

Growth and Achievements of Food Processing Industries in India

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Abstract

The Food Processing sector has great significance in India's economic growth and development as it establishes a strong linkage between the industry and agriculture sector. It also plays a strategic role by connecting the Indian farmers to the consumers in the domestic as well as global market. This paper makes an effort to study the growth of food processing industries in India and to analyze the achievements of these industries with respect to trade, employment and inflow of foreign direct investment. The study is analytical in nature, based on secondary data collected from various research papers, reports and publications. However, the descriptive statistics like percentage, table, diagram and growth rate etc are used to analyze the data. The study found that the share of Gross Value Added of Food Processing Industries to all India Gross Value Added has been rising continuously from 1.3% in 2013-14 to 2.08% in 2018-19. In 2018-19, the value of the processed food exports of India was worth of US\$ 35.30 billion which accounts for 10.69% of its total exports (i.e. US\$ 330.07 billion). Further, the inflow Foreign Direct Investment has increased by 468.14% from Rs 198.13 crore in 2000-01 to Rs 4430.44 crore in 2018-19. Similarly, this sector has also increased the generation of employment of people from 15.05 lakh persons in 2007-08 to 19.40 lakh persons in 2017-18. Hence, this sector has impacted positively in increasing employment, making trade surplus and attracting more foreign direct investment. The study recommends that the government should take more vibrant policy measures for the growth and development of this promising sun rise industry in the country.

Keywords: Food Processing Sector, Trade, Employment, Growth of Industries, Indian Economy

Introduction

The importance of industries in general and the food processing industry (FPI) in particular have significant role in the development of Indian economy. The FPI has greater significance in India's economic growth and development as it establishes a strong linkage between the industry and the agriculture sector. The FPI of India has been highly contributing to its economic development via increasing share to Gross Domestic Product (GDP) (Shelly and Kaur, 2015). The FPIs has opened up the wide opportunities in connection with production, consumption, employment and generation of income in India. As it establishes a synergy among agriculture, industry and consumer, it can directly affect to the improvement of nutrition of foods, reduce wastages, crop and product diversification in agriculture

and industry, changes in consumer's food preferences; ensure value addition of agricultural products, export earnings and assured price to farmers. The FPIs has a major role to play by connecting the Indian farmers to the consumers in the domestic as well as global market.

Indian consumers by tradition used to purchase the unprocessed and fresh food items to consume. They get more satisfaction if the food items are cooked or processed at home or restaurants. That's why they were reluctant to take packaged food items assuming its impurity, adulteration and less taste. Thus, the growth of Food Processing Industries was limited in the country even after independence. But with the passage of time and increasing job culture of women, the peoples' choice and preferences have changed towards the packaged and processed food items. Now people are very cautious

about health, time and nutritional content of food items. Therefore, the demand for processed food has increased tremendously among the young masses in India and hence the growth of FPIs is highly essential for the country.

Further, the demographic structure of India also supports to the growth and importance of FPIs in the country. The large size of youth population i.e. 604 million under the age of 24 (out of 1.22 billion total populations in 2011) also results to the increase in overall food consumption in India (GOI, NSSO 2011). It also directly affects to the increasing demand of nutraceuticals or functional food in the country. Besides, the rising of urban population also increases the food items demand specifically towards branded, packaged and ready to eat foods in each year. All such contributes to the production and supply of processed food items by establishing more FPIs in India. In fact, the FPIs command a lot for solving all such problems in years to come in India (Mukherjee et al 2013).

