Chapter - V

SUMMARY OF FINDINGS

AND

CONCLUSIONS
5.1. INTRODUCTORY 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 the sixth most important oilseed crop in the world. It contains 48-50% oil and 26-28% protein, and is a rich source of dietary fiber, minerals, and vitamins. 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.

Cultivated groundnut belongs to genus Arachis in sub tribe Stylosanthinae of tribe Aeschynomenea of family Leguminous. It is a self-pollinated, tropical annual legume. At locations where bee activity is high, some cross-pollination can occur. Cultivated groundnut has two subspecies, hypogaea and fastigiata, which in turn have two botanical varieties.

Commercial crops have been contributing a significant portion to the growth of Indian economy. 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.

The groundnut cultivation is mainly depending on rainfall in the dry land areas like Anantapur 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- institutional facilities for agricultural operations.
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.

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. 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.

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.

Though some research based studies have been undertaken in the past on the problems of groundnut marketing and other aspects of groundnut cultivators, 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 Anantapur district and to evaluate the role of government and other institutional agencies including regulated markets in this regard. Anantapur district is a leading producer of groundnut in Andhra Pradesh. Anantapur district is a major groundnut producing area in the state.
of Andhra Pradesh. However, the groundnut cultivation is mainly dependent on rainfall in the district.

The attack of various diseases to this crop and also the availability of inputs is meager for the groundnut cultivators. In Anantapur district, twelve regulated markets have been established and it is reported that the producers, traders and a number of officials of market committees are experiencing varied problems in the marketing of groundnut in these regulated markets in this district.

Therefore, it was felt that a thorough research-based study should be conducted to bring this problem into the limelight and motivate the officials and non-officials to sort out these problems. This major deficiency has 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 Anantapur district.

5.2. GROUNDNUT PRODUCTION AND ITS IMPORTANCE

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 (chukii), 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 centimetres during growing season, abundance of sunshine and relatively warm temperature.

5.3. 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,
- Neglected weed, insect pests and disease control.

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 cultivated on about 26.5 million hectares in the world, with an average Annual production of 35.7 million Metric tonnes in the Year 2003 (FAO, 2003). 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.

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 tonnes 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 worldwider 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 (Abulu, 1978). 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 tonnes in the whole world. India occupies the first place in acreage and second in production.

India exports groundnut kernels, shell, 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 synthesises 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 tonnes, 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 tonnes. 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.

5.4. PROFILE AND AGRICULTURAL CHARACTERISTICS OF THE STUDY AREA
Anantapur district was formed in the year 1882 by separating from Bellary district and was later on extended with the addition of Kadiri taluk from Cuddapah district in the year 1910 and Rayadurg taluk from Bellary district in the year 1956. Anantapur is the southern-most district of the Rayalseema region of Andhra Pradesh. While agriculture remains the most important economic activity of the district, it is characterized by high levels of
instability and uncertainty. Being located in the rain-shadow region of Andhra Pradesh, the district is drought-prone.

Anantapur district is bounded by Kurnool District in the north; Cuddapah District in the north-east; Chitoor District in the south-east; and Karnataka State on the West. The district has a total geographical area of 19.13 lakh hectare. For administrative purposes, the district is divided into three revenue divisions, namely, Anantapur, Dharmavaram, and Penukonda; there are sixty-three revenue mandals. Agriculture remains the predominant activity in the villages, with 80 percent of total workers engaged in agriculture, either as cultivators or agricultural labourers.

There are 929 inhabited villages, out of 964 total Revenue villages of the district. The number of villages in size group of 500 to 1999 forms 36.71 per cent of the total inhabited villages. The size group of 2000 to 4999 forms 38.64 per cent and the size group of 5000 to 9999 forms 12.81 per cent only out of total villages, while 84 villages (9.04 per cent) of total inhabited villages are having population less than 500.

Consequent on the introduction of the mandal system of administration in 1986, the district is being administered through three revenue divisions, namely Anantapur, Dharmavaram and Penukonda and 63 Mandal Parishads. The district has been divided into 3 Revenue Divisions viz., Anantapur division (20 revenue mandals), Dharmavaram division (17 revenue mandals) and Penukonda division (26 revenue mandals) consisting of 63 revenue mandals and Panchayati Raj mandal with identical jurisdiction which are the basic administrative and development units.

