

## AN EMPIRICAL SURVEY ON PRODUCT MIX OF AGRO BASED FOOD PRODUCTS IN JALGAON CITY

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### Abstract:

*The agro based food processing industry is divided in to various classes, subclasses, segments and categories. It is essential to find out the various products available in the market, there width, depth, length and consistency so that we can point out the most attractive area and recent trends in this industry. The data collected in this study had been from the organized and unorganized retail stores, dairies, bakeries, and meat stalls in the Jalgaon city. The main focus of this paper is to point out the how many product lines and variants are available in various segments of agro based food processed products in the market.*

*There is a small effort of the researcher to suggest or elaborate the opportunities for to expand, diversify the product and product range in particular segment or class of agro based food processed products.*

### KEYWORDS:

Product mix, Width, Depth, Length, Consistency.

### INTRODUCTION:

In ancient India agro based food products are stored in paves and underground well, which can be utilized throughout the year. After post independence and post liberalization Indian economy is fast developing economy. The economical, socio-cultural, technological, factors lead to the rapid urbanization, nucleus family structure, changing consumption patterns, changing buying behavior resulted in high demand of traditional and new food products, which satisfy the consumers in various aspects. The food processing industry is fastest developing industry in India.

FICCI in the report on Processed food enablers & barriers, reveals that the priority of Indian consumers towards purchasing of packaged foods, the first priority is taste, second quality & affordability, third one consumers across the spectrum are upgrading means from they switches from basic staples to enriched luxury versions of food items. As well as the report of NASSO 68th round in Maharashtra state the expenditure on food items in rural area is 52.4% and 41.6% in the period of June 2013, the expenditure on basic staples decreases but increase in convenience food. The report further reveals the important factors for expansion and growth are due to changes in demography, disposable income levels, and lifestyle have created a rapidly-growing domestic market for packaged food, with discernible patterns in consumption. These factors result in a multiplier effect, so that the growth potential for the sector is higher than current industry and analyst estimates. For companies, market share can be increased by investing throughout the value chain, targeting young consumers and creating 'value-added' products. Different categories of packaged foods are at different stages of product maturation and will require carefully targeted investment

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and product development.

### **Key factors of growth of Industry**

**Changing trends of consumer behavior:** Instead of traditional purchasing the consumers are interested in purchasing the food products in clean, hygienic sophisticated environment.

**Buying behavior:** consumers are prefers to purchase in small size, quality oriented, hygiene, variety, packaging conscious, attractive offers, availability.

**Shopping habits:** Prefers organized Retail shops instead of traditional Kirana stores.

**Nucleus Family structure:** due to the space and time constraint prefer to purchase in small quantity and ready to test new things.

### **WOMEN WORKING CLASS:**

A survey conducted by the Associated Chambers of Commerce and Industry of India (ASSOCHAM) has indicated a major shift in food habits in metropolitan cities with about 86 per cent of respondent households preferring to have instant food due to steep rise in dual-income levels, standard of living, convenience and influence of Western countries. Almost 92 per cent of the nuclear families surveyed said that after having children they have less time to spare and are spending less time in the kitchen. These families said they preferred take-outs, delivered food, and semi-prepared meals to help feed the family at mealtime.

Among bachelors, 72 per cent said they prefer ready-to-make food because of less cost, time and saving of energy. Sixty-seven per cent of working women revealed they preferred these foods as they were simple and easy to digest.

The above factors clearly depicts the how this industry is fastest growing industry in Indian economy.

The product mix concept explore the product offering by the particular industry or organization, it has certain width, length, depth and consistency. The width of product mix refers to how many different product lines, the length indicates total number of items in the mix, the depth refers to how many variants are offered of each product and lastly the consistency refers to how closely related to the product lines in end use.

### **Segmentation of Agro Based Food Processing Industry**

Agro based food processing industry includes all items from agricultural output to the ready to eat products.

On the basis of output agro based food processing industry can be classified in to four classes

- 1) Grain processing
- 2) Fruits and vegetables processing
- 3) Dairy and dairy products
- 4) Meat and meat products

Out of the each class again the classes are sub classified on the basis of processing into three categories

- 1) Direct product ex. Grain from agriculture
- 2) Primary processing ex. Grading, Packaging
- 3) Secondary processing, ex. Floor mill, Dal mill, oil mill
- 4) Tertiary processing ex. Consumer products like Bakery products, ready to eat products

### **OBJECTIVES**

- 1) To find out the product mix of various agro based food products available in retail shop.
- 2) To summarize the recent trends of product mix in agro based food processing industries.
- 3) To elaborate the opportunities in various segment of agro based food processing industry.

