



## MAJOR AGRICULTURAL CROPS IN CHITTOOR DISTRICT

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ABSTRACT

Chittoor covers an extent of 15.152 Sq.mms and divided into three Revenue Divisions namely Chittoor, Tirupati and Madanapalli. The major portion of the district is covered by Red soils with portions of alluvial soils in Chittoor and Bangarupalyam mandals. As per the village records 57% of the district is Red loamy and 34% Red sandy. The remaining 9% is covered by black clay (3%). The normal rainfall of the district for South West monsoon period is 438 mm that for north east monsoon period is 396 mm. The rainfall received during winter and summer is negligible. The average normal rainfall of the district is 934 mm. Around 70% of the lands in Chittoor district are dry lands and rainfed crops are grown in them. Only 30% is irrigated as against the Andhra Pradesh average (35%). Earlier a variety of dry crops – millets, ragi, bajra, jowar, ground nut, red gram, cowpea, bean pea, horse gram, etc. used to be grown. The farmers in our area grow paddy for one season and follow it up with two years of sugarcane. In the eastern taluks farmers opt for a cycle of paddy and groundnut (in rabi). In the western taluks, they prefer to grow vegetables, especially tomato. The district enjoys cover of both monsoons. It gets about 900 mms of annual average rainfall. The salubrious climate and easy drainage of water in most areas enables the farmers to raise a variety of crops from pan and banana to sugarcane, paddy, groundnut and flowers and vegetables as mentioned above.

Boundaries of the District: Chittoor District is bound on the North by Anantapur and Kadapa district, on the East by Nellore district and Chengalpattu district of Tamil nadu on the south by north Arcot district of Tamilnadu and Karnataka States. The district covers an extent of 15.152 Sq.mms and divided into three Revenue Divisions namely Chittoor, Tirupati and Madanapalli. It is situated between 12o 37' to 14o 8' of North latitude and 78o 33' to 79o55' of the Eastern Longitude.

### KEYWORDS

#### PHYSIOGRAPHY:

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#### RAIN FALL:

The district has the benefit of receiving rainfall during both the South West and North East monsoons. While the normal rainfall of the district for South West monsoon period is 438 mm that for north east monsoon period is 396 mm. The rainfall received during winter and summer is negligible. The average normal rainfall of the district is 934 mm. The rainfall from south west monsoon is more copiers compared to north east monsoon in the western mandals in the central part of the district, whereas the rainfall received from north east monsoon is comparatively less copiers in the eastern mandals of the district.

#### CLIMATE:

The climate of the district is dry and healthy. 31 Mandals in Madnapalli divisions are uplands and they are comparatively cooler than the eastern mandals except chittoor where the climate is moderate.

#### DEMOGRAPY:

The population of Chittoor district as per the 2001 census is 37.46 lakhs comprising 18.85 lakh males and 17.61 lakh females. The population density is 246 per square km. 77.6% males are literates whereas literacy among female population is 55.78%

#### Resources:

##### i) Agro Resources

Paddy (2,60,000 MT), Ragi (1,00,000 MT), Groundnut (2,85,000 MT) and Sugar Cane ( 20,70,000 MT)

#### (ii) Horticulture

Chittoor district is one of the few major mango growing districts in the entire state. Cashew nut is also grown in mainly Satyavedu, Puttur and Srikalahasdti Mandals Mango is grown on 53,401 acres producing around 2.14 lakh tonnes per year. Cashew nut is grown on 673 acres producing around 161.5 tonnes per year. Production of major crops – Mango (3,58,617 MT), Cashew nut (161.5 MT), Tomato (4,00,000 MT ), Papaya ( 6,000 MT ), Tamarind (15,000 MT)

(iii) Mineral Resources Low-grade steatite, soap stone, Grate and also road metal and building stones, Granite in different colors of Black, Pink and Grey. (iv) Dairy resources

The District is having about 3,00,000 milch animals yielding about 18 Lakh Liters of Milk per day.

#### Crops in Chittoor District: Traditional and modern

Around 70% of the lands in Chittoor district are dry lands and rainfed crops are grown in them. Only 30% is irrigated as against the Andhra Pradesh average (35%). Earlier a variety of dry crops – millets, ragi, bajra, jowar, ground nut, red gram, cowpea, bean pea, horse gram, etc. used to be grown. But due to unremunerative prices for millets , people have more or less ceased raising these crops and have instead concentrated on ground nut which is by far the most remunerative of the lot. As a part of the Eastern ghats , most of the district is studded with hills. Traditionally, several chains of small tanks had been built, especially during the reign of the Vijayanagara kings and these form the backbone of irrigated agriculture in the district in the absence of any major river or canal projects. The farmers in the middle part of the district grow paddy for one season and follow it up with two years of sugarcane. This is the cycle. In the eastern taluks of our district the situation is somewhat different. There the soil is more sandy and there is more rainfall. Farmers opt for a cycle of paddy and groundnut (in rabi). In the western taluks, the climate is mod-

erate, but there is water shortage although the soils are red and rich. They prefer to grow vegetables, especially tomato. While some do grow mulberry (for silk), the location of two metropolises close by, Bangalore and Chennai (175 kms and 150 kms respectively from Chittoor) has spurred the cultivation of vegetables like tomato, brinjal, beans and potato apart from flowers and grapes in a few pockets. It has also meant rapid growth in allied activities such as poultry and dairying. The district enjoys cover of both monsoons. It gets about 900 mms of annual average rainfall. The salubrious climate and easy drainage of water in most areas enables the farmers to raise a variety of crops from paddy and banana to sugarcane, paddy, groundnut and flowers and vegetables as mentioned above.

