Chapter – VII

SUMMARY OF FINDINGS AND CONCLUSIONS
7.1. CONCLUDING REMARKS

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. Among the major commercial crops, groundnut crop is an important one in the rain fed as well as in the irrigated areas.

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.

Groundnut is essentially a tropical plant. It requires a long and warm growing season. The most favourable climatic conditions for groundnuts are a well-distributed rainfall of at least 50 centimeters during growing season, abundance of sunshine and relatively warm temperature.

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. 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. 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 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.

7.1.1. The 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.

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.

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.

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 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.

7.2. THE PRODUCTION AND PRODUCTIVITY OF GROUNDNUT CROP IN ANDHRA PRADESH AND IN ANANTAPURAM DISTRICT

Groundnut is the most important oilseed crop in India. Especially in drought prone district of Anantapur, the farmers are mainly depends on groundnut cultivation. Due to lack of irrigation facilities and poor alternative cropping pattern in rain fed areas like Anantapur and in other Rayalaseema districts the farmers have been cultivating groundnut crop from the last several decades. But of nine oil seed crops grown in India,
the area under groundnut accounts for about 45 percent of the total cropped area and 55 percent of the total oilseeds area.

India is the major groundnut producing country in the world. It stands third place in exporting of groundnut and earned an amount of Rs. 52,579 lakhs during 2005-2006. The area under groundnut in India varied from 59,53,000 tons in 2002-03 to 75,96,000 tonnes in 1996-97 and its production varied from 46,63,000 tons to 89,82,000 tons during the decade under study. On an average the yield per hectare in India was 1048.80 kgs.

Among the major groundnut producing states of India Gujarat stands first place in area and production of groundnut followed by Andhra Pradesh. The yield per hectare was high in Tamil Nadu followed by Rajasthan. In Andhra Pradesh the annual average production of groundnut during the decade under study was 1464992.50 tons and the annual average yield per hectare was 796.50 kgs. The area and production of groundnut was high in Rayalaseema districts comparatively other regions of the state.

The annual average share of groundnut area to the total oil seeds area of Andhra Pradesh was 64.64 percent per annum. The annual average contribution of oilseeds area to the total cropped area of Andhra Pradesh was 28.05 per hectare and the share of groundnut area to the total cropped area and oil seeds area during 2002-2006 was 17.30 percent and 61.68 percent respectively. The production of groundnut in Andhra Pradesh was 13,64,817 tons and its share in total oilseeds production was 66.89 percent.

In Anantapur district of Rayalaseema region in Andhra Pradesh the annual average production of groundnut crop during 1996-97 to 2008-09 was 100012 tons and annual average yield per hectare during the same period was 604.40 kgs.

Comparatively with coastal districts, the yield per hectare is low in Anantapur district due to uneven rainfall, less concentration on fertilizers, poor economic conditions
of the farmers, inadequate financial resources, poor technology and poor agricultural 
extension activities in the district. By fulfilling the above factors, the productivity per 
hectare may be increased in Anantapur district in future.

7.3. GROUNDNUT CROP AND ITS IMPORTANCE AMONG THE OIL SEEDS

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.

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 (chukki), etc. 
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. 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.

Groundnut is essentially a tropical plant. It requires a long and warm growing 
season. The most favourable climatic conditions for groundnuts are a well-distributed 
rainfall of at least 50 centimeters during growing season, abundance of sunshine and 
relatively warm temperature.
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 man’s cashew nut. 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 of world 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.

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 991.8 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.

Especially in the developing countries, groundnut has to play an important role both as oil and food crop. For example in India about 10 kg groundnut per capita are available for domestic consumption. Fat and oil consumption averages less than 5 kg per capita per year. It has been estimated that in the year 2000, approximately 34 million Mt of groundnuts were produced worldwide of which 15 million Mt were produced in China, 6 million Mt in India, 2 million Mt in Nigeria, 1.5 million Mt in United States of America and the rest mostly in other countries.