### **REVIEW OF LITERATURE**

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### **Product Mix:**

There are two important factors consumer consider while purchasing, one is the product itself, and the other is the brand of the product (Bearden and Etzel 1982). A brand can be defined as a name, term, sign, symbol, or design, or combination of them, which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors (Keller 1993). A company's corporate brand provides consumers with expectations of what the company will deliver (Argenti and Druckenmiller). Brand name is a critical cue for customer perceptions of product quality (Grewal, R. Krishnan et al. 1998).

Ampuero and Vila (2006) have indicated that positioning has its origins in product packaging (the concept was called product positioning). This literally means the shape of the product, the size of the package and its price in comparison to the competition. Once the positioning plan has been completed (and the company knows how it wants to present itself to the market with respect to its competition), the company implements a plan of action through the construction of a suitable marketing mix (Brooksbank 1994). However, in general terms, packaging is the container that is in direct contact with product itself, which holds, protects, preserves and identifies the product as well as facilitating handling and commercialization (Vidales Giovannetti 1995). All the packaging elements, including texts, colors, structure, images and people/ personalities have to be combined to provide the consumer with visual sales negotiation when purchasing and using the product (McNeal, J.U. et al. 2003). Packaging plays a major role in communicating brand personality by means of several structural and graphic elements (Ampuero and Vila 2006).

## **RESEARCH METHODOLOGY**

### **Types of Research**

#### **Descriptive Research.**

This research work is related to find out the what is going on that is varieties of products available, quality, brands, sizes, and the width, depth and length of the products available in various categories of food processing industry.

## **DATA COLLECTION**

### **Primary Data**

In this research work the unstructured personal observation survey method mainly used for the collection of data and unstructured personal interview survey method had been used as per the requirement.

### **Research Design**

Descriptive research design,

### **Sampling Design:**

### **Sampling Method-**

Stratified sampling

### **Sampling strata-**

For this study the respondents are retail shops, bakeries, dairy retail outlets, meat market, etc

All category of most of the agro based food products, branded-unbranded, national -local are available in organized retail shops. In Jalgaon there are

### **1)Retail Shops:-**

Navjeevan, DMart, Bigbazar, Suresh Food, Vasants are the five major organized retail shops, while in unorganized there are more than 1000 kirana stores, more than 100 grain merchants and traders, are present.

- 2) Bakeries- More than 12 bakeries in Jalgaon city  
 3) Dairies- Co-op-01  
 Private- 05 (Big), Small- 21  
 4) Meat & Meat product;  
 Mutton Market- 03 stalls, Fish Market-02 stalls, chicken market-02 stalls, small chicken, fish and mutton stalls- more than 100. Bazaar(vegetables market).

Sr. No.	Strata	Strata Class	Respondent	Samples
1	Retail Shops	Organized	05	02
		Unorganized	>100	10
2	Bakeries		>15	05
3	Dairy	Co-op	01	01
		Private	>25	03
4	Meat & Meat Products	Stalls	>100	08
Total			>250	30

**Sample size:**

Agro based food processing units are classified into 04 classes, mainly, Grain, fruits & Vegetables, Dairy, and Meat. These basic four classes are again sub classified and on the basis of retail outlets the 30 samples would be selected from these classes.

**Sampling unit:** Jalgaon city

**FINDINGS:**

The Agro based food processing industry is classified into 04 classes and again in 04 subclasses

1) Grain

1.1) Primary product: Whole grain: (Cerals)

1.1.1) Graded

Sizes: Available in various sizes ranging from 250gm, 1kg, 50kg, 1qt.

Quality: clear, brightening natural colour

Brand: Unknown brands, private label brands in retail shop

Packaging: transparent polythene bags for small packs, multicolor polymer bags for big pack .

Variety: based on natural production varieties

High width low depth

1.1.2) Ungraded

Sizes: loose and 50kg, 1qt.

Quality: no quality dimension

Brand: NA

Packaging: Traditional

Variety: based on natural production varieties

High level competition found in Rice category, more than 15 national brands and 09 local brands are found.

