# A study of marketing challenges faced by fruits and vegetable firms under small scale agro food processing industry in Pune region.

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## Abstract

Food processing industry in India is in growing stage having huge scope for penetration in Indian market. Agro processing although is considered to be one of the established sector, food processing become a sunrise sector for it. Small scale companies have tremendous opportunities for its establishment and growth in Indian market especially in Pune region since Pune has availability of the natural resources for the growth of this sector especially fruit and vegetable since it is considered as a golden belt due to huge production of seasonal fruits and vegetables in this area. Many small scale companies started its operation in Pune food cluster very significantly however they are facing many challenges for its growth. The major challenges faced by these units are related to marketing of processed food products. Researchers tried to find out the marketing challenges faced by these units in Pune region in this research paper.

**Key Words**: Agro Processing, Marketing Challenges, Fruits & Vegetable processing, Pune food cluster

## Introduction

The food processing industry in India has been hailed as one of the sunrise sector for 25 years now. Although the potential has never been in doubt, its importance as a key growth driver is being realized only of late. The food processing industry is estimated to be around USD 180

billion (INR 8 Lakh Crore), and contributes about 1.3-1.5% to India's GDP. Nevertheless, given India's billion plus population, the food processing industry has a wider role to play in the coming years. Besides its core role of increasing shelf life of food, preserving food nutrients in the supply chain and providing fortified products targeted at micronutrient deficiencies, it needs to provide benefits to other areas in the value chain by providing farm extension services, improving price realization for the farmers by reducing intermediaries and strengthening supply chain through its forward and backward linkages. In other words the food processing industry needs to be "Agriculture Plus". With immense supply strength in agriculture the food processing industry is expected to play a key role across the food value chain in addressing the challenges.

The Indian food industry is poised for huge growth, increasing its contribution to world food trade every year. In India, the food sector has emerged as a high-growth and high-profit sector due to its immense potential for value addition, particularly within the food processing industry. The food industry, which is currently valued at USD 39.71 billion, is expected to grow at a Compounded Annual Growth Rate (CAGR) of 11 per cent to USD 65.4 billion by 2018. Food and grocery account for around 31 per cent of India's consumption basket.

The Indian food and grocery market is the world's sixth largest, with retail contributing 70 per cent of the sales. The Indian food processing industry accounts for 32 per cent of the country's total food market, one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth. It contributes around 8.80 and 8.39 per cent of Gross Value Added (GVA) in Manufacturing and Agriculture respectively, 13 per cent of India's exports and six per cent of total industrial investment.

**Segmentation of different sectors in food processing industry**

- ➢ **Diary:** 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.

The Food Processing Industry is a mature sector that loosely tracks underlying demographic trends, such as population and income growth. Companies generate revenue from the sale of food and ingredients to a whole host of customers, ranging from supermarket chains and local bodegas to restaurants and other players further down the processing chain. Food processing is the process of transforming raw ingredients into food. The process takes clean crops or animal products and uses them to produce long shelf life products that are highly marketable.

## Marketing

When we study the relationship with customer and take efforts to manage the exchange relationships we are doing marketing. When someone does the marketing, they create the customers, keep the customers and satisfy the needs wants of the customers. There are many activities related to buying and selling a product or service, which can be done with the help of marketing. Marketing serves several activities that will be taken as marketing efforts by marketing department such as developing a new product, setting the price, promotion & advertising, selling and delivering products to consumers etc. Primary aim of marketing is to catch the attention of target audiences through general media exposure,  celebrity endorsements, slogans, packaging design etc. Marketing develop the products and serives as per the demand of the customers as well as creating the demand for newly developed or adopted products ensuring satisfaction of the customers and profitability to the company.

## Marketing mix

The 'marketing mix' (also known as the 4 Ps) is a foundation model in marketing. The four Ps, often referred to as the marketing mix or the marketing program, represent the basic tools that marketers can use to bring their products or services to market. They are the foundation of

managerial marketing and the marketing plan typically devotes a section to each of these Ps. The original marketing mix, or 4 Ps, was originally proposed by E. Jerome McCarthy, which provides a framework for marketing decision-making while Booms and Bitner proposed a model of 7 Ps, comprising the original 4 Ps plus process, people and physical evidence, as being more applicable for services marketing.

