Chapter – I

INTRODUCTION
1.1. INTRODUCTION

India is one of the largest producers of oilseeds in the world and occupies an important position in the Indian agricultural economy. It is estimated that nine oilseeds namely groundnut, rapeseed-mustard, soybean, sunflower, safflower, sesame, niger, castor and linseed, accounted for an area of 23.44 million hectares with the production of 25.14 million tones. Groundnut is called as the ‘King’ of oilseeds. It is one of the most important food and cash crops of our country. While being a valuable source of all the nutrients, it is a low-priced commodity. Groundnut is also called as wonder nut and poor men’s cashew nut. Groundnut is one of the most important cash crops of our country. It is a low-priced commodity but a valuable source of all the nutrients.

Groundnut is grown on 26.4 million ha worldwide with a total production of 37.1 million metric t and an average productivity of 1.4 metric t/ha. Over 100 countries worldwide grow groundnut. Developing countries constitute 97% of the global area and 94% of the global production of this crop. The production of groundnut is concentrated in Asia and Africa (56% and 40% of the global area and 68% and 25% of the global production, respectively).

1.2. ORIGIN AND USES OF GROUNDNUT PRODUCE

Among the major commercial crops, groundnut crop is an important one in the rain fed as well as in the irrigated areas. From the export point of view groundnut and groundnut oil constitutes the most important items of agricultural exports. India ranks second place in the world after China in the production of groundnut. Groundnut is grown under different agro-climatic conditions.
It is used for a variety of purposes like soaps, cosmetics, paints, lubricants and a series of other products along with the regular consumption purpose as edible oil. It is a source of fat, protein and vitamins. Groundnut is the only important commercial crop in the dry land areas of the country and also it is the only major commercial crop in the drought prone district of Anantapuram in Rayalaseema region of Andhra Pradesh. So, the district headquarters of Anantapuram is called as ‘Groundnut City’ like Bangalore as ‘Green City’.

It has been reported that South America was the place from where cultivation of groundnut originated and spread to Brazil, Southern Bolivia and North-western Argentina. Groundnut was 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.

The groundnut oil has several uses but it is mainly used as cooking oil. It is used in many preparations, like soap making, fuel, cosmetics, shaving cream, leather dressings, furniture cream, lubricants, etc. Groundnut oil is also used in making vanaspati ghee and in fatty acids manufacturing. It is also used as a medium of preservation for preparation of pickles, chutney, etc.

The groundnut oil is used in making different types of medicated ointments, plasters, syrups and medicated emulsion. It is also used to make various food preparations like butter, milk, candy and chocolate, chutney, groundnut pack, laddu, barfi (chukii), etc. Whole kernels are used for table purpose by frying, soaking, roasting and boiling and in different types of namkeens. Roasted groundnut is the most popular way of eating. Kernels are also used as a spice in vegetables and as sprouts for salad.
It Groundnut cake is a good feed for animals and poultry due to its nutritive value and palatability. Groundnut shell has great potential for commercial use. It is used as a fuel, filler in cattle feed, hard particleboard, cork substitute, activated carbon, etc.

The groundnut straw is mainly used as animal feed and fuel and in preparation of compost. The green leaves and stems of plants are used as animal feed. The shells of pods obtained during threshing are also used as cattle feed.

1.3. CLIMATIC REQUIREMENTS FOR GROUNDNUT CROP

Groundnut is essentially a tropical plant. It requires a long and warm growing season. The most favorable climatic conditions for groundnuts are a well-distributed rainfall of at least 50 centimeters during growing season, abundance of sunshine and relatively warm temperature. It seems that plant will grow best when the mean temperature is 21°C to 26.5°C. Lower temperatures are not suitable for its proper development. During the ripening period, it requires about a month of warm, dry weather.

1.4. PROBLEMS OF GROUNDNUT CULTIVATORS

The groundnut cultivation is mainly depending on rainfall in the dry land areas like Anantapuram district, where the annual average rainfall is low comparatively with the other districts in the state as well as in India. Unequal rainfall is the cause for low yield of groundnut in many parts of the country. The other major problems of groundnut cultivators are non availability of quality seeds and other inputs of groundnut crop.

