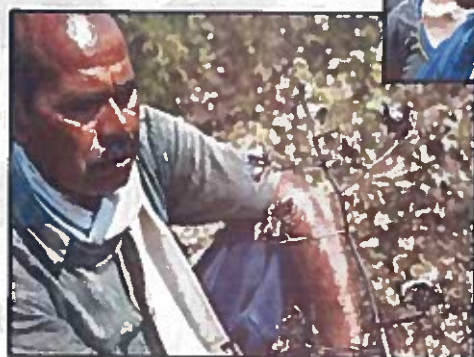


FARMER SUICIDES IN ANDHRA PRADESH



Dr. K. Rambabu, Ph.D
Research Associate



Study Sponsored by Ministry of Agriculture and Farmers Welfare
Government of India
Agro-Economic Research Centre
Andhra University, Visakhapatnam
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Preface

A large number of farmers committing suicides in certain parts of the country has become a grave concern for the Government of India. The factors like lower yields, rising cost of cultivation, declining prices of several crops, widening disparities between agricultural and non-agricultural sectors, conspicuous expenditure on ceremonies, a mounting debt burden and dipping incomes of the cultivators are responsible for plunging of the small and marginal farmer into crises which have no other alternative except driven them to take the extreme step of suicides.

Andhra Pradesh agriculture is caught into the problems of stagnating or declining crop yields, deceleration in the growth of output, increase in the cost of production and declining product price and causing distress to many farmers. The farmers who are not able to cope with the distress are taking the ultimate step of committing suicides.

The Government after careful examination, observed that the financial assistance, envisaged in 2004, is not commensurate with the present socio-economic circumstances and there by enhanced the ex-gratia and loan settlement ceiling limit to the family members of the deceased farmers (vide G.O.Ms. No.62, dt.19-02-2015) in the following manner:

- a) Enhance Ex-gratia from Rs.1.00 lakh to Rs. 3.50 lakh to the family of the deceased farmer towards rehabilitation of the family;
- b) Enhance loan settlement ceiling limit from Rs. 0.50 lakh (Rupees Fifty Thousand) to Rs. 1.50 lakh (Rupees one Lakh and Fifty Thousand) to the persons (debtors) entitled; as one time settlement and to wipe off all the liabilities on the part of deceased farmers families.

The major conclusion of the present study is that farmers' suicides are caused by a number mutually interacting factors representing socio-economic, cultural and psychological characteristics of the farmers. As inferred by this study, the prominent economic factors that are responsible for committing suicides are: continuous crop failures or low yields due to poor quality of irrigation, use of unsuitable seed and spurious pesticides and credit-input-product tie-up. The socio-cultural factors include dowry system, extravagant consumption and disintegration of social institutions at the village level are also significant causes for the distress of farmers.

Interacting with the family members of the suicide victims for collecting the data on various issues poses considerable embarrassment. Facing all the odds, Dr. M. Nageswara Rao, Research Officer, the Research Associates Dr. K. Rambabu, Dr. P. Ramu, Dr. K. V. Giribabu and Sri B. Krishna, Research Fellow, have taken meticulous care at all stages of data collection, processing it and drafting of the report.

I also thank, all the Government officials from Commissionerate of Agriculture, Guntur and the Joint Directors and Deputy Directors of Agriculture, Guntur and Ananthapur districts for providing all the necessary information. I take this opportunity to thank the extension

staff without whose co-operation and help we could not have completed this study in the stipulated time. Finally, I thank all the other members of the Centre who are associated with this study and the members of the sample victims' families and the other village level elders for co-operating with our investigating staff and providing the necessary information.

Prof. T. Koteswara Rao
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EXECUTIVE SUMMARY

Background and Objectives of the study:

Agriculture is the main stay of our economy. Since Independence it has recorded phenomenal progress, thanks to factors such as high yielding varieties of crops, improved input use, soil and water management practices, infrastructure development like irrigation, soil conservation, credit supply, mechanization, transportation, warehousing, marketing and price support. However, along with this progress our country has also witnessed increasing farmer suicides in the recent years. In order to gain a deeper understanding of this anomalous situation the Ministry of Agriculture, Government of India, commissioned a study by Agro-Economic Research Centres with the following objectives:

1. To analyse the incidence and spread of farmer suicides in selected states
2. To study the socio-economic profile of victim households, their cropping pattern and profitability of agriculture
3. To study the causes leading to farmer suicides, and
4. To recommend suitable policies to prevent farmers' suicides.

Methodology:

Andhra Pradesh is one of the states selected. Guntur district from the coastal region and Ananthapur from Rayalaseema region were selected in view of larger incidence of suicides. In Guntur district 3 mandals and 13 villages were selected and one suicide case was selected from each village. In Ananthapur district 10 mandals were identified. From these 16 villages and 17 cases of suicides were selected. Thus the study covered 2 districts, 29 villages and 30 farmers. The affected households were canvassed a structured questionnaire, which yielded the primary data.

Secondary data were collected from Central and State Government departments and other agencies. Log linier growth rates ($\ln Y = a + bt + ut$) for the period 1998 to 2015 were calculated to **identify the rate of farmers' suicides over a** period in the state as well as in selected districts. To observe the variation across the districts the coefficient of variation is estimated ($CV = \frac{\sigma}{\mu} \times 100$) The reference period for collecting the primary data is the agricultural year 2015-16.

Suicide Scenario in Andhra Pradesh:

79 cases of suicides among farmers were recorded in Andhra Pradesh during 2015-16. It averages 1.30 suicides per one lakh hectares of net sown area, 1.05 per one lakh ha. of gross cropped

area and 1.04 per one lakh farm families. Suicides per one lakh families stood at 6.12 in Ananthapur and 2.63 in Guntur. September-October recorded the maximum suicides (18.99%) and minimum (2.53%) in March.

During 2015-16 an amount of Rs. 233.34 lakhs was paid as compensation, of which Rs. 118.34 lakh was paid in Ananthapur district and 45 lakhs in Guntur district. There were delays in disbursement of compensation due to delays in certification of deaths by forensic laboratories.

Farmer suicides are widely attributed to crop failure and consequent debt overdue burden. Government of Andhra Pradesh took the following steps to address the situation particularly in the vulnerable districts of Kurnool, Ananthapur, Kadapa, Chittoor, Prakasam and Guntur.

1. Programme to mitigate the drought situation with the help of International Fund for Agricultural Development (IFDA) and Green Climate Fund
2. Identification of measures for drought proofing the affected areas
3. Simplification of procedures for confirming farmer suicides
4. Enhancement of ex-gratia (Rs.1.00 to 3.50 lakhs) and loan settlement (Rs. 0.50 to 1.50 lakhs) ceiling limits.

Besides, the following programmes are also being implemented by the state

Government to generally make farming more profitable and secure:

- 1) The Andhra Pradesh Land Licenced Cultivators Act, 2011.
- 2) Vaddileni pantarunulu and
- 3) Crop loans to farmers
- 4) Crop insurance
- 5) National Calamities and input subsidy
- 6) Agricultural Debt Redemption Scheme on crop loans
- 7) Chandranna Rythushkhetralu
- 8) Micro-nutrient application based on soil test results
- 9) Polam pilosthondi programme
- 10) Farm mechanization
- 11) Organic farming and
- 12) Multi-purpose Extension officers.

A profile of the sample households:

- 1) 67% of suicides occurred in the house and 33% in the farm; 67% from poison and 33% by hanging.
- 2) Of those committing suicide, 53% are literates; 13% studied middle school, 27% were articulates and 7% had higher secondary schooling.
- 3) 13% are from joint families and rest from nuclear families.
- 4) 43% are marginal farmers, 33% are small farmers, 13% are medium farmers and 10% are large farmers.
- 5) Almost half of the operational holdings consisted of leased-in land. Tenancy

was restored to make the land holdings more viable, wherever owned land was small.

- 6) 70% of gross cropped area is irrigated and intensity of cultivation is 152%.
- 7) 33% irrigated area is under canals, 37% under bore wells and 13% under tanks.
- 8) Cultivators raised high value crops like paddy, cotton, chillies, oilseeds and pulses.
- 9) Kharif Paddy and groundnut yields were near normal. Other crops recorded lower yields.
- 10) Indebtedness per household was Rs. 90,000. Only one-fourth of sample farmers reported institutional debt. Non-institutional sources are money lenders, landlords, traders/commission agents and friends/relatives. Per reporting household the outstanding debt to these sources averaged 1.65, 0.99, 1.69 and 1.10 lakh of rupees.

Causes for suicides:

The background of sample households doesn't show any abnormalities. Socially they are stable. Their educational levels are average. Their operational holdings, irrigation, tenancy, cropping pattern, etc., are also normal. They have raised high value crops like paddy, chillies, cotton, oilseeds and pulses.

However, empirical data suggest that the farmers were adversely affected by three factors:

1. Crop yields were lower than normal for several crops, especially pulses and groundnut.
 2. Prices received were less than minimum support prices in the case of Redgram and groundnut, which accounted for one-third of the gross cropped area, and were unable to cover the cost of cultivation.
 3. But this need not cause distress because the sample farmers had some resilience in the form of supplementary incomes from agricultural wages, salaries from employment, ancillary activities like dairy and animal husbandry, etc. Total household expenditure was only 63% of total household income which in the normal circumstances can cushion the loss in farming.
- a. Indebtedness is the third and major reason for suicides. In addition to crop loans, Heavy loans were contracted for
 - i. Irrigation development
 - ii. Mechanization
 - iii. Social needs like weddings or for health costs
 - b. Imprudent management of these investments leading to losses

c. Insults suffered at the hands of creditors for defaulting on loans

Suggested steps for prevention of suicides:

The persons committing suicide were farmers. But the reasons for suicides may not be directly related to crop failure or distress sales because it is a factor common to lakhs of farmers around them. The main reason is heavy indebtedness, failed investments and a highly sensitive and weak mind-set that was unable to withstand the pressure of creditors.

It is not a prudent response for the Government to either waive loans, or issue interest-free loans or directly compensate for suicides. Policy formulation by state to solve the problems of tenant farmers and implementation of tenancy reforms to save them from distress. Establishment of seed Bank/Seed villages in every mandal of the district. These may be short-term remedies. We need a long term policy which will not heavily burden the Government. It may include

- Drought-proofing of agriculture.
- Creation of more ancillary economic activities that could yield supplementary incomes.
- A credit mechanism which will
 - a. eliminate private lending
 - b. properly suit the repayment capacity of borrowers
 - c. is backed by technical advice that will prevent failure of investments.