The marketing mix refers to four broad levels of marketing decision, namely: product, price, promotion, and place. While entering in the market with their products or services firms need to create a successful mix of "The right product sold at the right price in the right place using the most suitable promotion." Through marketing activities, a company can either create demand or satisfy the demand and interest in its items and gain greater visibility with potential customers.

There are several activities conducted by a firm under their marketing department which could be considered as marketing efforts such as market research, analyzing the needs of the consumers, segmenting the market, targeting the right customers, new product development, commercializing the new product, establishing a very effective distribution system and making the product available for checking, demonstration and consumption, creating a strong & effective communication with the market, setting the right price for the product, pushing and promoting the product in the market, providing after sales service to the customers, managing the profitable customer relationship etc.

**Research Gap**

Many researches were conducted on the food processing industry especially in technology used in food processing however; very less research was done related to marketing of processed food products, especially in Pune region. It is now a known fact that major challenges faced by food processing units are related to marketing of processed food products. Several institutes as well as government also try to give marketing support to the food processing units however because of the characteristics of food products as well as market dynamics it has proved insufficient.

This study is an attempt to find the marketing challenges faced by fruits and vegetable firms under small scale agro food processing industry in Pune district. For analyzing the marketing challenges, researchers has considered Product challenges, Price challenges, Place challenges

and Promotion challenges (4 P's) as well as competition & regulatory (legal) issues as the key indicators.

**Objectives of the Study**

The objectives of the study were made in line to focus on small scale fruits and vegetable processing as:

1. To understand the processing of fruits and vegetable in agro food processing industry in Pune district.

2. To study marketing challenges faced by fruits and vegetable firms under small scale agro food processing industry in Pune district.

**Period of the Study**

For the study, Researchers selected small scale fruits and vegetable firms registered with Pune DIC (District Industries Center) and period of the study was December 2018 to April 2019.

**Research Type**

The research is descriptive type of research, andresearchers used survey method to aims at studying the marketing challenges to small scale fruits and vegetable firms in Pune district. For the research, researchers collected data by conducting survey with structured questionnaire from the selected small scale fruits and vegetable firms in Pune district. The Research consists of various systematic observation, collection, classification and interpretation of data.

**Sample Size**

This study is very specific and confined to a particular framework defined by the researchers. The research framework for this study is very much defined and focused related the geographical limitation along with sample units. This study is focused to Pune region. The sample units were decided on the basis of number of small scale fruits and vegetable units registered with District Industries Center (DIC) Pune. The data for sample units were directly

collected from Pune DIC. From the overall collected data of DIC total 93 firms were fitting to the criteria. Total available population for the subject found to be 93. Considering the number, researchers decided to go for convenience sampling method and considered all of them for data collection. However, researchers received data from 68 responses to analyze the data. The sample size for conducting this research was limited to the small scale firms registered with Pune DIC. The findings and conclusion of this study was derived on the basis of this sample size only.