The farmers are mainly depending on non-intuitional facilities for agricultural operations. Recently the groundnut cultivators are facing the problem of agricultural labour due to implementation of NREGS in the country. Due to NREGS the bargaining capacity of the labour has been increased for that reason they are demanding high wage
rates which are not remunerative for the traditional crop cultivators in the rainfed areas of the country. Due to poor transportation and inadequate storage and warehousing facilities the groundnut cultivators are also facing the marketable problems for their produce.

The reasons for low groundnut yields in India are low plant population because of:

- High cost of seed,
- Small and marginal farmers cannot afford the seed costs,
- Small farmers do not want to invest on seeds as the crop is exposed to vagaries of rainfall leading to uncertain yield
- Most of the farmers use local seed which may be of poor quality,
- Being a rain fed crop lack of optimum soil moisture at the time of sowing affects germination
- Non-adoption of seed treatment against seed – borne diseases may lead to decay and death of seed / seedling
- Cultivated in marginal and poor soils of low fertility status
- Farmers rarely apply fertilizers fearing crop loss due to failure of rains
- Multi nutrient deficiencies also contribute towards the decline in yields in any groundnut growing areas
- Use of complex fertilizers lead to deficiencies of Calcium and Sulfur affecting the yields.
No irrigation facilities to protect the crop from soil moisture deficit during breaks in rainfall during monsoon season, and

Neglected weed, insect pests and disease control.

The farmer is successful if there is a monetary gain for the increased output through increased yields coupled with remunerative price by better marketing service. The conditions under which the farmers dispose of their production and the price that they realize have a significant bearing on production activities. Therefore, greater attention and care is needed to improve marketing system to sell the agricultural products.

The entire production of different agricultural commodities does not go to the market. It depends upon the marketable surplus, immediate need for cash, price trend and availability of storage facilities. They are the producer, the consumer and the middleman. Shortage of storage facility, expansion of middlemen and their malpractice, high degree of illiteracy and ignorance of farmers, increased demand for agricultural produce from urban population and added greater marketable surplus together has called for rapid improvement in the existing marketing system. The economic progress and market development are interdependent.

The Various problems which embrace all faces of economic activity including production, distribution and consumption are suitably tackled otherwise economic progress gets arrested. Now-a-days the farmers’ main concern is profitable marketing of farm produce. The farmer will be convinced when he is assured of a good market for his produce. If the farmer’s income is to be enhanced appreciably, the adoption of improved
production techniques must be hand in hand with efficient marketing of agricultural produce.

1.5. WATER MANAGEMENT IN GROUNDNUT PRODUCTION

Being a rainy-season crop, groundnut does not require irrigation. However, if dry spell occurs, irrigation may become necessary. One time irrigation should be given at the pod development stage. The field should be well drained. In the southern part of the country where groundnut is grown in rabi season too, three to four irrigations are necessary. The first irrigation is given at the start of flowering and the subsequent irrigations whenever required during the fruiting period to encourage peg penetration and pod development. The last irrigation before harvesting facilitates the full recovery of pods from the soil.

1.6. REASONS FOR LOW GROUNDNUT YIELDS IN INDIA

- Low plant population because of high cost of seed, small and marginal farmers cannot afford the seed costs,
- Small farmers do not want to invest on seeds as the crop is exposed to vagaries of rainfall leading to uncertain yields,
- Most of the farmers use local seed which may be of poor quality,
- Being a rain fed crop, lack of optimum soil moisture at the time of sowing affects germination,
- Non-adoption of seed treatment against seed-borne diseases may lead to decay and death of seed/seedling,
- Cultivated in marginal and poor soils of low fertility status,
- Farmers rarely apply fertilizers fearing crop loss due to failure of rains,
Multi nutrient deficiencies also contribute towards the decline in yields in many groundnut growing areas,

Use of complex fertilizers lead to deficiencies of Calcium and Sulfur affecting the yields,

No irrigation facilities to protect the crop from soil moisture deficit during breaks in rainfall during monsoon season and

Neglected weed, insect pests and disease control.

