CHAPTER I
INTRODUCTION AND DESIGN OF THE STUDY

1.1 INTRODUCTION

India is predominantly an agricultural country. Nearly 40% of the country’s national income is derived from agriculture and its allied activities\(^1\). Despite major emphasis on the industrial development, agriculture continues to occupy a place of pride in our economy. Agriculture is India’s big economy. Although the share of agriculture in the total national income has been gradually decreasing on account of development of the secondary and tertiary sectors contribution continues to be significant. Agriculture provides the principal means of livelihood for over 58.4% of India’s population. It contributes approximately one-fifth of total gross. Domestic Product. Agriculture accounts for about 10% of the total export earnings and provides raw material to a large number of industries. About 43% of the country’s total geographical area is used for agricultural purposes\(^2\).

The growth of the agriculture and allied sectors would be around 5.4% during 2010 – 11 contributed by a good monsoon\(^3\). As per Economic Survey 2010 – 11, the need for a second green revolution has become imperative with focus on growing more of nutrition rich plants like fruits, vegetables and pulses which were never considered in the initial green revolution, concentration should also be given to rain-fed regions for increasing productivity of farms.

Groundnut crop sure important because they have been traditionally a very important source of foreign exchange earnings for the country through export and in the recent past, a deficit in the production had been causing major outflow of foreign exchange in the form of import of edible Groundnuts.

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\(^1\) Sankaran, S., 2009, Indian Economy, Chennai, Margham Publications, p.17.4.
\(^3\) www.ibef.org/india/economy/agriculture.aspx, retrieved on 23.08.2011.
According to the second advanced estimates of the Union ministry of Agriculture. India’s Groundnut production is expected to rise to 30.25 million tonnes in 2010. 11 as against 24.8 million tonnes in 2009 – 10.

In India, Groundnut sector has its own relevance and significance. Among commercial crops, Groundnut cultivation has emerged as a major alternative, suitable and safe crop. There are nine important Groundnut viz., groundnut, castor, sesame, sunflower, safflower, palm Groundnut, niger seed, linseed and rapeseed/mustard being grown in different regions of India. The gross cropped area for cultivation of all crops in 2009 – 10 is 190.8 million hectares. Out of this, 174.13 lakh hectares are used for cultivation of Groundnut.

Groundnut (Arachis hypogaea) is a member of sub-family, Papilionaceae of the family leguminosae. Groundnut consists of two subspecies each containing two botanical varieties. It has been reported that south America is the place from where cultivation of groundnut originated and spread to Brazil, Southern Bolivia and North – Western Argentina. Groundnut is introduced by the Portuguese from Brazil to West Africa and then to South-Western India in the 16th century. Almost every part of groundnut is of commercial value.

Groundnut is grown on a large scale in almost all the tropical and subtropical countries of the world. The most important groundnut growing countries are India, China, Nigeria, Sudan and USA. It is grown over an area of 26.4 million hectares with a total production of 36.1 million tonnes and an average productivity of 1.6 metric tons per ha in whole world. India occupies the third place in regard to average and in production. Groundnut is the major Groundnut crop in India accounting for 45% of Groundnut area and 55% of

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4 Ibid.,
Groundnut production in the country. Now India along with China accounts for half of the world’s groundnut production.

The groundnut has been recognized around the world by an assortment of colourful names. While Americans call it peanut, it is known by several other names such as African nut, Chinese nut, Manila nut, Kipper nut, Hawks nut, Jar nut, Earth chestnut, Monkey nut, Goober pea, Ground pea and Ground bean. Although peanuts have gained importance relatively recently, the origin of this crop dates back to 350 BC. Groundnut has become a substitute for costly cashew nut. Now, they are widely regarded as poor man’s cashews. Groundnut is now cultivated throughout the world. Groundnut is the 13th most important food crop of the world. It is the world’s 4th most important source of edible Groundnut and 3rd most important source of vegetable protein.

Groundnut has the first place among all the Groundnut crops in India and it is accounting for more than 40% average and 60% production in the country. In India the cultivation of groundnut is mostly confined to the southern states. Groundnut is essentially a tropical plant. It requires a long and warm growing season. The most favourable climatic condition for groundnut is a well distributed rainfall of at least 50” during growing season.

In India, groundnut is grown over an area of 7.5 million hectares with total production of 9.3 million tones and an average productivity of 1.4 metric tons per ha. Its cultivation is mostly confined to the western and southern states. viz., Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra. 70% of the area and 75% of the production are concentrated in these five states. The other important states where it is grown are Madhya Pradesh, Rajasthan, Uttar Pradesh and Punjab, Groundnut is essentially a tropical crop.

