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**Agro food-processing: A sunrise sector of the Indian economy**

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**ABSTRACT**

*India is the largest producer of milk, fruits, pulses, cashew nuts, coconuts and tea in world, and accounts for 10% of the world fruit production. Confederation of Indian Industry (CII) has estimated that the food processing sector has potential of attracting US\$ 33 billion (Rs.1,50,000 Crores) of investment in next ten years. The Indian domestic food market is expected to grow by nearly 40% of the current market size to Rs. 12,900 billion by 2015 and Rs. 17,200 billion by 2025 .The state wants to fully utilize the untapped potential of the sector, and generate more revenue from the sector. If the policies of government towards food processing industry are analysed, there also it comes out that according to the vision 2015, the food processing industry is moving towards higher avenues, for example increase in the level of processing of perishables from 6% to 20%, value addition from 20% to 35%, increase in share of global food trade from 1.5% to 3%.These targets can be achieved if policies are implemented properly and international standards match then food processing industry can become the leading industry of India's economy, generating huge employment opportunities and increase in Income.*

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## **Agro Food-processing: A sunrise sector of the Indian economy**

### **Introduction**

With agriculture at the core of Indian economy and more than two-thirds of the population dependent on farming, a developed Food Processing sector can be a strong link between agriculture and the consumers. Government's high priority to the sector coupled with a growing consumption-led demand is leading to a fast pace growth in the sector. A developed Food Processing sector will help overcome the biggest challenges in front of India:

- Low farmer income and high subsidies
- High wastage along the value chain
- Poor hygiene and safety standards

Food processing is the set of methods and techniques used to transform raw ingredients into food or to transform food into other forms for consumption by humans or animals either at home or by the food processing industry. Food processing is a large sector that covers activities such as agriculture, horticulture, plantation, animal husbandry and fisheries. It also includes other industries that use agriculture inputs for manufacturing of edible products. The food processing industry is made up of primary, secondary and tertiary food processors.

### **The agro Industry is broadly categorized in the following types:**

- Village Industries owned and run by rural households with very little capital investment and a high level of manual labour; products include pickles, papad, etc.
- Small scale industry characterized by medium investment and semi-automation; products include edible oil, rice mills, etc.
- Large scale industry involving large investment and a high level of automation; products include sugar, jute, cotton mills, etc

### **Historical Background**

The development of agro-based industries commenced during pre-independence days. Cotton mills, sugar mills, jute mills were fostered in the corporate sector. During the post-Independence days, with a view to rendering more employment and using local resources, small scale and village industries were favored. The increasing environmental concerns will give further stimulus to agro based industries. Jute and cotton bags, which have begun to be replaced by plastic bags, have made a comeback. It is the right time to engage in mass production of low cost jute/cotton bags to replace plastic bags.

The agro industry helps in processing agricultural products such as field crops, tree crops, livestock and fisheries and converting them to edible and other usable forms. The private sector is yet to actualize the full potential of the agro industry. The global market is mammoth for sugar, coffee, tea and processed foods such as sauce, jelly, honey, etc. The market for processed meat, spices and fruits is equally gigantic. Only with mass production coupled with modern technology and intensive marketing can the domestic market as well as the export market be exploited to the fullest extent. It is therefore imperative that food manufacturers understand changing consumer preferences, technology, with modernization, innovation and incorporation of latest trends and technology in the entire food chain as well as agro-production, the total production capacity of agro products in India and the world is likely to double by the next decade.

### Processed Food Segment

The processing level of the agro industry may be at the primary, secondary or tertiary stage. In the case of hides and skins, India exports largely semi-processed items whereas in coffee/tea, the exports are mostly in secondary stage by way of fully processed bulk shipments without branding/packing. Exports at the tertiary stage mean branding and packaging the product that are ready for use by the consumer.

