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ABSTRACT

A well-developed food processing sector with higher level of processing helps in the reduction of wastage, improves value addition, promotes crop diversification, ensures better return to the farmers, promotes employment as well as increases export earnings. This sector is also capable of addressing critical issues of food security, food inflation and providing wholesome, nutritious food to the masses. Over the year's agricultural production in India has consistently recorded higher output. India ranks third in cereals, first in pulses, second in vegetable primary, second in fruit primary, first in milk, third in eggs primary, etc. in World Agriculture in 2018. An abundant supply of raw materials, increase in demand for food products and incentives offered by the Government has impacted food processing sector positively. During the last 5 years ending 2019-20, Food Processing sector has been growing at an Average Annual Growth Rate (AAGR) of around 11.18 per cent as compared to around 4.19 per cent in Agriculture (at 2011-12 prices). Food Processing Sector has also emerged as an important segment of the Indian economy in terms of its contribution to GDP, employment and investment. The sector constituted as much as 9.87 per cent and 11.38 per cent of GVA in Manufacturing and Agriculture sector respectively.

Key Words: Food, Processing, Sector, farmers , Positively, Manufacturing, Agriculture

INTRODUCTION

The food processing sector in India encompasses manufacturing enterprises in all the segments from micro to large industries. India is having competitive advantage in terms of resource endowment, large domestic market and scope for promoting value added products. Achieving full potential of this sector would require Indian companies to improve their competitive strength vis-à-vis their global counterpart in term of scale of output, productivity, value addition and their linkages with the global value chain. Union Cabinet in its meeting on 31.03.2021 approved the Central Sector Scheme- "Production Linked Incentive Scheme for Food Processing Industry (PLISFPI)" to support creation of global food manufacturing champions and support Indian brands of food products in the international markets with an outlay of Rs. 10,900 crores. The PLISFPI has been formulated based on the Production Linked incentive scheme of NITI Aayog under "Aatma Nirbhar Bharat Abhiyaan for Enhancing India's Manufacturing Capabilities and Enhancing Exports". The Scheme will be implemented over a six-year period from 2021-22 to 2026-27. The Scheme Objectives are to extend financial support to food manufacturing entities, with stipulated maximum sales willing to make committed investment for expansion of food processing capacity and incur expenditure in branding & marketing of food products abroad to facilitate emergence of strong Indian brands.

Food processing sector faces a set of unique problems which have a direct bearing on the strategy and required intervention for the development of the sector. The processors in this sector deal with seasonal, perishable materials which need to be processed in a short period. As the sector mainly consist of tiny, micro & small units, neither they are able to generate adequate surplus for their expansion nor invest in supporting infrastructure. Therefore, the sector needs support for creation of infrastructure and targeted incentives to attract investment for creation of processing capacity. To address these issues, considerable investment is required in different components of the supply chain by way of grading and packing centers, controlled atmosphere facilities, reefer vans, cold storage for perishable cargo at port/airport/railway stations, testing laboratories and other supporting infrastructure and services such as setting up of testing laboratories, research & development, imparting skill training, marketing support etc.

It is seen that food products industry, compared to other industries has the largest number of factories and engages largest number of persons as well. Food Products industry also figures among the top five sectors with respect to fixed capital, gross value added and output. Food products industry employs largest number of persons as compared to other industries while generating the second highest output level as in other industries.

Food Processing Industries (MoFPI) has developed R&D Portal to present the information on products, processes and technology development as well as latest innovations by different Food Technology development Institutes of the country. The website provides easy and wider access to all categories of users such as entrepreneurs, industry, promoters, consumers, researchers, students and many more. The process will thus lead to provide technological solutions to existing problems of food processing sector and to enhance the sector's growth, food production and quality, consumers' safety, public health and trade. The website is expected to bridge the gap between the recognized food processing institutes/government organizations and the information/ technology seekers. Brief of findings of Research and Development projects pertaining to food processing sector are being placed on the above R&D portal by all the relevant Institutes in the country for the benefit of all the stakeholders.

OBJECTIVES

The main objectives of the food processing industries in India are as follows:

1. A study on FDI in Food Processing Sector.
2. The status of Stages of Processing of Food
3. To evaluate the Harvest and Post-Harvest Losses of Agri-Produce

These constraints are sought to be addressed under the schemes being The above illustration indicates the various factors which are likely to increase the demand for processed food in coming years. Programmes to increase the output of Indian agriculture implemented by the Ministry, as indicated in subsequent paper. without corresponding investments in processing facilities are likely to lead to a mismatch resulting in rural distress and decline in farmers' income. The most important step for improving the bargaining capacity of the farmer is to add value to his produce. This will come about if farmers are able to produce according to the requirements and standards demanded by the market. Food processors and retailers can provide the necessary demand for the agricultural produce and facilitate the flow of market information, technology and inputs to the farmer so that they can tailor their output to the needs of the market. In the process the farmers will be able to raise their own level of income and employment. The consumer is also likely to benefit as there will be an increase in the supply of food products with a longer shelf life.