Anantapur district is in the arid agro-ecological zone and is marked by hot arid bioclimatic condition with dry summers and mild winters. The district is characterised by hills, ridges, and undulating and gently sloping lands. Of the total geographical area of the district, hills and ridges cover 14 percent; undulating lands, 27 percent; gently sloping lands and very gently sloping plains extend over 54 percent; and valleys cover 5 percent.
The district is not endowed with perennial rivers. Seasonal rivers like Pennar, Jayamangala, Chitravati and Vedavati or Hungry rivers flow during the rainy days and benefit the seasonal requirements of the farmers on river banks in 3317 kms. route of the rivers. Streams like Kushavati in Hindupur, Swarna Mukhi in Madakasira, Tadakaleru and Pandameru in Anantapur block, Maddileru in Kadiri block and Papagni in Tanakal mandal are the important water supply sources to various large and medium irrigation tanks in the district.

Anantapur district is rich in mineral resources and is well known for Gold and Diamond deposits. The main mineral deposits are lime stone, barites, dolomite, iron ore, corundum, steatite, white shale, serpentine and quartz. Black, pink and multicolored granites are also available in the district. Tadipatri area is rich in cement grade like stone deposits.

Anantapur district is the driest part of the country with the second lowest average rain fall of 520.4 mm. after Jaisalmer district in the state of Rajasthan and is classified as tropical arid with and aridity index of 72.5. The rainfall is highly erratic. Normally southwest monsoon favours with 60 per cent of the total rainfall (310.8 mm.) and being far away from east cost. Northern monsoon will not be vigorous in the district (147 mm.).

The soils of Anantapur originated from both the granite and granite-gneisses land forms, as well as the Dharwar landforms. Both these land forms are characterized by hills and ridges and undulating and gently-sloping lands. There are about thirty four soil families in the district of Anantapur, and among these, the Anantapur and Penukonda soil families are the most predominant.

In the district, red alfisol soils are predominant, accounting for 78 percent, while black soils are found in 20 percent of the total geographical area. It is estimated that 63 percent of the total geographical area of the district is covered by sandy loam; 14 percent is under rock land; and about 19 percent is under clay. Large areas in the district have coarse soil-surface texture, are
poor in water and nutrient retention, and are prone to wind and water erosion.

The soils in Anantapur, Singanamala, Dharmavaram, Kalyanadurg, C.K. Palli, Kambadur, Rayadurg, Penukonda, Kadiri, Hindupur and Madakasira blocks is predominately red. In Uravakonda and Gooty blocks the red and black soils are almost in equal proportions. Red soil constitutes 76 per cent and black soil 24 per cent of the total area in the district. The soil can be classified as red clay, red loamy, red-sand, black loamy and sand. The soils are shallow, poor in nutrients, with high water absorption capacity.

The total ground water reserves as estimated by the ground water department are to the order of 1061.71 Mcm. The present level of utilization has been estimated at 391.20 Mcm, leaving a leaving a balance of 67.5 Mcm for further development. Ground water is available at a depth of 100' approximately.

Gross irrigated area in the district is 3.67 lakh acres. 52.9 per cent of irrigation is contributed by wells and 10.4 per cent by tanks. The net cultivated area under wells and tanks is very much dependent on the rainfall. The lands under wells and tanks will be fallow many a year on account of droughts. Thungabhadra high level canal is the only dependable irrigation source in the district, irrigation spreads 365 lakh acres through 152 villages.

In 2008-09, 305 minor irrigation tanks (that is, those with ayacut area above 100 acre) and 200 Panchayat tanks (that is, those with ayacut area below 100 acre) were counted in the district of Anantapur. Except for two tanks, Bukkapatnam and Dharmavaram, that are river fed, all other tanks are supplied by small streams or vankas or from local rainfall. By 2008, about 100 minor irrigation tanks have been converted into percolation tanks and their sluices have been closed because the ground water recharge that is possible due to storage of water is believed to be more beneficial compared to open irrigation from tanks in the context of their not filling up to full tank capacity.