1.7. IMPORTANCE OF GROUNDNUT

Groundnut is called as the ‘king’ of oilseeds. It is one of the most important food and cash crops of our country. While being a valuable source of all the nutrients, it is a low-priced commodity. Groundnut is also called as wonder nut and poor men’s cashew nut.

The groundnut is particularly valued for its protein content (26%).

On equal weight basis (Kg for Kg), groundnuts contain more protein than meat and about two and a half times more than eggs.

In addition to protein, groundnuts are a good source of calcium, phosphorus, iron, zinc and boron.

The groundnuts also contain vitamin ‘E’ and small amounts of vitamin ‘B’ complex.

High in calories, 5.6 calories nut -1 (calorific value of 567).

Being an oil seed crop, it contains 40 to 49% of oil.

1.8. Economic and Social Impact of Groundnut

Groundnut is cultivated on about 26.5 million hectares in the world, with an average annual production of 35.7 million Metric tons. The average yield world over is 1348 kg/ha. India is one of the largest producers of oilseeds in the world and occupies an
important position in the Indian agricultural economy. It is estimated that nine oilseeds, namely, groundnut, rapeseed-mustard, soya bean, sunflower, safflower, sesame, Niger, castor and linseed, accounted for an area of 23.44 million hectares with the production of 25.14 million tons during the year 2004-05.

China and India together are the world's leading groundnut producers accounting for nearly 60 percent of the production and 52 percent of the crop area. India cultivates about 7.74 million hectares and produces 7.61 million tons of groundnut with the productivity level of 991.80 kg per hectare. South Africa is the major producer in Africa, while in Latin America almost one half of the total groundnut produced in that region may be credited to Argentina. Among the developing countries, Egypt has the highest productivity and capacity to produce groundnuts (Table 1.4).

In most of the developing countries, the productivity levels are lower than in the United States of America, mainly due to a number of production constraints such as

- the cultivation of the crop on marginal lands under rainfed conditions,
- Occurrence of frequent drought stress due to vagaries of monsoon,
- higher incidence of disease and pest attacks,
- low input-use and
- factors related to socio-economic infrastructure.

1.9. SCENARIO OF DISEASES IN GROUNDNUT CROP

- Diseases are major constraints to groundnut production throughout the world.
- In general diseases cause 40 to 60% yield loss.
- The major yield loss come from fatal diseases like bud necrosis.
- Although, many diseases infect the crop, only a few cause significant reduction in yields.
Diseases leading to Aflatoxin contamination of pods and kernels are very injurious to the health of livestock and human beings. Aflatoxin has become the subject of concern in agriculture, as well as in animal and human health on a global scale.

1.10. PROBLEMS AND PROSPECTS IN THE MARKETING OF AGRICULTURAL COMMODITIES

Marketing is a key economic factor. Technological revolution, better communication and introduction of money economy increased the size of market and marketing. The concept of marketing is too significantly applicable to the agricultural economy. The process of marketing in agricultural produce is as much enough as comprehensive. Agricultural produce has become a very complicated process beyond the comprehension of the producer.

The tempo of the agricultural production, objectives of Green Revolution and the underlying motto of agricultural economy could be achieved by providing proper marketing services to the agricultural producers. Marketing has been considered as an important segment of the agricultural production programme and it serves as an indicator for determining the rural development programmes which collectively lead to the development of economy.

Academicians recognized that there is a close relationship between the economic development and the agricultural marketing. Mathiyas was stated that the marketing perhaps it’s greatest and most enduring role to play in the regeneration of agriculture in bringing the rural community into the main stream of national life. All this clearly indicates the need for an efficient market infrastructure without which the farmers may not realize in increasing the production.
The Royal Commission on Agriculture has emphatically stated that unless the cultivator can be certain support of securing adequate value for the quality and purity of his produce, the effort required for improvement will not be forthcoming. It is considered that the agricultural marketing occupies a predominant place and majority of the Indian population depends on agriculture since it is their main occupation. Indian agricultural producers remained economically weak. Further, they are unorganized which made them amenable to exploitation. But, the middle-men/traders become stronger.

