CHAPTER – I
DESIGN AND EXECUTION OF THE STUDY

1.1 INTRODUCTION

The term “marketing” is a comprehensive one. It is recognized as a special management function: It starts with the consumer and ends with the consumer. It includes all resources and set of activities necessary to direct and facilitate the flow of goods and services from the producer to the consumer. The ultimate objective of business is to create consumer. The consumer is the kingpin around which the entire business activities revolve. Marketing involves the interaction of several business activities, the aim of which is to fulfill the needs and desires of the consumers. This view of marketing has given birth to what is known as marketing concept ‘Satisfaction of the consumer is the most important goal of any business enterprise’. In an attempt to provide that satisfaction, one ought to look at every problem from the standpoint of the buyers. Their needs, wants, desires, preferences, beliefs, habits, foibles and egocentricities should be duly reflected in every marketing problem.¹ Philip Kotler has aptly described a marketing concept that customer satisfaction is the key for satisfying organizational goals. Thus marketing concept is more customers oriented than the product.²

Over the years, marketing philosophy has undergone a sea change. While the sales concept starts with the firm’s existing products and ends with the task of stimulating profitable volumes of sales, the marketing concept starts with the firm’s existing and potential customers, ends with a coordinated set of products and programmes to serve them, thereby building its profits on creating meaningful value satisfaction. Peter F. Drucker observed that “the purpose of business is to create a customer” and consumer’s satisfaction is the ultimate aim of any activity in any sound system whether it is capitalistic, or socialistic. As an important element in the economic activity, the behaviour of the consumer has to
be systematically understood, consumer research, therefore, concerns with the study and analysis of consumer behaviour.\textsuperscript{3}

Modern marketing aims at determining the needs and wants of target markets and adopts the organization to deliver the desired satisfaction more effectively and efficiently than its competitors. So the study and understanding of consumer behaviour is sine-qua-non for any marketing programme. The study of consumer behaviour flows naturally from the marketing concepts the idea of looking at the product from the consumers' point of view, offering what they really want, instead of what one thinks, what they need.

In studying consumer behaviour, it is consider not only what people buy, but where, how often, and under what conditions they make their purchases. Consumer research is extremely important in marketing strategy because the knowledge of the factors that influence consumer purchases can help to increase market share.\textsuperscript{4} If marketers have a sense of psychological and sociological factors operating on consumers, it becomes much easier for them to predict how consumers tend to react to new products, price changes and promotional companies. Thus the knowledge of consumer behaviour makes it simple, to analyse the market and plan appropriate strategies.

An understanding of the economic, psychological and sociological characteristics of the consumers and their motives, attitudes, cognitions and personalities can help to discover new market opportunities, to provide a sharper segmentation of the market and a meaningful product differentiation and to formulate marketing strategies based on consumer responses as a major variable. Thus, the marketing concept is consumers oriented. Hence, the study of consumer behaviour is basic to all marketing activities.
1.2 AGRICULTURAL MARKETING

Agricultural marketing refers mainly to the buying and selling of agricultural products. In earlier days, when the village economy was more or less self-sufficient, the marketing of agricultural products posed no difficulty as the farmer sold his produce to the consumer on cash or barter basis. Today's agricultural marketing has to undergo a series of exchanges or transfers from one person to another, before it reaches the consumer. There are three marketing functions involved in this such as assembling, preparation for consumption and distribution. Selling of any agricultural produce depends on some factors like the demand of the product at that time, availability of stock etc. The products may be sold directly in the market or it may be stored locally for the time being.

Moreover, it may be sold as it is gathered from the field or it may be cleaned, graded and processed by the farmer or the merchant of the village. Most of the agricultural products in India are sold by farmers in the private sector to money lenders (to whom the farmer may be indebted) or to village traders. Products are sold in various ways. For example; it is sold at a weekly village market in the farmers’ village or in a neighbouring village. If these outlets are not available, then the produce is sold at irregularly held markets in a nearby village or town or in the Mandy. In India, there are several Central Government Organizations, which involved in agricultural marketing like Commission, Agricultural Costs and Prices, Food Corporation of India.

Of late, the whispers in the corridors of power indicate an anxiety about such prospects. This is because there has been no growth in the production of food grain. In 2003-04, agriculture production peaked at 213.19 million tons of food grain. During this period, all agricultural crops showed a high level of production. The area under food grain has declined from a peak of 107 million hectares in 1983-84 to a little over 100 million hectares 2007-08.
The area under groundnut has declined sharply from over 8.67 million hectares in 1990-91 to 5.8 million hectares in 2007-08. However, the area under soyabean's has increased to 8.15 million hectares from 3.18 million hectares during the same period.\(^8\) Productivity is still hovering around 3123 kg per hectare of paddy as against 6265 kg in China. In the case of wheat, China produces 4455 kg per hectare as against 2618 kg per hectare in India.\(^9\)

1.3 CONSUMER BEHAVIOUR

A consumer is usually thought of as a person who buys a product or service for monetary consideration on prices, at place convenient to him, in order to satisfy his needs. In the present study the term “consumer” in the above mentioned sense, is applied to edible oil buyers as well as users. In identifying the consumer, this sort of information, derived from observable consumer bahaviour data is very important as far as locating total market share is concerned. But in as much as factual information forms the rational basis for all decision making, it follows that, to be useful, the information must be both comprehensive and reliable. The informational needs of those practicing marketing, especially in the creative field of product development and brand promotion require more qualitative, dynamic knowledge about the consumer than his income, age and family status.