FDI IN FOOD PROCESSING SECTOR

The 100 per cent FDI is permitted under the automatic route in food processing industries. 100% FDI is allowed through Government approval route for trading, including through e-commerce in respect of food products manufactured and/or produced in India. The sector has witnessed FDI equity inflow of USD 4.99 billion during April 2014 to September 2021. FDI Equity inflow to FPT is presented in the table 1

Table 1 : FDI Equity inflow to FPI

S. NO	Year (April-March)	FDI (in Rs. Crore)	FDI (in US\$ Million)
1	2014-15	3,164.72	515.86
2	2015-16	3,312.00	505.88
3	2016-17	4,865.85	727.22
4	2017-18	5,835.62	904.90
5	2018-19	4,430.44	628.24
6	2019-20	6414.67	904.70
7	2020-21	1670.37	393.41
8	2021-22 (Apr-Sept)	3047.44	410.62

Source: Department for Promotion of Industry and Internal Trade

STAGES OF PROCESSING OF FOOD

The Ministry of Food Processing Industries does not deal with a few food items such as coffee, tea, oilseeds, sugar, spices and alcohol made from molasses, as these items fall within the purview of other Ministries under the Allocation of Business Rules for Central Ministries. Never the less, since food processing industries include all edible, processed food from the economic activity point of view, data analyzed by this Ministry includes the entire sector. Food processing includes.

Manufactured Processes, if any raw product of agriculture, animal husbandry or fishing is transformed through a process [involving employees, power, machines or money] in such a way that its original physical properties undergo a change and if the transformed product is edible and has commercial value, then it comes within the domain of Food Processing Industries.

Other Value-Added Processes: If there is significant value addition (increased shelf life, shelled and ready for consumption etc.) such produce also comes under food processing, even if it does not undergo manufacturing processes. From an analytical perspective, food processing can be viewed as different levels of processing –primary, secondary and tertiary. Primary Processing relates to conversion of raw agricultural produce, milk, meat and fish into a commodity that is fit for human consumption. It involves steps such as cleaning, grading, sorting, packing etc. Food Processing Industries usually deal with higher levels of processing where new or higher value food products are manufactured.

Food processing could strengthen the link between agriculture and industry and help in generating farm income and employment as also in reducing wastage of agricultural products. A strong database is required for pursuing a policy towards this end. Ministry has recently concluded a study on Level of Food Processing in India, last study was conducted by IEG; the comparative results for the major categories are as under. Planning, development and control of, and assistance to, industries relating to bread, oil seeds, meals (edible), breakfast foods, biscuits, confectionery (including cocoa processing and chocolate making), malt extract, protein isolate, high protein food, weaning food and extruded food products (including other ready to eat foods) Comparative level of Food processing over the years is presented in the table 2

Table 2 : Comparative level of Food processing over the years

S. NO	Category/ Commodity	2005-06	2010-11	2015-16	2018-19
1	Coarse Cereals	17.7	23.3	28.6	29.4
2	Fruits	1.75	2.4	2.9	4.5
3	Vegetables	3.69	2.27	2.22	2.70
4	Milk	11.4	5.7	20.1	21.1
5	Fish	14.08	7.66	8.3	15.4
6	Meat	6.12	11.4	22.7	34.2

Source: Department for Promotion of Industry and Internal Trade

HARVEST AND POST-HARVEST LOSSES OF AGRI-PRODUCE

Despite the production of large scale agriculture in India, food inflation and food security issues are major concerns for policy makers in the country as they affect the basic need for the citizens i.e. to have sufficient, healthy and affordable food. A nation-wide study on quantitative assessment of harvest and post-harvest losses for 46 agricultural produces in 106 randomly selected districts was carried out by Central Institute of Post-Harvest Engineering & Technology (CIPHET), Ludhiana. The afore said study considers the quantitative loss as the Processing in India 2.6 Harvest and Post-Harvest Losses of Agri-Produce (i) Despite the production of large scale agriculture in India, food inflation and food security issues are major concerns for policy makers in the country as they affect the basic need for the citizens i.e. to have sufficient, healthy and affordable food. A nation-wide study on quantitative assessment of harvest and post-harvest losses for 46 agricultural

produces in 106 randomly selected districts was carried out by Central Institute of Post-Harvest Engineering & Technology (CIPHET), Ludhiana. The afore said study considers the quantitative loss as the material rendered “unfit for human consumption”. The different stages considered for assessment of losses are harvesting, collection, thrashing, grading/ sorting, winnowing / cleaning, drying, packaging, transportation, and storage depending upon the commodity.

