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ECONOMIC ANALYSIS OF FOOD PROCESSING INDUSTRY IN SOLAPUR DISTRICT

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Abstract:-Food processing dates back to the prehistoric age when crude processing including various types of cooking, such as over fire, smoking, steaming, fermenting, sun drying and preserving with salt were in practice. Foods preserved this way were a common part of warriors' and sailors' diets. These crude processing techniques remained essentially the same until the advent of the Industrial Revolution. Nicolas Apart developed a vacuum bottling process to supply food to troops in the French army, which eventually led to canning in tins by Peter Durand in 1810. Modern food processing technologies, in the 19th century were also largely developed to serve military needs.

Keywords:Economic Analysis , Food Processing Industry , Fruit and Vegetable processing.

INTRODUCTION

In the early 20th century, the space race, change in food habits and the quality consciousness of the consumers in the developed world furthered the development of food processing with advancements such as spray drying, juice concentrates, freeze drying and the introduction of artificial sweeteners, colorants, and preservatives. In the late 20th century products including dried instant soups, reconstituted fruit juices, and self cooking meals such as ready-to-eat food rations etc., were developed.

The Food Processing Industry in India is one among the most important in terms of production, consumption, export and growth prospects. Important sub-sectors in food processing industries are: Fruit and Vegetable processing, Fish Processing, Milk Processing, Meat and Poultry Processing, Packaged/Convenience Foods, Alcoholic Beverages and Soft drinks and Grain processing, etc. The agriculture sector has returned an extended come since independence with the appearance of the green, white and blue revolution. India has remodeled itself from a country of shortages to a land of surpluses with the rising of the economy; a shift is additionally being seen in the consumption pattern, from cereals to a lot of varied and nutritive diet of fruit and vegetables. This has resulted in the development of a sunrise industry namely the Food Processing Industry.

Agriculture and Industry are the two pillars of our Economy. Proper demand and supply are fundamental requirements for growing industry of India. When we are processing on matured agricultural cash crops then it is giving more utility for growing our lifespan and stays fit. Comparing other districts with Solapur, there is no sufficient success of industrial development; similarly it should be seen like an opportunity. Any industry is to be judged for the employment potential that it can offer to the economy. Small scale industries generate employment to a greater extent. But no tangible studies are being under taken to the employment opportunities generated by these units. There is a huge wastage of perishable food Items within the country attributable to lack of correct food processing facilities and the level of processing is only 2 per cent. However, India has tremendous potential to unleash large scale method primarily based farm activities to take advantage of the rising international business opportunities.

STATUS OF FOOD PROCESSING INDUSTRIES

- ❖ Size of food market in India - Rs. 8,60,000 Crores

- ❖ Primarily processed food market – Rs. 2,80,000 crore
- ❖ Value added processed food market – Rs. 1,80,000 crore
- ❖ The Sector attracted a total investment of Rs.38,531 Crores during the 9th plan period
- ❖ Investment during the 10th plan is estimated at Rs. 62,105 Crores
- ❖ Industry growth rate during the last five years is estimated at 7.14% against GDP of 6.2%
- ❖ Investment required during next ten years – Rs. 1,50,000 crore

LEVEL OF PROCESSING, VALUE ADDITION ETC

- Fruits & Vegetables Sector at 2%,
- Poultry 6%,
- Milk 35% (only 13% in modern dairies),
- Marine products 8%,
- Buffalo meat 21%.
- Value addition 20%
- Wastage – Rs. 58,000 crore



The states of Maharashtra, there are thirty-five districts in that micro, small and medium scale industries are working. Some where those kinds of industries are well developed, but Solapur district industries have major drawbacks and lack of economical and other kind of facilities and services. In Solapur district, the numbers of food processing units are 252, but these are divided into three scales like Micro, Small and Medium Enterprises. This industry spread in various talukas. The present research proposes an analysis of social-economic and geographical conditions and the particular economics of food processing industry, what are the subordinate factors for the growth and development with enough employability in the surrounding of this industry are some of the vital aspects of the study. Careful study with relation to the commercial illness among the FPI units has to be carried out.

Revival or closure of the sick units is a pre-requisites and its detailed analysis is necessary in the changing global scenario. It depends on the nature of the illness, origin and gravity of the problem etc. Some of the necessary amenities for the development of food processing industry are as follow –

- Necessary crops for food processing
- Scientific awareness about it
- Transportation
- Marketing
- Advertising

The important aspects with regards to this industry shall be considered such as what kind of economic surveys have been formed, governmental policies for these industry development. If we analyze carefully these things and come out with some possible solution for the future prospectus of the industry then Food Processing industry of Solapur would receive national and international status and its scope for optimum balance of trade will go beyond India and correct the trade place. Hence, all these circumstances will be very useful for social and economical progress the district and it will surely help in shaping and building the nation.

