Major Problems and Prospects of Food Processing Industry in Punjab

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Abstract- *As Punjab is agriculture dominating state and has very bright scope for setting food processing industry to uplift the agri-business system which will ultimately boost all other components of agri business system to complete the process. Economic liberalization, globalization, entry of MNC's in processed food segment has tremendously increased the opportunities as well as competition in the market with added advantage to customers. Likely modernization and commercialization of agriculture in post GATT era with emphasis on value added agro based products for domestic as well as international market, spell a very bright future of Punjab food industry and this study laid emphasis on domestic market, keeping in view the fast changing tastes of consumers and their preference towards processed food products.*

Keywords-*Food Processing; Problems in Punjab; GATT; Agribusiness*

1. INTRODUCTION

In developing country like India, the food processing industry has a higher potential for employment generation through development of Small Scale Industries (SSI). The achievement of the SSI sector has been much higher than the targets set during the recent years and the focus of small industry is now more on long-term sustainable growth rather than short-term subsistence. The power of small scale industry overall in India is very large with nearly 3 million small units and 24 million people working. Employment generation, industrial growth in clusters, regional development and local sustainability, entrepreneurship, sustainable consumption, low cost of production and flexible manufacturing systems can be counted as inherent strengths of the informal food processing industry in India.

At the same time, the large flour mills, modern rice mills, fruit and vegetable processing units, solvent extraction (Oil) units, milk products production units, meat processing units and fish processing units, these industries generally neither have their own research and development cells nor have any tie up with independent R & D institutions. On the other hand, the informal food processing sectors with huge magnitude such as bakeries, pasta goods units, and traditional units depend upon R&D institutions to really look into increasing their quality and profit margin. This is a recent trend. In this context, the opportunities have to be recognized in horticulture, spices, condiments, herbs, marine, meat products, traditional foods with grand mothers" taste, health foods, convenience foods and functional foods etc. North India, comprising Punjab, Haryana and Himachal Pradesh and parts of J&K, is fast emerging a hub of the food processing industry, thanks to changing lifestyle of its population, growing income of the middle class and surplus production of fruits, vegetables and milk.

2. OBJECTIVES OF THE STUDY

To evaluate the major problems and prospects of food processing industry in Punjab

3. REVIEW OF LITERATURE

This chapter deals with the reviews of literature i.e. different articles and studies that have been compiled from different journals and magazines in order to get a view regarding various studies that have been undertaken pertaining to different aspects of ready-to-eat food. A brief review of literature of selected studies and articles to the proposed research is presented here. These studies are reviewed critically and have an understanding of various dimensions of the problem.

Hollingsworth (2000) discussed that the growth in sales of healthy foods and food products in the US, together with the main population groups being targeted as consumers of such foods and the marketing of healthy food products by smaller, niche-specific companies. Aspects considered include: healthy food categories with rapidly expanding markets (new-age beverages; natural foods including organic and processed foods without added salt, sugars or preservatives, meat alternatives, frozen natural foods, organic frozen foods and specialty teas) importance of the adolescent population as current and future consumers and purchasers of healthy foods, and successful strategies used to market healthy food products by niche companies in the US.

Neff (2002) in his article „Time to go to market" said that 2002 could have proven to be one of the best times for launching new food products and new food marketing initiatives as consumers had spent more time at home eating, watching TV and even paying more attention to ads. They were likely to find not only consumers but also food retailers more receptive to their messages. Food retailers were saying that was the perfect time to launch a meaningful new brand or product initiative like the ready-to-eat foods because there were so many more people staying home, and the customer counts in the food retailers had been going up for the first time in over 10 years. Arya (1992) in his article, "Convenience Foods - Emerging Scenario", defined convenience of foods as those products in which all or a significant portion and their preparation has been transferred from the consumer"s kitchen to the processing plant. He observed that all over the world during the last two decades, the convenience food market has witnessed breath taking changes in quality and quantity of products available and the packaging technology employed for their processing. In India too, many of the products which were hitherto marketed by food service establishments or small scale artisans are now marketed by MNCs in attractive packages. Reinhardt (1996) discussed characteristics contributing to the success of innovative processed food products and the effective development of such products in the food industry was discussed by the researcher. Aspects considered include: definition of the term innovation; factors contributing to the success of innovative products (e.g. creativity and productivity, effective use of technological, management and marketing knowledge); success indicators (e.g. market performance, research and development activities, patent applications); typical characteristics of innovative foods (e.g. light, convenience, environmentally friendly and health criteria); and trends in the development of product innovations for alcohol free beverages and other foods. Srivastava and Patel (1994) reported that agro industry provides the farm industry linkage which help accelerate agriculture development of creating backward linkage (supply of credits, inputs and other production enhancement services) and forward linkage (processing, marketing) adding value to the farmer"s produce, generation employment opportunities and increasing the farmer"s net income. Sundareson (1990) observed that the Indian food processing Industry has so far been long on promise but short on performance; except for certain sectors such as milk based foods, cocoa products, instant coffee and bakery products, the reasons are not far to see. Among them are high cost of packaging due to high prices of raw material, very high government (state and central) taxes and levies amounting to a gross of nearly 50 percent of the