Review of Literature

The FPI is considered as most promising industry in India. It is also one of the biggest and more rapidly growing industries of the country in terms of growth, production, consumption and trade aspects (Sarangi, u.d.). The inflow of Foreign Direct Investment (FDI) plays a prominent role in the growth, development and renovation of the faster growing FPIs in India (Shelly and Kaur, 2015). The FPI is the fifth largest industry in India in terms of production, growth, consumption and export. Though it is a faster growing industry, but its growth is sub-optimal due to cost inefficiency, low level of productivity and high wastage. Besides, its potential growth is restricted due to the lack of quality of produce and competitiveness of FPIs in the international market (Murthy and Yogesh, 2014). The productivity level of FPI in India is very low in spite of having strong base for its growth and expansion, easy availability of inputs and other requisites. Similarly, India can't maximize the trade benefits of its food products as it has only 1.4% share of the world food trade with a meager amount of trade value i.e. worth of USD 13.7 billion (FICCI SR, 2010). The importance of promoting FPIs in India is realized to increase the farm income by enhancing the demand for agricultural produce. That's why Government of India has been taking several steps and initiatives to make India a hub of Global Food Factory and Global Food Market. The share of India's food trade to global food trade is hardly around 1.5 percent despite it is a leading producer of many agricultural produces in the world (Ghosh,2014). India's FPIs have been lagging behind in comparison to the global food producers as the cost of

production is higher and these industries often fail to implement all standard global food safety measures and enhancing and maintaining quality at par with global level especially for small and medium exporters of processed and fresh food (Rajneesh et al.,2014).

The food processing industries have the strong potentiality to enhance the productivity of some important food items like fish, milk, fruit and vegetables by providing farm extension services to their suppliers or through contract farming (Mukherjee et al 2013). From the review of the above existing literature, it is found that the few works have done to analyze the economic benefits of FPIs in India. Besides, all the above studies have focused on the growth aspects FPIs without focusing on the problems of slow growth of this sector in spite of its huge potential to increase the employment, production and attracting more FDI to the poor country like India. That's why the question comes to the mind of the author that; whether the growth of FPIs generates more employment in India? Are the FPIs able to generate potential trade benefits of this sector?

Objectives

The broader objective of this study is to familiarize the reader with the prospective industries in India. This could encourage some professionals and entrepreneurs to explore the sector and start their own enterprise. However, the specific objectives of this study are:

1. To study the growth of food processing industries in India.
2. To analyze the achievements of food processing industries in India with respect to trade, employment and inflow of foreign direct investment.

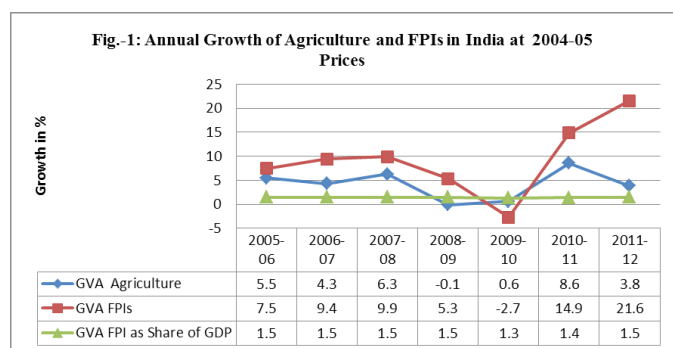
Methodology

This study is analytical in nature and based on secondary data collected from various research papers, reports submitted by various agencies and government data sources. It is an explorative analysis. The growth of food processing industries is analyzed in this paper with respect to Gross Value Added (GVA) of FPI vis-a-vis the GVA of agriculture in India. The growth of FPIs is studied in two different time periods, firstly, from 2005-06 to 2011-12 at 2004-05 prices and secondly, 2012-13 to 201-19 at 2011-12 prices. Similarly, the achievements of FPIs are analyzed by considering some selected variables such as foreign trade, inflow of foreign direct investment (FDI) and generation of employment by these industries. Besides, the descriptive statistics like percentage, table, diagram and growth rate etc. are used to analyze the data.