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It requires a long and warm growing season\textsuperscript{9}. In Tamil Nadu, groundnut is being cultivated in Thiruvannamalai, Villupuram, Vellore, Pudukkottai, Kancheepuram, Namakkal, Salem and Pudukottai districts which covers 64.89% of the total production of the state during 2009 – 2010\textsuperscript{10}.

**A BRIEF PROFILE OF THE STUDY AREA**

Pudukkottai District is well endowed with natural resources of land and sea, bounded by the marine hedge of Bay of Bengal in the east conjoined by the southern districts viz, Trichy, Sivaganga, Ramanathapuram and Thanjavur. It admeasures an area of 4663.29 sq.kms with a coastal length of 42 kms. The District is composed by 3 Revenue Divisions, 12 Taluks, 44 Firkas and 763 Revenue Villages. At the developmental front, it has 13 Blocks, 497 Village Panchayats, 2 Municipalities and 8 Town Panchayats.

**Demography:**

The 2011 census places Pudukkottai District with a population of 16,18,345 females being numerically superior with 8,15,157 as against 8,03,188 males. The rural population is about 13,01,991 and the urban population is about 3,16,354. The total literates number 11,10,545 with 6,08,776 males and 5,01,769 females. The Literacy rate is 77.19 percent with male literacy being 85.56 percent and female literacy being 69.00 percent. As for sex ratio it is 1015 females per thousand males. Scheduled Castes and Scheduled Tribes account for 17.60 percent and 0.08 percent respectively.

**Groundnut type:**

Block Groundnut, Red loamy, Sandy coastal Alluvium, Red sandy Groundnut are found to be popular in this district.

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\textsuperscript{9}www.nabard.org/file upload/databank/ evaluation study/groundnut 20% study, pdf, op.cit.,
Temperature:
The temperature ranges from a maximum of 39.7°C to minimum of 22.4°C. April to June are the hottest months and December to January are the coldest months.

Climate:
High temperature throughout the year. Generally a dry and hot climate prevails in this District.

Rainfall:
The actual annual rainfall was put at 895.4 mm during 2014-15 against the normal rainfall of 887.4 mm for the district. The annual precipitation is high with 8.0 mm, out of which 251.5 mm is received in South West Monsoon, 399.5 mm is received in North East Monsoon, 6.1 mm is received in Winter and 238.3 mm is received in Hot Weather Period.

River:
Vellar river is the major river of the district.

Cropping Pattern:
Pudukkottai District is predominately an agriculturally dominant district. Paddy, groundnut, sugarcane, maize and cashewnuts are the major crops grown in this district. Gross area sown and gross area irrigated under food and nonfood crops stood at 1,18,676 Hectares and 92,961 hectares respectively during 2014-15. About 21.67 percentage of the gross area sown was rain fed.

**Agricultural Holdings:**

According to 9th Agricultural census 2010-11 total number of farmers stood at 3,78,796 having total operational holding of 2,22,712 hectares. Farmers having size as low as 0.59 hectare, is uneconomical to cultivate. Out of the total 3,78,796 farmers marginal farmers accrued for 85.08 percent, followed by small farmers 10.00 percent, small medium farmers 3.79 percent and medium farmers 1.01 percent and large farmers 0.12 percent.

**Main Occupation:**

Majority of the people depend on Agriculture and allied activities. In the urban areas, the livelihood is earned through organised and unorganized sectors. According to 2011 census, the district has a total of 3,87,679 households. There are a total of 7,61,693 workers comprising of 1,92,462 cultivators, 2,34,344 agricultural labourers, 10,170 household industries, 2,03,272 other workers and 1,21,445 marginal workers.

**District Income:**

The Net District Domestic Product for Pudukkottai District for the year 2011-12 is estimated as Rs.9,94,875 lakhs at current prices and Rs.6,18,188 lakhs at constant (2004-05) prices. The NDDP accrued from primary, secondary and tertiary sectors of the economy is estimated at Rs. 2,25,351 lakhs, Rs. 2,22,393 lakhs and Rs. 5,47,131 lakhs respectively at current prices. For the same sectors above, the NDDP is computed as Rs.1,00,230 lakhs, Rs.1,37,375 lakhs and Rs.3,80,583 lakhs respectively at constant (2004-05) prices.

**Per Capita Income:**

The percapita income is estimated as Rs.64,064/- at current prices and Rs.39,808/- at constant (2004-05) prices during 2011-12 in this district.
Cropping pattern

In Pudukkottai district, total food crops area is 126816 hectare. Cereals are main agricultural produce. Among the food crops, paddy and sorghum (cholam) account for major share. In this district, cash crops like, banana, sugarcane, gingelly, sunflower, onion, turmeric, groundnut and flowers are being cultivated. The area under Sugarcanes shot up 8465 hectare during 2013 – 14. 1.2.