product price, low productivity in agriculture and erratic volume of farm output due to over dependence on the monsoons and inadequate development of irrigation, almost non-existent cold storage; poor transportation infrastructure leading to high distribution costs and uneven supplies to retail points, low availability and high cost of energy, inadequate product development to suit ethnic and regional tastes, needless controls such as reservation of certain items like bakery products for the small, poor data-base regarding consumption habits and preference of the population and expensive indigenous capital equipment due to high domestic prices of raw materials such as stainless steel and aluminum. The study dealt in major problems of FPI as was the requirement of the present study. But this work was done before liberalization of Indian economy.

4. RESEARCH METHODOLOGY

Understanding marketing problems and prospects help in determining the growth direction of successful ventures. It provides a lot of useful information regarding marketing mix for planning a successful strategy for the company managers as well as for the policy makers (including government) for the whole industry as well as economy in general. This study was designed to explore the problems as well as prospects of food processing industry in relation with its response to seasonal fluctuations in terms of productivity and profitability and exports. The study draws its significance from the fact that the state of Punjab even being agriculturally advanced, yet the overall agriculture sector is remuneratively not as good as it has the potential. In view of the above facts the scope of the present study has been restricted to the state of Punjab only, which proposes to investigate into the important aspect of marketing management includes STP, marketing mix, and its relationship with seasonal fluctuation and hence marketability which plays crucial role specially in processed food segment, where the market environment changes so quickly that the marketability and sometimes even business viability comes in question. This study was designed for milk processing industry in particular out of the food processing sector organizations in Punjab and they were observed with the latest developments.

5. SCOPE OF THE STUDY

As Punjab is agriculture dominating state and has very bright scope for setting food processing industry to uplift the agri-business system which will ultimately boost all other components of agri business system to complete the process. Economic liberalization, globalization, entry of MNC"s in processed food segment has tremendously increased the opportunities as well as competition in the market with added advantage to customers. Likely

modernization and commercialization of agriculture in post GATT era with emphasis on value added agro based products for domestic as well as international market, spell a very bright future of Punjab food industry and this study laid emphasis on domestic market, keeping in view the fast changing tastes of consumers and their preference towards processed food products. All the leading players of processed food industry are putting their all out effort to understand the need of each and every marketing perspective irrespective of different levels and structures of the organization. A light has been thrown in this study on this very important aspect of problems and prospects related to the product, consumers" preferences, marketing elements like product itself, brand perception etc. with an effort to analyze the policy of selected food processing organization from where it is evident that all the selected companies have given due consideration to this important aspect. All the selected organizations dealing with number of products as their product range and this effort has been tuned to the basic products and study was done in this light.

6. POPULATION OF THE STUDY

The study involves fact findings relating to food processing industry in Punjab. The population for this study comprises selected medium and small scale milk processing industry of Punjab as obtained by further references from such units. An attempt was made to obtain list of units from Directorate of Industries, Punjab and for small scale units, Punjab Small Scale Industries & Export Corporation. But no such comprehensive list was available. The senior functionaries of some of the milk processing units were consulted to prepare the list.