Results and Discussion

Growth of India's Food Processing Industries (FPIs)

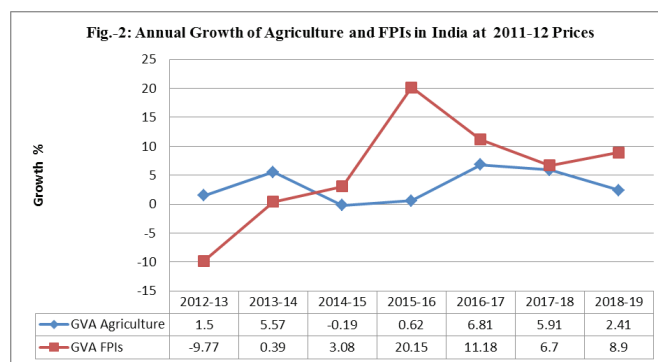
The growth of FPIs is essential in order to increase the supply chain of processed food items and to meet the demand of the ever increasing India's gigantic size of population. The growth of FPIs in India has analyzed in two different time periods i.e. from 2005-06 to 2011-12 at 2004-05 constant prices and from 2012-13 to 2018-19 at 2011-12 prices. The gross value added (GVA) of agriculture sector shows a fluctuating figure from 2005-06 to 2011-12 whereas the GVA of FPIs shows a positive trend except for the financial years 2008-09 and 2009-10. However, the growth of higher GVA of FPIs over agriculture indicates a positive sign for utilizing more agricultural produce by this sector. The detail growth of FPIs in terms of GVA has been depicted in Fig.-1 and Fig.-2. The growth of GVA FPIs is closely associated with the inflow of FDI to this sector in India. The growth of FPIs in India is also attributed to the increasing plan outlays during 10th and 11th five year plans (FYP) for this sector. The plan outlays of Rs. 2613 crore were made in 11th plan for creating food related infrastructures in this sector like food parks, mega food parks, integrated cold chain facility, packaging centre, value added centre, irradiation facility and setting up/modernization of abattoirs etc. (AR, MoFPIs-2009-10). But the GVA of FPIs is not satisfactory in first three years of 12th FYP. Nevertheless, the GVA FPIs increased in 2015-16 and 2016-17 by 20.15 and 11.10 per cent respectively. This shows that the growth of GVA FPIs is not satisfactory in from 2012-13 to 2018-19 as comparison to the increasing population and rising demand of processed food items among young masses. The youth population in the country is in the trap of rapid change in life style and taste, fashion and health cautiousness.



Source: Author

The Food Processing Sector has been growing at an Average Annual Growth Rate (AAGR) of around 10 per cent during 2014-15 to 2018-19 as compared to 3.11 per cent AAGR of agriculture sector at 2011-12 prices. However, the importance of food processing sector

has been greatly realized in the Indian economy as it constituted 8.98% and 11.11% of GVA in manufacturing and agriculture sector respectively in 2018-19 at 2011-12 prices. This is possible mainly due to the abundant and cheap supply of raw materials, better growth in agriculture sector, rising demand of processed food items and very encouraging incentives and initiatives taken by government for the growth of this sector.