SIGNIFICANCE OF THE STUDY

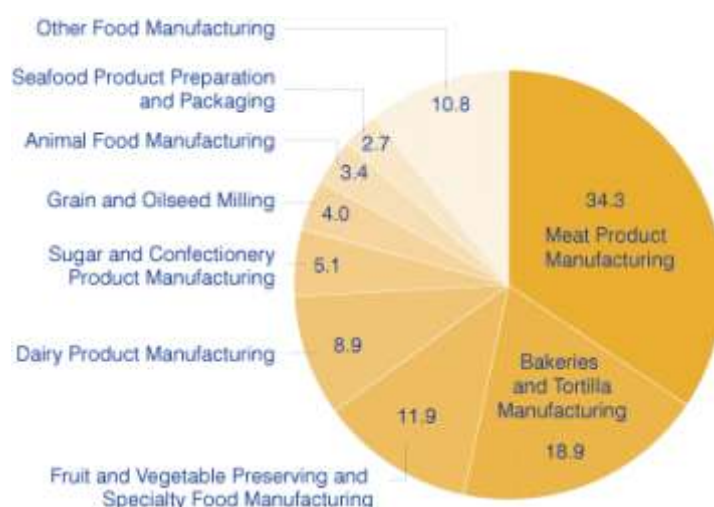
- Food processing plays vital role in the conservation and effective utilization of available food supply. The increasing commercialization of the agriculture sector has widened the production base business so resulting in its importance. Constant modernization of machinery, plants, automation, advertising, research and development with new and improved merchandise have provided a fresh impetus to the industry. Any industry, if it is to survive, requires trained and skilled entrepreneurial talent. Every industry depends on some other industries for its Inputs and in turn provides its outputs as inputs to some other industries. It is also important to encourage the food processing industry in the country to minimize huge losses to the farmers due to the lack of adequate post – harvest storage

capabilities on one hand and biodegradable nature of variety of crops, significantly fruits and vegetables.

The entire range of economic activities are thus inter-linked with each other in this web of input-output relationships. Any industry has to be analyzed for these inter-industry linkages. Food processing industry has strong backward linkages with agriculture, farming and poultry, animal Husbandry, fishing etc. With secondary industries manufacturing various types of food processing equipment and machinery, Packing materials and chemicals etc. These inter-industries linkages with regard to the FPI unit's of Solapur need to be looked into. This growth of the food processing Industry will bring immense benefits to the economy, raising agricultural yields, reducing losses, making employment and raising the standard of living of a really sizable amount of individuals throughout the country, specially, within the rural.

An Area With agitated schedules in our lives there has been a rise within the demand for convenience foods. Awareness of the requirement of quality and safety in food with nutrition has up among folks. These factors cause an enormous challenge to the food process units to come out with appropriate food product that suit the varying wants of the purchasers.

These development demands for the food sector, in order to meet consumer needs are proving a challenge for food scientists and technologists. Food processing industry is of enormous significance for the development of Solapur because of the vital linkages and synergies which it promotes between industry and agriculture.



ISSUES AND PROBLEM IN THIS INDUSTRY –

Actual implementation, low economic condition, less work ability, low labor frequency, low challenge for food scientists and technologists are some of the problems in this industry. Food process business is of enormous agriculture production of money crops for food processing, lack of investment, low financial gain and low significance for the development of Solapur because of the vital linkages and synergies which it demand, lack of quality of production, mismatch between investment & income of owner etc.

OBJECTIVES –

1. To study of the Geographical importance of F.P.I according to Solapur District
2. To analyze the economic condition of food processing industry
3. To analyze the financial situation of FPI in Solapur District and create Employability
4. To examine the problems of FPI
5. To suggest measures to solve the problems of FPI in Solapur district

Segmentation of different sectors in food processing industry:

<i>Sectors</i>	<i>Products</i>
Dairy	Whole Milk Powder, Skimmed milk powder, Condensed milk, Ice cream, Butter and Ghee, Cheese
Fruits & Vegetables	Beverages, Juices, Concentrates, Pulps, Slices, Frozen & Dehydrated products, Potato Wafers/Chips, etc
Grains & Cereals	Flour, Bakeries, Starch Glucose, Cornflakes, Malted Foods, Vermicelli, Beer and Malt extracts, Grain based Alcohol
Fisheries	Frozen & Canned products mainly in fresh form
Meat & Poultry	Frozen and packed - mainly in fresh form, Egg Powder
Consumer Foods	Snack food, Namkeens, Biscuits, Ready to eat food, Alcoholic, and Non-alcoholic beverages

CONSTRAINTS OF FPI SECTOR

- ❖ Lack of suitable infrastructure
- ❖ Lack of adequate quality control & testing infrastructure
- ❖ Inefficient supply chain vis a vis involvement of middlemen
- ❖ Lack of processable varieties of farm produce
- ❖ Seasonality of raw material
- ❖ High inventory carrying cost
- ❖ High taxation, high packaging cost
- ❖ Affordability and cultural preference of fresh food.