Dry land farming continues to be the main stay of the people of the district. Anantapur district has the largest gross cropped area in the state (25
lakhs acres) and 85 per cent of the cropped area is rainfed. Gross cropped area accounts for 52.6 per cent of the total geographical area of the district. Food crops are cultivated in 29.8 per cent of the total cropped area. The Principal crops raised in the district are groundnut (18.35 lakh acres), jawar (1.06 lakh acres) and paddy (1.5 lakh acres). The mulberry cultivation is fast improving.

An analysis of cropping pattern in Anantapur district over 1960-61 to 2006-07 shows that during early1960s, more than two thirds of gross cropped area was cultivated with food grains, predominantly millets, with some amount of pulses and paddy. Among non-food crops, cotton and groundnut were important. The variety of groundnut that was grown during the 1960s was the spreading variety which was a 150-day crop grown during the kharif season.

The area under groundnut has increased fourfold, from being slightly less than 2 lakh hectare in the early 1960s to 8 lakh hectare by 2005-06. Nearly 50 percent of groundnut area in the entire state of Andhra Pradesh belongs to Anantapur district now (2006-07). As groundnut is largely cultivated with pulses as an intercrop, the importance of pulses has remained more or less stable over the years.

In Anantapur, groundnut is essentially a kharif crop with 98 percent of total groundnut area being cultivated during the kharif season. Cropping intensity is quite low, in the range of 1.02 to 1.06, over 1961-62 to 2005-06 in the district with area sown more than once increasing by a mere 20,000 hectare over this period.

The changes observed in production of principal crops in the district over 1960-61 to 2006-07 reflects the changes that have occurred with regard to area under crops. There is a sharp decline in production of sorghum and millets, while pulses production has increased threefold. A striking feature of overall outturn of crops in the district is that though groundnut production shows an overall increasing trend, the rate of increase is far below the rate of expansion of area under groundnut.
While groundnut area expanded nearly four times over the forty-five year period under consideration, the production of groundnut barely doubled. Moreover, there is a great deal of fluctuation in the rate of growth of groundnut production over the years. These factors raise important questions regarding the level of groundnut yield. Analysing the yield of groundnut over the period 1971-72 to 2005-06 in Anantapur district, the state of Andhra Pradesh, and all of India it is clear that yield levels have always remained relatively low in Anantapur.

In addition to the low level of groundnut yield, Anantapur district also experiences a very high degree of fluctuations in yield levels. Fluctuation in yield over thirty three years, running from 1971-72 to 2005-06, is much higher in the district compared to the state and all India. Instability in yield is measured as the average percentage deviation of actual value in each year around the three-year moving average value for that year.

5.5. FINDINGS OF THE STUDY

Groundnut is the major oil crop in Anantapur district of Rayalaseem area in Andhra Pradesh. Most of the area under rainfed in the district is under groundnut cultivation. The farmers in the dry land areas of the district are mainly depending on groundnut crop. The farmers of the groundnut cultivators are facing the problems if low yield, low prices, uneven rain fall, inadequate financial problems, attack of diseases and poor marketing system for groundnut product in the drought prone district of Anantapur.

It reveals that 6.9% of the respondent farmers in Rapthadu panchayat, 4.7% in Bandameeda palli panchayat and 7.4% in Gondireddy palli panchayat are in the age group of below 30 years of age. About 24% of the respondent farmers in Rapthadu panchayat, 32.6% in Bandameeda palli panchayat and 40.7% in Gondireddy palli panchayat are in the age group of 30 to 40 years. It may also noticed that in Bandameeda palli panchayat, 35.7% of the sample farmers are illiterates, 50% have school level education and 16.3% have college level education.
It is noticed that 6.9% of the sample respondent households in Rapthadu panchayat, 7 percent in Bandameeda palli panchayat and 11.1% in Gondireddy palli panchayat have upto 3 members in the family. It may also observed that 17.2% of the sample households in Rapthadu panchayat, 9.3% in Bandameeda palli panchayat and 11.1% in Gondireddy palli panchayat have 4 members in the family. It shows that 13.8% in Rapthadu panchayat, 9.3% in Bandameeda palli panchayat and 11.1% of the sample groundnut cultivators in Gondireddy palli panchayat have above 6 members in their families.

It shows that in 62% of the respondent households of Rapthadu panchayat, in nearly 70% of the sample household families of Bandameeda palli panchayat and in 46.2% of the sample household families of Gondireddy palli panchayat, 3 members have been engaged in groundnut farming activity under reference.

