**International Journal of Academic Research**
**ISSN: 2348-7666; Vol.3, Issue-5(1), May, 2016**
**Impact Factor: 3.075; Email: drtvramana@yahoo.co.in**

# Management of agriculture in Andhra Pradesh: A study on Visakhapatnam District

Dr. Nalla Sushma, Associate Professor, Head of the Dept. Management Studies,
Pydah PG College, Visakhapatnam

***Abstract:*** *Agricultural development in India is also greatly influenced by the interaction between agrarian reforms and technological progress and its application. However, attempts at land reforms are creating more and more small farmers who are not able to absorb most of the advanced technology which needs considerable investment and capacity to understand science and technology in its application. Most of such farmers coming from the higher classes and reasonably rich families also are educated and intelligent enough to understand application process involved in modern technology.*

***Key words:*** *advanced technology, rural employment*

## Introduction

Agriculture is the back bone of Indian economy 60 percent of the people in India depend upon agriculture especially in rural areas majority of the people are depending upon agriculture. Economic growth can be possible with the development of agriculture. The aim of this article is to explain the agricultural management in Andhra Pradesh and find out the problems faced by farmers and suggest measures to improve the conditions. In the Indian context national development essentially means agricultural development. Agricultural accounts for over 40 percent of the real gross domestic product. The problem of the rural employment or under employment in rural India cannot be tackled except in the context of the function of agriculture. All over the world it was agriculture which paved the way for industrial growth. The surplus created by the agricultural production in term of food, raw material and labor have provided the basis for industrial growth on all the advanced countries of the world.

In third world countries like India special emphasis is laid on the management of agro-based industries in rural areas which utilize the agricultural surplus. In the process of expanding the cultivated area fast employment opportunities are provided in the construction or irrigation source and the distribution system. The application of modern technology for production and the intricacies of the cropping pattern create vast employment opportunities. Employment is also created due to the changes in crop-mix favoring labor intensive crops. Agriculture contributes to national welfare in several other ways. In India one of the specific objectives of the agricultural management is its contribution to the rising of the nutritional level of the population. After independence the government of India laid emphasis on the management of agriculture during the first two plan periods. It was exerted that agricultural growth would generate surpluses that accelerate the industrial growth of the country. Development of agro-based industries stimulated by agricultural

growth results in diversification in employment reducing the pressure on agriculture as a source of sustenance for a large section of people living in rural areas. Unfortunately, it was found that the slow growth of agriculture did not facilitate industrial advancement as expected.

Almost the entire attention of the first five year plan was directed at the development of agriculture. The government of India have launched special programmes for the benefit of marginal and small farmers and entrusted them to the management of the district collector. The small farmers development agency (SFDA) created in 1969 were intended to uplift the small farmers and help them take up land cultivation profitably. The marginal farmers and agricultural laborers agency (MLFLA) was created in 1971 to cater to the needs of the marginal farmers. At the instance of the government of India district rural development agencies (DRDAs) were created in all the states to take over the responsibility for these programmes.

For the benefit of the drought prone areas with scanty rainfall, in 1974 the drought prone area programmed (DPAP) was launched and schemes were worked out to meet the drought conditions. Similarly the hill area development program (1962) and desert area program (1979) were taken up in several states of India. In 1972 intensive tribal development program (ITDP) are launched at the instance of government of India which also provided the entire cost of the programme. Development of agriculture in tribal areas receives considerable attention under this programme.

Agricultural development in India is also greatly influenced by the interaction between agrarian reforms and technological progress and its application. However, attempts at land reforms are creating more and more small farmers who are not able to absorb most of the advanced technology which needs considerable investment and capacity to understand science and technology in its application. Most of such farmers coming from the higher classes and reasonably rich families also are educated and intelligent enough to understand application process involved in modern technology.

To bring social and economic justice that there was a shift of attention to the small and the marginal farmers during the 3$^{rd}$ and 4$^{th}$ plan periods. Later the anti-poverty programmes undertaken by the government were also directed towards helping the small and the marginal farmers and agricultural laborers to take up gainful employment through special designed programmes. The share of agriculture in the gross domestic product actually declined by the end of eighties in spite of increase in agricultural production. Statistics reveal that the real investment in agriculture actually declined during the eighties, ninety and as well as 2010.