7. SAMPLE DESIGN AND SIZE

Samples will be selected for small and medium scale units (SME"s) because there are differences in nature of operations. Out of the total units listed, only those units which were willing to share information and also manufacturing consumer as well as industrial products were chosen. Among such selected units, the units engaged in milk were considered for carrying out the research. As the food processing sector constitutes a lot of industries viz. milk, grain, vegetables, fruit, etc, the present study focuses at milk processing industry only. In the state of Punjab, there are many business organizations doing milk processing in organized as well as unorganized sector. For the purpose of the study only organized sector was considered which are branding their products and are directly in the commercial exchange of their products. The units engaged in processing operations like collection and chilling of milk etc. were not included for the same reason. The milk chilling centres, but they are working

as feeding/ancillairy units to the large scale industry only. They are not involved in domestic or export market and hence, were not included. Further, cooperative sector is the largest component apart from some large and small scale companies in milk processing business. Only Cooperative sector or small and medium scale units were included. The care was taken that those organizations are selected which make consumer goods for domestic consumption through domestic supply chain. Some of the companies were also engaged in exports.

Sampling for Industry related Objectives

Non–probability sampling design was followed for the selection of food processing companies. A sincere effort was made to prepare a list of all the food processing industries of Punjab through Directorate of Industry, Punjab, CII (North), PSIDC, PSIEC etc. To prepare a sampling frame, personal interaction with officials of different associations and companies was made to get the addresses of the units.

The population for this study comprised of the medium and small food processing units operating in Punjab State in the private sector as well as cooperative sector. Taking into account the cost and time involved in survey method and a number of other factors like availability of published records, willingness of company officials to share the information and access to accounts of many companies, it was considered to conduct the comprehensive study on companies only, which are operative in Punjab. Very large companies on the basis of their turnover having the major operations in Punjab state like Nestle, SmithKline Beecham were not selected as the study was planned to focus at marketing problems and prospects of medium and small scale companies only.

The selected companies were

1. Punjab State Cooperative Milk Producers Federation Ltd. (Milkfed), Chandigarh (All units)

2. Herman Milkfood, Manimajra (HM)

3. Hygeinic Foods Ltd., Khanna

4. Milk specialities Ltd., Chandigarh

5. Milkfoods Ltd., Patiala

6. Kang Milk products, Ludhiana

7. Baba

8. Mukand, Malerkotla

9. Supreme

For selecting the companies, the companies with similar product range were included. Furthermore, the

companies, in spite of the best efforts, which were not interested, to share the information considering it strategic were also excluded. Since the marketing practices are not shared in depth and majority of the companies consider the strategies to be part of their classified information, the companies which were willing to share this information were chosen for the purpose of present study.

8. DATA COLLECTION

As mentioned earlier, data collection was done on two fronts, viz. the milk processing units and consumers.

From Industrial organizations

Data collection emphasized the collection of the qualitative data relating to different aspects of marketing problems and prospects including information regarding product, price decisions, sales and distribution, promotional decisions in addition to information regarding sales and export performance, pricing, packaging apart from distribution of final product to selected segments apart from various aspects of consumer behaviour. The information on above said parameters was collected with the help of detailed structured questionnaire with initial input in the form of desk research which was conducted to scan through the library material available on the subject and various parameters pertaining to this study were listed. Later on, they were given shape in the form of questionnaire, which was designed so as to solicit precise responses from the executives of selected food processing organizations and consumers. To pretest the questionnaire a pilot survey was done to give final shape to the questionnaire. The questionnaire was structured and non disguised in nature. Some information was also collected through unstructured interviews of the senior functionaries of different companies and reviewing the company literature. Some of the questions which the companies were not ready to share were asked through disguised unstructured interview method. The primary information was collected with the help of structured and non disguised questionnaire. In person, top level and middle level marketing and production executives were consulted to get the questionnaire filled up. They were designated as manager (marketing), manager (production) and sales (executives), although the designation of respondent varies from company to company. Some of the companies refused to give information were excluded. The companies with improperly maintained records/data were also omitted. All the concerned persons were contacted to fill various portions of the structured and non disguised questionnaire. The secondary information was collected from other records of the companies and also from their websites. The websites of certain identified and authentic agencies including that of government of

Punjab were also visited to collect the information.