The purchase decision resulting in the exchange transaction is just one point on the buyer behaviour continuum, and the marketer is interested in much more than just that. The marketers like to know how the consumer in the first place arrived at this decision, the inputs that underlie and impinge upon it, their post transaction feelings and other things, so that the total marketing effort can be directed at generating consumer satisfaction in a more real sense. Therein lays the rationale for the study of consumer behaviour.

They add further that though the word “behaviour” is used to include only the overt or observable actions it is increasingly being recognized that the overt purchasing act is only one (the discernible) portion of decision process.
Consumer behaviour viewed more rationally, would include the less discernible, but nonetheless important processes that underlie and accompany consumption. In effect it involves the study not only of what people consume but when, how often, and under what condition goods and services are consumed.

1.4 WHY STUDY CONSUMER BEHAVIOUR?

The planners of the enterprises need to know about the changes taking place in an economy in order to adjust the supply to the demand of different goods. In common parlance, demand is considered in physical terms. But in actual practice, demand for a product is affected by many of the factors which can be termed as psychological or behavioural factors. In this regard brand attributes of the product, advertisement, availability, servicing in respect of durables are the important factors which influences the demand for the product.

It is not all alone the product which is purchased as the product but also purchased with the product are the benefits the buyer believe or expect from the same as well as the value satisfaction they hope to obtain by its use.

According to Levitt this is the competition of product augmentation, not competition between what companies produced in their factories, but between what they add to their factory output in the form of brand attributes of the product advertisement, availability, services financing, delivery arrangement and other things that people value. A consumer gives much importance to the product offering of the firm than what the product really offered to him. Thus it is important to study consumer behaviour in order to have in-depth understanding on consumer related studies.
1.5 OPERATIONAL CONCEPTS

Producer

Producer is the person ultimately responsible for overseeing all aspects of mounting a theatre production. The independent producer will usually be the originator and finder of the script and starts the whole process.10

Wholesaler

Wholesalers are those merchant middlemen who buy and sell produce in large quantities. They may bring the commodities either from the producer or from other wholesaler. They sell their produce to retailers, other wholesalers’ or processors or exporters. They normally do not sell significant quantities to final consumer.11

Retailer

Another important link in the channel of marketing of edible oil is the retailers. They buy commodities from the wholesaler and sell them to consumers in small quantities. They are producers’ personal representative.12

Consumer

The term “consumer” includes every human being, animals, birds and every manufacturing unit created by the human being who or which consumes either goods or services. According to Webster’s new collegiate dictionary, consumer means, one who consumes, one who uses economic goods so diminishes or destroys their utilities. One that consumes, especially one that acquires goods or services for direct use or ownership rather than for resale or use in production and manufacturing.13

Consumer Behaviour

According to Loudon and Dillabitta consumer behaviour is the decision process and physical activity individuals engage in when evaluating, acquiring, using or disposing of goods and services.14
Perception

Perception is how consumers view the product in terms of price, quality, quantity and other characteristics of a product.\textsuperscript{15}

Customer Satisfaction

Customer Satisfaction is a person’s feelings of pleasure or disappointment, resulting from comparison of product perceived and actual performance in relation to his or her satisfaction. So, customer satisfaction is a function of a product, perceived performance and the consumer expectation.\textsuperscript{16}

1.6 AN OVERVIEW OF OILSEEDS PRODUCTION IN INDIA

Oil seeds and edible oils occupy an important position in the Indian economy as they provide much needed protein and energy to the human and live - stock population and also earn precious foreign exchange to the country. They form raw materials base for edible oil producing industries that possess a large employment potential. The vegetable oil is a processed product of oil seeds are one of the important protein and energy containing ingredients in Indian food. The oil meal or oil cake a joint product meets the major energy and protein needs of the live - stock population of the country.

India is a fortunate to have a wide range of oilseeds crops grown in different agro climatic zones. The country is one of the biggest growers of oil seed crop in the world. India also stands first in the world in the production of groundnut, sesame and castor. Nearly one-fifth of the world rapeseed mustard produced in the country. Oil seeds annually cultivated over an area of over 18 million hectors in India, constituting crops like groundnut, rapeseed, mustard, sesame linseed, castor, nigerseed, safflower, soyabean sunflower and coconut. These claims the largest share (about 15 per cent) of agricultural and next to food grains and contributes about 5 per cent to 6 per cent of the gross national product. Among the non - food groups, their share in the total acreage is more
than 60 per cent linseed and castor come under non-edible use, while the rest of the oil seeds are utilized for edible use.