**Geographical Area of Research**

Pune is one of the fast emerging cities in India and attracting people from across the country and world. Increasing number of people and rising level of income has helped in increasing the demand of processed food in Pune. Administratively the district is divided into 15 talukas and 13 PanchayatSamitis. Junnar tehsil, Ambegaon tehsil, Khed tehsil, Maval tehsil, Mulshitehsil,Velhe tehsil, Bhor tehsil, Haveli tehsil, Purandar tehsil, Pimpri-Chinchwad City tensil, Pune City tehsil, Indapur tehsil, Daund tehsil, Baramati tehsil and Shirur
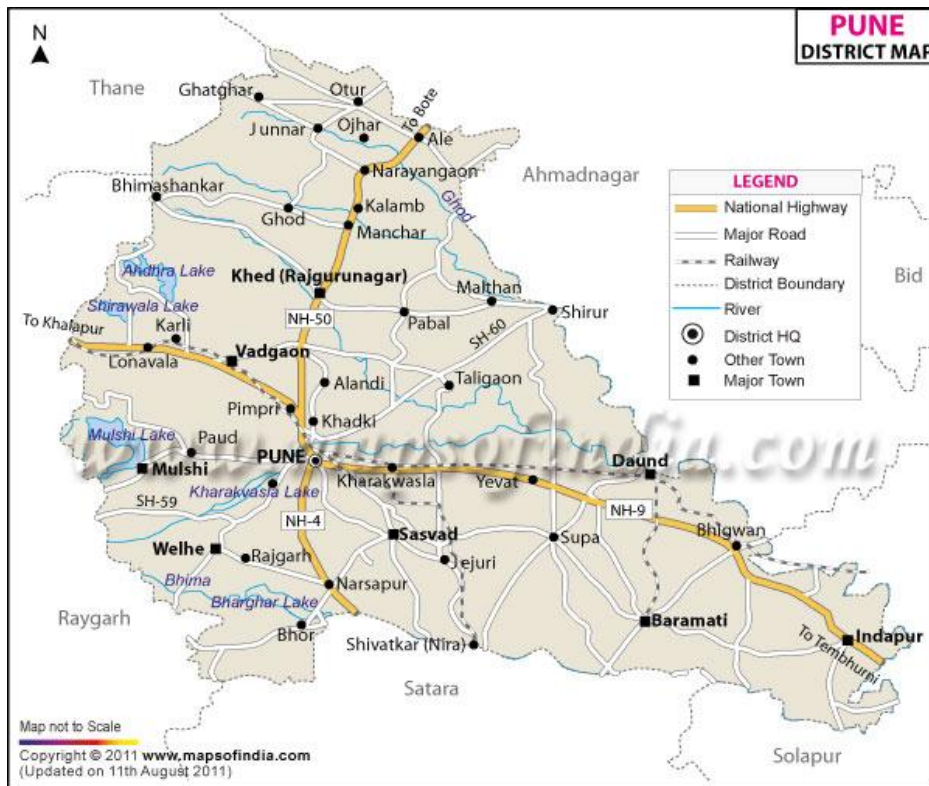
tehsil. Pune city is the administrative headquarters of the district. There are around 1,866 villages.

**Pune Region (Pune Food Cluster):**The Pune fruit & vegetable cluster consists of roughly around 550 units mainly located in Pune city & district, Panchgani, Mahabaleshwar, Lonavala and Khandala tract. The cluster is endowed with vast tracts of arable, agricultural land in this area with ready availability of fresh raw material. This region thriving hubs of food processing units due to local demand impulse in Pune emanating from changing life style giving way to eat off the shelf product. Proximity to urbanized market and connectivity to JNPT for export etc are some of the other positive factors that have provided this cluster an additional growth impetus. Total turnover of the Pune fruit and vegetable sector is more than Rs.850 Crore which is about 48% of the total food processing in this cluster.

The geographical scope of the research is Pune region, which consists of food processing units in Pune city, PCMC, rural areas of Pune district, nearby areas to Pune city like Panchgani, Mahabaleshwar, Lonavala and Khandala.

**Data Analysis**

Data Analysis is an inevitable part of research in order to get the appropriate results to conclude the study. In this study also data analysis is done with the help of appropriate statistical tools to analyze the data collected from different tools to test the hypotheses. For data analysis, data was collected from primary source (sample units) and analyzed by using statistical tools. Data was recorded and hypotheses were tested by statistical tools such as. chi-square test, t-test etc. Research used the statistical software specifically Microsoft excel and SPSS to analyze the data. Researchers also used statistical tool for checking the reliability of the scale which is useful for getting the appropriate result.

**Software use for Analysis**

Software plays an imports part in compiling the data and doing data analysis. Research used Majorly Microsoft Excel 2007 and SPSS for recording the data and doing data analysis. Microsoft word and power point is also used to prepare report and making several presentations. Overall the use of technology made the work comparatively easier to compile thesis.

**Comparison and Impact of different marketing challenges**

| S. No. | Comparison and Impact of different marketing challenges | Total responses out of 68 respondents |
|--------|---------------------------------------------------------|----------------------------------------|
| 1 | Poor product quality | 16 |
| 2 | Wrong pricing | 18 |
| 3 | Wrong Packaging | 16 |
| 4 | Poor Distribution | 21 |
| 5 | Poor Promotion | 21 |
| 6 | Lack of market knowledge | 18 |
| 7 | Lack in right sales forecasting | 22 |
| 8 | Intense competition | 25 |
| 9 | Regulatory/legal problems | 16 |
| 10 | Availability of raw material | 26 |

*Comparison and Impact of different marketing challenges*

**Hypotheses Testing**

**Hypothesis 1**

H0#: Fruits and vegetable firms under small scale agro food processing industry in Pune region are not facing marketing challenges.

Ha#: Fruits and vegetable firms under small scale agro food processing industry in Pune region are facing marketing challenges.