This work is related with food processing industry and gives a view about the circumstances facing this industry. A researcher has trying to made review to be related to study of FPI, there are many scholars having greater significance to use referential about FPI.

1. Rajkumar S. Adukia (2002), Food Processing Industry in India, NPCS, Delhi.

He explained in the book that advantages of food processing industry suggests that embrace poison removal, preservation, easing selling and distribution tasks, and increasing.

In addition, it will increase seasonal handiness of the many foods, permits transportation of delicate biodegradable foods across long distances and makes several types of foods safe to eat by de-activating spoilage and pathogenic, micro-organisms. Fashionable supermarkets wouldn't exist without fashionable food processing techniques, long voyages wouldn't be possible and military campaigns would be considerably harder and dear to execute.

Processed foods are usually less prone to early spoilage than fresh foods and are higher suited to long distance transportation from the supply to the buyer. Once they were initial introduced, some processed foods helped to alleviate food shortages and improved the general nutrition of populations because it created several new foods accessible to the lots. Modern food process additionally improves the standard of life for folks with allergies, diabetics, and other people who cannot consume some common food components. Food processing can also add extra nutrients such as vitamins.

2. NPCS Board (2005), Handbook on Agro Based Industries, NPCS, Delhi.

It explained in the book the agro industry is regarded as an extended arm of agriculture. The development of the agro business will facilitate stabilize and create agriculture additional moneymaking and create employment opportunities both at the production and selling stages. The broad primarily based development of the agro products industry can improve each the social and physical infrastructure of India. India is one in every of the biggest producers of food, and is that the second largest producer of rice, wheat, fruits, and vegetables in the world. Nearly seventieth of the population depends on agriculture and agro-based industries. Since it would cause diversification and commercialization of agriculture, it'll so enhance the incomes of farmers and create food surpluses. The agro industry principally includes of the post harvest activities of processing and preserving agricultural merchandise for intermediate or final consumption. It is a well recognized truth across the world, significantly in the context of commercial development that the importance of agro industries is relative to agriculture will increase as economies develop. It should be emphasized that food isn't simply manufacture.

3. H.Panda (2010), Fruits, Vegetables, Corn and Oilseeds Processing, NPCS, Delhi.

A number of the basics of the book are preservation of pineapple, mango and papaya chunks by hurdle technology, result of boiling on carotin content of forest green leafy vegetables consumed by tribals of south India, method development for production of pure fruit juice in natural color of selection, physical purification of rice bran and soybean oils, opposed nutrients and macromolecule edibility of fababeans and ricebeans as affected by soaking, dehulling and germination, quality changes in banana (*Musa acuminata*) wines on adding pectinase and passion fruit, volatile oil composition of fresh and cosmetically dehydrated galgal peels, development of cold grinding method, packaging and storage of cumin powder, bakery products and confections, etc.

This book deals utterly on the essential principles & methodology of fruits, vegetables, corn & completely processing & its preservation. This may be very resourceful to readers particularly to technocrats, engineers, upcoming entrepreneurs, scientists, food technologists etc.

4. NPCS Board (2010) Fruits, Vegetables & Food Processing with Canning Preservation, NPCS, Delhi.

It explained in the book Natural foods like fruits and vegetables are among the most four vital foods of mankind as they're not only nutritive but are also indispensable of the urban center. Maintenance of the health. India is that the second largest producer of fruits and vegetables in the world. Fertile soils, a dry climate, clean water and abundant daylight facilitate the onerous operating farmers to produce a bountiful harvest. Although there are several similarities between fruits and vegetables, there's one vital difference that affects the method that these 2 forms of crop are processed like fruits square measure additional acidic than vegetables. Food process is that the set of strategies and techniques accustomed rework raw ingredients into food or to rework food into alternative forms for consumption. Food processing usually takes clean, harvested crops or butchered animal products and uses these to produce enticing, marketable and sometimes long shelf-life food products. Canning is a method of conserving food in which the food is processed and sealed in an airtight instrumentation. Food preservation is that the method of treating and handling food to prevent or greatly weigh down spoilage (loss of quality, edibility or nutritive value) caused or accelerated by small organisms. one in every of the oldest strategies of food preservation is by drying, that reduces water activity sufficiently to stop or delay microorganism growth.