Oil seeds account for about 14 per cent of area and 8.5 per cent of production of total oil seeds. Further, of the total oil seeds production more than 93 per cent in edible. The five major oil seeds namely groundnut, gingili, castor, sunflower and coconut account for 88 per cent of the area and 85 per cent of production of oil seeds of the five major oil seeds, groundnut accounts for 64 per cent of production, gingili 40 per cent of production, castor about 3.5 sunflower 6.5 per cent and coconut accounts 12.6 per cent of production of total oil seeds.17

Although the country has become self sufficient in production of food grains mainly cereals, the performance of oil seeds is much below expectation. The growth rate of oil seed production has been only around 1.5 per cent per annum for the last 35 years as against the growth rate of food grain production of around 2.6 per cent per annum during the same period.18

1.7 PRODUCTION OF OIL SEEDS IN INDIA

The per capita availability of oils and fats in India is far below the minimum requirement and also for below the current fat consumption of the countries which are not importers of oil seeds. Imbalance between demand and supply of edible oil seems to have become chronic is as much as that the country has to spend over Rs.1, 000 crore per annum in imports particularly to cover the gap. Production of oils increased substantially but with the growing demand the country has been facing edible oil shortage for past two decades. During this period, however attempts have been made to correct the situation.

Firstly by improving the yield ability of the traditional oilseeds crops groundnut, rapeseed, mustard, sesame, linseed and castor and secondly by exploring the possibilities of new sources such as sunflower, soyabean, cotton and rice bran. Although the area under cultivation increased considerably, the
progress is still far below the desire level. This is mostly because oil seeds are cultivated mostly in unirrigated, semi arid areas and hence remain vulnerable to vagaries of nature.

Secondly they are cultivated mainly by small and marginal farmers who are still not well adapted to new forms technologies. Thirdly; the progress in respect of oil seeds has not been substantial mainly because food trains were given first priority in research and development. In the second phase of agricultural development programme, top priority is being given to produce high yielding varieties of oil seeds which could grow well under rained condition.

1.8 GOVERNMENT INITIATIVES TO BOOST UP OIL PRODUCTION IN INDIA

India is the fourth largest oilseed producing country in the world, next only to USA, China and Brazil, harvesting about 25 million tons of oilseeds against the world production of 250 million tons per annum. Since 1995, India’s share in world production of oilseeds has been around 10 per cent. Although, India is a major producer of oilseeds, per capita oil consumption in India is only 10.6 kg per annum which is low compared to 12.5 kg per annum in China, 20.8 kg per annum in Japan, 21.3 kg per annum in Brazil and 48.0 kg per annum in USA.19

To give a boost to the production efforts government is mounting production campaigns during the major crop seasons every year. As a part of this campaign national agricultural inputs are being organized fortnightly. All the national and state level agencies, universities and research centre as well as private and voluntary agencies are mobilized to make availability to the farmers the critical inputs namely credit, fertilizers, implement irrigation, pesticides, seeds and technology. A massive programme of free distribution of seed mini kits is being implemented. The minikits have proved very effective in popularising high yielding varieties of seeds among the farmer.
Besides new high yielding varieties of groundnut, rapeseeds and mustard (two of the major five oil seeds) have already been developed. This new strains are being introduced to the farmers through training and visit programmes which are now an integral part of all major extension activities. The production of mustard and rapeseed has tripled since the mid fifties. A special group on oilseeds set in the union agricultural ministry has evolved a strategy which is being vigorously followed in all the relevant states. It include expansion of the production of summer groundnut, in irrigated areas, intercropping, double cropping and relay cropping of oil seeds and improvement of oil seeds productivity in the existing areas.

Besides a project for restructuring edible oils and oil seeds production and marketing has been taken up by the National Diary Development Board in Gujarat, Madhya Pradesh, TamilNadu and Orissa. State Level Cooperative Oil Seeds Growers’ Federations are being formed in these states. Such as federation is entrusted with the task of promoting, cultivation, procurement processing and marketing of edible oils and oil seeds. Central Government has also divided to launch the National Oil Seeds Development Project which is essentially an extension of the intensive oil seeds development programme started not too long ago. All round efforts being made in different states to cultivate and popularise non-conventional oil sources and increasing attention being paid to soyabean production. It is proposed to extend the cultivation of Soya bean to Uttar Pradesh, Himachal Pradesh, Bihar and Rajasthan. Similarly sunflower and safflower cultivation is proposed to be extended to all potential areas.\textsuperscript{20}

1.9 NEED AND IMPORTANCE OF THE STUDY

Though several studies on the subject of consumer behaviour have been undertaken abroad, the explorations on the subject in the Indian context have been limited in numbers. It was, therefore, considered meaningful to explore whether the Indian consumers displayed similar pattern of consistent brand consumption or differed significantly. It was also considered relevant to study the
effect of certain market variables on subsequent buyer behaviour in the consumption of branded edible oils. So consumers buying criteria, i.e., how consumers accept or reject particular oil is of vital importance and is relevant to the present day problems and needs of the consumer (and society) in general.