- Input delivery systems that ensures quality of inputs.
- An effective crop insurance scheme to cover all crops.
- A farmer, welfare authority should be set by each and every state Government with considerable **Farmers' Welfare Fund to provide** social security system for the farmers. This body should be headed by a professional (not bureaucrats) in order to design and implement effectively three core components of social security **system, viz., Farmers' Pension scheme, Farmers' health insurance** scheme.
- Rural non-farm and non-crop sectors have to be promoted in order to diversify the rural income base which will act as a buffer in the event of crop failure and reduce income uncertainties.
- Agriculture should be agro-processing and linked with industry in order to promote long run processing industry, which will generate huge employment in rural areas besides improving the **farmers' income.**

An insurance-linked institutional credit covering short term and long term agricultural needs will in all probability remove the possibility of suicides.

CHAPTER – I

FARMERS SUICIDES IN ANDHRA PRADESH

Introduction:

Agriculture in Andhra Pradesh is basically small farm agriculture. As per 1995-96 agricultural census there were about 10603 thousand holdings in the state with an average size of 1.36 hectares per holding. Among the total holdings the small and marginal holdings accounted for 80.74 percent with 42.68 percent of the share in the total area. Over a period there has been an increase in number of holdings and decline in the average size of holdings. The number of holdings increased from 7370 thousand in 1980-81 to 10603 thousand in 1995-96. The changes in Land holdings in three census periods can be viewed from the following Table –A.

Table – A
CHANGES IN LAND HOLDINGS AND AREA IN A.P

	2000-01		2005-06		2010-11	
	Before Bifurcation	After Bifurcation	Before Bifurcation	After Bifurcation	Before Bifurcation	After Bifurcation
Total Holdings (in 000')	11532	6893	12044	7216	13175	7621
Total Area (in 000' ha)	14400	8054	14489	8189	14293	8096
Average Size (Ha)	1.25	1.17	1.20	1.13	1.08	1.06
Marginal & Small No.of Households (in 000')	9541	5803	10057	6111	11343	6575
Area (in 000' ha)	6669	3907	7017	4113	7847	4411
Average Size (Ha)	0.70	0.67	0.70	0.67	0.69	0.67
% of Holdings of Marginal & Small in Total Holdings	82.74	84.20	83.50	84.69	86.09	86.17
% of Area of Marginal and Small in Total Area	46.31	48.51	48.43	50.22	54.90	54.48

Source: Agricultural Census 2000-01, 2005-06 and 2010-11.

From the table the differences in landholdings and area of total farmers, marginal and small farmers in Andhra Pradesh can be observed before and after bifurcation. It is clearly observed that the average size of the holdings (total farmers) has decreased from 1.25 hectares in 2000-01 to 1.08 hectares in 2010-11 before bifurcation. Even after bifurcation the average size has further decreased from 1.17 hectares in 2000-01 to 1.06 hectares in 2010-11. On the other hand no significant change has been observed in the average holding of marginal and small farmers from 2000-01 to 2010-11 before and after bifurcation.

Under the conditions of decelerating/stagnating crop yields, the small size of the holdings and its decline over time had a significant impact on the agricultural incomes and the levels of living of the farm households. The per capita agricultural output recorded a negative growth in the nineties. The decline in per capita agriculture output and increase in the cost of cultivation per unit of output lead to the decline in the incomes of the farmer and increase in the dependence on credit for carrying out the farm activities.

Many studies show that small and marginal farmers in Andhra Pradesh still depend on non-institutional sources of credit particularly money lenders for 70 to 80 percent of their requirements. The money lenders charge exorbitantly high rates of interest. With the breakdown of extension services and lack of access to institutional credit, small and marginal farmers are becoming increasingly dependent upon private traders for credit and extension services, especially in the context of emerging high input use, high risk apricots. In the absence of public regulation of such services, the resource poor and innocent farmers are being exploited by unscrupulous traders and money lenders interested in selling spurious pesticides and seeds and falling into a distress situation. The farmers who are not able to cope up with this distress are resorting to the extreme step of putting an end to their life by committing suicide.

1.1A Extent of Farmers Suicides in Andhra Pradesh:

As per the data collected from newspapers and from the list prepared by Andhra Pradesh Rythu Sangam (before bifurcation) during the five year period i.e. October 1997 to September 2002, a total of 877 suicides by farmers were reported in the state. In 1998 a maximum of 353 farmers committed suicide. During 1990-99, 59 farmers and in 2000, 82 farmers committed suicide. Again in 2001 there was a steep rise in suicides, the number reaching 200. The year 2012 also saw a spate of suicides. By the end of August 2002, 112 cases were reported. Later the figure rose to 218 by the end of November (Prajasaakthi, November 21st, 2002). Of the total of 877 suicides, Coastal Andhra and Rayalaseema Regions accounted for around 13 percent each. Moreover in Ananthapur district 70 cases and 59 cases in Guntur district were reported. The district wise and year wise number of suicides by farmers for bifurcated Andhra Pradesh are presented in Table – B.

Table –B
YEAR WISE NO.OF FARMERS SUICIDES IN ANDHRA PRADESH

S.No	Name of the District	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
1	Srikakulam	0	0	0	1	0	0	4	1	0	0	1	1	2	2	1	0	0	1	14
2	Vizianagaram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
3	Visakhapatnam	0	0	0	0	0	0	9	5	2	1	1	3	8	4	1	0	0	1	35
4	East Godavari	0	1	0	0	1	0	5	2	4	3	2	2	10	18	5	2	0	4	59
5	West Godavari	0	0	0	0	0	0	8	0	0	1	1	1	0	0	0	0	0	5	16
6	Krishna	1	0	2	0	1	0	24	13	6	4	2	4	6	2	3	3	3	0	74
7	Guntur	5	12	1	4	5	1	73	24	33	22	30	5	12	25	15	14	0	12	293
8	Prakasam	0	3	4	2	1	0	44	9	8	10	8	0	10	10	1	2	1	12	125
9	Nellore	0	0	0	0	0	2	6	7	0	1	1	2	1	0	0	0	2	1	23
10	Ananthapur	1	9	21	35	61	72	72	70	69	90	86	47	45	67	40	31	41	51	908
11	Chittoor	0	0	2	4	1	4	39	22	24	24	17	10	3	7	3	0	0	3	163
12	YSR Kadapa	0	0	0	0	1	5	21	17	9	26	20	11	4	8	2	1	0	6	131
13	Kurnool	13	6	3	6	11	7	76	62	75	85	75	71	42	44	26	3	1	4	610
Total		20	31	33	52	82	91	381	232	230	267	244	157	143	187	97	56	48	101	2452
																	CV			144.22
CAGR					Guntur										0.97					
					Ananthapur										2.71					
					Andhra Pradesh										2.04					

Source: commissionerate of agriculture, Govt. of Andhra Pradesh, Guntur.

It can be observed from the table that the number of suicides which was 381 in 2004 gradually reduced to 48 by 2014 in new Andhra Pradesh. But in 2015 the suicides were reported to be 101, the reason may be attributed to the unexpected seasonal conditions and drought affects. During 2016, the suicides were reported as 79. This inferences that inspite of supplementary improvement programmes implemented in the state, the suicides are still continuing in the state. The reason may be attributed to the drought conditions and irrecoverable indebtedness. The coefficient of variation for number of suicides for the period 1998 to 2015 is estimated to be 144.22%. The log linear growth rates of number of suicides in the bifurcated Andhra Pradesh for the period 1998-2015 are found to be 0.97 percent for Guntur, 2.71 percent for Ananthapur and 2.04 percent for the state.

1.2 Review of the Literature:

A number of studies were conducted to examine the factors leading to farmers' suicides by individual scholars, academicians, fact finding committees and other voluntary agencies. Some of the studies are reviewed as follows:

1.2.1. Earlier Suicides by farmers in other states.

Parthasarathy and Shameem¹(1998) studied suicides of cotton farmers of Warangal district that occurred towards the end of 1997. They observed that though there were problems due to adverse rainfall leading to low yields, adverse prices, rising cost of cultivation, bad position of co-operative credit agencies, the major problem leading to distress and subsequent suicide in many cases was the growing indebtedness and the growing power of money lender, trader, landlord combine.

2. MuzzaffarAssadi² (1998) while analysing the farmers' suicides in Karnataka state observed that committing suicides by farmers was a new phenomenon in Karnataka as mostly the Karnataka farmers highlighted the problems through agitations. He finds that many who committed suicides grew commercial crops especially Tur dal, chillies etc. Most of them were tenant farmers who borrowed money from local moneylenders. Failure of crops for consecutive years and at the same time pressure from the landlords and moneylenders lead the farmers to commit suicide. He pointed out that it is a paradox that the capitalist structure, which integrates peasants in the larger market also traps the peasants in the larger frame work of exploitation.

While discussing Parthasarathy and Shameem analysis of the causes of suicides, Revathi³ (1998) feels that there are some missing issues. Firstly she pointed out that

irrigation is an implicit cause for the soaring debts of the farmers. The Cotton farmers of Warangal almost entirely depend on private irrigation. She observes that in the creation of private irrigation, farmers make heavy investments that lead to accumulation of debts. Secondly, she ascribed the source of credit **as another reason for the farmers' suicides**. She points-out that most of the studies conducted in the district revealed that it is either the commission agent or the pesticide dealer network that finances the credit needs of the farmers. They charge 15 percent to 20 per cent higher price over the normal price. She observed that such kind of tie up with the pesticide dealers who also supply seeds often of low quality **is tightening the noose around the farmers' necks**. Finally she says that the politics and economics of neglect of the region for decades also have a role in the suicides.

In a study of Bidar district in Karnataka, Vasavi⁴ (1999) points-out that the distress among farmers in the district was largely due to the inter linkages of ecological, economic and social crises. She feels that the commercial agriculture practices introduced by the state under the guise of developmental programmes did not fit the ecological specificity of the region. The available institutional credit facilities catered mostly to the large farmers. She observes that when the commercial crops fall, the small and marginal farmers who are already in the grip of moneylenders are threatened with food security. She blames the increasing subordination of cultivators to market forces the minimal role of state as major causes for distress among the agriculture community.

Ashish Bose⁵ (2000) in his analysis of suicides by Punjab farmers in the cotton belt finds that 85 percent of the farmers are in debt and causes for indebtedness are 1. Failure of the cotton crop, 2. High cost of pesticides, over use of pesticides and use of fake pesticides supplied by dealers and 3. Over mechanization of agriculture i.e. the needless purchase of tractors as a result of demonstration effect.