1.2. STATEMENT OF THE PROBLEM

Marketing plays a vital role in agricultural production. At the same time, there are more constraints in agricultural marketing. These problems are very series in Groundnut seeds, particularly in groundnut. It is observed that cultivation of groundnut is suffering from various problems like Decreasing Groundnut quality, High cost of seeds, Natural disasters, Severity of pest and diseases, labour storage, low production, High wage rate, lack of finance, lack of quality inputs and Damage by rodent and birds. Hence, farmers are not interested to cultivate groundnut in more areas.

The situation of the Groundnut seeds in the India is perplexing, with a sluggish and erratic growth in the production of Groundnut seeds in the face of a relatively higher growth, of population. This has resulted in a gap between demand and supply and has necessitated a large scale import of edible Groundnuts causing depletion in foreign exchange reserves. In spite of several possibilities, area expansion under Groundnut has limited scope. Bringing larger areas under irrigation can perhaps be achieved over a long period.

Cultivation of groundnut crop is the most popularised Groundnut seed crop among farming community and this is an important crop which helps to increase the economic conditions of the groundnut growers. Almost, every part of groundnut is of commercial value. The groundnut Groundnut has several uses but it is mainly used for cooking. It is used in many preparations like soap
making, fuels, cosmetics, shaving cream, leather dressings, furniture cream and lubricants. In fact, it plays a pivotal role in the Groundnut seed economy of India.

Efficient marketing is being increasingly recognised as a powerful drawing force for groundnut cultivation. Marketing of groundnut remains highly unorganized and it is marketed through various private traders and agents. This process itself discourages the growers to cultivate more areas. Apart from these, groundnut marketing poses with problems like forced sales, Price fluctuation, lack of transportation, lack of storage facilities, lack of credit facilities. Malpractices in weighting, labour shortage, middlemen’s intervention and lack of regulated market. On the other hand, inadequate technical know-how and government’s apathetic attitude have compounded the problems of cultivation and marketing of this crop. Against this background, the present study is a modest attempt to find out answers to the following questions.

1. What is the growth and progress of groundnut in area, production and yield?
2. What cultivation practice is being followed by groundnut growers?
3. Is there any constraint to growers in cultivation and marketing of groundnut?
4. What is the efficiency of the identified marketing channels?
5. What is the opinion of the intermediaries about their business? And
6. Is there any problem to intermediaries in groundnut marketing?

1.3. REVIEW OF LITERATURE

In any study, the review of previous studies are considered as important for getting a better understanding of the problem, objectives, the methodology followed and to identify the unexplored part of the field of study under consideration. In this regard, a review of some of the studies relating to the present study has been undertaken and presented in the following section.
Rajput and Verma\textsuperscript{11} (2000) estimated the marketing costs and margins in groundnut and worked out the price-spread in marketing of groundnut. Multi-stage random sampling technique has been used by them to collect the required data. They found that cost of cultivation of groundnut as Rs.9,837.20 per hectare.


Shakuntla Gupta\textsuperscript{13} (2000) used Multiple Linear Regression function to calculate the co-efficient of average response functions. It is found that relative yield, relative price and irrigation are the major factors which affecting the average allocation.

Perumal\textsuperscript{14} (2000) in his study found that most of the cultivators have not directly sold their kernels to the consumers. Only a negligible portion of output is sold to the fellow farmer cum-local merchant. A considerable portion of output is directly sold by the farmers to the wholesaler who is running

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Groundnut mills. Further, he identified that groundnut growers are getting more profit through irrigated groundnut cultivation than rain-fed cultivation.

Balaji et al.,\textsuperscript{15}(2001) made a study to identify the marketing efficiency for groundnut marketing. They have collected data from both growers and intermediaries (commission agents, license traders, wholesalers, Groundnut retailers and millers) by using simple random sampling technique. They have analysed the collected data with Composite efficiency index and Shepherd marketing efficiency index methods analysed. As per the Shepherd index, they found that the price – spread was lowest in the channel Producers – Decortication units – Groundnut millers – wholesalers (Groundnut) – Retailers (Groundnut) Consumers. Even as per Composite index method, they found that the same channel as a most efficient.

Basavaraja et al.,\textsuperscript{16} (2001) examined the relationship between price and grade of the produce by using linear Regression Analysis. They found that more than 50% of the variation in price is due to variation in grade.