The result of the present study would be much helpful to the policy makers to walkout an appropriate policy measures in marketing of edible oil according to consumers’ taste and preference. The most important and interesting area of marketing is consumer behaviour. It is important because a large majority of consumers show brand bias in their purchase decisions and also show evidence of varying degree of loyalty. The present study is interesting as the phenomenon is still in that initial stage of study where disputes abound defying complete and precise explanation.

As has been already noted, the essence of the modem marketing is that all elements of business should be geared up to the satisfaction of the consumer. This requires a thorough understanding of consumer behaviour and perception. Without such insights, marketers will fall to segment market effectively and design strategies for and effective penetration into the defined market segment. Consumer behaviour is a fundamental ingredient in the marketing process. Consumer research in India plays an important role in increased rate of new product introduction and overall increase in marketing expenditure and growing concern for improving productivity. On the other hand increasing degree of westernization relatively higher level of educational attainments, concerned for status in society have been responsible in making people look down upon the traditional customs.

Marketing producers, sellers and consumers are the integral partners in the market. The state of affairs and the status of many market situations depend on how the partners act, react and interact. How people can act and react is market behaviour. It is relevant to note that the market behavior is a matter linked
up with the behaviour of market and the consumer whose interaction resulting in the marketing situation.

The behaviour patterns of the increasing population are highly influenced by their objectives. In the marketing, the consumers activate with the objectives of maximizing their satisfaction. On the other hand, the producers activate marketing mix. In view of the growing importance of the consumer behaviour, the present study is targeted at understanding consumer behaviour and perception particularly with reference to edible oil.

1.10 SCOPE OF THE STUDY

This study has been designed to cover the consumer behaviour and perception of edible oils in Namakkal District. Though the market has flooded with many brands of edible oil and the behaviour and perception of consumers vary from brand to brand, this study focused on the consumer behaviour and perception of edible oil. Though the field and the concept of marketing deal with many elements and strategies, this study covers only the analysis of behaviour and perception of the consumer.

1.11 PRODUCT CHOSEN FOR THE PRESENT STUDY

The researcher has chosen the following products for the present study.
1. Sunflower oil
2. Groundnut oil
3. Gingili oil
4. Other oil (Castor oil).

1.12 STATEMENT OF THE PROBLEM

Edible oil is used by people to cook food and delicious fast food. This is extracted by crushing and processing oil seeds. This forms an important ingredient in process of food preparation. Edible oil provides necessary fat, aroma and flavour which is highly essential to increase the palatability of food. It enhances the quality of food items. At most, all the people in the world use edible
oil in their cooking. The above statement underlines the importance of edible oil. Different families prefer different varieties of edible oil to cook their food items. Some families still use non brands traditional oil made out of groundnut, gingili and mustard. Many families now use branded traditional oil like Idhayam and Anandam made out of gingili oil some women use branded low cholesterol docile oil with brand names Sunola, Suffola, Sundrop etc. Each family takes into consideration many factors before it chooses its edible requirement in cooking.

Some families prefer a combination of cooking oil. They use different edible oil for different food preparation. Edible oil contains, fat protein vitamins and minerals which are vital for growth and energy.\(^2\) It is main source of fat and proteins for pure vegetarian. A particular variety of edible oil is predominantly used in a specific geographical region. This may be due to the fact that the particular variety of edible oil seed is agriculturally viable. Purchase of cooking oil also depends on factors like culture, preferences, taste, flavour and health.

Many attempts have been made to study the behaviour and perception of consumer products like, tooth pastes and soaps. It will be interesting to study the consumer behavior and perception concept among users regarding the cooking oil they use in food preparation, especially after the arrival of new brand names in edible oil like Sunola, Saffola, Harvest, postman, Sunleam, Sundrop, Flora, Idhayam, Parachute, Anandam and VVD.\(^2\) After viewing advertisements claiming to be cholesterol free, many housewives could have switched to branded refined oil from the traditional non branded cooking oil. In this context the study is very significant one to answer the following questions as how the consumers are buying edible oil among various brands? What are their expectations while purchasing a particular brand? What is their behaviour and perception towards edible oil?