Similarly, in developing countries, most of the groundnuts are used for extraction of oil for domestic consumption and export. For example, Sudan accounted for 17 percent of the world groundnut export trade. Groundnuts are important component of Nigerian diet and about 5 percent of the estimated 58.9 g of crude protein available per head per
day is contributed by groundnut. In most of the developing countries it provides high-quality cooking oil and is an important source of protein for both human and animal diet and also provides much needed foreign exchange by exporting the kernels and cake.

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 24.7 million hectares with a total production of 33 million tons in the whole world. India occupies the first place in acreage and second in production.

India exports groundnut kernels, shell, and handpicked selected (HPS) groundnut and oil cake forms. Groundnut haulms and leaves serve as a rich source of cattle feed and raw material for preparation of silage. Being a leguminous crop, groundnut is also grown in crop rotation as it synthesizes atmospheric nitrogen and adds 100-120 kg of nitrogen in the field per hectare per season.

Groundnuts assumed a significant position in India’s oilseeds production during the years 1993-94 to 2007-08. In 1993-94, the total oilseeds production of India was 215 lakh tons of which 36.42 per cent was contributed by groundnuts. In India, groundnut is grown over an area of 6.9 million hectares with total production of 5.3 million tons. Its cultivation is mostly confined to south Indian states, viz, Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra. The other important states where it is grown are Madhya Pradesh, Rajasthan, Uttar Pradesh and Punjab. The share of groundnuts in shell was 39,779.84 thousand kg valued at Rs. 11,039.43 lakh.
7.4. THE PROFILE AND THE CHARACTERISTICS OF AGRICULTURE IN ANANTAPURAM DISTRICT

The share of agriculture in State Domestic Product was 69 per cent in 1961, but, now it is around 20 per cent. At the same time the share of workforce depending on agriculture has not declined. Nearly 65 per cent of the population in the state depends on agriculture for their livelihood. The declining share of agriculture in the state’s income reflects the dwindling income of the people living on Agriculture. The decline in agricultural income is not countered by any increase in non–agricultural employment.

Land and water are crucial natural resources for any developmental activities. Land use pattern for the last 60 years in Andhra Pradesh suggests that the state has not reached the absolute limit of expansion of area under cultivation. It is clear that there is a stagnation in growth of land under cultivation. There is high growth in land use for non–agriculture purposes. The barren and uncultivable waste had declined. Land under permanent pasture and other grazing lands recorded a declining trend over the entire period. The land under current fallow had increased during the period. The area under current fallows in Andhra Pradesh had been increasing due to erratic rainfall, scarcity of agricultural inputs, pests etc. No significant changes have been found in net area sown during the sixty years period.

Though the total cropped area found to be increased, this increase in total cropped area may be attributed to the increase in area sown more than once. Land continued to be the pivotal property in terms of both income and employment around which socio–economic privileges and deprivations revolve. The trends in the changes in land distribution pattern reveals that increased population led to sub–division and fragmentation of land holdings, on a continuing basis coupled with lack of alternative
employment opportunities ultimately leading to proliferation of extremely small and uneconomical holdings. This proportion of tiny holdings has thus created a crisis like stagnation in the livelihood standard of farm households. The net sown area is found to be stagnant for the last 50 years. Nearly 40 per cent of net sown area is un–irrigated.

About 50 per cent of the rural work force in the state is living on rainfed agriculture. The share of rice, jowar and bajra of rainfed in gross cropped areas declined during 1957–58 to 2007–08. The share of pulses, groundnut, cotton, and chilies in the Gross Cropped Area increased significantly during the same period. Low value cereal crops were replaced by high value crops like cotton, groundnut and pulses. Because of this shift from low value to high value crops occurred in rainfed agriculture. High cost of production and fluctuation of yields has widely affected the livelihood of the farm families.

The stagnation in net sown area and pressure of population on agriculture sector has been worsening the living conditions of people living on agriculture. The share of rainfed area is as high as 88.3% in Anantapur district followed by Adilabad, Kurnool and Mahaboobnagar districts with 84.06%, 79.56% and 78.28% respectively. Large areas of Rayalaseema, Telangana regions and Southern part of Coastal Andhra are compounded with the problem of low rainfall and frequent occurrence of drought. The shares of cereals like Jowar, Bajra and Maize under rainfed cultivation have been more or less stagnant. The share of rainfed groundnut in total groundnut area decreased from 93.25 per cent to 86.37 per cent. Similarly, the share of cotton decreased from 99.41 per cent to 81.63 per cent.