Ranjit Kumar and Chhotan Singh\textsuperscript{17} (2001) made a study to identify the factors influencing the acreage under edible Groundnut in Rajasthan. They found that the yield as one of the most important factors which affected average under the edible Groundnut. It is suggested that technological improvement would not only increase the yield of Groundnut but also lower the instability in the yield, resulting into increase in returns to the farmers.

Gaddi et al., 18 (2002) made a study on resource use efficiency in groundnut production. Multi-stage random sampling technique has been used by them to collect the data. Cobb-Douglas type of production function is used and it is found that co-efficient of multiple determinations for all the sets of production function are significant.

Sunil kumar et al., 19 (2002) found that channel of Producer, wholesaler (Groundnut processor) – Groundnut wholesaler – Retailer – Consumer as an important marketing channel. They found that producer’s share in consumer’s rupee is higher (78.78%) in this channel whereas the channel Producer – Village trader – Wholesaler (Groundnut processor) – Groundnut wholesaler - Retailer – Consumer.

Singh 20 (2002) examined variation in area, production and productivity of Groundnut crops from 1970 - 71 to 1981 – 82 by using Linear Growth Rate. He found that area, production and productivity have registered Linear Growth of -0.71% and 0.96% and 1.93% per annum respectively during the first period (1970 - 71 to 1975 – 76). During the second period (1976 – 77 to 1981 – 82), area, production and productivity registered positive linear growth of 0.40%, 3.28% and 2.55% per annum respectively.

Shiyani and Maurvi N. Pandya 21 (2003) examined the Total Factor Productivity growth for the four major Groundnut crops in Gujarat. For their study, they have collected time series data on area, production and yield per hectare from the Directorate of Agriculture, Gujarat. They found that the

acreage under Groundnut crops and yield per hectare of all these crops improved substantially during the last 40 years which in turn resulted in increase in total Groundnut production. Positive growth rate of Total Factor Productivity index is found only in castor while other Groundnut showed negative growth rate of Total factor productivity index due to relatively higher growth of input use compared to that of output index.

Balaji et al.\textsuperscript{22} (2003) have adopted Garrett’s Ranking Technique to identify the problems associated with production and marketing of groundnut. They found that pest and disease as an important problem in groundnut cultivation and in marketing, lack of storage facility as an important problem.

Ravi kumar et al.,\textsuperscript{23} (2003) made a study to identify the growth of commission agents and wholesalers in the selected markets. They found that increase in number of commission agents firms is more in Warangal market (69\%) followed by Ankapalle (52\%) and Adoni (27\%) markets respectively. The increase in number of wholesalers firms is more in Adoni markets by (101\%) followed by Warangal (75\%) and Anakapalle (46\%) market respectively. Performance of commission agents have been analysed with Gini ratio and it is found that Adoni market as a good performance market.

Baljit Singh et al.,\textsuperscript{24} (2004) made a study to measure the magnitude of instability in the yield and price changes in major Groundnut crops. Required data have been collected from the statistical abstract of Haryana and some other unpublished sources. They found that area of rapeseed – mustard and groundnut has positive and significant impact on current year area in Haryana.

as a whole lag year. Further, this study highlighted that the price variability has
decreased due to improved market facilities and improved price of Groundnut
crops.

Sharad Bhatnagar\textsuperscript{25} (2004) examined the growth in area, production and
yield of sunflower. He found that the area of sunflower was reduced with a
significant compound growth rate of 14.36% production of sunflower was
reduced with a significant compound growth rate of 16.88% and yield of
sunflower was reduced with a significant compound growth rate of 2.94%. He
suggested that there is a demand for wide adaptability of sunflower in Haryana
that may also be helpful in increasing production of Groundnut.

Rama Rao et al.,\textsuperscript{26} (2004) estimated the Compound Growth rate of
groundnut by using exponential time trend equation. They found that
examination of growth pattern in area, production and productivity of
groundnut during the period between 1980 – 81 and 1989 – 90.

Ravi Kumar et al.,\textsuperscript{27} (2005) examined various constraints in export of
Groundnut by using Garret Ranking Method. He suggested that Government of
India should take all possible steps to increase the export of Groundnut.