1.13 LITERATURE REVIEW

Marks, Stephen V. and others (1998) pointed out that in an effort to control increase in the prices of certain tradable commodities in recent years; the
Indonesian government has experimented with a variety of policy interventions. Palm oil is important both as an export commodity and for household consumption in the form of cooking oil. This article examined a palm oil export tax policy that ran from September 1994 through June 1997. It was found that the taxes did reduce the domestic prices of palm oil products and we estimate their effects on the distribution of income within Indonesia. Notably, they found that they actually reduced revenues of the government, and lowered profits for palm oil refiners.\textsuperscript{23}

**Fang, Cheng and Beghin, John.C (2002)** stated that the final demand for edible vegetable oils and animal fats in three regions of Chine based on an in-completed demand system. For each region, the demand for the major staple oil is price inelastic. The aggregate demand for no staple and condiment oils in more responsive to price changes and is elastic in some cases. All edible oils have positive income elasticity, but smaller than one. The share of animal fat in total fat and oil consumption is decreasing with rising income. Older and smaller households exhibit larger per-capita consumption of oils and fats.\textsuperscript{24}

**Elhassanean and El-Fadaly (2003)** in their article a trial was carried out to develop a new bio-technique for removal some toxic substances from edible oils are affected by deep fat frying operation. Wastewater samples from oil and soap company was used as a source of oil using bacteria and very simple technique for treatment the deep fat frying oils with bacterial isolated was applied. The result suggested that this bio-technique could be adequately coordinated with the commercial concern and the interests of society for the administration, which aim to improve consumer safety.\textsuperscript{25}

**Mehra, Yash.P. and Petersen, Jonh.D (2005)** ascertained that cooking oil price increase have a negative effect on spending whereas oil price declines have no effect. The estimated negative effect of an oil price increase on spending is larger if one focuses on edible oil price increases occurring after a period of stable oil process (net oil price increases) or if spending includes
durables, the latter suggesting the possible negative influence of energy prices on the purchase of big-ticket consumption goods. Furthermore, the estimated oil price coefficients in the consumption equation do not show parameter instability during the 1980s when oil prices moved widely for the first time in both directions.²⁶

Ramana and Viswanath (2005) depicts that edible oils, as an important item of consumption, have rightly acquired considerable importance all these days. Being an essential food item for general populace, its importance can be gauged from the fact that it is used all over the world, as a major source of nutrition for the human beings. Oils are used in the form of raw oils, refined and vanaspathi constituting 15 to 20 per cent of the consumers’ monthly budget. In this context the productivity of edible oil has assumed vital relevance to the economy of the world in general and the country’s economy like India in particular. Besides, oil industry has become a major organized sector with over 100 units in operation all over the country providing direct or indirect employment to over a million people.²⁷

Samir Mili (2006) explores that the current and expected trends for olive oil marketing in non-traditional markets. Quantitative interpretations are presented in order to assess olive oil demand enhancement possibilities in this market. The research argument is developed around two analytical axes; 1. The rationale behind the need to foster olive oil international expansion outside producing markets, 2. Modes of market access and marketing strategies to gain new markets and to achieve sustained competitive advantages.²⁸

Kumar, Parmod (2006) analysed the nature of price inter-linkages among four commodity complexes, namely cereals, pulses, oil seeds and edible oils. In the case of oilseeds, only groundnut, mustard, sunflower and soyabean belonged to the common market. In edible oils, groundnut, rapeseed, mustard and coconut formed a common market in the long run. In the late 1990’s, prices of oilseeds drifted away from the long-run equilibrium path because of a short period
disturbance in the oilseeds market. However, the drift was not visible in the case of edible oils plausibly because of the presence of imported edible oil.²⁹

Mr. Dorab Mistry, (2006) Director of the Godrej group, said that India’s imports oil for the year 2007-08 reached a record 6.3mt as shipments of palm and soya oil rose during September and October in anticipation of a rise in import duty. India’s edible oil import may decline by about 300,000 tonnes in the current season because the government is expected to raise customs duties, The import of edible oil is estimated to be 6 million tonnes (mt) in 2008-09, compared with 6.3mt in the previous season.³⁰

Dinesh babu and Venkateshwaran (2008) stated in their study “Marketing problems of edible oil industry in the state of Tamilnadu” that edible oil is one of the important consumer items. Consumers use it in the preparation of food items every day. The demand for edible oil is growing because of the increase not only in population but also in their standard of living. The production of edible oil is also encouraged. The Government supplies edible oil through its public distribution shops. Now a day, big oil mills go for large scale production and rap the economies of scale of production. The profit of the large scale units attracts many new firms to the market. The existing firms are unable to compete with the large firms in marketing their products.³¹

Pan, Suwen and others (2008) applied a censored incomplete demand system to household expenditures for edible oil in India. The results showed that edible peanut oil is still a luxury good in India, whereas expenditure elasticity’s for other edible oils are relatively low. The food habit, location, education of household heads, and other demographic variables have significant effects on the choice of edible oils.³²

Commodity Online (2008) consumption of edible oil New Delhi: Union Minister for Agriculture, Consumer Affairs, Food and Public Distribution, SharadPawar said that in spite of increase by 167 per cent in domestic
production of oilseeds from 108 lakh tonnes in 1985-86 to 288.2 lakh tonnes in 2007-08, domestic supply of edible oils fall short because demand for edible oils has been increasing at a pace faster than of production due to growth in population and improvement in the standards of living of people. According to the projections made for the 10th Five Year Plan, the annual consumption of edible oils in the country has increased from 98 lakh tonnes in 2001-02 to 124 lakh tonnes in 2006-07. The demand is projected to increase from 127 lakh tonnes in 2007-08 to 149 lakh tonnes in 2011-12. The deficit in domestic supply of about 4 to 5 million tonnes of edible oils is being met by imports.33