The share of pulses like redg ram, green gram, black gram and Bengal gram have been almost stagnant. It can be concluded that the share of Paddy under rainfed
agriculture has considerably decreased while that of pulses and other crops have almost been stable with negligible variations. The agricultural growth in Andhra Pradesh can be measured in terms of area, production, productivity of major crops. The growth indicators of selected crops in dry land areas found to be fluctuating widely. These fluctuations have direct and indirect impact on socio–economic conditions of the dry land farmers in Andhra Pradesh.

7.5. FINDINGS OF THE STUDY

Socioeconomics or socio–economics is the study of the relationship between economic activity and social life. The field is often considered multidisciplinary, using theories and methods from sociology, economics, history, psychology and many others. It has emerged as a separate field of study in the late twentieth century. Examples of causes for socioeconomic impacts include new technologies, changes in the physical environment and ecological changes.

The goal of socioeconomic study is generally to bring about socioeconomic development, usually in terms of improvements in metrics such as GDP, life expectancy, literacy, levels of employment, etc. Although harder to measure, changes in less–tangible factors are also considered such as personal dignity, freedom of association, personal safety and freedom from fear of physical harm and the extent of participation in civil society. Social and economic factors are that characterize the individual or group within the social structure. Personal characteristics are those intrinsic factors that are unique to a particular person and directly affect that person’s regular capacity to pursue and gainful occupation.

Personal characteristics have always been considered in the determination of their involvement, awareness on modernization of agriculture and managing groundnut
cultivation in a proper way. The overall evidence must establish on a more likely than not basis, that the person is incapable regularly of pursuing any substantially gainful occupation. The personal characteristics to be considered are: age, education, availability of social infrastructure, work experience. The personal characteristics of age, education and work experience directly affect a person’s ability to work.

Age, in terms of function, is an important consideration. With increasing age, there is a gradual reduction in the reserve capacity of most body organs. This can affect a person’s ability to recover from injury or illness and his or her ability to sustain work.

Individuals are affected differently and at a different rate by the aging process. With increasing age, the physical finding related to the medical condition usually deteriorates and there can be an associated increase in the incidence and severity of impairments, leading to disability.

Education includes both formal and informal knowledge and skills obtained through learning process and or work experience. Education also influences to know the rules and regulations of the various schemes, awareness on the implementation of the scheme. Work experience is the third personal characteristic contributing to a comprehensive evaluation of an individual.

Socio-economic conditions, such as unemployment rate or the availability of certain type of jobs in a particular locality are factors that exist in society which are outside the context of the individual. They affect groups or populations living in regions or provinces, or the county as a whole and may constitute a barrier to work. Similarly, factors such as lack of childcare or elder care, family responsibilities or preferred working hours are also to be considered to analyze the socio economic characteristics.
Out of 300 sample respondents, only less than one percent are above 60 years of age group. It shows that the old age persons have not shown interest in the groundnut cultivation where they are physically not active to work comparatively with the young rural farmers. It also reveals that only in Peddannavari Palli village eight percent of the respondent farmers are above 60 years of age.

It may also noticed that out of 300 sample respondent groundnut growers in Anantapuram district, 33% are in the age group of 40-60 years with the village wise variation of 24% to 52% under study. It reveals that 54% of the total respondent farmers are in the age group of 25-40 years followed by 33% in the age group of 40-60 years under reference.

If the level of education increases, automatically the bargaining capacity of the farmers for their agricultural products and mode of cultivation will be changed. To understand the modern methods of groundnut cultivation, the farming community should be educated.

Out of 300 sample respondent farmers, 62% are illiterates and their percentage varies from 40% in Ganjivari Palli village to 92% in Gantapuram village. In four out of 12 sample villages, 72% are illiterates. More than 56% of the sample respondent farmers are illiterates in 75% of the sample villages under reference. It reveals that in two villages, 8% have primary standards, in five sample villages under reference 20% have primary education and in two villages, 32% of the respondent farmers have primary educational standards.