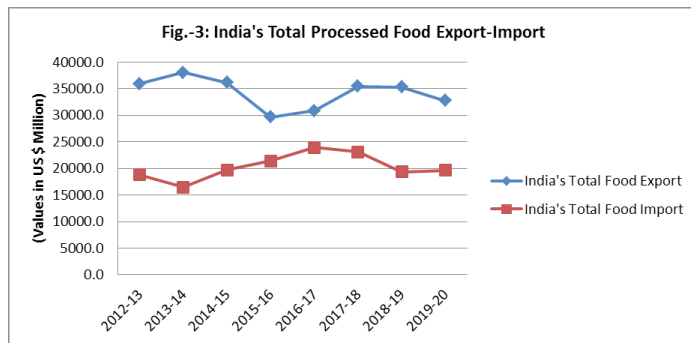
Source: Author

Besides, the share of GVA FPI to all India GVA has been rising continuously from 1.3% in 2013-14 to 2.08% in 2018-19 (AR 2018-19, MoFPI, GOI). There is no dearth of supply of raw materials for the growth and expansion of FPIs as India is the leading producer of Milk, Ghee, Pulses, Ginger, Bananas, Guavas, Papayas and Mangoes and second leading producers of rice, wheat, vegetables and fruits. This will be a base for the establishment of new FPIs or expansion of existing ones like edible oil industries, beverages, bottled drinks etc. The requirement of cold chain is on high demand in the economy. The cold chain will be a strong driving force for establishment of FPIs in the different parts of the country. Unfortunately, India is lacking in development of cold chains for different raw material/agricultural produce which are highly discernible for FPIs. For example, there are 250 nos. of existing integrated pack houses against the necessity of 75,000 nos., 32 million tonnes cold stores (bulk and distribution hubs) against the requirements of 35 million tonnes and 800 nos. of ripen chambers against the demand of 9000 nos. by the end of 2019-20. However, to give a heavy boost for accelerating the growth of this sector, the Government of India launched Pradhan Mantri Kisan Sampad Yojana (PMKSY) on 3rd May 2017. It is a comprehensive package meant for the creation of modern infrastructure with efficient supply chain management from farm to retail outlet. The schemes like Mega Food parks, Integrated Cold Chain and Value Addition Infrastructure, Creation / Expansion of Food Processing & Preservation Capacities, Infrastructure for Agro-processing Clusters and Food Safety and Quality Assurance Infrastructure were implemented under PMKSY.

Achievements of Food Producing Industries in India

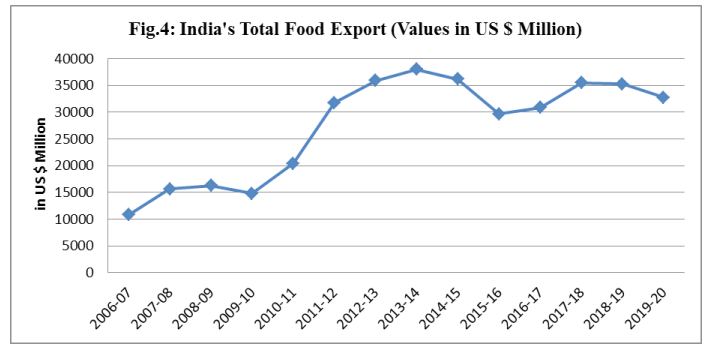
A. Trade Benefits

The achievements of FPIs can be aptly analyzed by taking into account of its trade benefits to the nation. It is found that India has achieved trade surpluses in FPI sector. The Fig.-3 depicts India's total processed food exports and imports from 2012-13 to 2019-20. In each financial year India enjoys trade surpluses. This trade surplus can be used to meet our capital deficiency in some extent. India has witnessed 2.61% share to world's total food export in 2014 which has slightly reduced to 2.31% in 2018. Similarly, its import share to world's total food imports has reduced marginally from 1.32% in 2014 to 1.30% in 2018. In 2018-19, the value of processed food exports of India was worth of US\$ 35.30 billion which accounts for 10.69% of its total exports (i.e. US\$ 330.07 billion).



Source: Author

The five leading exported food items are cereals (23.12%), Fish and Crustaceans, Mollusks and other Aquatic Invertebrates (17.72%), meat and edible meat (10.54%), coffee, tea, mate and spices (9.06%) and Residues and Waste from the Food Industries; Prepared Animal Fodder (5.43%). These five food items constitute 65.85% of total food and food processed items of India in 2018-19. The share of food processed items to India's total export was 11.3% in 2015-16 which reduced to 10.7% in 2018-19 (MoFPI-AR-2019-20). The value of India's total food exports produced from FPIs has been depicted in Fig.2. It is found that the country has witnessed an increasing trend of its value of total food exports from 2006-07 (US\$ 1032 million) to 2019-20 (US\$ 32732.0million). This is mainly due to giving more priority to this sector for its growth in number, production of food items and export to other countries by Ministry of Food Processing Industries, Government of India. It shows that the FPI sector has bright future for the nation in years to come.