The farmer is successful if there is a monetary gain for the increased output through increased yields coupled with remunerative price by better marketing service. The conditions under which the farmers dispose of their production and the price that they realize have a significant bearing on production activities. Therefore, greater attention and care is needed to improve marketing system to sell the agricultural products. The entire production of different agricultural commodities does not go to the market. It depends upon the marketable surplus, immediate need for cash, price trend and availability of storage facilities.

The marketable surplus depends upon the level of production on the one hand and the farmers’ household requirements on the other. Marketable surplus is the residual left to the producer after meeting his family consumption, farm needs and wage payments to agricultural labour in kind. Marketable surplus is the quantity of sale irrespective of the requirement of a cultivator. Marketing of agricultural produce is no less importance than production and consumption.

The experiences and market development are interdependent. The production and marketing are the basic elements of agricultural system. Desai (1982) described that the marketing of agricultural produce is as important as the production itself which is a basic
element. Faruqui Nayyar (1972) said that as a link between producers and consumers, marketing plays a very important role, not only in stimulating production and consumption but also in increasing the pace of economic development. According to the United Nations Conference on Food and Agriculture held in October 1945 at Quebec, marketing is crux of the whole food and agriculture problems.

It will be useless to increase the output of food and would be equally futile to set up optimum standards of nutrition, unless means could be found to move food from the producer to consumer at a price which is remunerative to the producer and is within consumers’ ability to pay. Thus, the success of any agricultural development programme rests ultimately on the efficiency of the marketing system. According to the National Commission on Agriculture, Agricultural Marketing is a process which starts with decision to produce a saleable farm commodity and it involves all aspects of market structure, both functional and institutional, based on technical and academic considerations and includes pre and post-harvest operations such as assembling, grading, storage, transportation and distribution. In the marketing system, three entities are involved.

They are the producer, the consumer and the middleman. Shortage of storage facility, expansion of middlemen and their malpractice, high degree of illiteracy and ignorance of farmers, increased demand for agricultural produce from urban population and added greater marketable surplus together has called for rapid improvement in the existing marketing system. The economic progress and market development are interdependent. Various problems which embrace all faces of economic activity including production, distribution and consumption are suitably tackled otherwise economic progress gets arrested.
Improving technology is one of the major measures adopted by the advanced countries for promotion of economic progress. Therefore, sound agricultural marketing system is a must for the economic development of the farming community. Now-a-days, the farmers’ main concern is profitable marketing of farm produce. The farmer will be convinced when he is assured of a good market for his produce. If the farmer’s income is to be enhanced appreciably, the adoption of improved production techniques must be hand in hand with efficient marketing of agricultural produce

1.11. SIGNIFICANCE OF THE STUDY

Though some research based studies have been undertaken in the past on the problems of groundnut cultivator, they are mostly at a macro-level. Apart from this, not a single study has been undertaken so far, to enquire into the various problems of groundnut cultivators in Anantapuram district and to evaluate the role of government and other institutional agencies including regulated markets in this regard. The groundnut cultivation is mainly depends on rainfall in the district. The attack of various diseases to this crop and also the availability of inputs are meager for the groundnut cultivators.

Therefore, it was felt that a thorough research-based study should be conducted to bring this problem the various into the limelight and motivate the officials and non-officials to sort out these problems. The major deficiencies have provoked the researcher to take up this research work. This study seeks to explore the problems of credit facilities, availability of other inputs, control of diseases and marketing of groundnut for both the regulated markets and non-regulated markets in Anantapuram District.
1.12. OBJECTIVES OF STUDY

The major objectives of the present research study are:

- To examine the importance of groundnut crop and its role in agriculture.

- To analyze the production and productivity of groundnut crop in the study area.

- To study the profile of the study area and the sample farmers.

- To analyze the socio-economic conditions of the groundnut farmers in the study area,

- To identify the problems and prospects of sample groundnut farmers in Anantapuram district,

- To suggest the possible measures to increase the socio-economic conditions of groundnut growers under study.

1.13. HYPOTHESIS OF THE STUDY

- The production and productivity of groundnut crop is low in the study area.

- The groundnut farmers are not in a position to receive the inputs in time.

- There is a poor institutional support for the agricultural credit.

- The poor agricultural marketing system prevails in the study area.