Sonika Gupta et al.,\textsuperscript{28}(2006) made a study to find out the trends in area
production and productivity of sesame crop in different states. Required data
have been collected from the Directorate of Economics and Statistics and
Ministry of Agriculture, New Delhi. They found that all India level

\textsuperscript{25} Sharad Bhatnagar, (2004), “Sunflower as well as oilseed scenario in Haryana”, Agricultural Situation
Technological Change in Groundnut Production in Andhra Pradesh”, Agricultural Situation in India
\textsuperscript{27} Ravikumar, K.N., Sree Lakshmi, K., and Bapuji, Rao, B., (2005), “Production and Marketing
Scenario of oilseeds in the era of globalization”, Agricultural Situation in India, Vol.LXII, No.6,
September, pp.437 – 450.
reference to sesame crop”, Indian Journal of Agricultural Marketing, vol.20, No.1., January – April,
pp.111-123.
productivity was increased by 2.46% per annum and also found that increase in area is seen in Gujarat and West Bengal whereas in Madhya Pradesh and Uttar Pradesh reverse trend is observed. It is suggested that prices of sesame were influenced by the prices of other Groundnut in the market thus there is a need to make strategies to avoid the price reduction in the central market for Groundnut in general and sesame in particular.

Sadeesh et al., 29(2006) identified the various constraints in increasing Groundnut production like inadequate input supply arrangements, wide fluctuation in prices, inefficient storage, insufficient technological inputs and exploitation by middlemen.

Padmavathi30(2006) used compound growth rate to analyse the growth in area, production and yield. She found that compound growth rate or area is high in the soya bean (20.8%) followed by groundnut (11.3%), rape and mustard (2.2%), castor (1.0%), sunflower (0.4%) and niger (0.4%) whereas it is high again in the production of soya bean (22.7%) followed by sunflower (10.7%). But on the whole the growth rate of production of local Groundnut is high (3.1%) followed by area (1.7%) and yield (1.4%).

Vishwakarma et al., 31(2007) made a study to assess the harvest and post-harvest losses of groundnut in Junsgrh of Gujarat. Required data have been collected by using stratified multi-stage random sampling technique. They found that the losses during harvest and storage are quite high and needs to be minimized. Losses during harvest took place mainly due to the pods left in the Groundnut during picking.

Dudhati and Khunt\textsuperscript{32} (2007) estimated the cost of production and marketing of groundnut seeds. Survey method has been used by them to collect the required data. They found that cost of production of groundnut seeds as Rs.20,905.21 per hectare and Rs.1,601.92 per quintal and also found that high price of foundation seeds was common problem in cultivation of groundnut seeds.

Swain\textsuperscript{33} (2007) used compound growth Rate to analyse growth in area production and yield of Groundnut. For this study, required data have been collected from the published sources of the State Government of Rajasthan. It is found that production has increased mainly because of steep rise in area.

Rama Rao et al.,\textsuperscript{34} (2008) used multivariate logistic regression models to analyse the farmers adoption decision with respect to different technologies. They found that 92% of the farmers applied chemical insecticides.

Mary Madhuri and Sathyanarayana Reddy\textsuperscript{35} (2008) examined the effect of new agricultural technology on groundnut production. They found that technology is a major determinant in groundnut production and the factors like supply of improved seed varieties and hybrids, modern irrigation facilities, nutrient supply, efficient crop management and effective technology transfer are the main components of agriculture technology.

Shard Bhatnagar and Shekhar Bhatnager\textsuperscript{36} (2008) examined trends in area production and yield of sunflower, soybean and mustard crops. Required

data have been collected from the agricultural statistics at a glance. They found that area and production of soybean and average yield of mustard have shown the maximum gain than the other crops.

Rupesh Lawwa and Anil Kumar\(^\text{37}\) (2008) used compound growth rate to examine the trends in area, production and yield of Groundnut. Required data have been collected from the statistics department of both state government and central government. They found that improvement in production was mainly due to expansion in area as contribution of yield to the production was observed in significant.

Taru et al., \(^\text{38}\) (2008) made a study on resource use efficiency in groundnut production. For their study, they have selected 143 farmers from Michika Local government area of Adamawa state by using simple random sampling technique. Cobb – Douglas type of production function has been used and it is found that 78.84% of the total variations in groundnut yield are explained by combined influence of all the explanatory variables (farm inputs) in the regression equation.

Patil et al., \(^\text{39}\) (2009) made a study to find out trends in area, production and productivity of groundnut. Required data have been collected from the various published and unpublished sources, websites of Directorate of Economics and Statistics, Government of India and Department of Agriculture. They found that the production of groundnut has been decreased during the year 2005 – 06 i.e., 2,74,800 tonnes as compared to 5,12,300 tonnes during the year 1993 – 94. This is due to decrease in acreage under the crop and also found that decrease in productivity of groundnut is due to monsoon failure.


Shelka et al.,\textsuperscript{40}(2009) made a study to identify the price-spread and marketing pattern of groundnut. They have collected data from the groundnut growers, commission agents, retailers and consumers. The study revealed that the most important marketing channel existing in the market as producer – commission agent- retailer – consumer and also found that the producer’s share in consumers rupee as 49.99%.