`The situation of decline in agriculture is prevailed in almost all states in India. The state of Andhra Pradesh is most exempted from this. During 1990 to 2004 the farmers in Andhra Pradesh faced several problems due to lack of rains, scarcity of power supply, improper supply of quality seeds and fertilizers, non fixation of proper price for the agricultural products by government etc. Hundreds of farmers committed suicide during this period. In

2004 Y.S Raja Sekhar Reddy became the chief minister as promised by him. In his election manifesto he had put his first signature on the file of free electric power supply 9 hours per day. Due to lack of rains and improper supply of water to fields the farmers in east and west Godavari in Andhra Pradesh declared crop holiday in 2009 to 2014. In 2014 Telugu Desam party came into power with a slogan of debt waive to Agricultural farmers. It has given promise that debt and gold loans taken by farmers from banks will be cleared. The government of Andhra Pradesh under the leadership of Chandra Babu Naidu is paying more attention towards the management of Agriculture with a slogan of "polam pilustondhi raa". In 2016 budget Government. Of Andhra Pradesh as well as India put more emphasis on Agricultural development. In this context that the present study is under taken, to examine the problem of Agricultural management in Andhra Pradesh with special reference to Visakhapatnam district.

### Objectives of the study:

1. To describe the management of agriculture in India
2. To explain the administrative organization for management of Agriculture
3. To know the perceptions of farmers in the study area
4. To identify the problems in agricultural management and suggest measures
5. To improve the present state of condition

### Methodology

The present study is an empherical study and the data is collected through the primary and secondary sources of books, articles from journals, reports of committees appointed by the government, published and unpublished records maintained by the department of agriculture and allied organizations. The annual discrimination reports and other statistical data are extensively collected. When come to primary sources interview schedule was used to collect information from 300 sample respondents from 5 selected mandals. Observation method is also adapted and visits were paid to offices of the Agricultural Department, the rural banks when transactions involving agriculturists were taking place. A few visits were also made to some of the fields for the purpose of observing the application inputs by the farmers. After data collection the data is analyzed by using simple percentages. The variables taken for present study are caste, Age, Educational qualifications and income.

### Administration organization for management of Agriculture:

Even nearly after seven decades independence Indian economy essentially still remains agrarian. Today India is not only self-sufficient in the production of food grains but can boast of large buffer stocks, which can see the country through a season of drought or floods. The credit for achievement rightly goes to the farmers who have come out of their traditional beliefs and methods to adopt modern science and technology in short span of time.

There is a vast administrative structure built in India over the years to manage the function of agriculture. No wonder the union ministry consists of 23

divisions, 3 attached offices, and 22 sub offices spread over the country, not to speak of autonomous bodies, research institutions and co-operative organizations under it. At the state level there is a cabinet minister in charge of the agriculture portfolio at the political level who is assisted by a powerful secretariat organization. At the executive level the directorate is headed by an officer of an I.A.S rank who secures co-ordination between the different agencies concerned with the agriculture. At the district level, the joint director who is incharge of the agricultural operations is assisted by subject matter specialists. He functions under the administrative control of the district collector, who secures coordination between the different agencies concerned with agriculture. The weakest line in the agriculture departmental hierarchy is the one at the mandal level today.

**Profile of the study area (Visakhapatnam District):** The present study is conducted in Visakhapatnam District of Andhra Pradesh.Visakhapatnam District is one of the North Eastern Coastal districts of Andhra Pradesh and it lies between 17-15' and 18-32' Northern latitude and 18-54' and 83-30' in Eastern longitude. It is bounded on the North Partly by the Orissa state and partly by Vizianagaram Districts, on the south by East Godavari District, on the west by Orissa State and on the East by Bay of Bengal.

**Demographic characteristics**

According to 2011 Visakhapatnam had population of 4,288,113 of which male and female were 2,140,872 and 2,147,241 respectively.

**Literacy :** Average literacy rate of Visakhapatnam in 2011 were 67.70 compared to 59.96 of 2001.if things are looked out at gender wise, male and female literacy were 75.47 and 60.00 respectively.