Mohanty⁶ (2001) made a comprehensive analysis of suicides of farmers in Maharashtra by linking historical with contemporary data and economic with social phenomenon. The findings of the study indicate that the suicides of farmers were the result of complex process of interaction of historical as well as contemporary forces. The author points-out that the lower and medium caste farmers which were mostly the small farmers had aspired for better socio-economic position through agriculture, in the planning era in the wake of land reforms and other welfare measures but when they failed to realise it owing to crop loss, they found their life not worth-living.

In efficient market structure, improper credit delivery systems interlocking of inputs and credit market is among the various factors that cause distress to farmers, as observed by Deshpande⁷ (2002) in his survey **of farmers' suicides in Karnataka market inadequacy** and crash in prices were reported as major reasons for farmers distress. He feels the breakup of family unit and village community resulting-in reduced social support is also a factor for distress of the farmers. He suggests the discouragement of the interlocking of the inputs and credit market and removal of market imperfections so that the cultivators may get their fair-share.

C. Satapathy and B. Mishra⁸ (2012) conducted a ground level study in Odisha with a sample of 50 respondents consisting of agricultural scientists and farmers with equal proportion lead to arrive at the following conclusions: 1. Farmers commit suicides because of multiple factors. These are crop failure, pressure of credit agencies, economic condition, social situation, poor market, non-remunerative technology and weak psychology, 2. Crop failure is attributed as major for farmers' suicide, high cost of labour, climatic hazards and high cost of inputs are the major reasons of crop failure; 3. Pressure of credit agencies as cause of farmers' suicides is well viewed by scientists as well as farmers. Less period for payment, increased pressure for repayment, high rate of interest are cited as the major components for which farmers feel frustrated and attempt to end their valuable lives. 4. **Poor economic condition and inherited poverty force the farmers' to commit suicide.** Increased cost of living, insufficient farm income and inherited poor economic condition are **the major causes which compel them to end their lives.** 5. **In social life farmers' feel** frustrated because of unpaid loan for which they bear social stigma increased family burden, expansion of expiration of family members especially children and non-cooperation of family members to bear with poverty force the farmers to escape from world; 6. Poor market structure has been the cause of acute poverty of the farmers. Non-guarantee for procurement by government, low market price of farm produce and non-disposal of produce push the farmers into depressed situation leading to suicide; 7. Present farm policy is not much helpful to farming communities. No production incentive, no protection to produce and absence of crop insurance push the farmers into darkness of uncertainty, where he finds ending of life is the only solution, 8. Present farm technology is not that much remunerative to allow small and marginal **farmers' to have at-least** a meaningful living. The technology is not profit oriented, not suiting to small and marginal land holding nor market driven. It is evident that being whole life in farming, the condition of farmers has not changed much compared to other walks of life; 9. Weak Psychology of rural farmers

constituted by elements like afraid of future, low risk bearing capacity, frequently depression lead farmers to end their precious life.

Nishmeetsingh and Aashay Tripathi (2014)⁹ concluded that suicide is a complex phenomenon usually connected with the economic, social & psychological distress of the family and the individual in particular. The National Crime Records Bureau (NCRB) data shows the high incidence of farmer suicides in the states of India. Reasons like crop failure, improper irrigation, limited returns etc., have been responsible for forcing the farmers to take the extreme step. However, research shows that the majority of farmer suicides have happened because of the economic distress caused by indebtedness or bankruptcy. There is a possible chain of linkage between the low returns from crops to bankruptcy and the rising debt for farmers leading to financial distress. Moreover, due to the socio-economic complexity of various factors working at the gross-root level, it would not be appropriate to conclude that all farmer suicides have taken place only due to indebtedness.

1.2.2. Earlier Experiences of Suicides in Andhra Pradesh.

Basha¹⁰ (2002) who conducted a study on the suicide farmers of Ananthapur district found that the Ananthapur farmers were less distressed, though poor, when they were farming for subsistence. The distress increased as the market forces entered in the form of commercial crops, electricity for tube well irrigation, chemical fertilizers and pesticides. He points out that the shift to groundnut cultivation increased the agricultural incomes. Over time the integration between rural and urban areas increased and with it the social evils like demanding huge dowries also increased. Most of the farmers borrow huge amounts for the marriages of their daughters with the hope that they can repay easily with two or three good crops but with the consecutive crop failures pressure on the farmer increases from moneylenders, banks etc., leading to the distress and disillusionment. Narayana (2002) in **his analysis of farmers' suicides in Ananthapur district points-out** that the tube wells frequently dry up due to scant rainfall and the farmers keep trying in new areas. In this process even a larger farmer reaches the blink of poverty.

A Vaidyanadhan¹¹ (2006) observed that the incidence of farmers' suicides were concentrated mostly in the low rainfall and low irrigation tracts of Andhra Pradesh, Karnataka, Kerala, Maharashtra and Punjab. He pointed-out that the suicide households have a much higher level of total debt, a much higher dependence on traders and money lenders and high proportion of debt have been used for non-productive purposes (consumption, social ceremonies, Illness etc.,) when compared to non-suicide households.

The high level of indebtedness and teetering on the brink of bankruptcy driven the farmers to take the extreme step of suicides.

NarasimhaRao. P and Suri K.C¹² (2006) find-out the agrarian distress in Andhra Pradesh which led to the collapse of the farmers' economy conducted a study in two villages in Guntur district and analysed the factors. The findings of the study are low economic status and those engaged in agriculture, under employment in the agriculture, because of large workforce still continuing in agriculture, widening gap in the per capita income between people employed in agriculture and those in non-agriculture. Another cause for the farmers' suicides is a shift in the cropping pattern from low value crops to high value crops i.e from traditional crops to high risk crops like cotton and chillies which require increased expenditure on inputs result-in high cost of cultivation. To meet the high cost of cultivation, the farmers have no other alternative except to depend upon loans, especially on informal agencies. But the net surpluses from agriculture have been continuously declining during the previous decade owing to recurring drought conditions prevailing in the state. Apart-from crop losses the other factors like spurious seeds and pesticides, non-remunerative prices for their produce, increasing expenditure on health and education, contributing the acceleration of the agrarian crises and indebtedness among the farmers. Besides this the other social factors like a low literacy rate, breakdown of the Joint Family system and the collapse of the other social institutions, little interest of the political parties in organizing and mobilizing the farmers, created depressing conditions in the peasant community which drove them to take a drastic step of committing suicides.

In their opinion that this situation has been changed owing to the transformation of the government from Telugu Desam party to Congress Party and the measures taken by the new government like waiving of electricity dues, free electricity for agricultural purposes to the farmers and massive investments in irrigation projects and the moratorium declared on the recovery of farm debts helped the farmers to come out of their agrarian distress.

V. Anil Kumar¹³ (2003) in his paper on "Farmers' Suicides in Andhra Pradesh: The Response of Rural Political Institutions", addresses the question as to what policy procedures have gone into the present impasse in the rural governance in the state of Andhra Pradesh and attempts to suggest how the involvement of rural institutional structures in addressing the farmers' suicides can help to alleviate the situation.

S. Vijay Kumar¹⁴ (2006) in his paper "Institutional Failure and Farmers' Suicides in Andhra Pradesh," says that the macro and micro level factors together have created stress

among the poor farmers forcing them to commit suicides. He further says that in 1987, 27 cotton growers in Warangal and Guntur districts have committed suicide when they lost the entire cotton crop due to pest attack. Similar incidents have been repeated during 1997-98 on a bigger scale and continuing thereafter. However, the government did not pay any attention to identify the root-causes and other related risk factors that are forcing farmers into distress conditions. Hence in his paper he attempted to examine how some of the macro and micro level factors have led to distress conditions in agriculture, especially how they impacted on the small and marginal farmers.

Pathim Venu¹⁵ (2013) in his paper he says that the **farmers' committed suicides in Andhra Pradesh** due to the failure of monsoons leading to a series of droughts, lack of remunerative prices, exploitation by middlemen, rise in fertilizer prices, rise in labour cash, escalation in input etc., lead to a series of suicides. He further says that in Nellore district, the southern-most coastal district of Andhra Pradesh, the suicides took place after 1980. The crime rate with mere 6.3 in 1980 and steeply increased too approximately to two folds to 11.2 in 2011. He finally says that the number of suicides in Unbifurcated Andhra Pradesh is highest i.e., 2666 in 2004 and lowest is 1097 in 1997.

As reported in Telugu Daily: Eenadu dated July 26, 2015, during the year 2014, of the total suicides committed by farmers in the country, Telangana state occupied 2nd rank next to Maharashtra and Andhra Pradesh state was in 7th position. Of the 160 suicides committed by farmers exclusively in the separated state of Andhra Pradesh, 45.60 per cent were the owned land cultivators and the rest 54.4 per cent were the tenant cultivators. Again of these 160 suicides, 26.30 per cent were due to problems associated with irrigation and crop loss, 22.50 per cent due to acute indebtedness, 6.9 per cent due to family problems, 5.0 per cent due to ill-health, 6.3 per cent due to unknown reasons and the remaining 33.0 per cent were due to other combined reasons.

In Andhra Pradesh, farmers' suicides can be phased into three time farmers:

1. Mid nineteen eighties, to be specific, 1986-87 in Prakasam district by cotton farmers.
2. Mid nineteen, to be specific, Guntur and Ananthapur district in Andhra Pradesh where the dominant crop was again cotton followed by ground nut.
3. The present ongoing suicides spanning the whole of the Andhra Pradesh state, not confined to one crop only.

However, the present review of literature suggests that there is now an imperative need for carving out policies and programmes while addressing the problem, at micro level, particularly aiming at crop-specific and district-specific levels.

1.3 Main Objectives and Scope of the study:

Various aspects that are directly or indirectly responsible for the distress and disillusionment among the farmers. While the indebtedness of the farmers seems to be the major reported cause, the reasons that prompt the farmers to borrow money are varied and they differ from place to place. In some areas it is the cropping pattern followed by the farmers i.e. unsuitable to the area, with the anticipation that they can earn higher agricultural incomes the farmers taken-up cultivation of commercial crops which are high input use, and high risk crops. Due to Insufficient knowledge and Extension services, crop management becomes difficult resulting in crop loss. Many farmers are the victims of the deceit of the pesticide dealers who supply spurious pesticides that cannot contain the pest attack. Often it is the low quality seed that result-in low yields. As more and more farmers are shifting to commercial crops that involve high investments in the event of crop failure or price fall the household faces food insecurity. Recently agriculture in India has become more a gamble either recurring droughts or floods and the farmers undergo a lot of mental tension until they receive the crop. Marketing of the produce is another problem for the farmers due to uncertain prices and they may not receive expected returns in the event of price crash. Majority of the small and marginal farmers who dispose off their produce in the village itself face problems like under weighment or receive less than the prevailing market price. Those who take the product to the market are exploited at various stages by commission agents, Weighmen etc., Such exploitation cause loss of expectations of the cultivators leading to disappointment and distress. Thus there are various factors such as socio-psychological factors, agri-economic factors, loss of expectations, absence of proper institutional support and proper policy break up that lead to the distress of the farming community. In order to improve the situation and mitigate the farmers distress a comprehensive study of the problems faced by the farmers that vary from region to region is necessary.