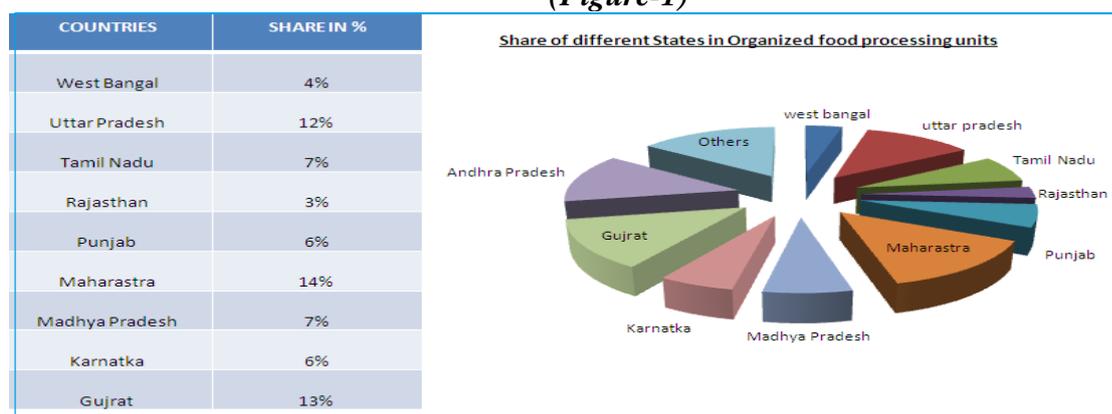
A few years ago, companies struggled to sell packaged foods. But now it is much easier to break into the Indian market because of a younger population, higher incomes, new technologies and a growing middle class, estimated at 50 million households. An average Indian spends around 53 per cent of his/her income on food. The domestic market for processed foods is not only huge but is growing fast in tandem with the economy. It is estimated to be worth \$90 billion. Processed Food Manufacturing companies are required to be persistent and must adapt products to the Indian cultural preferences.

### Other Segments

- Dairy product is another area where there is enormous potential. No doubt the country has made tremendous strides in the last 20 years in production and processing of milk and milk products. But the fact remains that only 15 per cent of all the milk produced is processed. Today, a large number of people suffer from diabetic or cardiac ailments and availability of fat free milk, fat free curd and sugar free food is poor. A simple product like soya milk is not produced in adequate quantity.
- Fish and shrimp have good export potential but there is an immense lack of cold storage and modern processing facilities. For instance fish production is around six million tonnes a year and the frozen storage capacity spread over 500 units is only one lakh tonnes.
- Another area is herbal medicine. It is being increasingly realized the world over that herbal drugs do not have any side effects. India has a good number of tried and tested herbal products in use and what is required is rigorous quality control, proper packaging and a brand name.

### Food processing Industries in different states

(Figure-1)



Source: J Food Process Technol.

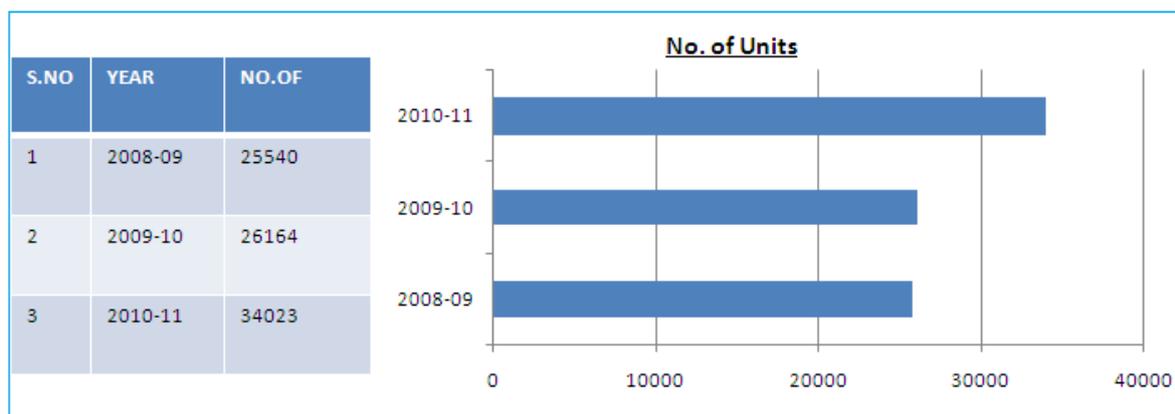
Major food processing states in India are Andhra Pradesh (13.4% of India's food processing industry, and a centre for fruits, vegetables, grains and livestock products viz. Poultry, dairy, fisheries, meat, etc.), Gujarat (12.7%, and a centre for edible oils and Dairy), Maharashtra (14%, and a centre for fruit, vegetables, grains, and beverages), and Uttar Pradesh (12%, across almost all product categories)

Figure 1 demonstrates that there is uneven development of food processing industries in India; most of the states have not fully capitalised their resources, and most of the produce is getting waste. This figure also demonstrates the fact that there is huge gap between numbers of food processing industries present in different states