Out of 300 sample respondents, around six percent have upper primary education with a variation of 4% to 16%. It shows that in four villages, only four percent have upper primary standards, in another four villages, eight percent have same standards of
education.

It reveals that in eight out of 12 sample villages about five percent of the respondent groundnut growers have secondary school standards with a variation of four percent in three villages, eight percent in another three villages and 12% and 16% in Ganjivari Palli and Peddannavari Palli villages. Only in four out of 12 villages around two percent of the respondents are studied up to degree level and in Kurumala village, two respondents were studied professional course.

Out of 300 sample respondent farmers, 91% are married, about 7% are unmarried, 2% are widowed and less than one percent are divorced. It may also observed that in Thammapuram, 88% of the sample groundnut growers are married, eight percent are unmarried and only one respondent is widow. In Ramapuram village also 88% are married, eight percent are unmarried and one respondent is a divorced female. It reveals that in Gantapuram village all the respondent groundnut growers are married only. In Mulappagari Palli village, 96% are married and only four percent are widowed.

It reveals that 92% in Kurumala, Bhupathivari Palli and Vepamani Peta villages, 84% in Ganjivari Palli and 88% in Peddannavari Palli village are married. Out of 300 sample farmers, 95% are Hindus and only five percent are Muslims. Out of this five percent of Muslims, 8% are concentrated in Thammapuram, Ramapuram and Vepamani Peta villages, 20% are in Bhupathivari Palli village, 12% in Nallaboyana Palli and another 4% in Ganjivari Palli village.

It reveals that about 32% of the respondents belong to Scheduled Caste and 48% from backward community. It may also observed that only in Gantapuram village, 52% of the respondents are Scheduled Tribes and 28% in Kurumala, 4% in Peddannavari Palli and Bhupathivari Palli are tribals. It shows that 24% in Bhupathivari Palli, 16% in
Peddannavari Palli, Donnikota and Ramapuram, 12% in Nallaboyana Palli and Vepamani Peta villages, 8% in Kurumala and four percent in Ganjivari Palli and Thammapuram village belongs to other communities who are mainly depending on cultivation.

It shows that in Thammapuram village, 88% of the respondent farmers have BPL cards and 12% of the respondents have Antyodaya cards. In Ramapuram village, 8% have APL cards, 64% have BPL cards, 24% have Antyodaya and 4% have Annapurna cards.

It may also observed that 12% in Nallaboyana Palli, Maskavanka Palli, 8% in Ganjivari Palli, Kurumala and Ramapuram, 4% in Vepamani Peta are availing APL cards. The Antyodaya cards possessed by 12% in Thammapuram, Bhupathivari Palli villages, by 24% in Ramapuram and Ganjivari Palli villages, by 20% in Nallaboyana Palli and Peddannavari Palli villages.

It reveals that 4% in Ramapuram, Bhupathivari Palli and Ganjivari Palli villages, 8% in Gantapuram and Kurumala villages are living in Semi-Pukka houses. It may also observed that 68% in Thammapuram, 64% in Ganjivari Palli, 60% in Kurumala and Maskavanka Palli, 56% in Nallaboyana Palli and Mulappagari Palli villages, 44% in Donnikota, 40% in Gantapuram, 36% in Bhupathivari Palli and Ganjivari Palli villages and 28% in Vepamani Peta village are living in Pukka houses.

Out of 300 sample respondents, about 92% of the respondents are living in their own houses, nearly 6% are living in rented house and only two percent are living in rent free buildings of their friends or relatives. It reveals that in seven out of 12 villages, 8% to 16% of the respondents are living in rented houses and in five out of 12 villages, 4% to 8% of the respondents are living in rent free houses owned by their friends or relatives.

It reveals that out of 300 sample respondents, agriculture is the main occupation for 24% of the sample groundnut farmers. It may also noticed that 8% of the respondent
farmers in Thammapuram and Gantapuram villages, 16% in Vepamani Peta village, 20% of the respondents in Kurumala, 24% in Peddannavari Palli, 28% of the respondent households in Ramapuram, Maskavanka Palli, Donnikota villages, 32% in Nallaboyana Palli and Ganjivari Palli and 44% of the sample respondents in Bhupathivari Palli village are mainly depending on agriculture as their main occupation.