Adinya\textsuperscript{41} (2009) analysed the cost-returns profitability in groundnut marketing. For this study, required data have been collected from 120 groundnut growers by using random sampling technique. It was found that problems are negatively affect the efficiency of groundnut marketing in the study area.

Venkattakumar et al.,\textsuperscript{42} (2010) examined cultivation constraints in Groundnut. The study was conducted in mahabubnagar, Cuddappah and Raga Reddy districts of Andhra Pradesh. To identify the most significant problem Rank – Based Quotient (RBQ) anlaysis has been used. They found that non-availability of quality seeds as an important problem.

Vinod kumar\textsuperscript{43} (2010) made a study on marketing channels for groundnut and to estimate the price-spread in various channels. The marketing of groundnut is done through five channels viz., channel – 1 (producer – processor), channel II (producer – village trader – processor), channel III (producer – wholesaler- processor), channel IV (producer – village trader – wholesaler – processor) and channel V (producer – wholesaler – retailer –

consumer). They found that price – spread among the five identified channels indicate that the channel - I as the most efficient because the producers share was maximum (96.44%) whereas in channel – V, the producer margin in consumer’s rupee was found to be minimum (42.50%).

Gote et al., ⁴⁴ (2010) examined the cost of cultivation of groundnut in Banaskantha district of Gujarat. Multi-stage stratified random sampling technique has been used by them to collect the required data. They found that average cost of cultivation of groundnut was estimated as Rs.22, 252 per hectare.

Pathan et al.⁴⁵ (2010) used compound growth rate to analyse the area production and productivity of groundnut at state level and national level. Required data have been collected from the secondary sources mainly from the State and Central Government reports, websites and also from published and unpublished sources. They found that rate of growth per annum as -4.70% for state level and it as significant at 1% level. Further, at National level the growth rate was -2.50%. The growth rate for national level has been statistically insignificant at 1% level. This indicates that negative growth in production of groundnut in the country.

Thus, the study differs from the earlier studies in respect of its scope nature, contents and the area covered. The present study is thus significant and it is expected to be useful not only to the growers of groundnut in the Pudukkottai district of TamilNadu but also to the intermediaries, Groundnut millers, government and policy makers in better understanding of the present way of the groundnut marketing. Further, this study will helpful to improve the Groundnut economy of India.

1.4 SCOPE OF THE STUDY

This study is confined to Pudukkottai district of Tamil Nadu. Groundnut is being grown in almost all the districts of the state. Pudukkottai district is one of the leading districts in groundnut cultivation. This study is an attempt to examine the cultivation and marketing of groundnut. The present study is based on both primary and secondary data. Required secondary data have been collected from the website of Food and Agriculture organisation, Directorate of Economics and statistics of Government of India, Season and Crop Report of Government of Tamil Nadu and the records of Pudukkottai district statistical office for the period between 2000 and 2010.

On the basis of collected secondary data, the present study intended to make an in-depth analysis of the trend in area, production and yield.

On the basis of collected primary data, factors influencing groundnut cultivation, cultivation problems, problems faced by groundnut cultivation, marketing cost, marketing efficiency, price-spread, opinion of the groundnut growers about the existing marketing system, problems faced by groundnut marketing intermediaries opinion about their business and problem faced by intermediaries have been examined.

1.5 OBJECTIVES OF THE STUDY

The present study is undertaken with the following specific objectives.

1. To examine the growth rates of area, production and yield of groundnut.
2. To study the existing groundnut cultivation practices along with factors influencing and cultivation problems faced by the groundnut growers.
3. To measure the efficiency of various identified marketing channels of groundnut growers.
4. To identify the opinion of the sample farmers about the existing marketing system and problems faced by them.
5. To analyse the opinion of the intermediaries about their business and problems faced by them.

1.6 HYPOTHESES

On the basis of the framed objectives, the researcher’s theoretical knowledge, discussions with field experts and from other research studies, the following null hypotheses have been framed and these are subjected to appropriate statistical tests.

H1 : There is no significant association between the socio-economic characteristics (Age, Educational level, Size of the family, Nature of the family, Number of family members in agriculture, size of the growers, allocation of land for groundnut cultivation, Experience, Gross annual income, Annual net income in groundnut, Gross annual expenditure and Annual net expenditure in agriculture) of the sample farmers and their opinion about the existing marketing system.

H2 : There is no significant association between the socio-economic characteristics (Age, Educational level, size of the family, number of family members involved in the business, experience, type of the business and nature of the business) of the sample intermediaries and their opinion about their business.