Factor Analysis

The Factor Analysis is general and frequently used as an interdependence statistical technique that has found increased use in marketing research, (Luck, 1987. p.542). The Factor Analysis is designated as the queen of analytical methods because of its power and elegance (Dwivedi, 1997, p.199). It is a method of extracting common factor variance from a set of measures. It minimizes the multiplicity of measures to the utmost simplicity. It indicates what measures go together and suggests unities in the basic characteristics underlying varied measures. The two basic reasons for using Factor Analytical are (1) to simplify a set of data by reducing a large number of measures (in which some may be interrelated causing multi-collinearity for a set of respondents to a smaller manageable number of factors which are not interrelated) that still retain most of the information found in the original data set and (2) to identify the underlying structure of the data in which a large number of basic characteristics (constructs) of the sample.

9. DATA ANALYSIS

To achieve the objectives of the present study, both data interpretation/analysis and review of literature approach was followed to go in for in depth analysis of marketing problems and prospects of selected food processing companies operation in Punjab and that of consumers" responses. Since the marketing practices are not shade in depth and majority of the companies consider the strategies to be part of theire classified information, the companies which are willing the share this information were chosen for the purpose of present study.

Problems faced during the marketing of products

Through rotation of matrix, the first component has high loadings from four problem areas: Government regulations and rates, High Tax rates, poor infrastructure to support and high initial cost. Looking at the problem areas, the factor can be termed Governmental and Infrastructural problems factor.Varying tastes and preferences, procurement of raw material, unawareness about market potential etc. variables are associated strongly with the second component. As there is uncertainty in consumers" taste and preferences, raw material supplies and market potential, the factor can be termed Uncertainty factor.Distribution related problems, seasonal fluctuations, varying export demand are associated strongly with the third component. Looking at the problem areas, the factor can be termed Varying distribution and demand problems.The fourth component is

strongly associated with Unavailability of required human resources, and competition with unorganized sector. Looking at the problem areas, the factor can be termed Competition resource factor.The fifth component is strongly associated with unethical practices of competition by competitors and middlemen‴s attitude. Looking at the problem areas, the factor can be termed Human factor.As one goes on, the factors become harder to interpret.

10. CONCLUSION

Future Prospects of Organized Food Processing Industry

Considering the various problems being faced by the food processing industry and their extent, it is important to discuss the future prospects of the industry in Punjab. It is not to be forgotten that the problems become prospects if they are identified and a suitable decision is taken followed by an appropriate marketing strategy. The quality of product was figured at top in terms of point considered while making product strategy followed by relationship with customer followed by Brand image , time commitment . Low price figured at very low rung of the ladder. National level players covering large territory like Verka, Milkfood, Milk Specialties and Hygeinic gave more importance to Brand image apart from top priority selling point i.e. quality. For local level or small scale players, relationship with customer was the biggest point. National players gave least consideration to low priced tag.

Extent of change taking place in the product/production due to change in season

Keeping in view the fact that a product line is a group of products that are closely related because they function in almost similar manner are sold to same customer groups are marketed through same type of distribution outlets, or fall within given price ranges. As the processed milk products are perishable in nature as is the raw material itself i.e. milk and hence fluctuations in the product line with respect to season are bound to come. The almost whole food processing industry follows the same trend. With this objective in mind, reactions are sought from selected food processing industries regarding field of change and extent for judging their reactions, decision making and to watch weather they are watching the movement of the product or not.

Finding and suggesting buyers about new uses of existing products was most significant change followed by looking for new markets, packaging and pricing. Change in flavour/taste came next in the order. It was important to note that change in pricing was least favoured by the marketers. This may be due to the reason that these fooditems have become necessity or part of daily life, so demand persists. Withdrawal from existing product range figured at last among all changes. The big scale companies like Verka, Milkfood and Hygienic gave a lot of weightage to change in market apart from finding new buyers and change in uses of the products. Withdrawal of existing product range was at all not favourable to local companies like, Indasa, Kang, Baba and Mukand.

All companies except Verka, Milkfood, Hygienic and Milk Specialties, gave no weightage at all change in pricing and very less weightage to change in distribution system. The companies which operate at large geographical area may change distribution system e.g. shift to refrigerated system.