It reveals that the agricultural labour activity is the main occupation for 92% of the respondents in Thammapuram village, for 84% in Vepamani Peta village, for 88% of the respondents in Gantapuram, for 76% of the respondents in Mulappagari Palli, for 72% in Peddannavari Palli, Kurumala, Donnikota and Maskavanka Palli villages, for 68% in Ramapuram and Nallaboyana Palli villages, for 64% in Ganjivari Palli and for 52% in Bhupathivari Palli villages.

The dry land farmer engaged in groundnut cultivation in the rural families depends in the size and nature of family. Out of 300 sample respondents in 12 selected villages of three sample mandals in Anantapuram district, about 51% of the respondent families are nuclear families and the remaining 49% are joint families. In another two villages only 40% of the respondent households have nuclear families. In Maskavanka Palli village only 32% of the families are nuclear families.

It may also observed that 58 respondent families in all the sample villages have three to five male children in their families with a variation of 2 to 7 families having two male child. It may also observed that out of 300 sample groundnut farmers, 170 families have up to two male adults in each family with a variation of nine families to 17 families having up to two male adults in their families.
It reveals that the respondent families having aged persons are low. It shows that only 11 respondent families in five sample villages have up to two male aged persons and in two families in Gantapuram village, three to five male aged persons are there.

It reveals that groundnut cultivation is the major source of income to 11.81% of the sample respondent families under study with a variation of 1.56% of families in Ramapuram village to 32.31% in Maskavanka Palli village and in four out of 12 villages; the respondent families have not received any income from milk animals. It shows that for 4.13% of the sample respondent families, sunflower production is the major source of income with a variation of three percent of families to 17% of the families. Paddy cultivation is the major source of income to around six percent of the sample respondent families under reference with a variation of about two percent of the families in three villages to 22% of the families in Ganjivari Palli village.

It reveals that income from the wages of agricultural labour is the major source of income to about 29% of the respondent families with a variation of 26.56% of the families in Nallaboyana Palli village to around 49% of the families in Peddannavari Palli and Vepamani Peta villages.

The village wise data shows that only one respondent in Nallaboyana Palli and four respondents in Thammapuram were involved in groundnut cultivation for more than 50 days. It reveals that 56% to 84% of the sample respondent farmers in the selected villages under reference entitled more than 50 days of self employment through groundnut cultivation.

It reveals that 64% of the respondents in Thammapuram and Ramapuram villages, 72% in Nallaboyana Palli, 92% in Gantapuram, 52% in Mulappagari Palli, 36% in Maskavanka Palli village, 32% in Donnikota, 56% in Kurumala and Vepamani Peta, 40%
in Bhupathivari Palli, 68% in Ganjivari Palli and 44% in Peddannavari Palli village are transporting their groundnut produce through tractors.

It may also observed that all the respondents in Thammapuram, Nallaboyana Palli, Gantapuram, Kurumala, Bhupathivari Palli and Ganjivari Palli villages were timely received their money earned by selling the groundnut. However, four percent of the respondents each in Mulappagar Palli, and Peddannavari Palli village, eight per cent in Ramapuram, Maskavanka Palli and Vepamani Peta villages, and 12% of the respondents in Donnikota village reported that they were not received their money from the sale of groundnut in time.

It reveals that out of 300 respondent farmers, nearly 38% received their groundnut amount within seven days, 43% received their money between 8 to 15 days and the remaining 19% received their money from 16 to 30 days after the sale of groundnut. Out of 128 respondents who received their dairy earnings between 8 to 15 days varied with 20% in Vepamani Peta, 28% in Peddannavari Palli, 32% in Ganjivari Palli and Mulappagar Palli villages, 36% in Ramapuram, 44% in Gantapuram village, 48% in hammapuram, 52% in Nallaboyana Palli and Kurumala, and 56% of the respondents in Peddapodella, Donnikota and Bhupathivari Palli villages.