1.7 PERIOD OF THE STUDY

In order to achieve the objectives of the study, both primary and secondary data have been used. Primary data have been collected from both groundnut growers and intermediaries during the period from 2012 to 2015. Required secondary data have been collected for the period from 2000 to 2010.
1.8 PILOT STUDY AND PRE-TESTING

The pilot study is conducted with a sample of 50 farmers and 25 intermediaries during January 2015. In the pilot study, the interview schedule is pre-tested and then refined for use in the final study. On the basis of outcome of the study appropriate modifications have been made in the final interview schedule. Further, the findings of the pilot study enabled to frame hypotheses and design of the study.

1.9 SAMPLING DESIGN AND METHODOLOGY

This study is an empirical research based on survey method. The present study is confined to Pudukkottai district of Tamilnadu. The Pudukkottai district is one of the leading districts in groundnut cultivation and groundnut is being cultivated in 8465 hectares (as per the records of District Statistical Department) in this district. Hence, this district has been chosen for the present study. To elicit the required primary data, it is decided to use multi-stage sampling technique. In the first stage, Pudukkottai district has been purposively selected.

SELECTION OF THE BLOCKS

In Pudukkottai district, there are 14 blocks. Groundnut is being cultivated in the blocks viz., Alangudi (2460 hectare), Vadakadu (3157) Karampakkudi (1120 hectare), Thirumayam (720 hectare) and Pudukkottai (1008 hectare) in a considerable area and this accounted for 74.57% of the total area of the groundnut cultivation of the district. Hence, these five blocks have been selected purposively in the second stage.

SELECTION OF THE REVENUE VILLAGES

In the third stage, a list of revenue villages in the selected blocks have been identified and it is found that there are 204 Revenue villages (Alangudi block 21, Vadakadu block 32, Karampakkudi block 25, Thirumayam block 100 and Pudukkottai block 26). Further, with the co-operation of Divisional
Statistical Officials, Block Development Officials, Village Administrative Officers and Groundnut growers, a detailed list of groundnut growers along with area of groundnut cultivation is prepared and the same has been arranged in a descending order. It is decided to select the top 50% Revenue villages and this is accounted for 102 Revenue villages.

SELECTION OF THE GROUNDNUT GROWERS

In the next stage, to select the groundnut growers, a list of groundnut growers who cultivate the groundnut at least $\frac{1}{2}$ acre of land with minimum 5 years of experience during the year 2008 is prepared. As per this list, it is found that there are 1465 groundnut growers. By using simple random sampling technique. 40% (586) of the groundnut growers have been selected.

Data have been collected by survey method. The sample farmers are interviewed personally with the help of well designed and pre-tested schedule to elicit accurate and reliable data with minimum errors. Owing to non-response to some questions and non-co-operation of the sample farmers, 86 have been ignored. Thus, the total sample farmer is 500.

SELECTION OF THE INTERMEDIARIES

Groundnut growers in the study area are marketing their groundnut to the various intermediaries like Village traders, Commission agents and Groundnut millers. Hence, for the present study, these three intermediaries are considered. Village traders are located at almost all the Revenue villages. Commission agents are located in the places like Alangudi, Vadakadu, and Karampakkudi Thirumayam and Pudukkottai blocks. Groundnut millers are located in Alangudi Revenue Division. For eliciting the required information from the intermediaries, a separate is used.

On the basis of the information provided by the sample farmers. Village traders, Groundnut millers and Groundnut Mill Owners’ Association, it is
found that there are 346 intermediaries, (Village traders 157, commission agents 91 and Groundnut millers 98) By using random sampling technique, 70% (242) of the intermediaries have been selected. Owing to non response and non-co-operation of the sample intermediaries 42 have been ignored. Thus the total sample intermediaries is 200.

1.10 COLLECTION OF DATA

Both primary and secondary data are used. Required primary data have been collected with the pre-tested, well structured and non-disguised interview schedules from the farmers and intermediaries. Required secondary data have been collected from the website of food and agriculture organisation, Directorate of economics and statistics of government of India. Season and crop report of government of tamilnadu and the records of Pudukkottai district statistical office for the period between 2000 and 2010.

1.11. FRAMEWORK OF ANALYSIS

In the present study, growth rate has been calculated with the help of compound growth rate. Marketing efficiency and channel efficiency have been analysed with the help of efficiency index, shepherd’s method and Acharya and Agarwal method.