1.2) Primary processing:

1.2.1) Pulses

In pulses category, traditional sizes are available in 30 kg, 50 kg packs, in small size packs private label brands are found. No well known brands are available; Quality is associated with packaging and pricing. Packaging transparent and multicolour BOPP woven bags are found. High width low depth

**1.2.2) Oil:**

In oil category, 1liter, 5 liter and 15kg. are available while well known 06 national brands and 05

local brands are present. All Varieties are found soya bean, ground nut, sunflower and new rice bran is available in big packs while mustered, and sesame oil is available in small packs. Packaging LDPE pouch, plastic bottle and tetra pack of 1 liter, plastic can of 5 liter, and metal tin of 15 liter are available. Quality is associated with brand image and price.

### **1.2.3)Flour:**

In this category 1 kg, 5kg, and 50 kg packs are available while 05national and private label and 04 local brands are available. In case of variety, wheat flour is dominating but newly blended high nutrition flour brands are available, Bengal gram flour (BESAN), peas flour are available while varieties of various grain flour are available in private label brands. In terms of packaging 1and 5 kg packs are in multicolor BOPP woven bags while fabric woven bags are used for 50 kg packs. Quality is associated with brand, price and date of packaging.

### **1.3)Secondary Processing:**

Bakery, Noodles, Papad, Biscuits, Namkeen, input of food industry.

#### **1.3.1) Bakery products:**

The fresh bread, buns, pastries and cakes mainly 06 well known local brands and 03 national brands are available. Wide varieties are available in case of bread, pastries and cakes and the term quality is associated with experience packaging and price. There is high completion in the biscuit industry, 07 national brands and 05 local brands while few loose unbranded products are available.

#### **1.3.2) Noodles:**

In this category various sizes from small to family packs with large number of varieties are available. Wrappers, BOPP multicolor woven bags are the packaging types in this category. Quality is directly associated with brand and price.

#### **1.3.3) Namkeen**

High competition in this segment at local levels, there are 04 national brands and 07 local brands are available. Large number of varieties and sizes are available. Quality is directly associated with brand, availability and price.

1.3.4) In Papad category the market is dominated by Lijjat brand with large number of varieties. 06 Local brands and private label brands are found in this category.

### **1.4) Tertiary processing:**

Ready to eat segment, this segment is dominated by ITC, MTR, Everest, Suhana, Chings, MDH. Large numbers of varieties are available with attractive packaging. Quality is directly associated with taste and availability. The rate of new product development is very high in this segment.

## **2)Fruits and Vegetables processing:**

### **2.1) Primary Products:**

Seasonal fresh fruits and vegetables are available in fruit and vegetable market. Jain Fresh is only one local brand founds in this category.

### **2.2) Primary processing:**

Graded fruits and vegetables are available on the particular stalls and retail shops. Mango, Kiwi, sweet tamarind, strawberry are available in box packs the other fruits and vegetables are available in loose form, the quality of this fruits are associated with the seller stalls.

### **2.3) Secondary processing:**

Fruits to dry fruits, spices, Vegetables to dehydrated vegetables, wafers, Juices, crush, pulp, Jam, Jelly's, Pickles, ketchup, chutney's, candies, confectionaries.

**2.3.1 Vegetables:** In this segment the dehydrated form of pure vegetables are not available except 'Kasoori methi' of MDH. The branded and the private label brand of ginger-garlic, onion paste is available.

#### **Spices:**

2.3.2 Spices in loose are abundantly available on spices shops and stalls. Well known brands are found in raw mixture of spices. There are generally two types one is low quality low price and other one high quality high price.

#### **Powder form:**

In loose and in packaged form, loose form available on stalls while there is tough competition in packaged form, there is high width, high depth and overall high length and consistency found in this segment. There are 07 national brands and 06 local brands and private label brand related to the retail shops are found in all elements of this category.

### **2.3.3 Beverages: Juices/ crush/ pulp/ squash/ sharbat**

There is highly saturated market of this segment, in liquid form there is high width and high depth of product mix found but in case of concentrate or powdered form Rasana dominates the market. The main brands found in this category are Dabur's brands Real and Real Activ. Other players include Parle, Fresh Gold, and Godrej. Some of the other brands of fruit juices and drinks include Frooti, Appy, Mazza, Minute Maid, Slice, Fresh Gold, and Del Monte. The main competitors for this segment are the fresh juice stalls like coconut water, fruit juices, lassi stalls.