The report of the study was released in 2010. The study has estimated that harvest and post-harvest losses of major agricultural produces at national level was of the order of Rs. 44,143 crore per annum at 2009 wholesale prices. A repeat Study by CIPHET, Ludhiana on the extent of harvest and post-harvest losses of major agricultural produces was conducted in 2015 covering 45 agricultural crops.

MAKE IN INDIA” PROGRAMME

Food processing sector has been identified as one of the priority sectors under “MAKE IN INDIA”, an initiative of Hon’ble Prime Minister of India. With a view to attract investment to this sector, Ministry of Food Processing Industry has been implementing schemes for development of infrastructure for promoting food processing industries. Mega Food Parks with common utility/ facility like roads, electricity, water supply, sewage facility and common processing facility like pulping, packaging, cold storage, dry storage and logistics are being promoted in areas with strong agricultural resource base. These parks provide fully developed plots and factory sheds to entrepreneurs on long term lease basis where they can set up food processing units in “plug and play model”.

In the context of “MAKE IN INDIA” campaign, the Ministry has been disseminating information to potential investors to attract investment to the sector through a dedicated “Investors Portal” in which a range of information like resource base, availability of land, state specific policies, fiscal incentives are shared with the potential investors. The Ministry is also collaborating with Invest India to help the investors in terms of locating joint venture partners, extending hand holding services, expediting regulatory approvals and providing investors after care services. The investor can also put their query in the Investors portal which is promptly attended to by the Ministry for guiding the investors.¹

DEVELOPMENTAL INITIATIVES

Several development initiatives have been taken by the Ministry to promote growth of the food processing sector in the country. Some of these are:

1. Creating modern infrastructure for supporting the growth of food processing sector through implementation of the Schemes of Mega Food Parks, Integrated Cold Chain and Value Addition Infrastructure, Agro Processing Cluster and Backward & Forward Linkages, and setting up/ modernization of PM Kisan Sampada Yojana (PMKSY).
2. Providing assistance to food processing industries under various Central Sector and Centrally Sponsored Plan Schemes.
3. Widening the R&D base in food processing by involvement of various R&D institutes and support to R&D activities.
4. Developing human resources to meet the growing requirement of managers, entrepreneurs and skilled workers in the food processing sector.
5. Developing a strong supply chain for perishable farm produce to reach processing centers with minimal loss of time.
6. Extending fiscal incentives for the food processing industries.
7. Promoting Foreign Direct Investment under the ‘Make in India’ initiative.

PROMOTIONAL INITIATIVES

In order to create awareness about the potential and prospect of food processing industry in the country, this Ministry provides assistance for

1. Organizing Workshops, Seminars, Exhibitions and Fairs;
2. Commissioning of Studies/ Surveys, etc.
3. Participation in national/ international fairs/exhibitions, etc.

CONCLUSION

The above illustration indicates the various factors which are likely to increase the demand for processed food in coming years. Programmes to increase the output of Indian agriculture without corresponding investments in processing facilities are likely to lead to a mismatch resulting in rural distress and decline in farmers' income. The most important step for improving the bargaining capacity of the farmer is to add value to his produce. This will come about if farmers are able to produce according to the requirements and standards demanded by the market. Food processors and retailers can provide the necessary demand for the agricultural produce and facilitate the flow of market information, technology and inputs to the farmer so that they can tailor their output to the needs of the market. In the process the farmers will be able to raise their own level of income and employment. The consumer is also likely to benefit as there will be an increase in the supply of food products with a longer shelf life. this stage of the development of the food processing industry. It is therefore essential that public investment is significantly increased to fund these components of rural infrastructure to enable private enterprise to take up the remaining, commercially viable components of the supply chain. This is borne out by the experience of developed countries where the state has stepped into to build rural infrastructure in a big way. Carefully calibrated subsidies, innovative strategies, empowering rural producers & consumers through better awareness and support to entrepreneurs in terms of technology and training are some of the ways in which this Ministry has catalyzed growth in this sector.

REFERENCE

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