**Milani, Fabio (2009)** discussed a structural general equilibrium model to investigate the changing relationship between the oil price and macro economic variables. The edible oil price, through the role of edible oil in production and consumption, affects aggregate demand and supply in the model. The assumption of rational expectations is relaxed in flavour of learning. Oil prices, therefore, affect the economy through an additional channel, i.e., through their effect on the formation of agents’ perceptions about the effects of oil prices on the economy have changed over time oil prices were perceived to have large effects on output.34

**Shu Wen Ng and Barry Mp Pokin (2009)** studied that China’s health profile has shifted to one dominated by obesity and nutrition related no communicable diseases (NR-NCDs) necessitating an examination of how economic policies can improve this situation. Edible oil consumption is responsible for much of the increase in energy density of the Chinese diet and particularly linked with the shifting burden of NR-NCDs towards the poor. Longitudinal analysis among adults in the China Health and Nutrition Survey covering the period 1991 to 2000 revealed that the price policy effects on edible oil can influence dietary composition (Particularly of the poor) and the result identified that the needed preventive policy.35
**Assocham (2009)** India’s edible oil import is likely to shoot up 73 per cent by 2020 and may rise further if the current growth of production is not maintained. The deficit between demand and supply in edible oils, to be bridged through imports, will surge to 8.1 million tonnes from the current 4.71 million tonnes. However, the report warns that the situation may get worse if growth in domestic vegetable oil production is not maintained. "As edible oil consumption is expected to grow with increasing population and per capita consumption, the country is likely to remain heavily dependent on imports as production growth is not sufficient to bridge the gap".\(^{36}\)

**Fitch Ratings (2010)** published a special report that the outlook for India’s edible oil sector is stable, due to continuing improvement in demand, fuelled by India’s growing per capita GDP. Companies with conservative hedging and inventory policies, strong raw material sourcing arrangements, and geographically dispersed plants (which keep logistical costs optimal), are likely to have stable credit profiles in 2010. However, many are entering the branded edible oil segment, where margins will be lower during the entry phase due to the associated sales and marketing expenses. This entry could also result in higher working capital requirements. Some operators, anticipating higher prices, are believed to have built up inventories, which could constrain liquidity and could be adversely impacted should edible oil prices decline.\(^{37}\)

**Anand Kumar (2010)** envisaged that the demand for edible oil continues to soar in India as a growing number of people both in urban and rural areas depend increasingly on vegetable oils. Vegetable oil usage soars during the festive season in the post monsoon phase, as millions of people consume sweets, fried delicacies and other stuff during the September-December festive season. According to the Solvent Extractors’ Association of India (SEAI), the country imported 1.06 million tonnes of vegetable oil in August, which is the highest since 1994, when the government allowed imports. It was also 64 per cent higher than in the same month last year.\(^{38}\)
Rabo India Report (2010) observed that the Indian edible oil industry is expected to grow at a rate of 6 per cent annually over the next five years, said Rabo India in its latest research report. India relies heavily on imports to meet over 50 per cent of domestic edible oil requirements. Through the years, India’s domestic production of oilseeds has not grown in line with edible oil demand. Lower levels of oilseed production have resulted in low capacity utilization. Increasing trend of consumer shift towards branded or packaged oil. Branded oil segment in India is annually growing at the rate of 20 per cent, with sunflowers and soya oils leading the market.  

According to R.P.S. Kohli, (2011) director, Jivo Wellness, said that the company aims to a sell Rs.1 billion worth of sunola oil in two years and Rs. 5 billion over the next five years. “We aim to capture a 10 per cent share of the Indian packaged branded edible oil market in five years.” The packaged branded edible oil market is currently worth over Rs.100 billion.  

Saleem samad (2011) analysed that Bangladesh fortifying edible oil to control vitamin deficiency. The ministry of Industries will implement the project in partnership with Bangladesh vegetable oil refiners association and United Nations Children Fund (UNICEF). The Ministry announced that a total of 90 million children and women would benefit from the project. Bangladesh imports edible oil from Malaysia, Canada and India. The oil is repacked in small plastic containers for sale in the grocery store. Quality assurance and control of the fortified edible oil will be ensured through tree levels of testing until Bangladesh Standards and Testing Institute (BSTI), which maintains standards of consumer items, formulates a new law to ensure quality.