In this connection the Ministry of Agriculture, Government of India has asked its Agro-Economic Research Centres (AERCs) to undertake a comprehensive study and to chalk out policy measures that can mitigate the problems of the farmers in the respective states. The Agro-Economic Research Centre (AERC), Andhra University, Visakhapatnam has taken up the study in Andhra Pradesh with the following objectives:

The specific objectives of the study are:

1. To analyse the incidence and spread of farmers suicides in the selected state of Andhra Pradesh to map the hotspots of suicides.
2. To study the socio-economic profile, cropping pattern and profitability of victim farm households.
3. **To Study causes leading to farmer's suicides and**
4. **To recommend suitable policies to alleviate the incidence of farmers' suicides.**

1.4 Data & Methodology:

The present study is mainly based on both primary and secondary data. The secondary data for the study was collected from, government offices like Commissionerate of Agriculture, Directorate of Economics and Statistics and from officials associated with the problem at the village level. As suggested by the coordinator of the study a sample size of 30 suicides **farmers'** families from two districts viz, Guntur and Ananthapur in which highest number of suicides were taken place are selected. Among the two districts, one district Guntur being the representative from Coastal Districts Region and another district Ananthapur being the representative of Rayalaseema Region are taken for the study. In Guntur district 13 sample suicide families are selected taking each case from 13 villages located in 3 mandals. Similarly in Ananthapur district 17 suicide families from 16 villages located in 10 mandals are selected for canvassing. Thus total a sample of 30 suicide families from two districts are canvassed with a structured questionnaire. Moreover log liner growth rates ($\ln Y = a + bt + ut$) for the period 1998 to 2015 were calculated to identify the **rate of farmers' suicides over a period in the state** as well as in selected districts. To observe the variation across the districts the coefficient of variation is estimated ($CV = \frac{\sigma}{\mu} \times 100$)

The reference period for collecting the primary data is the agricultural year 2015-16.

Table 1.1: Sample size of primary data

Sl.No.	Names of selected district	Name of selected Taluka/Mandals	Name of Village	No. of Victims' families interviewed
1	GUNTUR	VATTICHRUKURU	PULLATAGUNTA	1
2	GUNTUR	VATTICHRUKURU	CHINTALAPALLIPADU	1
3	GUNTUR	VATTICHRUKURU	ENGINAMPADU	1
4	GUNTUR	VATTICHRUKURU	KORNEPADU	1
5	GUNTUR	VATTICHRUKURU	CHINTAPALLIPADU	1
6	GUNTUR	VATTICHRUKURU	LEMALLAPADU	1
7	GUNTUR	VATTICHRUKURU	KARAMPUDI	1
8	GUNTUR	CHEBROLU	KOTTAREDDYPALEM	1
9	GUNTUR	CHEBROLU	PATHAREDDYPALEM	1
10	GUNTUR	CHEBROLU	CHEBROLU	1
11	GUNTUR	CHEBROLU	VADLAMUDI	1
12	GUNTUR	PEDAKAKANI	VENIGANDLA	1
13	GUNTUR	PEDAKAKANI	UPPALAPADU	1
	Guntur Total	3	13	13
14	ANANTHAPUR	GOOTHI	KOTHAPETA	1
15	ANANTHAPUR	GOOTHI	KOJJEPALLI	2
16	ANANTHAPUR	GOOTHI	BASINIPADU	1
17	ANANTHAPUR	BUKKASAMUDRAM	SIDDARAMPURAM	1
18	ANANTHAPUR	BUKKASAMUDRAM	SANJEEVPURAM	1
19	ANANTHAPUR	NARPALA	NARSAPURAM	1
20	ANANTHAPUR	NARPALA	NAYANAPALLI	1
21	ANANTHAPUR	GARLADINNE	PATHAKALLURU	1
22	ANANTHAPUR	GARLADINNE	MARTURU	1
23	ANANTHAPUR	ODICHERUVU	VADDIVARIPALLI	1
24	ANANTHAPUR	BUKKAPATNAM	YADAKALANKAPALLI	1
25	ANANTHAPUR	NALLANADA	KALAVANDALAPALLI	1
26	ANANTHAPUR	ANANTHAPUR	NARSAYANNINA KUNTA	1
27	ANANTHAPUR	TANAKOL	RATNA NAGAR TANDA	1
28	ANANTHAPUR	SINGARAYAPALLI	KORIVIPALLI	1
29	ANANTHAPUR	SINGARAYAPALLI	LOLLURU	1
	Ananthapur Total	10	16	17
	Grand Total	13	29	30

Source: Field Survey.

Note: In total row we should also give total no. of districts, taluks / blocks and villages covered for the survey.

1.5 Structure of the Report:

The present study is divided into five chapters. The first chapter being the introductory chapter, the second chapter presents the Farmers' Suicides Scenario in the state. The analysis of primary data is presented in third chapter while the fourth chapter provides the causes and after effect of suicides. Finally the fifth chapter deals with the conclusions and policy suggestions. **In addition, some case studies of farmers' suicides are also appended at the end of the report.**

CHAPTER – II

FARMERS' SUICIDE SCENARIO IN THE STATE:

2.1 Introduction:

Andhra Pradesh agriculture is caught into the problems of stagnating or declining crop yields, deceleration in the growth of output, increase in the cost of production and declining product prices and causing distress to many farmers. The farmers who are not able to cope with the distress are taking the ultimate step of committing suicide. The present chapter deals with the farmers' suicide scenario in the state.

2.2 Intensity of Farmers' Suicides in the State:

2.2.1 District-wise Details of Farmers Suicide case of suicides reported in the state:

During 2015-16 the cases of suicides reported in the state are 79. Of them 25.32 percent of the cases are reported from Guntur district and 34.18 percent are reported from Ananthapur district. Moreover the number of Farmers' suicides per lakh hectare of net sown area are reported as 1.30, and the number of farmers' suicides per lakh hectare of gross cropped area are reported as 1.05 in the state. On the other hand the numbers of farmers' suicides per lakh farming families are reported as 1.04 in the state.

Observing across the districts the number of farmers' suicides per lakh hectare of net sown area are reported to be 3.76 in Guntur district and 3.18 in Ananthapur district. Similarly the numbers of farmers' suicides per lakh hectare of gross cropped area are estimated to be 2.95 in Guntur district and 2.93 in Ananthapur district. Moreover the numbers of farmers suicides per lakh farming farmers are observed to be 2.63 in Guntur and 3.71 in Ananthapur. Observing across the districts of the state the suicides per lakh farming farmers varied from 0.16 in Kurnool district to 3.71 in Ananthapur district. No suicide cases are reported from Srikakulam, Vizianagaram and Krishna districts. The district-wise details of farmers' suicides in the state (2015-16) are presented in table No. 2.1.

**Table 2.1: District-wise details of farmers' suicide in the state
(July, 2015 to June, 2016) - AP**

Sl. No.	Name of the district	No. Of farmers' suicide	% to state total	No. Of farmers' suicide per lakh hectare of Net Sown Area = (no. of farmers' suicides x 100,000) / net sown area in ha)	No. Of farmers' suicide per lakh hectare of Gross cropped area = (no. of farmers' suicides x 100,000) / gross cropped area in ha)	No. Of farmers' suicide per lakh farming farmers = (no. of farmers' suicides x 100,000) / no.of farmers)
1	Srikakulam	0	0.00	0.00	0.00	0.00
2	Vizianagaram	0	0.00	0.00	0.00	0.00
3	Visakhapatnam	2	2.53	0.72	0.57	0.42
4	East Godavari	4	5.06	0.93	0.59	0.57
5	West Godavari	7	8.86	1.65	1.01	1.24
6	Krishna	0	0.00	0.00	0.00	0.00
7	Guntur	20	25.32	3.76	2.95	2.63
8	Prakasam	6	7.59	1.02	0.98	0.89
9	S.P.S. Nellore	1	1.27	0.23	0.22	0.22
10	Ananthapuram	27	34.18	3.18	2.93	3.71
11	Chittor	2	2.53	0.54	0.47	0.30
12	YSR Kadapa	9	11.39	2.65	2.27	2.04
13	Kurnool	1	1.27	0.12	0.11	0.16
	Total	79	100.00	1.30	1.05	1.04

Source: Commissionerate of Agriculture, Govt of Andhra Pradesh

2.2.2. Month wise Farmers' Suicides:

The details of months wise **farmers' suicides in the state (2015-16)** are presented in table 2.2. It can be observed from the table that comparatively higher percentage of suicides were taken place in September and October months of 2015. Similar percentage of suicides were reported in August, November and December months of 2015. Moreover 10.13 percent of suicides are reported in both July 2015 and February, 2016.

No suicide cases were reported in May and June months of 2016. Observing across the months the percentage of suicide cases varied from 18.99 percent in October 2015 to 2.53 percent in March 2016.

**Table 2.2: Month-wise farmers' suicide in the state
(July, 2015 to June, 2016)**

Sl.No.	Months	No. of Farmers' Suicides	Percent to total No. of farmers' suicides
1	July,2015	8	10.13
2	August,2015	9	11.39
3	September,2015	11	13.92
4	October,2015	15	18.99
5	November,2015	9	11.39
6	December,2015	9	11.39
7	January,2016	3	3.80
8	February,2016	8	10.13
9	March,2016	2	2.53
10	April,2016	5	6.33
11	May,2016	0	0.00
12	June,2016	0	0.00
	Total	79	100.00

Source: Commissionerate of Agriculture, Govt. of Andhra Pradesh

2.3 A Procedure Adopted and criteria for compensation:

The Government of Andhra Pradesh has initiated an action plan for addressing the **issue of the farmers' suicides in the vulnerable villages/mandals of five vulnerable districts** (Kurnool, Ananthapur, Kadapa, Chittoor and Prakasam) based on the reasons identified by the three member committee. Subsequently Guntur district is also included along with the above five vulnerable districts.