- The ground farmers are facing various problems in the cultivation of groundnut crop in dry land areas under study.
1.14. METHODOLOGY OF THE STUDY

For the purpose of the present study, Anantapuram district of Rayalaseema region in Andhra Pradesh has been selected in the first stage. In the second stage three revenue mandals (Bathalapalli of Dharmavaram revenue division, Talupula of Penukonda revenue division and Nallamada of Penukonda revenue division) have been selected based on cultivation of groundnut crop in the district. In third stage, four villages from each selected revenue mandal have been selected. In the final stage, 25 sample Groundnut growers have been selected on the basis of simple random sampling covering different caste category. This altogether covers three revenue mandals, 12 villages, and 25 respondents from each village with coverage of 300 sample respondents belonging to different categories. The sample details are presented in table 11.

Table 1.1. Details of Sampling for the Study in Anantapur District of A.P.

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<tr>
<th>S.No.</th>
<th>Mandal</th>
<th>Village</th>
<th>Sample Size</th>
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<tbody>
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<td>1.</td>
<td>Bathalapalli</td>
<td>Thammapuram</td>
<td>25</td>
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<td></td>
<td>Ramapuram</td>
<td>25</td>
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<td></td>
<td></td>
<td>Nallaboyana Palli</td>
<td>25</td>
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<td></td>
<td></td>
<td>Gantapuram</td>
<td>25</td>
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<td>2.</td>
<td>Nallamada</td>
<td>Mulappagari Palli</td>
<td>25</td>
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<td>Maskavanka Palli</td>
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<td>Kurumala</td>
<td>25</td>
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<td>3.</td>
<td>Talupula</td>
<td>Bhupathivari Palli</td>
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<td>Vepamani Peta</td>
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<td></td>
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<td>Ganjivari Palli</td>
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<td></td>
<td></td>
<td>Peddannavari Palli</td>
<td>25</td>
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<td></td>
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<td><strong>Total</strong></td>
<td><strong>300</strong></td>
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Source: Primary Data
1.15. SOURCES OF DATA

The study is based on both primary and secondary data. The main sources of primary data are the groundnut producers. To elicit the information from the groundnut producers a well designed questionnaire has been adopted and administered to a selected cross section of groundnut producers in the sample Panchayats. A pre-tested schedule has been administered to the cultivators in enlightening their responses to groundnut cultivation and its related issues.

Besides the above, the personal interview method has also been adopted to make group discussions and observations for the study purpose. Apart from this, personal visits have also been made to the market centers to observe the procedures at the markets. The secondary data has been collected from the relevant offices and the libraries in the state and from the Chief Planning Office of Anantapuram district.

1.16. SCOPE AND LIMITATIONS OF THE STUDY

Groundnut is one of the most important oil seed crop in Andhra Pradesh. Again in Andhra Pradesh, Anantapuram district is one of the leading producers of groundnut in the State. Because of its multifarious uses and significant commercial value, apart from its being an importance as edible oil in the entire country there is an ever increasing demand for groundnut not only for industrial and business purposes but also for domestic consumption purpose. This study is purely a micro-level study conducted at a village level. The primary data required for this research work will be collected from the groundnut producers. The present study is based on survey method by direct personal interview with a well designed schedule.
1.17. STATISTICAL TOOLS

For the purpose of analysis of the data the coefficient of correlation, regression analysis, simple percentages, averages, bar diagrams and pie diagrams have been adopted wherever necessary to interpret the data in a statistical manner.

1.18. ORGANIZATION OF THE STUDY

The first chapter covers the introduction covering importance of the study, review of literature, objectives, methodology, scope and limitations of the study and chapter scheme.

The second chapter reviews the earlier studies relating to the problems and prospects of groundnut cultivators.

The production and productivity of groundnut in Andhra Pradesh and in Anantapuram district has been presented in chapter three.

The fourth chapter is devoted to analyze the status and importance of groundnut among the oil seeds and its uses as well as its position in the agricultural economics.

The profile of the study district and the characteristics of agriculture in the district are presented in fifth chapter.

The socio-economic conditions of groundnut cultivators and their problems will be focused in chapter six.

The last chapter is entirely devoted for summary of findings and suggestions for policy implications.
1.19. REFERENCES