Source: Author

B. Inflow of Foreign Direct Investment (FDI)

The growth of FPIs is a need of the hour. For establishment of new FPIs or expansion of existing industries needs huge amount of capital for investment. In early 21 century, the Government of India had taken several policy measures to revamp the FPIs in India. Some notable schemes are setting up of National Meat and Poultry Processing Board (NMPPB), Grapes Processing Board (GPB), National Fish Processing Development Council (NFPDC), National Institute of Food Technology, Entrepreneurship and Management (NIFTEM), strengthening of Indian Institute of Crop Processing Technology (IICPT) etc. encouraged the producers to start investment in this sun rising industry of the country. These policy measures attracted foreign investors to start business in India by bringing more FDIs to the economy. As depicted in Fig.-1 and Table-1, the inflow of FDI was Rs182.94 crore (US \$ 41.74 million) in 2005-06 and the growth of GVA FPI was 7.5%. But the GVA FPI increased to 21.6% as a result of rising of FDI of Rs 826.16 (US \$ 170.21 million). Therefore, it is concluded that the role of FDI in growth and development FPIs in India is highly essential. The Table-1 gives a picture of inflow of FDI to the food processing sector with its share of FDI of FPI in total FDI.

The FDI in the food processing sector rose 44 per cent to US\$904.7 million in the financial year 2019-20. From 2019-20, the Government of India has allowed 100 per cent FDI in food processing sectors through the automatic route in order to make ease of doing business. In 2016, the centre had allowed 100 per cent FDI through the approval route for retail trading.

Some of the major foreign direct investments in this sector so far are Amazon (food retail business), Parle Agro Private Ltd (Frooti Fizz), US based food company Cargill Inc (consumer retail business) and Pepsi and Coca Cola, Mad Over Donuts (MoD), Danone SA (nutrition business) and Uber Technologies Inc (UberEATS-food delivery service).

Table-1: FDI inflow to Food Processing Industries in India

Year	FDI in Rs Crore	FDI (US \$ Million)	Share of FDI of FPI in Total FDI: Annual (US \$ Million)
2000-01	198.13	45.75	1.86
2001-02	1,036.12	219.39	5.40
2002-03	176.53	36.88	1.36
2003-04	502.39	109.22	4.99
2004-05	174.08	43.98	1.37
2005-06	182.94	41.74	0.75
2006-07	441.00	102.00	0.82
2007-08	279.01	70.17	0.29
2008-09	455.59	102.71	0.33
2009-10	1,314.23	278.89	1.08
2010-11	858.03	188.67	0.88
2011-12	826.16	170.21	0.48
2012-13	2193.65	401.46	1.79
2013-14	25,106.73	3,982.88	16.39
2014-15	3,164.72	515.86	1.14
2015-16	3,312.00	505.88	0.91
2016-17	4,865.85	727.22	1.21
2017-18	5,835.62	904.9	1.48
2018-19	4,430.44	628.24	1.01

Source: Compiled by Author from Annual Reports of MoFPI, GoI

C. Generation of Employment

The achievements of an industry or sector can be better studied through its ability to generate employment opportunities for its people. India has been suffering from acute poverty and unemployment due to its rapid growth of population in one hand and also trying to reap its great demographic dividend over the years on the other. In fact, the growth of any types of industries will generate additional employment opportunities to its ever increasing unemployed people. The establishment of FPIs is no exception of it.

The Table-2 depicts the generation of employment opportunities in persons (in lakh) by the organized FPIs from 2007-08 to 2017-18. It is found that the FPIs have created employment to 15.05 lakh persons in 2007-08 which has increased to 19.40 lakh persons in 2017-18. This is possible mostly due to two reasons; firstly, the increase in FPIs in the economy over the years due to government intervention and increasing awareness and training for establishment of these industries and secondly, the expansion of some existing FPIs during the

above period. Besides, the employment trend in these FPIs has been positive except 2012-13 and 2015-16.