The plan of action in each of the village is as follows:

- a) Identification of vulnerable villages by considering parameters viz., hundred percent rainfed area, mono-cropping or mono-farming system, successive crop failures over a period of three to five years, failure of more number of existing bore-wells, huge indebtedness due to successive crop failures.
- b) Identification of vulnerable villages in all the vulnerable districts was completed and a campaign was also organized from 7-12-2015 to 12-12-2015 duly involving Allied sector officials and Scientists for confidence building

among the farmers and creating awareness on the benefits of the scheme implemented by the Government of Andhra Pradesh for the welfare of farmers.

- c) During the campaign, pamphlets on implements of different schemes and rights/facilities/ subsidies being given to the farmers were distributed to the farmers in all the villages. Counselling schemes were also constituted in all the mandals duly involving Revenue, Agriculture Departments and local prominent NGOs.
- d) Confidence building measures in the identified villages.
- e) Farmer-wise/each land holding-wise survey.
- f) Medium and long term plans for social and water conservation.
- g) Organizing farmers and building community support.
- h) Community mobilization (SHGs to be formed by NGOs).
- i) Debt swapping and
- j) Marketing linkage through commodity interest groups.

In view of drought conditions, Government is providing protective irrigation through Rainguns in the drought affected districts.

Sanction of budget under (International Fund for Agricultural Development) IFAD and Green Climate Fund to mitigate the drought situation in all the Rayalaseema districts and Guntur and Prakasam districts is under process.

The Government has also identified some of the thrust areas for making the state as drought proof and provide much needed water resource to the farm lands;

- 1) Arresting land degradation and water harvesting activities
- 2) In-situ moisture conservation measures.
- 3) Soil health management practices.
- 4) Extensive Protective irrigation to all farmers.
- 5) Promoting farming systems approach through appropriate livestock support system particularly for backyard poultry, small ruminants and dairy.
- 6) Institution building and knowledge systems.
- 7) Promoting Fish Production in seasonal and perennial water bodies.
- 8) Establishing Business-Service-Information Centre at each FPO level and
- 9) Providing access to institutional credit; reducing informal debt.

Moreover the proposal regarding the simplification of the verification procedure followed in deciding genuineness of the farmers' suicides is under consideration.

2.3.B. Proposal for sanctioning of Ex-Gratia to the families of the deceased farmers:

It is proposed to modify the utilization of the ex-gratia amount of Rs. 3.50 lakhs sanctioned by the government;

Upon completion of verification process within three weeks by the Divisional Committee, Certain measures of providing comfort to the distressed families were taken immediately, without waiting for the final sanction of financial assistance. Moreover considering the family in the aftermath of suicide in the most vulnerable category as a single-parent family, the following unconditional support was provided:

1. Inclusion in Antyodaya scheme,
2. Support under National Family Benefit scheme (NFBs) as lump-sum assistance to household which loses a breadwinner (including women),
3. Admission of children in government residential schools, social welfare and tribal welfare schools and hostels.
4. Children of the distressed family made eligible for free education in private schools as a part of the provisions of right to education Act,
5. Housing Under India Awas Yojana (IAY) or equivalent state government scheme,
6. pensions,
7. Eligibility for Arogyasree scheme was provided,
8. priority in economic support under government schemes and
9. Eligibility relaxation in government schemes.

After careful examination, Government observed that the financial assistance envisaged in 2004 is not commensurate with the present socio-economic circumstances and thereby enhanced the Ex-gratia and the loan settlement ceiling limit to the family members of the deceased farmers vide G.O.Ms No. 62 dated 19th February, 2015; enhancement of Ex-gratia from Rs. 1.00 lakh to 3.50 lakhs (Rupees three lakh fifty thousand only) to the family of the deceased farmer towards rehabilitation of the family; enhancement of loan settlement limit from Rs. 50,000 to Rs. 1.50 lakh to the persons (debtors) entitled; as one time settlement and to wipe off all the liabilities on the part of the deceased families of farmers.

2.3C: Reasons for delay in payments of Ex-Gratia to the deceased farmer families form the Government:

While implementation of the financial assistance to the farmers, the benefit could not be reached to all the deceased farmer families due to delay in release of Ex-gratia amount. The reasons for delay in payment of Ex-gratia to the deceased farmer families are as follows:

- 1) The mandal level team comprising of the 1) Mandal Agricultural Officer 2) Mandal Revenue Officer 3) Sub-Inspector of police will submit a preliminary enquiry report on the suicidal death of the farmer taking into consideration of the agricultural family.
- 2) Further the three member committee comprising of 1) Assistant Director of Agriculture 2) Revenue Divisional Officer and Deputy Superintendent of Police **constituted for final verification of the genuineness of the farmers' suicide** will submit the report to the district collector after receiving the forensic lab reports and relevant necessary documents.
- 3) The district collector based on the final report by the three member committee in-turn submit the proposals for release of ex-gratia to the families of the deceased farmers within a time period of 2-3 months after committing the suicide by the farmer.
- 4) The ex-gratia proposals received from the districts are being submitted to the special chief secretary to the government (Agri.) A&C department immediately to a maximum of seven days.
- 5) After submission of proposals the ex-gratia being released in about 2-3 months after obtaining the necessary approvals in the government.

With the above procedure the payment of ex-gratia may be delayed to some extent. As a result the financial assistance would not be reached to all the deceased farmer families at a time.

2.4. Compensation paid and actions by state Government to avert in the future:

2.4.1.Details of Compensation:

The details of compensation paid to the deceased farmer families are presented in table 2.3. Out of the total 79 (see table 2.1) suicide farmers, only 59.49 percent of farmer

families could receive compensation during the year 2015-16 (July 2015 to June 2016). Glancing across the districts the percentage of families received compensation varied from 25 percent in East Godavari district to 100 percent in West Godavari, Chittoor and Kurnool districts. Observing the selected districts 45 Percent of total suicide farmers received compensation in Guntur district and 88.89 per cent of families in Ananthapur district. The total amount of compensation paid in the state during the year 2015-16 is accounted for Rs. 233.34 lakhs. Of which Rs. 45 lakhs were paid as compensation in Guntur district and Rs. 118.34 lakhs were paid in Ananthapur district. On an average the compensation amount paid per family is reported to be Rs. 4.96 lakhs in the state. Looking over the selected districts it can be observed that Rs. 5.00 lakhs were paid as compensation per family in Guntur district and Rs. 4.93 lakhs in Ananthapur district. All the above details can be observed in the following table 2.3.

**Table 2.3: Details of compensation paid
(July, 2015 to June, 2016)**

Sl.no	Name of District	No. Of families compensated	Percent of families received compensation to total farmers' suicide in the district (%) = $\frac{\text{no. of families compensated in the district}}{\text{total no. of farmers' suicide in the district}} \times 100$	Total amount of compensation paid in Rs. Lakhs	Compensation paid per family = $\frac{\text{total compensation paid}}{\text{no. of families compensated}}$ (Rs. in lakhs)
1	Srikakulam	0	0.00	0.00	0.00
2	Vizianagaram	0	0.00	0.00	0.00
3	Visakhapatnam	1	50.00	5.00	5.00
4	East Godavari	1	25.00	5.00	5.00
5	West Godavari	7	100.00	35.00	5.00
6	Krishna	0	0.00	0.00	0.00
7	Guntur	9	45.00	45.00	5.00
8	Prakasam	2	33.33	10.00	5.00
9	S.P.S. Nellore	0	0.00	0.00	0.00
10	Ananthapur	24	88.89	118.34	4.93
11	Chittoor	2	100.00	10.00	5.00
12	YSR Kadapa	0	0.00	0.00	0.00
13	Kurnool	1	100.00	5.00	5.00
	Total	47	59.49	233.34	4.96

Source: Commissionerate of Agriculture, Govt. of Andhra Pradesh

2.4.2. Actions by State Government to avert suicides in the future:

The following steps are taken by the state Government to prevent farmers' suicides.

The Andhra Pradesh Land Licenced Cultivators Act, 2011:

- 1.** Andhra Pradesh is the first state in India to promulgate an Act No. 18 of 2011 dated 23rd December, 2011 to provide Loan and other benefits Eligibility Cards (LECs) to the land licensed cultivators. LECs have been issued to provide crop loans through banks, coverage of crop insurance and input subsidy in case of natural calamity.
- 2.** During 2016-17, to facilitate the loans to the tenant farmers the certificate of cultivators" are being issued to the tenant farmers by the Agriculture Department for extending the finance of Rs. 1 Lakh on hypothecation of crop and without insisting on collateral security.
- 3.** The list of tenant farmers' issued with the "Certificate of Cultivators" are also made available in the APAGRISNET Portal for easy access to the bankers.
- 4.** So far 6 lakhs LEC cards by the Revenue Department and 31376 COCs by the Agriculture Departments were issued to the tenant farmers.
- 5.** An amount Rs. 6.91 crores has been disbursed to 15.54 COC issued farmers and an amount of Rs. 182.81 crores has been disbursed to 72097 LEC card holders.

II. Vaddileni Panta Runalu and Pavala vaddi Scheme on crop loans:

The government has announced the interest free crop loans to all the farmers upto Rs. 1 Lakh and pavala vaddi for crop loans from Rs. 1 Lakh to Rs. 3 Lakhs if repaid in-time from Rabi 2011-12. On 30th June, 2012 the government has announced that upon prompt repayment the **farmers' shall be able to avail zero (0) percent interest facility.** The state government will pay the interest to the respective banks as and when the farmers repay the principal amount promptly. The said G.O is applicable for loans taken from kharif 2012 and to tenant farmers' also.

III. Crop Loans to Farmers:

Each and every eligible farmer has been provided with crop loan as per scale of finance. As per RBI guidelines, the scale of finance is fixed by taking all aspects of production into consideration by state level technical committee. During 2016-17, it is

proposed to disburse an amount of Rs. 83,003 crore towards agriculture credit, till date an amount Rs. 51,073 crore has been disbursed. The Rabi loaning is in progress.

IV. Crop Insurance:

Kharif 2016:

- 1) Around 14.61 lakh loanee and 0.68 lakh of non-loanee farmers' enrolled and PMFBY and WBCIS schemes.
- 2) Crop cutting experiments data which is captured by TABs is being uploaded in the GOI (Government of India) portal for better transparency and early settlement of crop insurance claims.
- 3) For Government, claim settlement was completed under WBCIS in record time of 45 days.
- 4) The insurance claims of the crops other than WBCIS under PMFBY is under process and it will be settled by the end of January, 2017.