It may also noticed that 5 family members have been working in the farming activities of only one sample family in Rapthadu panchayat, 16.3% of the sample families in Bandameeda palli panchayat and in 11.5% of the sample families in Gondireddy palli panchayat under reference. It reveals that 20.7% of the sample households in Rapthadu panchayat, 28.6% of the sample groundnut cultivators in Bandameeda palli panchayat and 33.3% of the sample respondent households in Gondireddy palli panchayat have less than 3 acres of land. It shows that 27.6% of the sample households in Rapthadu panchayat, 31% of the respondents in Bandameeda palli panchayat and 33.3% of the sample respondents in Gondireddy palli panchayat have 3 to 5 acres of land for agricultural operations.

The groundnut crop has been growing under irrigation by 51.7% of the sample cultivators in Rapthadu panchayat, by 69% of the sample farmers in Bandameeda palli panchayat and by 77.8% of the sample respondents in Gondireddy palli panchayat. Out of 99 sample groundnut cultivators in the study area, 34.3% are cultivating groundnut under rainfed and 66.3% are cultivating the same under irrigation.
Bore well irrigation is the major source for 94.1% of the respondent farmers in Rapthadu panchayat. It is the major source for 96.4% in Bandameeda palli panchayat and for all the respondents in Gondireddy palli panchayat. Open well irrigation is the major source for only one respondent farmer in Rapthadu panchayat under reference.

It reveals that 84.6 percent of the sample respondent groundnut cultivators in Rapthadu panchayat, 34.8% in Bandameeda palli panchayat and 28.6% in Gondireddy palli panchayat are cultivating groundnut in less than 2 acres of land. It may also observed that 11.5% in Rapthadu panchayat, 43.5% in Bandameeda palli panchayat and 64.3% in Gondireddy palli panchayat are cultivating groundnut in 2 to 4 acres.

It may also notice that the yield per acre is 6 to 10 quintals per acre for 44.8% of the farmers in Rapthadu panchayat, for 39.5% of the farmers in Bandameeda palli panchayat and for 36% in Gondireddy palli panchayat. It is 11 to 13 quintals per acre for 24.1% of the sample farmers in Rapthadu panchayat, for 25.6% in Bandameeda palli panchayat and for 64% of the farmers in Gondireddy palli panchayat. The yield per acre is above 13 quintals per acre for 17.2% of the sample groundnut cultivators in Rapthadu panchayat, and for 23.3% in Bandameeda palli panchayat.

The expenditure incurred on cattle shed is Rs. 10001 to Rs. 20000 for one respondent each in Rapthadu and Bandameeda palli panchayat respectively. It is Rs. 20001 to Rs. 40000 for 60.9% of the sample farmers in Rapthadu panchayat, for 20% of the farmers in Bandameeda palli panchayat and for 41.7% in Gondireddy palli panchayat. The expenditure on cattle shed is above Rs. 40000 for 34.8% of the sample farmers in Rapthadu panchayat, for 74.3% in Bandameeda palli panchayat and for 58.3% in Gondireddy palli panchayat.

It may be observed that upto Rs. 20000 was incurred on purchase of pump sets for well irrigation to the groundnut cultivation by 25% of the sample farmers in Rapthadu panchayat and by only one respondent farmer in Gondireddy palli panchayat. It may also noticed that an amount of Rs. 20001
to Rs.40000 aws incurred on purchase of pump sets by 75 % of the sample farmers in Rapthadu panchayat, by 88.5 % of the farmers in Bandameeda palli panchayat and by 95 % of the farmers in Gondireddy palli panchayat. Above Rs. 40000 aws incurred for the same by only 3 sample respondent groundnut cultivators in Bandameeda palli panchayat.

It shows that 37.5% of the sample respondent groundnut cultivators in Rapthadu panchayat, 25% of the sample farmers in Bandameeda palli panchayat and 42.9 % in Gondireddy palli panchayat spent an amount of Rs. 20000 for digging of bore wells. It may also noticed that 62.55 of the sample cultivators in Rapthadu panchayat, 75 % in Bandameeda palli panchayat and 57.1 % of the sample respondent groundnut cultivators in Gondireddy palli panchayat spent an amount of Rs. 20001 to Rs. 40000 for digging of bore well.