One of the sectors which is attracting a huge attention from global market players, as well as from domestic players is fruit and vegetable processing sector. There is a sudden surge in demand for these products and market is trying to cope up with the demand. India is the second major producer of fruit and vegetable after China, but our fruit and vegetable processing industry is making a very slow progress. In last 16 years, only 2068 new licenses have been issued for the fruit and vegetable processing industries, marking only 50% rise in the number of industries. These facts again prove that there is higher preference for fresh fruit and vegetables. (Figure 2)

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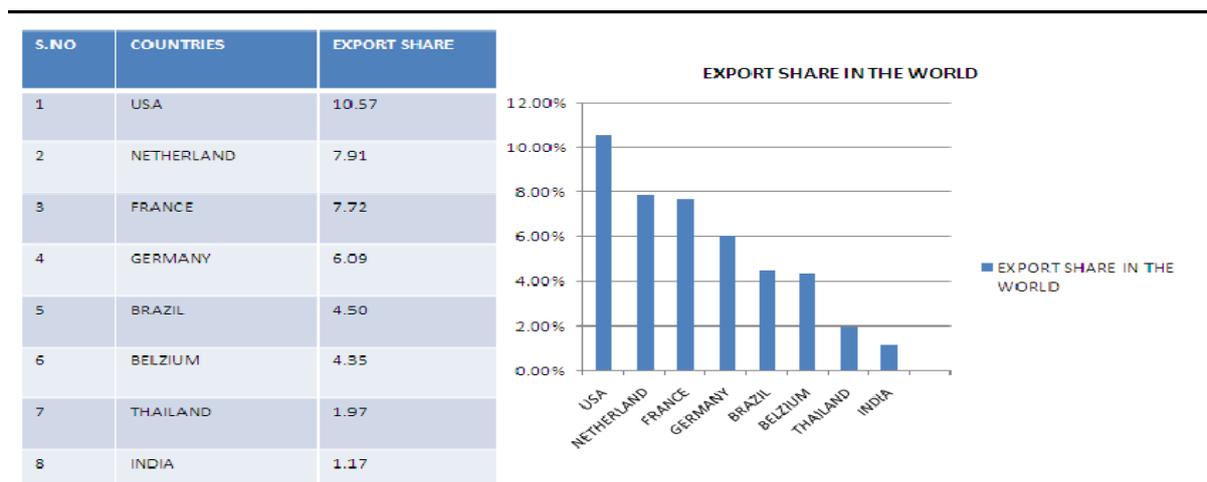
Issued Licenses for the fruit and vegetable processing industries from 2008-2011



Source: Integrated Agribusiness Development Policy 2011

**Export Share in the world:** At present, our share in exports of processed food in world trade has remained at about 1.5% or Rs. 16 billion [10]. Competitiveness of Indian export items are coming down, eg. India slipped from first to third rank in tea export. It is no longer competitive even with Vietnam in marine products and spices. Indian exporters are largely small scale, often undercut each other, export low value-added products to small traders/agents overseas or bulk packaged commodities for reprocessing and re-packaging overseas where real value addition takes place. According to Annual Report of MOFPI, 2008-09, India produces 105 million tones of milk, 150 million tones of fruits and vegetables, 485 million Livestock, 230 million tons of food grain, 7 million tons of fish, 489 million poultry and 45, 200 million eggs, and still our presence at world stage is even less than 1.5% (Figure 3).

Figure -3: Exports Share in the World (in %)



Source: Ministry of food processing.

**Government’s efforts:** Ministry of food processing industries has allocated following budget for 2014-15 to promote the food processing sector in India.

**Ministry of Food Processing Industries  
Budget Allocation for 2014-15**

S.No.	(PLAN) Scheme /Sub Head	Allocation	(Rs. Crore)
1	Infrastructure Development		
	a) Mega Food Park	120.00	315.00
	b) Cold Chain, Value Addition & Preservation Infrastructure	160.00	
	c) Abattoir	35.00	
2	Technology Upgradation/Establishment/Modernisation of Food Processing Industries (Spillover)		160.00
3	Quality Assurance, Codex Standard , R&D and other Promotional Activities		36.00
4	Human Resource Development (Spillover)		4.00
5	(NMFP)-National Mission on Food Processing		180.00
6	(i) Strengthening of Institutions-Grants-in-Aid (Revenue)		31.20
	(ii)Grants-in-Aid for creation of Capital Assests (Revenue Section)		36.20
	(iii)Economic Services (Revenue Section)		7.60
	<b>Total</b>		<b>770.00</b>