Rabi 2016:

- 1) Under PMFBY, Paddy Maize, Bengalgram, groundnut, Blackgram, Green gram and Red chilli of major crops were covered in all 13 districts.
- 2) Under WBCIS, Mango, Banana, Cashewnut, Acid Lime and Tomato crops were covered in selected districts.
- 3) Village as an Insurance Unit: Paddy in 5 districts (East Godavari, West Godavari, Krishna, Nellore and Chittoor) Bengal gram in 3 districts (Prakasam, Kurnool and Kadapa) and Maize in Guntur district were covered.
- 4) Around 50,000 Non-Loanee farmers enrolled under PMFBY and WBCIS during Rabi 2016-17 season so far.

V. Natural Calamities and input subsidy:

Drought-Kharif 2016:

The state Government has declared 268 mandals in 7 districts i.e., Srikakulam(11), Prakasam (46), S.P.S.R Nellore (27) Chittoor (53), YSR Kadapa (32), Ananthapur (63) and Kurnool (36) as drought affected during kharif 2016. Enumeration of Agricultural crop damages has been completed. Proposals are submitted to the disaster management

department for release of input subsidy of Rs. 1762. 70 crores to an extent of 12.73 lakh hectares.

Vardha Cycle during December, 2016:

Crop damages has been reported due to Cyclone in Kadapa, Prakasam and Chittoor districts. As per preliminary reports the crop damages are reported in a total of 3010.18 hectares in 3 districts together.

VI. Agricultural Debt Redemption Scheme on crop loans:

Due to a series of natural calamities in the past five years causing extensive damage to crops, the government has decided to redeem the outstanding dues of the farmers for the upliftment of the farmers in distress.

Sofar an amount of Rs. 10542 crores has been released duly covering 54.98 lakhs eligible accounts in the first and second instalments.

VII. Chandranna Rythu Skhetralu:

This is a cluster demonstration approach to educate the farmers on best management practices. During Rabi 2016-17 it is planned to organize 2,244 number of CRKs and so far, 1430 CRKs were organized (63 percent).

VIII. Micro-Nutrient Application Based on Soil Test Results:

There is a large scale deficiency of micro and secondary nutrients like zinc, boron, sulphur, iron which are directly or indirectly affecting the yield of different crops across the state. Collections of soil samples have been started from 15th October, 2016 wherever the kharif 2016 crop is harvested. So far 1,91,989 soil samples were collected and 75,761 (39.46%) were analysed.

By June, 2017 almost every farm holding (76 lakhs) will be provided with soil Health Card. In order to create awareness among the impact of farmers on the impact of micro-nutrients on crop yields the department has taken up Mission Mode approach by supplying the micro nutrients to the level of saturation on 50% subsidy.

IX. Polam Pilosthondi Programme:

In order to take the results of the research and extension to the door steps of farmers and to redress the grievances, the government has launched "Polam Pilosthondi" programme on 8-8-2014. The field level officers of agriculture and allied departments along-with the scientists are visiting villages for two days in a week (every Tuesday and Wednesday) and covering two villages per day.

A field visit followed by Gramasabha are being organized in the scheduled village. The field visit helps to assess the emerging issues at field level and the necessary suggestions are being given to farmers in the field itself.

During the year 2016-17 the Polam pilosthondi Programme was planned to organize for a period of 4 months in kharif season and 4 months in rabi season. So far, 51,750 village visits completed and created awareness to 39.69 lakh farmers including women farmers'.

X. Farm Mechanization:

Farm Mechanization is being promoted in the state with special emphasis on Mission Mode. An amount of Rs. 286.27 crores has been allocated for the year 2016-17 for distribution of different farm equipment with emphasis to promote to Custom Hiring Centres on 50 per cent subsidy to the farmers. The SC and ST farmers were provided with 70 per cent subsidy. An amount of Rs. 181.14 crores has been spent so far by distributing 61,823 numbers of implements. Further, 623 numbers of Custom Hiring Centres were grounded in the state.

XI. Organic Farming:

The programme is in implementation in 131 clusters identified @10/11 in each district. During kharif 2016, a total number of 29,786 farmers adopted organic/natural farming in an area of 16095 hectares. Budget provided to establish NPM shops @ 5 per cluster and Desicows @ 30 per cluster on 50 per cent subsidy. So far 2806 number of Desicows and 446 NPM shops sanctioned to beneficiaries.

A four member team with one Scientist, One Department Officer, NGO and ZBNF farmer are identified for adoption of each cluster. Institution building by organizing farmers into RythuMitra Groups (RMGs), Village Level Federations and Cluster Level Federations in

131 organic clusters of Andhra Pradesh through Orvakalmandal, Poduputu Lakshmi Ikya Sangam (OMPLIS), Orvakal (V and M), Kurnool district is under progress. Moreover identification of 169 new clusters for the year 2017 is under process.

XII. Multi-Purpose Extension Officers:

To facilitate the effective extension reach to the farming community and to address the immediate needs of the farmers during the season in case of unfavourable seasonal conditions. The government has decided to appoint Multi-Purpose Extension Officers (MPEO) on contract basis. In addition 4354 MPEOs were placed to strengthen the Agriculture Extension and 3935 MPEOs are working presently.

In addition to the above, the Training Programmes and Exposure visits are organized visits regularly to the farmers and farm women for their technical up-gradation and capacity enhancement. All the above agricultural departmental schemes are being implemented in Andhra Pradesh to save the farmer from the clutches of the private money-lenders, to mitigate the problems of the farmer, to achieve the socio-economic stabilisation and finally for the well-being of the farmers in Andhra Pradesh.

2.5. Summary:

During 2015-16 the cases of suicides reported in the state are 79. The numbers of **farmers' suicides per lakh hectare of net sown area** are reported as 1.30 and the numbers of **farmers' suicides per lakh hectare of gross cropped area** are reported as 1.05 in the state. On the other hand the **numbers of farmers' suicides per lakh farming families** are reported as **1.04 in the state**. Moreover, in Guntur the number of farmers' suicides per lakh farming families are reported to be 2.63 and 6.12 in Ananthapur. The suicides per lakh farming families varied from 0.15 in Kurnool district to 6.12 in Ananthapur district. It is observed that higher percentages of suicides were taken place in September and October months of 2015. Observing across the months the percentage of suicide cases varied from 18.99 per cent in October, 2015 to 2.53 percent in March, 2016.

The government of Andhra Pradesh has initiated an action plan for addressing the **issue of farmers' suicides in the vulnerable villages/mandals of 5 vulnerable districts** viz., Kurnool, Ananthapur, Kadapa, Chittoor and Prakasam based on the reasons identified by the three member committee. Subsequently the Guntur district is also included along with the five vulnerable districts. Sanction of budget under International Fund for Agricultural Development (IFAD) and Green Climate Fund to mitigate drought situation in all the

Rayalaseema districts and Guntur and Prakasam districts is under process. The government has also identified some of the thrust areas for making state as drought proof and provide much needed water resource to the farm lands. Moreover the proposal regarding **simplification of the verification procedure followed in deciding genuineness of the farmers' suicides** is under consideration. Upon completion of verification process within three weeks by the divisional committee, certain measures of providing comfort to the distressed families were taken immediately without waiting for the final sanction of financial assistance.

After careful examination government observed that the financial assistance envisaged in 2004 is not commensurate with the present socio-economic circumstances and thereby enhanced the ex-gratia and the loan settlement ceiling limit to the family members of the deceased farmers vide G.O.Ms.No. 62 dated 19th February, 2015; enhancement of ex-gratia from 1 lakh to 3.50 lakhs to the family of the deceased farmer towards rehabilitation of the family; enhancement of loan settlement from Rs. 50,000 to Rs. 1.50 lakh to the persons (debtors) entitled; as one time settlement and to wipe off all the liabilities on the part of deceased families of farmers.

While implementation of the financial assistance to the farmers, the benefit could not be reached to all the deceased farmer families due to delay in release of ex-gratia amount. After receiving the forensic lab reports and relevant necessary documents the three member committee submit the report to the district collector and the district collector in-turn submit the proposal for release of ex-gratia to the families of deceased farmers. As the forensic lab report comes late, release of ex-gratia amount will be delayed to that extent. As a result, the financial assistance would not be reached to all the deceased farmer families at a time.

The total amount of compensation paid in the state during the year 2015-16 is accounted for Rs. 233.34 lakhs. Of which Rs. 45 lakhs were paid as compensation in Guntur district and Rs. 118.34 lakhs were paid in Ananthapur district. On an average the compensation amount paid per family is reported to be Rs. 4.96 lakhs in the state. Moreover Rs. 5 lakhs were paid as compensation in Guntur district and Rs. 4.93 lakhs in Ananthapur district.

The government has taken **steps to prevent farmers' suicides in future** by implementing the schemes as follows:

- 1) The Andhra Pradesh Land Licenced Cultivators Act, 2011.
- 2) Vaddileni Pantarunulu and

- 3) Crop loans to farmers
- 4) Crop insurance
- 5) National Calamities and input subsidy
- 6) Agricultural Debt Redemption Scheme on crop loans
- 7) Chandranna Rythu Skhetralu
- 8) Micro-nutrient application based on soil test results
- 9) Polam Pilosthondi programme
- 10) Farm mechanization
- 11) Organic farming and
- 12) Multi-purpose Extension officers.

In addition to the above, the training programmes and exposures visits are organised regularly for farmers and farm women for their technical up-gradation and capacity enhancement.

CHAPTER – III

ANALYSIS OF PRIMARY DATA

3.1. Introduction:

For the purpose of analysis of primary data two districts viz., Guntur and Ananthapur are selected and 13 suicide cases from Guntur and 17 Suicide cases from Ananthapur district are studied. The study of the socio-economic characteristics such as caste, literacy, type of family, size of the family and age structure, ownership of land and other assets etc., provide insights into the living conditions of the farmers and help in further analysis of the determinants of distress of the farmers.

The Guntur district is bounded on the North by Krishna & Nalgonda districts, on the West by Prakasam and Mahaboobnagar districts, on the South by Prakasam district, on the East by Krishna district and Bay of Bengal. It is situated between 15-16 and 16-50 of the Northern latitude and 70-10 and 80-55 of the Eastern longitude. The population of the district is 48.87 lakhs with a diversity of 429 per square kilometre. The percentage of literacy is 67.40 and the percentage of Urban population to total population is 33.81. The total geographical area of the district is 11,39,100 hectares. The normal rainfall of the district is 851.00 mm. The important rivers and rivulets in the district are the Krishna, the Naguleru, the Chandravanka and the Gundlakamma. The river Krishna travels about 250 kms, through the district along the northern boundary of the district. The two major irrigation projects in the district are: 1) Old Krishna ayacut, now renamed as Prakasam barrage with an ayacut of 2,02,032 hectares and 2) Nagarjunasagar Project with an ayacut of 2,54,583 hectares. Both the projects are constructed on the river Krishna. A medium irrigation channel by name Guntur Branch Canal (GBC) having an ayacut of 10,931 hectares and the minor irrigation sources like Tanks, filter points, tube wells etc., are provided irrigation. The soils in general are very fertile and they are broadly classified as Black cotton, Red loamy and Sandy loamy. A black cotton area is in 70 Percent, Red loamy in 24 Percent and Sandy loamy in about 6 Percent of the area in the district.