**Cronbach's Alpha**

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|----------------------------------------------|------------|
| .799 | .800 | 10 |

*Reliability statistics Hypothesis 1 (Source: Analysis through SPSS)*

A value around 0.7 is considered to be a good value and at this value, the reliability of the scale is considered to be fairly good. Higher is the value better is the reliability of the scale. In above case the value is 0.799. Hence used scale is reliable.

### One-Sample Test

| | Test Value = 3.5 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of | |
| | t | df | Sig. (2- | Mean | Lower | Upper |
| VAR00 | 5.157 | 67 | .000 | .47059 | .2884 | .6527 |
| VAR00 | 3.492 | 67 | .001 | .35294 | .1512 | .5547 |
| VAR00 | 4.936 | 67 | .000 | .45588 | .2715 | .6402 |
| VAR00 | 4.402 | 67 | .000 | .44118 | .2411 | .6412 |
| VAR00 | 5.208 | 67 | .000 | .50000 | .3084 | .6916 |
| VAR00 | 3.685 | 67 | .000 | .38235 | .1752 | .5895 |
| VAR00 | 5.982 | 67 | .000 | .55882 | .3723 | .7453 |
| VAR00 | 5.347 | 67 | .000 | .55882 | .3502 | .7674 |
| VAR00 | 4.215 | 67 | .000 | .41176 | .2168 | .6067 |
| VAR00 | 5.645 | 67 | .000 | .58824 | .3802 | .7962 |

*One Sample test Hypothesis 1 (Source: Analysis through SPSS)*

**T – Value**

Table value from T – Table at 67 Degrees of Freedom & 95 % confidence level is - 1.99

**T Calculate > T Table Value (For all the variables)**

**P Value**

P values of all 10 variables are less than the significant level 0.05.Hence Null Hypothesis is rejected which means alternative Hypothesis, "Fruits and vegetable firms under small scale agro food processing industry in Pune district are facing marketing challenges" is accepted.

**Findings & Discussion**

Researchers found that small scale fruit and vegetable processing units in Pune region face the marketing challenges related to understanding product attributes requirements. They also majorly face problem related to managing the finished product inventory and stiff competition from large scale organizations and MNC's.

As per the received responses the marketing challenges are rearranged according to the relative importance given by the respondents which are as follows-

| S. No. | Comparison and Impact of different marketing challenges | Total responses out of 68 respondents |
|---|---|---|
| 10 | Improper inventory control of Finished product | 26 |
| 8 | Intense competition | 25 |
| 7 | Lack in right sales forecasting | 22 |
| 4 | Inadequate Distribution | 21 |
| 5 | Poor Promotion | 21 |
| 2 | In appropriate pricing | 18 |
| 6 | Lack of market knowledge | 18 |
| 1 | Poor product quality | 16 |
| 3 | Wrong Packaging | 16 |
| 9 | Regulatory/legal problems | 16 |

**Suggestions and Recommendations**

1. Shop Audit must be performed by the company time to time for controlling the inventory management of finished products.
2. Proper product, price, place and promotion strategies should be adopted to under check the competition.
3. Companies should develop the system to record the sales data time to time which will result in sales forecasting.
4. Non pricing root should be practiced at the fullest extent.

5.  Channel partners should be chosen as per type of market like Modern trade, Institutional trade and retail market.
6.  Digital Marketing should be adopted as a cost effective promotional strategy.
7.  Quality control measures should be taken by implementing TQM.
8.  Economic pouch packing and latest packaging trends should be adopted.

**Limitations of Study**

➢ The research is limited to the population defined in sample size which makes it to 68 small scale fruits and vegetable processing firms registered with Pune DIC only.

➢ This research focused only on the marketing challenges faced by small scale fruits and vegetable processing firms.

➢ Respondent were unenthusiastic and sometimes unwilling to give real information.

➢ This study is limited to the geographical region defined by researchers'i.e Pune region only.

**Conclusion**

Small scale agro food processing units in Pune food cluster is in growing stage. Many of them are missing on professional approach towards managing their business operations. They majorly face challenges related to marketing because of lack of its knowledge. Most of the small scale companies are under estimating the marketing function and the owners or promoters of the company only handling it on their own without professional knowledge of the Marketing. They should appoint a separate marketing manager who will look after the marketing function and should adopt the marketing efforts and practice it professionally.

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