The village wise data reveals that 92% of the respondents in Gantapuram, 84% in Nallaboyana Palli, 80% in Peddannavari Palli, 76% in Kurumala village, 68% of the respondents in Thammapuram and Bhupathivari Palli, 60% in Ramapuram and Mulappagar Palli village, 56% of the sample respondents in Donnikota, 44% in Vepamani Peta and 40% in Ganjivari Palli village observed that the crop insurance available for groundnut crop in their sample villages.
It shows that out of 300 sample respondents, 80% were informed that the credit facility was there for the groundnut cultivation and the remaining 20% said that there was no availability of credit for the groundnut cultivation in the sample villages under reference. It reveals that out of 300 respondent households in 12 sample villages in Anantapuram district under study, only 12.67% of the respondents informed that the women are not involving in groundnut cultivation.

The village wise data reveals that 36% in Bhupathivari Palli, 32% in Peddannavari Palli, 16% of the respondents in Ganjivari Palli and Donnikota villages, 12% in Thammapuram and Ramapuram villages, 8% in Nallaboyana Palli and Gantapuram villages said that the women are not mainly involved in groundnut cultivation.

Nearly 97% of the sample respondent farmers opined that the labour are not frequently or not timely available especially for weeding and harvesting the groundnut crop and the remaining three per cent of the respondents observed that they are mobilizing the labour for groundnut cultivation whenever they need.

Out of the total respondent households under study, 58% of the respondent families, upto 2 members are involved in groundnut cultivation. It reveals that in 37% of the respondent families, three members are involved in groundnut cultivation in a family and in five per cent of the respondent families, above three family members are involved in groundnut cultivation as a subsidiary occupation along with their main occupation.

It may also observed that three members are involving in 36% of the families in Thammapuram, Kurumala and Bhupathivari Palli villages, 28% of the families in Ramapuram, 52% of the respondent families in Nallaboyana Palli and Gantapuram villages, 16% in Mulappagari Palli and Vepamani Peta, 68% of the families in
Maskavanka Palli village, 44% in Ganjivari Palli and 32% of the sample respondent households in Peddannavari Palli village.

All the sample groundnut producer respondents are to be maintained individual account in the post office or bank to maintain their savings through the groundnut cultivation. However, it shows that 84.33% of the respondent households have individual account in the post office/bank. It may also observed that all the respondent households in Maskavanka Palli village have individual accounts in the post office/bank.

It may also observed that 17% of the respondents farmers met an amount of Rs. 20001/- to Rs. 30000/- per annum under reference. It may also observed that 13% of the sample farmers spent an amount of Rs. 30001/- to Rs. 50000/-. It reveals that out of 300 groundnut producers, five percent of the respondents earned less than Rs. 20000/- from groundnut produce.

It may also reveals that only in seven out of 12 villages with a variation of 4% to 16% were received less than Rs. 20000 per year. It shows that 48% of the respondents in Thammapuram, 60% in Ramapuram, 64% in Nallaboyana Palli, 72% in Bhupathivari Palli, 76% of the respondents in Maskavanka Palli, Donnikota and Kurumala villages, 80% in Mulappagari Palli and Vepamani Peta, 84% in Gantapuram, and Peddannavari Palli and 92% in Ganjivari Palli received more than Rs. 40000 per annum.

About 92% of the respondents in Peddannavari Palli and Gantapuram villages, 88% in Ramapuram village, 80% in Nallaboyana Palli, 72% of the respondents in Vepamani Peta, 68% in Ganjivari Palli and Bhupathivari Palli, 64% in Mulappagari Palli, 52% of the respondents in Kurumala and Maskavanka Palli and 44% in Donnikota village observe that the buyers are checking the quality of groundnut before they purchase from the groundnut producers.
It may also reveals that in 10 out of 12 villages under study they received the extension services from the agriculture department to improve the yield and to control the diseases for the groundnut crop. It shows that four per cent of the respondent farmers in Mulappagari Palli, Maskavanka Palli and Bhupathivari Palli villages, eight per cent in Donnikota, 12% in Kurumala and Vepamani Peta villages, 16% of the respondent farmers in Thammapuram and Ramapuram villages and 24% in Nallaboyana Palli and Gantapuram village received the Groundnut Cultivation extension services from the concerned offices to improve the yield of groundnut production.