5. Dr. B.D. Pawar (Nov 2013), Sharad Krushi, Shri. Bhagwat Dhadaji Pawar, Pune.

He explained about it under the title of Agriculture Development through the Food Processing. Government planning need to relate with food processing industry by establishing in a rural level. Central government newly launched 'Rajiv Gandhi Central Institute' for good, skilled technician and worker for operating new and advance technology in food processing industry. There are some major stumbling blocks for progress of this industry like the unavailability of better species. In short, this article is on the subject of food processing industry of rural development.

6. Dr. Vijay Kavimandan (Nov 2013), Sharad Krushi, Shri. Bhagwat Dhadaji Pawar, Pune.

He elaborated under the title of 'Definite Progress Possible with Food Processing'. He said that most of the agriculture species are perishable. E.g. Fruits, Milk, Vegetables etc. Comparatively provisional products have less durability, that's why food processing is needful for made enduring and exploiting food stuff. According to the author agricultural product obtaining recompenses.

7. Dr. T.S. MOTE (Nov. 2013), Sharad Krushi, Shri. Bhagwat Dhadaji Pawar, Pune.

He covered the following points:

Govt. should support to these types of industry and provide each and every fundamental service.
To reform the legislative of food processing industry
To less tax burden on processing foods and machinery
To support to creating flexible market for FPI food stuffs.
Promote to National and Foreign Direct Investment
Use of less energy consumed machinery and bio - technology

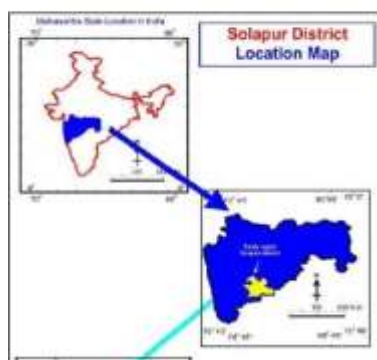
All of the above writer's research work is highly helped and related to development of the FPI like the government's policies, regulation reforms, connected to rural development and agriculture development. As a son of farmer, I am also contributing to agricultural development or the rejuvenation but from economic point of view.

Which objectives mentioned in the synopsis that objectives are not covered by above authors so my research work is different from above research work.

Industrial Background of Solapur -

In Solapur district there are total 252 units in working condition. I will be selecting for analysis which is name Solapur District as a part of sampling and will be chosen 25% only in total units.

Study Area



Geographically Solapur is located between **17.10 to 18.32 degrees north latitude** and **74.42 to 76.15 degrees east longitude**. The district is situated on the **south east** fringe of Maharashtra State.

The district in general has flat terrain

Area = 14844.6 sq.kms
338.8 sq.kms is Urban area
14505.8 sq.kms is Rural area

Tehsils: 11

Primary information will collecting through Survey technique by administering separate structured interview schedules to the involved set of respondents. The researcher personally visited to the Food processing units and the concerned authorities of management of the food processing units under study and the concerned authorities and with their prior permission, the mandatory solicited was invited. Secondary data were collected from several types of journals and magazines were also used to analyze the problems of this industry.

Primary Data Collection

As far as concern the primary data of this study it is necessary to glance at DIC and Gazette information of the district. As the study requires more detailed information about the management and organization and business policies adopted by various food processing units such as the marketing strategies, production methods, pricing strategies, adaptation of food regulation etc. There are mainly 3 basic ways that to collect primary information by perceptive behavior, experimentally or by survey.

Secondary Data Collection

The secondary data in the form of archival information necessary for this investigation was collected mainly from the various libraries (academic), archives and Government publish sources as well as the Internet (Web Sites relating to the Study Topic) have been used. Particularly helpful were:

1. Office of District industrial Center, Solapur.
2. Various kinds of Journals, Magazines, Books etc.
3. Dayanand College Library, Solapur
4. Jaykar Library, Pune
5. Office of District Industrial Centre, Solapur
6. A Gokhale Institute of Politics and Economics, Pune.

The present study covers only industries in the Solapur District, that is the scope for research work, because there are 41 units in Solapur District, and these are playing very vital role in the development of industrial recognition of the District as a growing phenomenon in food processing. The period of research is in the year of 2007-20013. In this research researcher will be studying the economic condition (average, percentage) of FPI, for this, the researcher using following tools: - MS Excel & SPSS.

FINDINGS AND CONCLUSIONS

The food processing industry in India is segmented into food grain, fruit/vegetable processing, milk and milk products, beverages, fish, poultry products, meat and meat products, aerated soft drinks, alcoholic beverages, breakfast cereals, bread, biscuits, confectioneries, malt protein and edible oils.

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