The women also get employment opportunities in FPI in India. But the women's share is less than their male counterparts as maximum FPIs are established in either urban centers or semi urban centers in India.

Table-2: Employment Generation in Food Processing Industries

Year	Persons employed (in Lakh)	Annual Growth in %
2007-08	15.05	-
2008-09	15.64	3.92
2009-10	16.06	2.69
2010-11	16.62	3.49
2011-12	17.77	6.92
2012-13	16.89	-4.95
2013-14	17.41	3.08
2014-15	17.73	1.84
2015-16	17.65	-0.45
2016-17	18.54	5.04
2017-18	19.40	4.64

Source: Compiled by Author from Annual Reports of MoFPI, GoI

In 2016-17, Only 2.33 lakh women got employment in registered FPIs whereas 12.62 lakh employed in unregistered FPIs in India. The share of women employment in registered and unregistered FIPs is 12.55% and 24.69% respectively. Besides, in 2017-18, 19.4 lakh people got employment in FPIs which constitutes 12.3% share to overall industrial employment in the country (MoFPI-AR-2019-20).

Conclusion

The Indian food processing sector plays a vital role in myriad ways by increasing the supply chain of the processed foods, generating more formal and informal employment and benefiting our foreign trade by making trade surplus. The rising population particularly the young masses in India experience the changing food habits, nutrition cautiousness of food, rising workloads on female, preferring leisure and entertainment over preparing and preserving foods at home etc. have increased the demand for the processed foods. The same tendency will continue in future despite the pandemic situations like Covid-19. But, it is found that this sun rise industry fails to meet the rising demand for food products and that is mainly due to the limited growth of FPIs in India. These industries are also located in few selected areas without giving priority to the

regions where there is ample scope to grow. Further, this sector also fails to create a Global Food Hubs due to the problems like high cost, lower quality, lack of proper package and certification and creating a value brand for both domestic and global market. Besides, this promising industry also requires the investment support from India's large business houses like Reliance, Tata, Adani, Birla, Jindal etc. Moreover, both central and state governments also extend their supports by revamping the policy measures and creating a conducive business environment in the state.

References

- FICCI (2010). On Challenges in Food Processing Sector/Bottlenecks In Indian Food Processing Industry, Available at: <https://ficci.in/sedocument/20073/food-processing-bottlenecks-study.pdf> retrieved on dt. 22.04.2021
- Ghosh, N. (2014). An Assessment of the extent of Food Processing in various food sub-sectors, report submitted to Ministry of Agriculture, Government of India, New Delhi.
- Government of India (2011). Annual Report 2009-10, Ministry of Food Processing Industries, New Delhi.
- Government of India (2020). Annual Report 2018-19, Ministry of Food Processing Industries, New Delhi.
- Government of India (2021). Annual Report 2019-20, Ministry of Food Processing Industries, New Delhi.
- Mahajan, R., Garg, S., Sharma, P.B. (2014). Global Food Safety: Determinants are Codex standards and WTO's SPS Food Safety Regulations. *Journal of Advances in Management Research*, 11(2):176-191.
- Mukherjee, D, Bajaj, H. Garg, N and Abraham, J (2013). Feeding a Billion: Role of the Food Processing Industry, FICCI Available At: https://ficci.in/spdocument/20312/Feeding-a-Billion_Role-of-the-Food-Processing-Industry.pdf
- Murthy, T., M. Sridhara and Yogesh, M.S. (2014). An overview of Food Processing Industry in India – Challenges and Opportunities, *International Interdisciplinary Research Journal*, IV(V), Sept-Oct.
- Sarang, P. (2022). A Review on Indian Food Processing Industry: Challenges And Opportunities, Director (Research) ICSI-CCGRT, Navi Mumbai.
- Shelly and Kaur, K. (2015). Impacts of Food Processing Industry on Economic Growth, FDI and Exports of India, *Pacific Business Review International*, 7(12).