### **2.3.4 Jam Jelly's, confectionary, candies, toffees:**

Wide width and deep depth in this segment presence of reputed brands and local brands made this segment highly saturated. The rate of new product development is very high in terms of packaging and shape and type.

### **2.3.5 Pickles**

**Pickles:** this segment is dominated by local player NiLons, Bedekar and national player Mothers recipe, Ashoka and local players with high width but low depth in this segment.

### **2.3.6 Sauces/ Ketchups:**

This segment is dominated by national players like Maggi, Kissan, Heinz, Ashoka. There is very rare presence of local players in this category. The overall product mix is low width and low depth in this segment.

### **2.3.7 Chutneys**

This segment is dominated by Bedekar, Pravin and Prakash brands with low width and low depth.

### **2.3.8 Dry fruits:**

This segment is highly dominated by local stalls who sell the dry fruits in loose and private label polythene bags. The branded packaged packs are available in almonds, Cashew, Pista, black manuka, Kismis etc but the brands are not well known. There is high product width but low depth observed in this category.

### **2.3.9 Wafers:**

In this category there are two product lines, potato, banana, there are 05 national players like Lays, Parle, Haldiram, Balaji, having high depth in potato category while more than 20 local unbranded low depth packs are available. While in banana category most of the players are local manufacturers, they sold in loose and transparent polythene small packs. In branded category only one product line that was potato having high depth. In case of local unbranded category two product lines, potato and banana with no depth.

### **2.4 Tertiary Processing:**

#### **Ready to eat segment**

McCain, MTR, Safal, Knorr, Suhana, ITC (Kitchens of India), Everest, Chings, highly saturated market having high width, and high depth, with highest rate of new product development in this segment.

### **3)Milk & Milk Processing:**

#### **3.1 Primary Product: Fresh milk**

In this segment the fresh milk is abundantly available, there are more than 100 dudhwala bhaiya suppling the fresh milk.

#### **3.2 Primary Processing: ( Packaging)**

In this segment the major player is Vikas and small players like Sarswati, there were two product lines, cow and buffalo in 500ml and 200 ml packs. While more than 20 local dairies sells the milk in transparent polythene bags.

#### **3.3 Secondary Processing: Curds, paneers, ghee, basundi, rabadi, mava, etc**

In the Ghee category there is high competition due to presence of national brands Amul, Gowardhan, Paras, Mother dairy, Madhusudan rather Vikas is market leader, and there are more than 20 local dairy brands are available. In this segment there are two product lines cow and buffalo in 200 gm, 500 gm and 1kg packs.

Curds, curd milk, paneers, mava, sweets are available in local dairies as per the demands while Vikas, Saraswati and Amul, Aarey brands are available .

### **3.4 Tertiary Processing:**

#### **3.4.1 Milk powder**

In this segment Everyday, Amul, Paras, Madhusudan, Gowardhan are the major brands available while Nestles Everyday is market leader.

#### **3.4.2 Cheese, Butter**

In this segment Amul and Britannia are two market leaders, low width but high depth in this segment.

#### **3.4.3 Shrikhand**

This segment is dominated by local players, in single product line high depth found in this category.

### **4)Meat and Meat Processing.**

#### **3.1 Primary product:**

In this segment there are more than 200 stalls/shops of Mutton, Chickens, Beefs, Fish are found which sells the fresh meat.

### **3.2 Processed Meat:**

This is highly neglected sector, in this segment there are only two national brands Venky's and Godrej's Real chicken are in the form of frozen chicken while there is no such value added products are available. In fish category, canned prawn, canned and frozen fish available in raw at the fish stalls.

## **CONCLUSION**

### **1) Grain**

1.1. In primary product category the products are highly in loose form, while in the packaged 30 kg and 50 kg bags are available, not well known brand are available. For small family the small packs 05-10-20 kg are not available except basmati rice. Well known brand is not available. Low depth

1.2. Primary processing: In pulses category, in case of small packs of 1-5kg TATA's I-Shakti and Adani-Wilmar's Jublee brands attracts the more competitors, the local players are also launched their brands. In case of large packs such well known brands are not available.