The predominant crops grown in the district are; Paddy, Jower and Bajra among Cereals, Blackgram and Redgram among pulses, cotton, chillies, turmeric and tobacco among non-food and commercial crops.

Ananthapur district lies between 13'-40' and 15'-15' Northern Latitude and 76'-50' and 78'-30' Eastern longitude. It is bounded by Bellary, Kurnool district on the North, Kadapa and Kolar districts of Karnataka on South East and North respectively. The district of

Ananthapur has fairly good elevations which provide the district with tolerable climate throughout the year. The geographical positions of the peninsula render it, the driest part of the state and hence agriculture conditions are more often precarious. Monsoons also evade this part due to its unfortunate location. The normal rainfall of the district is 553.0 millimetres by which it secures least rainfall when compared to Rayalaseema and other parts of Andhra Pradesh. The normal rainfall for the South West monsoon period is 338.0 mms which forms about 61.2 percent of the total rainfall for the year. The failure of the rains in this South West monsoon period of June to September will lead the district to drought by failure of crops. The soils of Ananthapur district are predominantly red except in Kanekal, Bommanahal, Vidapalaka, Uravakonda, Vajrakarur, Guntakal, Gooty, Pamidi, Peddavaduguru, Yadaki, Tadipatri, Yellanuru, Peddapappure and Putlur mandals. In these mandals red and black soils occur almost in equal proportion. Thus 76 percent red soils, 24 per cent are black soils. The density of population of rural and urban population of the district workout to 72 percent and 28 percent in 2011 Census as against 75 Percent and 25 percent in 2001 Census. The total geographical area of the district 19.13 lakh hectares. The total cropped area is 10.84 lakh hectares. The district occupies the lowest position in respect of irrigation facilities with only 13.54 percent of the gross-cropped area during 2012-13. The predominant crop in this district is groundnut.

3.2. Socio-Economic Profile of the Victim:

While discussing about the social status of an individual especially in the rural areas caste is an important indicator. The level of literacy of a farmer may influence his farming practices and reduce risk. The study of the family structure is important as family is the primary unit which instils confidence in an individual. The close-knit relationships within the family can dissuade a person from taking the extreme step of committing suicide. Usually such support is believed to be more in a joint family than a nuclear family. But the latest trend is splitting up of Joint families into nuclear units even in rural areas. The structure of age distribution within the family is also a determining factor in receiving family support in emotional and practical areas. With more number of adults in the family, an individual may get more emotional and practical support. A large family with more number of dependents may be a burden when the head of family cannot earn enough to support the family. Such situations may cause distress to the head of the household.

As said earlier 30 victim households from 2 districts (Guntur and Ananthapur) are surveyed with a structured questionnaire. While canvassing the questionnaire 93.33 percent of respondents are spouses of the victims and 6.67 percent respondents are brothers of the

victims. All the victim cases are male members only. Of the total sample 43.33 percent are from OBC category, 40 percent are from general category, 13.33 percent are SCs, and 3.33 per cent are STs. About 96.67 percent of cases are Hindus and 3.33 percent are Muslims.

About 90 percent of the sample victims are reported to be in the age group of 31-60 years. 6.67 percent of the cases are under the age group of below 30 years. Only 3.33 percent of the cases is reported to be in the group of above 60 years.

Of the total sample 53.33 percent are illiterates. 26.67 percent of victims are reported to have studied up to matriculation. About 13.33 percent are reported middle school education. Only 6.67 percent higher secondary education.

All the sample victims are married and reported to have arranged marriages. About 76.67 percent of the victims reported to have married the girls from outside relatives and 23.33 percent within relatives. The average number of heirs of the victims reported as sons 0.50 and daughters 0.47.

About 10 per cent of the victims reported to have only mother and 6.67 per cent reported to have only father. Only 6.67 percent of the victims reported to have both father and mother.

Out of the total sample of 30, 76.67 percent have committed suicide by consuming poison and 23.33 percent by hanging. Out of the total number of committed suicides 66.67 percent were taken place in the house and 23.33 percent at farm. All the above details are presented in table 3.1.

Table 3.1: Socio-economic profile of victim

Particulars		
Total number of victim households surveyed: (Numbers)		30
Type of respondents (% to total sample)	1.Wives / Sons / Daughters	93.33
	2.Brothers / Sisters / others	6.67
Gender (% to total sample)	1.Male	100.00
	2.Female	0.00
Social status (% to total sample)	1.SC	13.33
	2.ST	3.33
	3.OBC	43.33
	4.Genera	40.00
Religion (% to total sample)	1.Hindu	96.67
	2.Muslim	3.33
	3.Christian	0.00
	4.Others	0.00
Age group (% to total sample)	1.Upto 30 years	6.67
	2.Between 31 to 60 years	90.00
	3.Above 60 years	3.33
Years of schooling (% to total sample)	1.Illiterate	53.33
	2.Primary (4 years)	0.00
	3.Middle (7 years)	13.33
	4.Matriculation/secondary (10 years)	26.67
	5.Higher secondary (12 years)	6.67
	6.Degree/Diploma (15 years)	0.00
	7.Above Degree (Above 15 years)	0.00
Marital status (% to total sample)	1.Married	100.00
	2.Un Married	0.00
Type of marriage (% to total sample)	3.Arranged	100.00
	4.Love	0.00
Married to whom (% to total sample)	5.Within relatives	23.33
	6.Outside relatives	76.67
Heirs of the victim (Average No. to total sample)	1.Sons	0.50
	2.Daughters	0.47
Victims who had parents and had brothers and sisters (% to total sample)	1.Only Mother	10.00
	2Only Father	6.67
	3.Both mother and father	6.67
	4.Brothes and sisters	0.00
Method of suicide (% to total Sample)	1.Poison consumption	76.67
	2.Hanging	23.33
	3.Jumping into river / well	0.00
	4. Current shock	0.00
	5. Self immolation	0.00
	6. Railway Track	0.00
	7. Others	0.00
Place of suicide (% to total sample)	1.House	66.67
	2.Farm	23.33
	3. Lodge / Hotel	0.00
	4. Others	10.00

Source: Field Data

3.3. Socio-Economic Profile of Victim's Family:

The details of socio-economic profile of victims family are presented in the table 3.2. The average size of households is reported to be 3.40. All the victim families are mainly dependent on farming activity. About 86.67 percent of the victim families reported to be nuclear and 13.33 percent are Joint families. All the victims sample families are residing within the village only.

About 36.37 percent of the victims reported to have adult males and 49.02 percent reported adult females in their families. Moreover 14.71 percent reported to have children in their family.

About 33.33 percent of the victim family members are illiterates. The primary education is reported by 10.78 percent of the family members. About 16.67 percent of victim family members reported to have middle school education. Secondary school education is reported by 20.59 percent of the victim family members. About 9.80 percent of the victim family members reported to have higher secondary education and 8.82 percent of victim family members reported degree level of education.

Holdings of the total sample 43.33 percent are marginal holdings, 33.33 percent are small holdings, 13.33 percent are medium holdings and only 10 percent of the victim families reported to be large holdings. While glancing over the area of the victim families 16.49 percent are marginal (0.1 to 2.5 acre) holdings and 31.11 percent are small (2.51 to 5 acre) holdings. About 22.41 percent are reported to be medium (5.1 to 10 acre) holdings and 29.99 percent are large (10.1 and above acre) holdings.

Table 3.2: Socio-Economic Profile of victims' family

Particulars			
Existing household size: (Average numbers)			3.40
Households depending on farming as a main occupation (% to total sample)			100.00
Family type (% to total sample)	1.Joint		13.33
	2.Nuclear		86.67
Location of the households (% to total sample)	1.Within the village		100.00
	2.In their own farm		0.00
Age group of family members (% to total sample)	1.Adult Males (>15 yrs)		36.27
	2.Adult Females (>15 yrs)		49.02
	3.Children (<15 yrs)		14.71
Years of schooling of family members (% to total sample)	1.Illiterate		33.33
	2.Primary (4 years)		10.78
	3.Middle (7 years)		16.67
	4.Matriculation/secondary (10 years)		20.59
	5.Higher secondary (12 years)		9.80
	6.Degree/Diploma (15 years)		8.82
	7.Above Degree (Above 15 years)		0.00
Farm Size	% of area to holdings of sample	1.Marginal (0.1 to 2.5 ac)	16.49
		3.2.Small (2.51 to 5 ac)	31.11
		4.Medium (5.1 to 10 ac)	22.41
		5.Large (10.1 and above)	29.99
	% of holdings to total sample	1.Marginal (0.1 to 2.5 ac)	43.33
		2.Small (2.51 to 5 ac)	33.33
		3.Medium (5.1 to 10 ac)	13.33
		4.Large (10.1 and above)	10.00
		Average operational holding size (acres Per HH)	4.06

Source: Field Data

3.4. Characteristics of operational holdings:

While discussing the socio-economic profile of the farm household, land assumes importance as several other factors like, social status, crop economy, household economy etc... depend on the extent of the land owned. In this section the characteristics of per household operational holdings are examined. On which the average operated area per household is reported to be 4.06 acres of which 69.46 percentage is irrigated area, the per household gross cropped area is reported to be 5.46 acres of which 77.29 percentage is irrigated area. Moreover the intensity of cropping per household is reported to be 134.45 percentage and intensity of irrigation is accounted for 155.21 percentage. The details of per household operated area are presented in table 3.3.

Table 3.3: Characteristics of operational holdings (Per HH)

Sl. No.	Land details	Irrigated	Un-irrigated	Total
1	Total owned land	1.47	1.01	2.48
2	Un-cultivated land	0.00	0.00	0.00
3	Cultivated (Own)	1.12	1.01	2.13
4	Leased-in land	1.70	0.23	1.93
5	Leased-out land	0.35	0.00	0.35
6	Net Operated Area(1-2+4-5)	2.82	1.25	4.07
7	Gross Cropped Area	4.22	1.25	5.47
8	Gross Irrigated Area	4.22	-	4.22
9	Net Irrigated Area	2.72	-	2.72
10	Cropping Intensity (%)	149.7	100.00	134.45
11	Irrigation Intensity (%)	155.21	-	155.21

3.5. Sources of Irrigation:

The details of source wise distribution of irrigated area per household are presented in table 3.4. The per household irrigated area is reported to be 2.82 acres of which 37.23 percentage is through tube well irrigation, 33.10 percentage of area is irrigated by canal, 16.55 percentage of the area is irrigated by open wells and only 13.00 percent of the area is irrigated by tanks.