A significant proportion of 95% of the farmers are selling the groundnut produce within the village to the groundnut buyers and about three per cent of the respondents are directly selling the groundnut produce at the nearest town areas. Regarding to selling the groundnut produce within the village, all the respondents in Thammapuram, Ramapuram, Nallaboyana Palli and Gantapuram, 96% of the respondents in Maskavanka Palli, Kurumala, Bhupathivari Palli and Peddannavari Palli villages, 92% of the respondents in Vepamani Peta and Ganjivari Palli villages.

It may also observed that another 48% of the sample respondent farmers in Thammapuram and Nallaboyana Palli villages, 40% in Ramapuram village, 60% of the respondents in Gantapuram, 20% of the respondents in Mulappagari Palli, Donnikota and Kurumala villages, 28% in Bhupathivari Palli, 36% in Vepamani Peta, 32% in Ganjivari Palli and 24% of the respondents in Peddannavari Palli village kept their earnings with their spouse.

The village wise data also reveals that 68% of the respondents in Ganjivari Palli village, 76% in Nallaboyana Palli, Bhupathivari Palli and Peddannavari Palli villages, 80% in Maskavanka Palli and Donnikota villages, 92% of the respondents in
Thammapuram and Vepamani Peta villages and 96% of the sample respondents in Mulappagari Palli village prefer the mode of payment on seasonal basis. Only six per cent of the sample respondent farmers opined that they are paying loans promptly to the banks.

However, all the respondent farmers in Peddannavari Palli, Ganjivari Palli, Vepamani Peta, Kurumala and Donnikota were reported that they paying the loans regularly to the banks. Due to increasing awareness among the farmers and increasing significance of crop loan facility and link between repayment and crop insurance facility, the farmers are repaying the loans regularly.

The village wise data shows that all the respondent farmers in Gantapuram and Ganjivari Palli villages are reported that the groundnut cultivation is profitable to the farmers, especially for dryland farmers by way of increasing the income levels and improving the purchasing power of the farmers depending on groundnut cultivation.

Out of 300 samples groundnut growers in Anantapuram district under study, about 89% of the respondents were reported that through the groundnut cultivation in their villages the income levels were not increased in their families and only 11 percent observed that through the groundnut cultivation their income levels were improved.

About 20% of the respondents reported that groundnut cultivation is useful to avoid migration and only one per cent of the respondents reported that it is useful for the repayment of old debts. It may also observed that seven percent of the respondent farmers reported that the groundnut cultivation created a scarcity of agricultural labour and another 11% reported that the scheme is useful to increase the economic status of the farmers. The village wise data reveals that 36% of the respondents in Thammapuram and Nallaboyana Palli reported that it is useful to avoid migration.
The village wise data reveals that 24% of the respondents in Bhupathivari Palli, 36% in Ganjivari Palli, Vepamani Peta and Ramapuram villages, 44% in Donnikota village, 48% in Peddannavari Palli and Maskavanka Palli village, 52% of the respondents in Kurumala, Mulappagari Palli, Gantapuram and Nallaboyana Palli village and 72% of the respondent farmers in Thammapuram village were purchased the durable goods from the sale of groundnut produce during the last three years.

Out of 300 respondents, about 31% of the sample groundnut growers purchased agricultural inputs from the sale of groundnut and the village wise data on purchase of agricultural inputs by the respondents reveals that four per cent in Peddannavari Palli village, 12% in Vepamani Peta, 16% in Ganjivari Palli, 20% in Mulappagari Palli village, 28% in Bhupathivari Palli and Maskavanka Palli villages, 32% of the respondents in Donnikota, 36% in Kurumala, 39.13% in Nallaboyana Palli, 48% in Gantapuram village, 54% in Ramapuram and 62% in Thammapuram village purchased the agricultural inputs from the sale of groundnut.

It may also observed that nearly 33% of the sample respondent households purchased pesticides from their dairy income and it varies from 22% in Bhupathivari Palli village to 50% in Vepamani Peta village. Only six per cent of the sample respondent households in nine selected villages utilized the money earned from the sale of groundnut for domestic purpose. The village-wise data reveals that one respondent in Nallaboyana Palli village to four respondents in Thammapuram village utilized the money for domestic purpose.