Source: Ministry of food processing industries

**FICCI survey identified top five challenges which need immediate action to stimulate the growth of the sector:**

**1. Inadequate Infrastructure Facilities:**

As per the survey maximum percentage of respondents ranked inadequate infrastructure as the top most concern hindering the growth of the sector accounting to 44.25% of weighted response. The inadequate support infrastructure which is the biggest bottleneck in expanding the food processing sector, in terms of both investment and exports includes: long and fragmented supply chain, inadequate cold storage and warehousing facilities, road, and rail and port infrastructure. Also, lack of modern logistics infrastructure such as logistics parks, integrated cold chain solutions, last mile connectivity, dependence on road over rail, customized transportation, technology adoption (barcoding, RFIDs) and government support via incentivizing private public partnerships are some of the lacunae that exist in supply chain & logistics sector in India.

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## **2. Absence of Comprehensive national level policy on food processing sector:**

The food processing sector is governed by statutes rather than a single comprehensive policy on food processing. India urgently needs a national food processing policy which incorporates tax breaks for the sector. The policy to be effective will have to be comprehensive and adopt a number of legislative, administrative and promotional measures. The survey showed absence of comprehensive national level policy on food processing sector as the second most critical factor hampering Industry's growth, receiving 34.46% of weighted response. The respondents felt that policy should evolve through detailed discussions between all the stakeholders across the entire value chain on pan India basis and should promote the development of viable agri-business and agro-industry models based on different agro-climates and regions.

## **3. Food Safety Laws & Inconsistency in State and Central policies:**

The Indian food regulations comprise various food policies that have been enacted at different points of time, and are under the ambit of various ministries of Government of India (GOI). Historically they were introduced to complement and supplement each other in achieving total food sufficiency, safety and quality. The result is that the food sector in India is governed by a number of different statutes rather than a single comprehensive enactment. This incremental approach has led to incoherence and inconsistency in the food sector regulatory scenario. In addition the multiplicity of ministries and administering authorities at both the central and state level has resulted in a complex regulatory system that is not well integrated adding an additional burden on the food industry. The respondents of the survey identified food safety laws as the third critical factor hampering Industry's growth, receiving 34.46% of weighted response and Inconsistency in state and central policies as the fourth major challenges for food processing sector accounting for 28.08% of weighted response.

## **4. Lack of adequate trained manpower:**

Many positive developments in the food processing sector have also resulted in the apprehension about the emerging skill shortages due to mismatch between the demand for specific skills and available supply. In fact, of late, shortage of skilled, semi-skilled and unskilled workers has emerged as a critical factor impacting the competitiveness of Indian food industry. The FICCI survey showed that lack of adequate trained manpower was also a major hindrance to the growth of the sector, accounting for 25.53% of weighted responses making it as fifth most important item of concern. At each level in the value chain, there are strong deficiencies in technical knowhow and support.

According to recent FICCI survey on skill demand in food processing industry, it has been observed that a majority percentage of organizations are dissatisfied with the skills of the available trained manpower. For instance, 58% of the respondents were dissatisfied with technical skills and knowledge needed for the job. Also 72% showed discontent with employees' ability to use appropriate and modern tools, equipment, and technologies specific to their jobs.

## **Conclusion**

The growth of food processing companies has been sub-optimal because of high cost, low level of productivity, high wastage and lack of competitiveness of Indian food products in the global market. Therefore, to fully leverage the growth potential of the sector, current challenges that are being faced by the industry need to be properly addressed and steps need to be taken to remove the bottlenecks hampering the sectoral growth. FICCI survey has thus acted as a first step in identifying these challenges, thus providing a roadmap for all the stakeholders to work on, and thus contributing in realizing the immense potential of this industry.

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India is the second largest producer of food in the world. Whether it is canned food, processed food, food grains, dairy products, frozen food, fish, meat, poultry, the Indian agro industry has a huge potential, the significance and growth of which will never cease. Sea fishing, aqua culture, milk and milk products, meat and poultry are some of the agro sectors that have shown marked growth over the years. Linkages between members of the food supply chains and prevailing policies and business environments to take advantage of the global market.

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