Out of this 27 sample respondents, 33.3% were spent an amount of less than Rs. 10000 for bullock cart operation. Another 22.2 % of the sample respondent cultivators spent Rs. 10001 to Rs. 20000 for purchase of bullock carts and the remaining 44.4% spent an amount of Rs. 20001 to Rs. 40000 for the purchase of bullock carts in all the sample gram panchayats under reference.

It shows that 38.1% in Rapthadu panchayat, 63.4 % in Bandameeda palli panchayat and 63% in Gondireddy palli panchayat spent an amount of Rs. 2501 to Rs. 7500 and 14.3% in Rapthadu panchayat, 4.9% in Bandameeda palli panchayat and 11.1% in Gondireddy palli panchayat were spent an amount of above Rs. 7500 for the maintenance of farm buildings.

It may be observed that 42.9% in Rapthadu panchayat, 92.3% in Bandameeda palli panchayat and 12.5% in Gondireddy palli panchayat paid upto Rs. 20000 for the agricultural labour involved in the groundnut cultivation activities of the sample farmers in the study area. It shows that 57.1% in Raothadu panchayat, and 87.5% in gondireddy aplli panchayat paid Rs. Rs. 20001 to Rs. 30000 for the wages to the labour.

It may also noticed that 11.1% in Rapthadu panchayat, 20% in Bandameeda palli panchayat and 4.2% in Gondireddy palli panchayat spent
an amount of Rs. 5000 to Rs. 10000 on farm yard manure. Out of 91 sample respondents who applied for farm yard manure, 86.8% of the sample respondents spent an amount of less than Rs. 5000 and another 123.25 spent above Rs. 5000 for the farm yard manure.

Out of this number, 62.10% of the farmers purchased the chemical fertilizers worth of less than Rs. 5000 per crop under study. Another 37.9% of the sample farmers spent Rs. 5000 to Rs. 10000 for the purchase of fertilizers for groundnut crop. It may also noticed that 58% in Rapthadu panchayat, 61.5% in Bandameeda palli panchayat and 68.4% in Gondireddy palli panchayat spent an amount of less than Rs. 5000 on fertilizers.

It reveals that 78.4% of the sample respondent farmers in Rapthadu panchayat, 87.5% in Bandameeda palli panchayat and 96.3% in Gondireddy palli panchayat spent less than Rs. 2500 for the purchase of pesticides to groundnut crop. It may also noticed that 21.6% in Rapthadu panchayat, 12.5% in Bandameeda palli panchayat and 3.7% in Gondireddy palli panchayat spent Rs. 2501 to Rs. 500 to purchase the pesticides.

Out of 85 respondent farmers, 95.3% were spent less than Rs. 5000 on groundnut seed, 1.2% each spent Rs. 5000 to Rs. 10000 and Rs. 10000 to Rs. 20000 and the remaining 2.4% of the sample respondents purchased more than Rs. 15000 of groundnut seeds in the study area. It may also noticed that all the respondents in Rapthadu and Gondireddy palli panchayat and 89 5% in Bandameeda palli panchayat purchased less than Rs. 5000 of groundnut seeds.

The soli conservation is the major problem for 7.1 % of the sample groundnut cultivators in Rapthadu panchayat, for 32.5% of the respondents in Bandameeda palli panchayat and for 40.7% in Gondireddy palli panchayat. Out of 95 sample farmers who faced the agro-biological factors, 5.3 % each were suffered with severity of disease for groundnut crop and pest problem.

The problem of high cost of fertilizers is faced by 15.4% in Rapthadu panchayat, 17.9 % in Bandameeda palli panchayat and 7.7% in Gondireddy palli panchayat. The problem of high cost of fertilizers is faced by 23.1% in
Rapthadu panchayat and 7.7% in Bandameeda palli panchayat. It shows that inadequacy of credit is the major problem for 7.7% of the sample groundnut cultivators each in Rapthadu and Bandameeda palli panchayat.