Out of 300 sample respondent households under study, nearly 93% of the respondents reported that they are not utilizing the provision of sprinkler irrigation facility available on subsidy basis due to inadequate ground water levels and the remaining seven
percent said that they adopted the modern irrigation facilities. The village wise data reveals that all the respondents in Maskavanka Palli and Kurumala villages, 96% of the respondent households in Mulappagari Palli, Donnikota, Bhupathivari Palli, Vepamani Peta and Ganjivari Palli villages, 88% in the remaining villages of Thammapuram, Ramapuram, Gantapuram and Peddannavari Palli villages reported that they are unable to the sprinkler irrigation for the groundnut crops. It reveals that out of 300 respondents, nearly 10% of the respondents in eight out of 12 sample villages are facing food insecurity, though the groundnut cultivation is in operation.

It may also observed that 52% of the respondent households in Kurumala, 60% in Gantapuram, Donnikota and Ganjivari Palli villages, 64% of the respondents in Ramapuram, Nallaboyana Palli and Bhupathivari Palli villages, 80% in Mulappagari Palli and 92% in Maskavanka Palli villages are managing food security through groundnut cultivation.

The leafy vegetables are frequently consumed by 285 respondent households in the sample villages and their number varied from 22 respondents in Thammapuram, Nallaboyana Palli and Mulappagari Palli villages to all the respondents in Ramapuram, Donnikota, Kurumala, Bhupathivari Palli and Ganjivari Palli villages. Fruits are frequently consumed by only 38 respondent households with a variation of one respondent in Gantapuram village to six respondent farmers in Thammapuram village.

It reveals that all the respondents in eight out of 12 villages have been satisfied with the groundnut cultivation and 96% of the sample respondent farmers in Thammapuram, Ramapuram, Gantapuram and Vepamani Peta are also satisfied with the groundnut cultivation in their families. Only one respondent each in Thammapuram, Ramapuram, Gantapuram and Vepamani Peta are not satisfied with their occupation.
7.6. SUGGESTIONS

In the light of the above findings of the study, the following suggestions are made to improve the socio–economic conditions of the groundnut cultivators and also to improve the productivity of the groundnut crop in a drought prone district of Anantapuram of Rayalaseema region in Andhra Pradesh.

- Timely availability of groundnut seed with good quality is necessary
- The NREGA programme to be included in agricultural activities
- 50% of the agricultural wages to be paid by the government for dry land crops like groundnut to increase the income levels of the groundnut growers
- To improve the fertility of the soil, soil conservation works through NREGA to be implemented in dry land areas
- Agricultural credit to be maximized per acre
- Irrigation facilities to be improved
- Micro irrigation to be provided to all sections of farmers at very low subsidy rates
- Irrespective of the landholding size, the sprinkler irrigation facilities to be provided for well irrigation farmers
- Crop loans to be provided through the institutional agencies before starting the sowing season.
- The fertilizers which required for groundnut crop to be available locally
- Agricultural extension services to control unexpected diseases for groundnut crop is necessary
- Crop insurance scheme should not be linked with crop loans
- Allied activities to be improved for the diversification of more value added activities of the farmers
It is also necessary to supply the agricultural inputs to the groundnut producers at subsidized rates.

Friendly behaviour by hamalis, weigh men and other staff of regulated markets is necessary.

Transportation and village link roads can be improved through the market yards concerned.

It is necessary to provide the storage facilities in the market yards to maintain stocks up to get the remunerative prices to the groundnut producers.

Institutional credit facilities to be extended for all the social needs of the farmers to avoid non–institutional finance.

Rural infrastructure including roads, ware houses, internet access, need vast improvement.

Establishment of Agri Risk Fund for groundnut growers in dry land areas, which could help in mitigating risks and uncertain rainfall is suggested.

Live stock based farming should be encouraged to meet the family expenditure, whenever the crops will be failed.

There is a need to strengthening the policy of price support and procurement mechanism for groundnut cultivators in rainfed areas.

The crop insurance amount should be paid to the farmers before starting the sowing season of groundnut crop.