**Administrative Regions:**Administratively, the District is dividing into 3 Revenue Divisions and 43 Mandals. The Visakhapatnam Mandals has been recently divided into two mandals as Visakhapatnam Urban and Visakhapatnam Rural. Among the 43 mandals 5 mandals are randomly selected for the present study

**Opinion survey:** Researcher contacted 300 sample respondents and selected from the 5 mandals developed as well as under developed and gathered the following information from them

**Socio-economic profile of the respondent:**

Table-1: Caste composition of respondents

| S.No | Caste of the respondents | Number | percent |
|---|---|---|---|
| 1 | Forward caste | 122 | 40.7 |
| 2 | Backward caste | 126 | 42.0 |
| 3 | Scheduled caste | 2 | 16.0 |
| 4 | Scheduled tribe | 2 | 0.7 |
| 5 | Others | 22 | 0.7 |

A majority of the 300 respondents covered in the opinion survey belong to backward castes followed by members of forward caste, scheduled caste and scheduled tribe as shown in the table above. Of the 10 women respondents 6 belonged to the forward castes while the rest are back ward class women

Table-2: Respondent's age wise

| S.No | Age group of respondents | No. of respondents | percent |
|---|---|---|---|
| 1 | 30+40years | 100 | 33.3 |
| 2 | 41-50years | 66 | 22.0 |
| 3 | 51-60years | 94 | 31.3 |
| 4 | 61-70years | 32 | 10.7 |
| 5 | 71years & Above | 8 | 2.7 |

Among the respondents the largest number belong to the age group of 30-40 years followed by an older batch of 50-60 people as shown above

Table-3:Respondent's education wise / caste wise

| S. No | Caste of the respondents | Illiterate | Semi-literate | High school | Inter | Degree | P. G | Row total of respondents |
|---|---|---|---|---|---|---|---|---|
| 1 | Forward caste | 32 | 26 | 36 | 8 | 18 | 2 | 122 |
| 2 | Backward caste | 86 | 26 | 6 | 4 | 4 | - | 126 |
| 3 | Scheduled caste | 34 | 10 | 2 | 2 | - | - 48 | |
| 4 | Scheduled tribe | 2 | - | - | - | - | - | 2 |
| 5 | Others | - | - | 2 | - | - | - | 2 |

Regarding the educational qualifications more than half the respondents are illiterate while at the other end 22 of them are graduates as shown in the above table. Among the graduates the largest number belongs to forward castes.

Table-4: Respondents' source of livelihood

| S.No | Land holding (acres) | Agrl income source | Poultry | Shepherd | Small business | Petty jobs | Total |
|---|---|---|---|---|---|---|---|
| 1 | 1-5 acres | 72 | 2 | 10 | 9 | 3 | 96 |
| 2 | 5-10 | 70 | 2 | 9 | 15 | 4 | 100 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | acres | | | | | | |
| 3 | 10-20 | 42 | - | 4 | 3 | 1 | 50 |
| 4 | 20-40 | 20 | - | 2 | 6 | 2 | 30 |
| 5 | 40 &above | 16 | - | 5 | 3 | - | 24 |

Among the 300 respondents 220 have stated that agriculture is their only source of living while others derive income from other sources as shown in above.

Table-5:**Whether land is ancestral or acquired**

| S.No | Land holding | Ancestors | self | Both | Row total of respondents |
|---|---|---|---|---|---|
| 1 | 1-5 acres | 56 | 38 | 2 | 96 |
| 2 | 5-10 acres | 60 | 32 | 8 | 100 |
| 3 | 10-20 acres | 30 | 4 | 16 | 50 |
| 4 | 20-40 acres | 16 | 6 | 8 | 30 |
| 5 | 40 & above | 20 | 2 | 2 | 24 |
| | Column total of respondents | 182<br>60.37% | 82<br>27.35% | 36<br>12% | 300<br>100% |

More than two-thirds of the respondents use ploughs for tilling their lands. While the rest use tractors. Those who own and used tractors are invariably large farmers with more than 30 to 40 acres of land while there are also other big farmers who secure tractors on rent. Further 87 percent of the respondents use their own bullocks for ploughing land while 38 percent either hire them or borrow them from friends.