The influence of the various personal and socio-economic variables of the sample groundnut growers in the opinion about the existing marketing system is analysed with the help of $\chi^2$ test, ‘F’ test (ANOVA), ‘Z’ test contingency co-efficient and multiple regression analysis. Calculations have been made with SPSS version 10. To find out the most significant factor influencing the farmers to cultivate the groundnut, cultivation problems and marketing problems faced by the groundnut growers, Garrett Ranking Technique has been used.
The influence of the various personal and socio-economic variables of the sample intermediaries in the opinion about their business is analysed with the help of $\chi^2$ test, ‘F’ test (ANOVA), ‘Z’ test and factor analysis. Calculation have been made with SPSS version 10. To find out the most significant problem faced by the intermediaries, Garrett ranking technique has been used.

1.12 OPERATIONAL DEFINITIONS

1.12.1 Marketing margin
Marketing margin involves the cost of moving the product from the point of production to the point of consumption and the profit of various market functionaries.

1.12.2 Price spread
The price paid by the consumer and the price received by the producer.

1.12.3 Communality
Communality is the amount of variance, a variable shares with all the other variables being considered. This is also the proportion of variance explained by the common factors.

1.12.4 Eigen value
The eigen value represents the total variance explained by each factor.

1.12.5 Factor loadings
The loadings are simple correlations between the variables and the factors.

1.12.6 Percentage of variance
This is the percentage of the total variance attributed to each factors.
1.12.7 Beta co-efficient

To solve the problem, standardized regression co-efficient is to be calculated. It is called a Beta co-efficient, and it is calculated from the normal regression co-efficient. The regression co-efficient are recalculated to have a mean of zero and a standard deviation of one. Standardization removes the effects of using different scales of measurement. Beta co-efficient will range from 0.00 to 1.00. Use of the beta co-efficient allows direct comparisons between independent variables to determine which variables have the most influence on the dependent measure.

1.13 LIMITATIONS OF THE STUDY

Inspite of all possible efforts to make the analysis more comprehensive and scientific a study of the present kind is bound to have certain limitations. Some of them are as follows.

1. The study is conducted with the groundnut growers and intermediaries residing in the Pudukkottai district of Tamilnadu. Hence, general application of the results may be restricted only to similar socio-economic environment.

2. As the secondary data collected from many sources, the gap in one source is filled by referring the other sources. Therefore, the authenticity of the is filled by referring the other sources. Therefore, the authenticity of the data is circumscribed by the reliability of data reported by the Authorities. Hence, any generalization heads needs an in-depth analysis.

3. The farmers are not in the habit of maintaining the detailed accounts regarding groundnut yield, marketed price, income and expenses. Hence, the information from the memory of groundnut growers might be subjected to recalls bias.

4. The size of the sample is restricted. Therefore, the limitations of a restricted sample size are applicable to the present study.
5. The data for the study has been collected exclusively by personal canvassing of interview schedule. The data so collected are subject to what may be called the error of response in some degree or other. Such errors of response are largely due to lack of awareness, improper maintenance of accounts and fear of revealing trade information of the farmers and intermediaries.

6. The result cannot be generalized and extended to other districts due to difference in agro-climatic conditions, groundnut conditions, irrigation facilities and labour availability.

7. In some cases, the farmers failed to give their opinion categorically. In such situations, further questions are asked and logical conclusions are drawn based on their replies.

1.14 CHAPTERISATION SCHEME

Keeping in view of the objectives mentioned earlier, the present study is comprised of seven chapters.

CHAPTER 1: INTRODUCTION AND DESIGN OF THE STUDY

The introductory chapter contains introduction, statement of the problem, review of literature, scope of the study, objectives of the study, hypotheses, period of the study, pilot study and pre-testing, sampling design and methodology, collection of data, framework of analysis, operational definitions, limitations of the study and chapterisation scheme.

CHAPTER II: GROWTH OF GROUNDNUT IN AREA, PRODUCTION AND YIELD

This chapter examines the growth in area, production and yield of groundnut.
CHAPTER III: CULTIVATION PRACTICES AND PROBLEMS

This chapter examines the groundnut cultivation practices, factors motivating the farmers to cultivate the groundnut and problems faced by them.

CHAPTER IV: MARKETING PATTERN AND EFFICIENCY OF VARIOUS CHANNELS IN GROUNDNUT MARKETING

This chapter analysis the existing marketing channels, marketing cost, marketing margin, marketing efficiency and price-spread of various identified channels.

CHAPTER V: MARKETING PROBLEMS OF GROUNDNUT GROWERS

This chapter examines the opinion of the sample farmers about the existing marketing system for groundnut and analyses the marketing problems faced by the sample farmers.

CHAPTER VI: INTERMEDIARIES AND GROUNDNUT MARKETING

This chapter examines the opinion of the groundnut marketing about the existing marketing system for groundnut and analyses intermediaries problem.

CHAPTER VII: A SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

This chapter analysis the findings, suggestions and conclusions about the research.