The economic times (2011) India’s oilseeds production is expected to rise by 10 per cent to 34.6 million tonnes this year. Land under oilseeds cultivation has also gone up to 16.9 million hectares this month, from 16.4 million last September. The sprawling central Indian state of Madhya Pradesh has seen an increase in soyabean acreage, while groundnut cultivation has seen a spurt in
southern states such as Andhra Pradesh, Karnataka and Tamil Nadu. Castor seed cultivation has also increased substantially. But global oilseeds production, especially in countries such as Brazil, Argentina and China, is expected to be lower this year, even as consumption continues to soar. This could result in a worldwide shortage of vegetable oil.  

**R. S Agarwal and R S Goenka (2011)** director, Emami, group said that about 85-90 per cent of the 14 million tonne per annum of edible oil market is dominated by the unbranded segment, which Emami is targeting to tap. For this, it will launch low unit packs in price denominations of Rs. 5 and Rs. 10. "They aimed to corner 10 per cent market share and the top two spots in the edible oils market in India by 2015 and log in Rs. 300 crore of business in the first year of launch itself".  

**1.13 OBJECTIVES OF THE STUDY**

1. To know the socio-economic status of the consumers in the study area.
2. To identify the awareness of consumers about edible oil.
3. To study the profile of the edible oil industry.
4. To analyse the behaviour, perception and level of satisfaction of the respondents towards edible oil.
5. To know the factors influence the consumer to purchase a particular brand of the edible oil.
6. To give suitable suggestions and measures to the edible oil manufacturers and consumers.

**1.14 AREA OF THE STUDY**

The area chosen for the present study is Namakkal District in the state of Tamil Nadu. Namakkal is well known for poultry farm and transport. This is a major industrial city that is growing steadily. The familiarity and acquaintance of the researcher with this area has also influenced in the selection of this area for the present study.
1.15 HYPOTHESES

- There is no significant difference between the respondents belonging to different classes of selected demographic factors with reference to their attitude of product purchase.
- There is no significant influence by the factors of edible oil towards purchase.
- There is no significant association between the selected demographic variables and their level of awareness.
- There is no significant association between the selected demographic variables and their level of satisfaction.
- There is no significant association between the selected demographic variables and after purchase experience.
- There is no significant association between the selected demographic variables and future purchase.
- There is no significant association between the selected demographic variables and period of edible oil used.

1.16 RESEARCH METHODOLOGY

1.16.1 Research Design
Survey method has been followed in the process of research. The data collections were done with the help of survey method as applicable for the present study.

1.16.2 Pilot study
Before beginning to carry out the present study, the researcher initially conducted a pilot study in order to find out the feasibility and the relevance of present study. For this purpose the researcher contacted several edible oil users for assessing the significance and validity of carrying out the present research work. Since the researcher got favourable result from the pilot study, the present study has been undertaken.
1.16.3 Pre – testing

Pre – testing helps in enriching the design of the questionnaire and assist in testing the validity and reliability of statistical techniques to be adopted. Questionnaire was developed and administered to a convenience sample of fifty edible oil users. After analysing the responses of pre – testing, the necessary modifications have been made. After the data collection, tabulation was done objectively.

1.16.4 Sampling Design

The study area Namakkal district is stratified into taluks known as stratum. The number of households in individual taluk as well as Namakkal district is obtained. The total number of household in Namakkal district is 3, 94,378. To obtain valid result a sufficient sample size should be drawn. This is based on what level of confidence we are fixing and how large the error we are going to tolerate for the survey. By fixing 95 per cent level of confidence allowing a margin error of 4.32 per cent, we found that the optimum sample size is 540. By proportional stratification using the formula

\[ nh = Nh/Nxh \ where; \ h = 1, 2 \ldots, L \]

We allocate sample to individual taluk. Since the frame (sample list) for the individual taluk is not available we are not able to use simple random sampling. Hence the present study adopts convenience sampling for selection of unit. The sample allocated for the individual taluk is presented in table 1.1.

<table>
<thead>
<tr>
<th>Name of the Taluk</th>
<th>Total Households (Sub Population)</th>
<th>Sub Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namakkal</td>
<td>121424</td>
<td>165</td>
</tr>
<tr>
<td>Rasipuram</td>
<td>82471</td>
<td>115</td>
</tr>
<tr>
<td>Thiruchengodu</td>
<td>139501</td>
<td>190</td>
</tr>
<tr>
<td>Paramathi- Velur</td>
<td>50982</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>394378</td>
<td>540</td>
</tr>
</tbody>
</table>

**Source:** Census report – 2011

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Totally 540 questionnaires were prepared and supplied to the respondents. All the questionnaires were collected, a scrutiny of these questionnaires led to the rejection of 7 questionnaires on account of incomplete responses. Thus 533 completed questionnaires were used as sample size for the present study.

1.17 DATA COLLECTION
The study is based on both primary data and secondary data

1.17.1 Primary Data
The data collected from consumers of edible oil constitute primary. The data is collected for the present study by means of a well framed questionnaire, which consists of three parts. The first part of the questionnaire is framed to obtain the general information and profile of consumers. Second part deals the consumer behaviour while buying the edible oil and the final part deals with the perception and the factors determining the level of satisfaction of consumer.