Table-6

Type of crops grown

| S. No | Land holding (acres) | Paddy | Commercial | Paddy & commercial | Paddy & vegetables | Commercial &vegetables | Row total of respondents |
|---|---|---|---|---|---|---|---|
| 1 | 1-5 | 78 | 2 | 16 | - | - | 96 |
| 2 | 5-10 | 56 | 2 | 38 | 2 | 2 | 100 |
| 3 | 10-20 | 14 | - | 34 | - | 2 | 50 |
| 4 | 20-40 | 8 | - | 14 | 6 | 2 | 30 |
| 5 | 40 & above | 4 | - | 12 | 2 | 6 | 24 |
| | total respondents | 160<br>53.35% | 4<br>1.4% | 114<br>38% | 10<br>3.3% | 12<br>3.5% | 300<br>100% |

From the above table it can be seen that small farmers with less than 5 acres of land prefer to grow only paddy whiles only a few of them also growing commercial crops.

Only a few of farmers prefer to grow vegetables along with paddy. Also those who grow commercial vegetables are few in number

Table-7

Type of land

| S.No | Land holding | Wet | Dry | Both | Total respondents |
|---|---|---|---|---|---|
| 1 | 1-5 acres | 20 | 18 | 58 | 96 |
| 2 | 5-10 acres | 24 | 4 | 72 | 100 |
| 3 | 10-20 acres | 2 | 4 | 44 | 50 |
| 4 | 20-40 acres | | 4 | 26 | 30 |
| 5 | 40 & above | | | 24 | 24 |
| | total of respondents | 46 | 30 | 224 | 300 |
| | | 15.4% | 10% | 74.7% | 100% |

It could be seen from the above table tables that those who possess wet land are few in number compared to 75 percent of the respondents who posses both dry and wet land. It is also of the interest to note that those who own only dry land are few in number

Table-8 Duration of loans

| S.No | Land holding | Not applicable | Short term | Medium term | Long term | Row total of respondents |
|---|---|---|---|---|---|---|
| 1 | 1-5 acres | 56 | 32 | 8 | - | 96 |
| 2 | 5-10 acres | 70 | 20 | 10 | - | 100 |
| 3 | 10-20 acres | 38 | 8 | 2 | 2 | 50 |
| 4 | 20-40 acres | 24 | 6 | - | - | 30 |
| 5 | 40 & above | 16 | 6 | 2 | - | 24 |
| | total of respondents | 204 | 72 | 22 | 2 | 300 |

The above table shows the types of loans contacted by respondents belong to different categories landholders. Further who borrow money posses less than 10 acres of land. Further it could also be seen that the same category of farmers going for short-term and medium term loans compared to others

Use of fertilizers

Table-9

| S.No | Land holding | Not applicable | Self | Others | Both | Row total of respondents |
|---|---|---|---|---|---|---|
| 1 | 1-5 acres | 2 | 42 | 52 | - | 96 |
| 2 | 5-10 acres | 6 | 62 | 28 | 4 | 100 |
| 3 | 10-20 acres | - | 36 | 12 | 2 | 50 |
| 4 | 20-40 acres | - | 28 | 2 | - | 30 |
| 5 | 40 & above | 2 | 18 | 2 | 2 | 24 |
| | Total of respondents | 10 | 186 | 96 | 8 | 300 |

The following table shows that 62 percent of the respondents use chemical fertilizers on their own without seeking the advice of others. Only 32 percent of them consult others before applying. Almost all the farmers admit that they use both fertilizers as well as natural manures in different proportions depending upon their availability. Only 10 of 300 respondents have categorically stated that they do not use, while only 2 of the respondents mentioned that they do not use natural compose at all.

Table-10
Water source for Irrigation

| S.No | Land holding | Wells | Tanks | Row total of respondents |
|---|---|---|---|---|
| 1 | 1-5 acres | 68 | 28 | 96 |
| 2 | 5-10 acres | 68 | 22 | 100 |
| 3 | 10-20 acres | 42 | 8 | 50 |
| 4 | 20-40 acres | 22 | 8 | 30 |
| 5 | 40 & above | 18 | 6 | 24 |
| | Column total of respondents | 218 | 82 | 300 |

The respondents stated that they use water either from wells or tanks depending upon their availability locally. For instance farmers covered by big tanks or lakes like the pakala lake need not dig wells for irrigation purpose. In other places shallow wells or tube wells are dug. Of the 300 respondents 218 use wells while only 82 irrigate land under tanks

