders to impart training and also certifying. Our focus areas are Infrastructure, Industrial Policy, Education & Skill Development, Health and Rural Development & Agribusiness. Besides housing the Secretariat, the prestigious PHD House, headquarters of the Chamber, also has exquisite Conference Rooms, an excellent 250-seater auditorium, Business Centre, and a host of other facilities to cater to the Members' business requirements. Conference Manager of the Chamber will be happy to assist you on this.

"PHD Chamber is more than an organization of the business community, as it lives by the chosen motto 'In Community's Life & Part of It' and contributes significantly to socio-economic development and capacity building in several fields through its research-based policy advocacy role, positively impacts the economic growth and development of the nation amongst its key thrust areas. In a nutshell, the Chamber acts as a catalyst in the promotion of industry, trade and entrepreneurship. The Chamber also circulates its consolidated monthly generic publication "PHD Bulletin" amongst all its members, International MOU Partners, Diplomats and Govt. Officials, is an insightful issue on all the day-to-day functioning and various activities undertaken by the Chamber. "

The Chamber caters to the business, economical and social interests of Chhattisgarh, Bihar, Delhi, Haryana, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Madhya Pradesh, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand and the Union Territory of Chandigarh. The Chamber comprises of over 2000 corporates as its direct members and serves more than 48,000 indirect members through 200 Association Members and 8 Secretarial Affiliates. The Chamber operates through its Expert and State Committees and Task Forces on various important subjects which are supported by an effective Secretariat and allied infrastructure, including a full-fledged Library, Data Bank, Information Cell, Computer Cell etc. PHD Chamber reconstitutes its various Expert/State Committees every year. These Committees consist of experts drawn from amongst the membership and also special invitees. PHD Chamber attaches great importance to these Committees as it draws upon the knowledge and expertise of persons nominated on such Committees for rendering effective and result oriented services to its membership.

### Abbreviations

MoA: Ministry of Agriculture MoFPI: Ministry of Food Processing Industries GoI: Government of India FPI: Food Processing Industries RTE: Ready to Eat RTC: Ready to Cook F&V: Fruits & Vegetables PE: Private Equity SME: Small and Medium Enterprises NHB: National Horticulture Board TMOP: Technology Mission On Oilseeds and Pulses TMNE: Technology Mission for Integrated Development of Horticulture in the North Eastern States SFAC: Small Farmers Agri-Business Consortium CDB: Coconut Development Board NDDB: National Dairy Development Board IGBP: Indian Grape Processing Board NMPPB: National Meat and Poultry Processing Board FSSA: Food Safety and Standards Authority EIC: Export Inspection Council CEPC: Cashew Export Promotion Council AEZ: Agri Export Zones NDRI: National Dairy Research Institute IIPR: Indian Institute of Pulse Research NMPPB: National Meat & Poultry Processing Board ICAR: Indian Council of Agricultural Research IICPT: Indian Institute of Crop Processing Technology NIFTEM: National Institute of Food Technology Entrepreneurship and Management IIP: Indian Institute of Packaging CFTRI: Central Food Technological Research Institute FTL: Food Testing Laboratory NIN: National Institute of Nutrition IBEF: India Brand Equity Foundation INR: Indian Rupee FDI: Foreign Direct Investment HACCP: Hazard Analysis and Critical Control Points R&D: Research & Development CAGR: Compound Annual Growth Rate GDP: Gross Domestic Product

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