**Jaggery:** The district is known for its jaggery. The jaggery comes in two categories, the white or golden yellow colored, mostly from Aragonda or western region is for consumption.. and fetches a better price. Farmers have increasingly taken to adding bleaching agents such as sodium thiosulphate, (Hydros) which is prohibited for human consumption. The colour lasts for a couple of months, by which time the jaggery changes several hands and is also probably consumed. The second variety is of darker even black colour due to the nature of the soil. Generally, soils which are alkaline will give rise to paler jaggery, which though attractive by look is not as sweet as the darker one. The latter fetches a slightly lower price than the yellow variety (by about Rs.100/- to Rs.200/- per quintal). It is mostly meant for brewing illicit liquor.

A number of private sugar factories have sprung up in the district, apart from the two major cooperative sugar factories sponsored by the government. As there is enough cane to supply to factories, there is no restriction on production of jaggery, which often fetches a better price than the factory price for cane. Besides, the farmers do not have to run after the factory sugar cane inspector for the cutting order and then wait for the lorry to arrive at any odd hour and search for people to load it with cane. Farmers appear least bothered about their jaggery being used for brewing arrack which gives adverse effect on health. Prices of jaggery and sugarcane (factories) have been more or less stagnant for the last five years, while the cost of production- labour, fertilizer, and electricity etc. have been steadily going up which results in loss to the farmers in the district.

**Mango:** Climatically the area is suited for mango. Once a mango garden is raised (in about 7 years) it requires little maintenance and fetches fairly good income – about Rs.10,000/- per acre. While the income from mango for the last three decades has been steadily rising, the costs have also started rising, especially for spraying pesticides and irrigation and of late, the returns are not as much as they used to be earlier (a decade ago). Although the price of mango is highly volatile from year to year depending on the production in the district and elsewhere, it tends to give a steady income in a lump sum annually to the farmer with least maintenance problems. Most farmers sell their mango crops to merchants for one or two years at a time and use the money for some urgent needs such as marriages, house construction or sinking bore wells or for medical bills etc. A number of juice making factories have sprung up in the district (around 25) which are seasonal in operation. Their fortunes also fluctuate with the mango market. (See Annexure IV)

**Vegetables:** The highly volatile vegetable market is very labour and capital intensive and farmers prefer to grow them in small plots of one or two acres generally. Vegetables and sugarcane crops are the mainstay of small and marginal farmers. As there aren't enough cold storage plants, farmers are often put to heavy losses in vegetables, especially tomato, when the prices crash due to glut in the market. The stakes are high for tomato with investments ranging from 25 to 40,000/- per acre with profits likely to go up to even one or two lakhs per acre (if tomato sells at Rs.10 or Rs.12/-) per kg in the wholesale market).

**Groundnut:** It is the mainstay of the dry land farmers, and most marginal farmers double up as agricultural workers. Unfortunately, the crop is very much dependent upon the mercy of timely and frequent rains in the kharif. For every one season of good crops there will be two bad years of heavy loss and two years of bare sustenance. Of late, the cost of raising groundnut crop is also rising, pushing the farmers into greater debt. The brunt of the price crash due to import of cheap palm oil from Malaysia was born by these farmers. The yields are also very low --- depending on timely rains, from 5 to 15 bags an acre. But the economics in the flat sandy soils of the Eastern taluks of the district are very different where it is raised as an irrigated dry crop in the rabi season with heavy doses of chemical fertilizers, the yield going up to 30 to 40 bags per acre, if not more.

**Choice of Crop:** Price or profit is the basic motivating factor for the farmer to grow any crop. But he will make the choice of crop depending upon a variety of factors apart from the price, like cost and easy availability of labour in season, ability of the crop to withstand shortages of water supply and easy marketability, disease- proneness of the crop. It is the risk of rejection by the factory (apart from the intensity of labour) that dissuaded many farmers from taking to gerkin cultivation under contract farming for a company in Kolar, Karnataka, although it promised high returns of Rs.50,000/- per acre apart from supply of seed, pesticide, fertilizer and credit and buy-back of the produce at a fixed, predetermined price. It is for the same reasons that crops like sugarcane are preferred to the rest: sugarcane can withstand shortage of water for over a month i.e. even if one or two wettings are missed or even more it will still give some crop unlike say paddy or vegetables which will be wiped out. One gets nothing, besides it is least disease prone and jaggery making can be managed with family labour with one or two labourers, so that even at current low prices,( not counting family labour) one can earn up to Rs.20 to 30,000 per acre (gross income). If, dairying can take care of the running costs of labour, etc. then one can end the season with a lump sum. This is the main attraction of sugarcane.

**Conclusion:** As Agriculture is gambling of nature, farmers have to change their cropping pattern and methods of farm in the district to maintain sustainability in agricultural sector.

## REFERENCES

1. DEFRA, Diversification in Agriculture | 2. Singh, Aradhana (Lead Author); Lakshar Boukerrou and Michelle Miller (Topic Editors). Diversification in agriculture. | 3. M.L. Narasaiah: Institutional Finance for Agricultural Development( 2010) | 4. Swaminathan: Agriculture Cannot Wait: New Horizons In Indian Agriculture | Swaminathan | 5. Culas, Richard and Mahendrarajah Causes of Diversification in Agriculture over Time: Evidence from Norwegian Farming Sector, 2005. | 6. www.fao.org | 7. www.ifpri.org