Table-11
How agriculture department is approached

| S.No | Land holding | Self | leaders | Middle man | Row total of respondents |
|---|---|---|---|---|---|
| 1 | 1-5 acres | 32 | 42 | 22 | 96 |
| 2 | 5-10 acres | 62 | 24 | 14 | 100 |
| 3 | 10-20 acres | 38 | 6 | 6 | 50 |
| 4 | 20-40 acres | 30 | - | - | 30 |

| | | | | | |
|---|---|---|---|---|---|
| 5 | 40 & above | 24 | - | - | 24 |
| | Column total of respondents | 186 | 72 | 42 | 300<br>100% |

Table-12

Satisfaction with agriculture department-holding wise

| S.No | Respondents Land holding | Yes | no | Row total of respondents |
|---|---|---|---|---|
| 1 | 1-5 acres | 18 | 18 | 96 |
| 2 | 5-10 acres | 22 | 78 | 100 |
| 3 | 10-20 acres | 12 | 38 | 50 |
| 4 | 20-40 acres | 14 | 16 | 30 |
| 5 | 40 & above | 10 | 14 | 24 |
| | Column total of respondents | 76 | 224 | 300 |

From the above table-11 & 12 it is disappoint to note that 75 percent of the farmers express dissatisfaction with the services rendered by the functionaries of the agriculture department. Significantly among those who are dissatisfied are small farmers. About 70 percent of respondents have expressed their displeasure about the role of the panchayat raj leadership and the village development officer in agriculture development programmes. But it is also evident from the above tables that while the bigger riots always approach officers directly. Very few of the respondents mentioned the village development officers by designation as the person who helps them approach their functionaries of agriculture department

**Following are the findings of the study in Visakhapatnam District**

1. The main crops grown in the study area are paddy and ground nuts beside this sugar cane and banana plantation is also there. Farmers said that they are facing problems like scarcity of power supply and water supply.

2. Though TDP government declared depth weight but so far no attempts were made to take proper decisions on this. Due to this reason farmers are getting troubles from bankers where they have taken agricultural and gold loans.

3. There is no co-operation from the staff of agricultural department to the farmers. Majority of the farmers said that staff is harassing them and lot of corruption is prevailed in the department. More over they didn't have satisfaction towards the performance of department staff.

4. Majority of the farmers complained that quality of seeds and fertilizers are not supplied by the agricultural department .

**Measures to improve the conditions of Agricultural management**

1. Literacy rate of farmers should be increased by conducting adult education

classes at night time. So that awareness will be increased and farmers can be able to follow modern methods and techniques in agriculture.

2. Publicity towards the use of modern methods should be intensified by the government through television and radio.

3. Government should give proper power and water supply to the field of farmers.

4. Quality seeds and fertilizers should be supplied by the government in proper time.

5. Monitoring and proper supervision should be there to control corruption among the agricultural department staff.

6. Less interest rate loan facility should be provided to the farmers to save them from the clutches of money lenders.

7. Politicians and administrators should come forward to implement the legislation related to land reforms properly.

## Conclusion

1. In conclusion, we can say that India should be proud of its progress in agriculture since independence.

2. Today, it is able to feed its 101 crores population.

3. However, the country is fast approaching a point of saturation in agricultural production. The fact remains that the country has not been able to prevent the rapid growth of population.

4. No doubt additional areas are constantly brought under cultivation and additional irrigation facilities provided.

5. But with conditions of drought and floods constantly occurring, the balance between demand and supply of food grains remains delicate

6. The Indian farmer no doubt he is doing best.

7. Even farmers of the Visakhapatnam district which was described as backward a few years back can boast of producing the best quality of rice in large quantities. But there is a limit beyond which they become helpless, to produce more besides the efforts of farmers, government should also contribute its own help to the farmers by allocating more amounts towards the development of agriculture in its annual budget. Proper management of agriculture on the other hand is also essential

## References

1. Bharadwaj, Krishna- productions conditions in Indian agriculture(London: Cambridge university press), 1974
2. Bhatia, M.S.V.K Sharma & T.Haque- changes in factor relations and factor productivity in Indian agriculture, agricultural situations in India January 1984
3. Kahlo, A.S.K Tyagi, D.S- agricultural price policy in India, allied publishers pvt.ltd., New Delhi 1983
4. Vital reddy.k (E.D)- agriculture in India readings in agricultural resource development,1984
5. Census of India -2011 report of government of India
6. Profile of Visakhapatnam District from hand book of Visakhapatnam District, 2016