1.17.2 Secondary Data
The secondary data were collected from the books, journals, magazines, websites, annual reports of department of food and public distribution and publication of records of Tamil Nadu agricultural departments relating to edible oil products.

1.18 PERIOD OF THE STUDY
Primary data for the purpose of this research study were collected for a period of seven months from January 2011 to July 2011. The secondary data relating to edible oil industry, edible oil seed production and edible oil consumption which were collected for a period of 10 years from 2000-2001 to 2009-2010.
1.19 STATISTICAL TOOLS USED

Data were collected through questionnaire regarding behaviour and perception of the respondents on usage of edible oil. The collected data were analysed through descriptive statistical tools such as Percentage, Mean, and Standard deviation, ANOVA, t-test, F-test, Chi-Square test, samples t - test, Correlation analysis, Factor analysis, Cluster analysis and Multiple regression have been used to identify the consumers with similar tastes and preferences with respect to purchase of edible oil.

1.19.1 Descriptive analysis

Descriptive analysis, also termed as percentage analysis, was used for each question contained in the questionnaire mainly to ascertain the distribution of respondents under each category. Diagrams and charts are mainly used for clear understanding of the data collected in pictorial form. Pie-charts and bar charts were used for this purpose.

1.19.2 Chi-square analysis

The Chi - square analysis is used to test the significance of association between two attributes. In other words, this technique is used to test the significance association between brand and years of using edible oil, source of information, source of advertisement, factor influencing the purchase. Similarly the significance of association between the brand and problems faced, frequency of changing the edible oil with respect to demographic variables is tested with chi - square test.

1.19.3 Friedman’s Non parametric Test:

The Friedman test is a non parametric alternative to the repeated measures analysis of variance. To identify the factor which is more influencing the respondent towards attitude the Friedman’s test analysis was used.

$$G = \frac{12}{nK(K+1)} \sum \frac{R_j^2}{n} - 3n(K+1)$$
1.19.4 Average score analysis

The ANOVA, t-test and F-test have been used to test the significant differences between the groups of respondents in their perception and satisfaction for selected independent variables like age, sex, income, etc. The Chi-Square test has been used to test the association between the consumer demographic characteristics and the preferred product attributes and satisfaction. After converting the qualitative information into a quantitative one using a five point scale, the average score were obtained from the respondents on various issues to determine the level of satisfaction.

The test for mean score analysis (ANOVA) test procedure is used to compares mean scores of more than two groups. The procedure assumes that the variances of the groups are equal and it was tested with Levene’s test statistics. The significant difference between the mean scores is tested with respect to the various factors.

1.19.5 Independent-samples t - test

The Independent-Samples t - test procedure is used to compares mean scores of two groups. The procedure assumes that the variances of the two groups are equal and it was tested with Levene's test statistics. The significant difference between the mean scores is tested with respect to the various factors like varieties and season.

1.19.6 Factor Analysis

Both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used in this thesis. Factor analysis is a branch of multivariate analysis that is concerned with the sharp internal relationship of a set of variables. The numerous variables used in a multi-item scale such as those utilized in the thesis, can be analyzed to note if those variables could be seen as approximately explaining a single factor (De Groot et. al. 1982).
1.19.7 Cluster analysis

In order to group the respondents in the various clusters based on the various factors and to identify the influencing factors in each cluster, the researcher have applied one of the advance multivariate statistical technique cluster analysis.

1.19.8 Multiple regression analysis

Linear regression is used to model the value of a dependent scale variable based on its linear relationship to one or more predictors. Linear regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable. Regression analysis is used to explain the variation in the overall satisfaction (dependent variable) based on the variation over the variables (independent variable) satisfied with brand choice, product information on pack, satisfied with price, satisfied with expiry date, satisfied with quality, satisfied with taste and type of family.

1.20 LIMITATIONS OF THE STUDY

1. This study encompassed the respondents of Namakkal district only.
2. Time constraint have imposed major limitations to the study and forced to restrict the respondents within a stipulated time.
3. The information provided by the respondents was purely based on their perception only. The quality and reliability of the data collected were subject to the prevailing condition.
4. This study concentrated only four major edible oils like sunflower, groundnut, gingili and other (castor) oil.

1.21 CHAPTER SCHEME

- The first chapter gives the introduction and design of the study. It includes introduction, statement of the problem, objectives, importance of the study, methodology followed, period of the study, limitations of the study and chapter scheme.
• The **second chapter** describes the theoretical framework of consumer behaviour and perception.
• The **third chapter** portrays the profile of edible oil industry and study area.
• The **fourth chapter** analyses the consumer behaviour and factors influencing the consumer to purchase the edible oil.
• The **fifth chapter** analyses the level of satisfaction of consumers with preferred product attributes.
• The **sixth chapter** offers the findings, suggestions and conclusion of the study.
END NOTES

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