It reveals that 96.6% in Rapthadu panchayat and all the respondent farmers in Bandameeda palli and Gondireddy aplli panchayats were partially sold their groundnut product. It reveals that all the respondent farmers in Rapthadu and Gondireddy palli panchayat sold the product through the village traders. Out of 99 sample respondent farmers in Rapthadu mandal under study, one percent sold the product directly, 5% sold through the commission argents and the remaining 94.95% sold the product through the village traders.

It may be observed that 13.8% of the sample farmers in Rapthadu panchayat, 44.7% in Bandameeda palli panchayat and 59.3% in Gondireddy palli panchayat are selling their groundnut product to the market through the commission agents as it is the easy method of sale.

It may also noticed that 37.95 in Rapthadu panchayat, 45.2% in Bandameeda palli panchayat and 92.86% of the respondents in Gondireddy palli panchayat said that the price for groundnut in the last kahrif season is between Rs.1801 and Rs.2500. It shows that 58.6% in Rapthadu panchayat, and 54.8% in Bandameeda palli panchayat are selling their product at above Rs. 2500 per quintal.

It reveals that only one respondent in Gondireddy palli panchayat faced the problem of price fluctuations. It shows that 25.9% of the sample farmers in Rapthadu panchayat, 20% in Bandameeda palli panchayat and 16% in Gondireddy palli panchayat faced the problem of too many middle men in selling the product. Inadequate finance is the major problem for 14.8 % of the sample farmers in Rapthadu panchayat, for 17.5% in Bandameeda palli panchayat and for 24% of the farmers in Gondireddy palli panchayat.

It may be observed that 18.5% of the sample respondents in Rapthadu panchayat, 10.64% in Bandameeda palli panchayat and 4% in Gondireddy palli panchayat spent Rs 11 to Rs 15 per quintal for packaging the product. It
may also noticed that 81.5% in Rapthadu panchayat, 89.36% in Bandameeda palli panchayat and 96% in Gondireddy palli panchayat paid Rs. 16 to Rs 20 per quintal of groundnut for packaging purpose.

It is observed that 96.3% of the sample respondents in Rapthadu panchayat, 64.3% in Bandameeda palli panchayat and 72% of the sample respondents in Gondireddy palli panchayat paid an amount of less than Rs. 10/- for loading the groundnut into the transport vehicle. It may also noticed that nearly 4% in Rapthadu panchayat, 35.7% in Bandameeda palli panchayat and 28% in Gondireddy palli panchayat paid Rs. 11 to Rs. 20 for loading of groundnut product into the transport vehicle.

It may also noticed that one respondent farmer each in Rapthadu and Bandameeda palli panchayat and 16 67% of the sample farmers in Gondireddy palli panchayat paid Rs. 20 to Rs. 30 per quintal for transportation of the groundnut product to the market. Out of 99 sample groundnut cultivators in the study area, 92.93% were paid upto Rs.20 per quintal and another 7.07% of the sample farmers paid Rs. 20 to Rs. 30 per quintal for transportation of groundnut product to the market.

5.6. SUGGESTIONS

- It is necessary to provide the institutional credit facilities to the farmers before starting the sowing season, i.e., in the end of May every year to purchase the quality seeds and for plouging operations.
- Soil erosion and conservation programmes to be implemented effectively in the rainfed areas.
- Quality seeds to be provided to the farmers in time.
- Required fertilizers to be available to the farmers along with the necessary fertilizers wherever necessary.
- Crop insurance to be available to all the farmers without any linkage to the crop loans from the banks.
- Due to inadequate financial resources, the farmers are not able to purchase the agricultural inputs intime which cause loss for groundnut
cultivation. Hence, it is necessary to increase the institutional credit facilities.

- Recently implemented NREGA is one of the causes for non-availability of labour during weeding and harvesting season. It is necessary to divert the NREGA scheme to agricultural operations.
- Price fluctuations are common in agricultural commodities. This to be controlled.
- Remunerative prices for groundnut crop to be provided.
- Marketing facilities are poor for groundnut production during the harvesting season. The groundnut production is to be purchased by the government agencies at remunerative prices.
- Storage facilities to be improved for groundnut production.
- Unequal and low rainfall is the cause for low yield of groundnut production. So, irrigation facilities to be improved. For these sprinkler irrigation facilities to be improved to utilize the ground water facilities properly.
- Crop insurance scheme to be implemented properly and timely.