Extent of change taking place in the product/production efficiency due to change in season

To explain the possible reasons responsible for change in product line with respect to their weightage. It was found that all the companies were of the common view that changes in physical conditions like temperature etc. Change in preferred tastes of consumer w.r.t. particular product became the second most important reason of seasonal fluctuation felt by the milk processing companies. The consumers‴ liking for products like ice cream, flavoured milk, lassi etc is more in summer season. Change in level of availability of raw material was another important reason of seasonal changes. As milk yield as well as its nutritional composition (fat/protein content) is greatly affected by atmospheric temperature, availability of type of fodder for the cattle and hence, the supply of milk to the processing unit is also greatly affected.Consumer‴s quantum of consumption w.r.t. particular product also changes in different seasons as the liking and suitability changes.

The companies feel that technology requirement in each season and hence cost of processing also varies but gets the least weightage. The important changes in use of technology in each season are regarding distribution and storage, but major technology adopted for processing operations almost remains unchanged irrespective of seasons. Verka feels that all factors are equally important as far as seasonal fluctuation is concerned. Milkfood and Milk Specialties Ltd. feel that all factors of change are very important whereas the change in taste and preference of customers is just important. For Hygienic, consumer related factors like change in quantum of consumption and their taste and preferences are just important whereas the other factors are very important. Change in preferred tastes of consumer w.r.t. particular product and change in physical conditions are very important reasons of seasonal fluctuation for Herman.

Importance of problems faced during marketing of products

It was observed that milk processing industry feels that „government regulation like high tax rates" was the single most important problem faced by selected food processing companies, followed by „lack of distribution i.e. non-availability of processed food items in comparison to unprocessed food material", „High initial investment" and „nature of the product itself e.g. low shelf life" were the next major problems for the industry followed by „Unawareness of consumers about quality of processed foods". Poor infrastructure was the least important problem considered by the industry.

While talking about the companies, „high tax rates" problem was the common problem for all the companies. Milkfood, Milk Speacilities and Supreme Industries (Uttam) felt that government regulations also impede realization of their business potential. The companies like Verka and Milkfood, for having large processing volume, were of the view that lack of distribution and consumers" awareness of quality over the unprocessed food are also major problems.

Importance of problems related to seasonal fluctuations

When the officials of selected companies were asked about the various factors related to seasonal changes which affect the performance and functioning of their organizations, cost of transportation was the biggest problem affecting their organizations. As Punjab state is in sub-tropical zone, temperature varies from sub zero to forty plus in various seasons, the perishable nature of the food material decreases shelf life. The organizations have to incur more cost on transportation using refrigerated vehicles or ice blocks. The cost is incurred on transportation of raw material as well as finished product to market. By incurring higher cost on refrigeration or chilling by ice, the companies can procure the milk from a wider area and can also distribute in a bigger market. Moreover, the companies can also use vehicles with bigger container capacity, and thus covering large area using more time. Similarly, cost of distribution is another major problem related to seasonal variations. The vendors prefer to keep lesser stocks and also want supplies twice a day. The companies, in such cases, need to supply food material at more number of vendors located at distant locations. Cost of storage is another problem related to temperature and Relative Humidity which vary with seasons. Variation in cost of storage in different seasons is caused by refrigeration or chilling of food material.

As costs of transportation, distribution and storage increase or decrease in different seasons, the effect on profitability is obviously an important problem for the milk processing industry. The production capacity utilization and supply to markets vary from season to season, hence, profitability suffers.

Labour requirements also change with season. It was observed that more labour is required in summer season as supplies are more and hence, more quantity of milk is processed. The procurement of raw material is another significant problem related to seasonal fluctuations.It was important to observe that the companies do not feel problem in maintaining quality of food material. When further probed, it was observed that food material has standard parameters of quality in terms of fat, proteins, carbohydrates composition. These standards are either fixed as per some laws or are industry standards. Thus, companies have to maintain those quality standards in all seasons. Thus, it can be inferred that seasonal fluctuations cause significant problems to FPI and affect the performance and functioning. In some seasons, the procurement is more and related problems are also more e.g. costs of transportation, distribution and storage. Similarly, in some seasons, the procurement of raw material is less and hence profitability suffers. The major reason is perishability or less shelf life of food products.

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