In oil category, the absence of local brands in organized retail indicates that these brands are limited up to lower and lower middle class. They are lacking in tapping the upper class of the society. In this segment instead of retail consumer, the B2B customers are more and instead of brand it's highly price sensitive segment.

1.3 Secondary Processing: Bakery, Noodles, Papad, Biscuits, Namkeen, input of food industry.

### **Bakery products:**

Availability is important concern in this segment. National brands like Britannia, Monginis are available while local brands like Jeet, goldy, Ashok, Maodern, made their presence in convenience store.

### **Noodles:**

This category is dominated by national players, while the local players are not make their presence in retail packaged products. Homemade and local noodles manufacturers are lacking in developing their brands

### **Namkeen**

High competition in this segment at local levels, the local Namkeen manufacturers and sweetmart stores are bounded in traditional products and packaging and lacking in presence in convenience stalls and stores.

In Papad category there is huge market for local players if they managed the marketing mix properly.

### **1.4 Tertiary processing:**

Ready to eat segment, this segment is dominated by national brands ITC, MTR, Everest, Suhana, Chings, MDH. The local players are not able to enter in this segment while there is opportunity to them to develop the special Khandeshi dishes which are famous all over the Maharashtra.

### **1) Fruits and Vegetables processing:**

#### **2.1) Primary Products:**

There is wide scope for grading and packaging and branding for local players. The success of 'Jain Fresh' brands can motivate to the local players.

#### **2.2) Primary processing:**

The traditional way of marketing in this category, there is wide scope for new value addition in terms of grading and packaging.



### **2.3) Secondary processing:**

**2.3.1 Vegetables:** In this segment there is wide scope for preparation of dehydrated vegetables, and develops the brands.

#### **Spices:**

2.3.2 In this category there are local well known brands are found in raw mixture of spices and scope for to increase the range of different combination.

#### **Powder form:**

This is highly saturated segment but scope for local recipes preparation. Khandeshi Masala, Bonde masala, Navjeevan masala( Private label) are well known, available for limited recipe.

#### **2.3.3 Beverages:** Juices/ crush/ pulp/ squash/ sharbat

There is tough competition in this segment due to presence of multinational, national brands. The local players should extend their products from nectar juices to fruit drink and juices. The pack type and brand plays important role in this category.

#### **2.3.4 Jam Jelly's, confectionary, candies, toffees :**

Brand, packaging and new products development are the key factors in this segment.

#### **2.3.5 Pickles**

**Pickles:** there is high range of homemade pickels varieties gives the best opportunities to extended the existing product range.

#### **2.3.6 Sauces/ Ketchups:**

The fresh factors can gives the opportunities to the local players in terms of consumer product. The presence of large number of caters, hotels and food stalls are the another source of motivation for development of industrial packs.

#### **2.3.7 Chutneys**

Huge opportunities in this segment number of homemade chutneys are found in this region. In case of consistency the dry chutneys are the best option.

#### **2.3.8 Dry fruits:**

In this segment the buyer needs authentication of pure form, so well branded, packed and available everywhere can dominates the market.

### **2.4 Tertiary Processing:**

Ready to eat segment, This segment requires high level of investment, the well settled industries can take the opportunities for the preparation of local dishes and various regional dishes.

#### **2)Milk & Milk Processing:**

Highly saturated market, but the brand which maintains freshness, hygiene, nutrition can dominate the market. In this segment higher the level of processing more the profit. Low width high depth.

#### **3)Meat and Meat Processing.**

Commercial products in this category are very rare. The abundant availability of fresh meat and the

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factor freshness might restrict the development of commercial products. Low width low depth.

### CONCLUSION:

The product mix concept that is width, length, and depth can predict the saturation, competition and opportunity in particular industry. The Agro based food processing industry is very vast in nature, classify and sub classify into 12-16 major segments. High width and high depth indicates tough competition, indicates there is necessity to develop new innovative product in this category. The high width, low depth indicates there is opportunity to serve the different classes by producing different variants. The low width and high depth indicates there is less scope of to develops new product lines and needs high level of innovation. Finally low width and low depth indicates the high opportunity in development of new product lines and variants. The new product lines and variants should be develops on the basis of consistency which is based on internal and external factors, in internal factors includes resources, nature of product, distribution channel and external factors includes consumer preferences, economic, social, and technological factors.

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