Table 3.4:Source-wise distribution of irrigated area

Sl.No.	Land details:	Total Area in acres (Per HH)	Percent to total sample area
A.	Irrigated area		
	Irrigated	2.82	69.29
	Un-irrigated	1.25	30.71
	Total Area	4.07	100.00
B	Sources of irrigation		
	Open well	0.47	16.55
	Tube well	1.05	37.23
	Tank	0.37	13.00
	Canal	0.93	33.10
	Others	0.00	0.00
	Total Irrigated Area	2.82	100.00

3.6. Leasing of Land:

The details of leasing of land per household are presented in table 3.5. Due to uncertainty of irrigation sources, some farmers take un-irrigated land area for lease. The average leased-in land of irrigated area per household is reported to be 1.70 acres. On the other hand 0.27 acres of un-irrigated area is reported to be taken as lease. Moreover the rental value paid per acre irrigated area is Rs. 10,300 and Rs. 6000 for un-irrigated area.

The average per household irrigated area given out for lease is reported to be 0.35 areas and rental value received per acre is Rs. 12,000 on the other hand not even small piece of un irrigated land is reported to be leased-out by the selected sample victims.

Table 3.5: Rental value of leased-in and leased-out land

Sl.No.	Particulars		Irrigated	Un-irrigated
A	Leased - in	Area in acres per HH	1.70	0.27
		Rental value paid per acre in Rs.	10300	6000
B	Leased-out	Area in acres per HH	0.35	0.00
		Rental value received per acre in Rs.	12000	0.00

3.7. Source wise Income and Items of Expenditure:

While eliciting information from sample victim families, all of the sample households invariable expressed their opinion that due to increasing the price of agricultural inputs and erratic monsoons, their incomes have been reduced comparatively than previous years. Moreover due to increase in the expenditure of non-food items they could not receive adequate incomes to maintain their families. As a result, the household are prone to borrow loans from local money lenders and commission agents etc. with meagre incomes they failed to repay the loan amounts to the money lenders than after receiving the agricultural income. This has resulted in distresses which instigate them for committing suicides.

The total per household income is reported to be Rs. 71,056 of which 45.56 percent represents the income from agriculture. The income from agriculture wages, dairy and animal husbandry are reported 15.72 percent and 6.73 percent respectively. Moreover 28.99 percent of income is obtained through services (salary and pension). Here it is found that those victim families who are having pensions doing services outside villages were able to maintain their daily lives even after failure of agriculture income. Further, out of the total per expenditure of Rs. 54,534, 37.90 percent was spent towards food and 62.10 percent was spent towards non-food items. On the whole all the victim families without exception have expressed that the consumption expenditure has been increased over the last five years.

All the above details of income and expenditure during 2015-16 are presented in table 3.6.

Table 3.6: Net income and expenditure during 2015-16-A.P

Sl. No.	Source	Amt in Rs. Per HH	% To total	% of HH to total sample who mentioned that the income has reduced / expenditure increased over the last 5 years (% to each respective sources)
A	INCOME			
1	Agriculture	32372	45.56	95.00
2	Agriculture wage income	11167	15.72	0.00
3	Dairy and animal husbandry	4783	6.73	20.00
4	Poultry	0	0.00	0.00
5	Fishery	0	0.00	0.00
6	Service (salary and pension)	20600	28.99	0.00
7	Self business	1667	2.35	0.00
8	Others-1	467	0.66	0.00
9	Others-2	0	0.00	0.00
10	Others-3	0	0.00	0.00
	Total income (A)	71056	100.00	0.00
B	CONSUMPTION EXPENDITURE			
1	Food	20667	46.41	100.00
2	Non-food	23867	53.59	100.00
	Total expenditure (B)	44534	100.00	100.00
C	Surplus / Deficit (+ / -) A- B	26522		
D	Percent of expenditure to income			62.67

3.8. Cropping Pattern and Returns from cultivation:

The details of cropping pattern and net returns of the sample households in two districts taken together are presented in table 3.7. The per household total area cultivated is reported to be 3.66 acres in kharif and 4.03 acres in rabi season. The per household total annual cultivated area (Banana crop) is reported as 5.5 acres. The percentage of cropped area in total cultivated area is reported to be 67.09 in kharif, 29.55 in rabi and 3.36 as perennial.

Table 3.7: Season-wise cropping pattern and Net Returns

Sl. No.	Name of the crop	No. of HH Who have cultivated	cultivated area in acres (PER HH)	% of cropped area in total cropped area	Total production in Qtls PER HH	Yield per acre in qtls = Total production / Total cultivated area	Average price received per qtl. (Rs.) = Sum of price received per qtl of those who cultivated / No. of sample farmers who cultivated	Gross returns per acre (Rs.) = ((Average price received per qtl X Total production) / Total cultivated area)	Total cost of cultivation (Rs.)	Cost of cultivation per acre (Rs.) = Total cost of cultivation / cultivated area	Net returns per acre (Rs.) = Gross returns per acre minus cost of cultivation per acre	Net returns per HH (Rs.) = (((Average price received per qtl. X Total Production) - (total cost of cultivation)) / No. of HH cultivated)
KHARIF												
A	Crop Group-1											
1	Paddy	14	3.53	30.16	71.71	20.32	1343	27292	920000	18623	8669	30588
2	Green Gram	1	1.00	0.61	5.00	5.00	5000	25000	20000	20000	5000	5000
3	Cotton	3	3.67	6.72	22.33	6.09	3767	22942	205000	18636	4306	15789
4	Chilli	3	2.50	4.58	16.67	6.67	7833	52222	350000	46667	5556	13889
5	Ground nut	6	4.00	14.65	15.67	3.92	2318	9080	235000	9792	-712	-12258
6	Red Gram	3	5.67	10.38	13.67	2.41	2500	6029	130000	7647	-1618	-9167
	Total	30	3.66	67.09	42.03	11.47	2667	30601	1860000	16924	13677	41313
RABI												
A	Crop Group-1											
1	Paddy	4	2.75	6.72	55.00	20.00	1413	28250	185000	16818	11432	31438
2	Maize	2	5.95	7.26	147.50	24.79	1200	29748	150000	12605	17143	102000
3	Green Gram	2	3.00	3.66	18.00	6.00	4500	27000	94000	15667	11333	34000
4	Black Gram	1	4.50	2.75	22.00	4.89	4500	22000	30000	6667	15333	69000
5	Groundnut	3	5.00	9.16	21.67	4.33	3110	13477	171000	11400	2077	30080
	Total	12	4.03	29.55	53.17	13.18	2573	33921	630000	13017	20905	88390
SUMMER												
A	Crop Group-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANNUAL/PERENNIAL												
A	Crop Group-1											
1	Banana	1	5.50	3.36	80.00	14.55	2500	36364	145000	26364	10000	55000
	Total	1	5.50	3.36	80.00	14.55	2500	36364	145000	26364	10000	55000

Source: Field Survey

The crop-wise production per reported household in kharif is accounted for 71.71 quintals in case of Paddy, 5.00 quintals in case of Greengram, 23.33 quintals in case of cotton, 16.67 quintals in case of chilli and Groundnut and Red gram crops accounted for 15.67 quintals and 13.67 quintals respectively. Moreover, the production per household in rabi season are reported as 55 quintals Paddy, 147.50 quintals Maize, 18 quintals Greengram, 22 quintals black gram and 21.67 quintals in case of Groundnut. The production of perennial crop is reported as 80 quintals per household.

It can be observed from the table that the yields of Greengram, Cotton, Groundnut and Redgram have reported low yields in kharif and Greengram and Groundnut crops in rabi season. The low yields in respect of the above crops are due to erratic monsoons and inadequate irrigation facilities. Accordingly the price received per quintal is also low in respect of the above crops which have resulted in low returns per acre. While observing the per acre net returns of various crops grown in kharif, groundnut crop showed negative returns. This is due to continuous drought conditions and lack of required rainfall in the season. Similar is the case with Cotton also in the kharif season. Moreover in rabi season meagre returns per acre were received by the groundnut growers. Glancing over per household net returns of the crops the same above situation is observed in case of cotton and groundnut crops. While discussing with the district officials and sample households about the yields of the various crops that are grown, they have expressed that almost all crops have yielded low returns due to unfavourable seasonal conditions.

3.9 Credit Availed:

The details of credit availed by sample households are presented in table 3.8.

Table 3.8: Details on credit of sample Households

Sl.no.	Source of credit	No. of borrowing HH as a % to total sample		Purpose of borrowing				Outstanding amount: Rs/per borrowing HH of total borrowing HHs (Rs)	Average interest rate	% of borrowing HH who paid the installments as per schedule
				Farming purposes		Non-farming purposes				
				No. of borrowing HH as a % to total borrowing HHs	Amount borrowed per borrowing HH of total borrowing HHs (Rs)	No. of borrowing HH as a % to total borrowing HHs	Amount borrowed per borrowing HH of total borrowing HHs			
1	Institutional									
a	Co-op. Society/bank	6	20.00	100.00 (6)	90000	0.00	0.00	90000	8.00	0.00
b	Commercial bank incl. RRBs	19	63.33	89.47 (17)	82789	10.53 (2)	150000	91429	11.00	0.00
c	Others (specify)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Non-institutional									
a	Landlord	8	26.67	62.50 (5)	68750	37.50 (3)	173333	99091	24.00	0.00
b	Moneylender	18	60.00	88.89 (16)	138889	11.11 (2)	250000	136500	24.00	1.47
c	Traders and commission agents	7	23.33	100 (7)	157143	0.00	0.00	168571	24.00	0.00
d	Relatives and friends	10	33.33	60.00 (6)	80000	40.00 (4)	237500	110714	24.00	0.00
e	Others(specify)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Grand Total	68		83.82 (57)	77196	16.18 (11)	101354	87038	14.38	1.47

Source: Field survey

Note: figures in brackets indicate No. reported from each source.

The sample households have borrowed amount from both Institutional and Non-institutional sources. While glancing over the institutional sources, out of the total 30 sample households 20 percent of the households have borrowed credit from co-operative societies and 63.33 percent of households from commercial banks including Regional Rural Banks (RRBs). All those households borrowed from co-operative society @ 8 percent interest rate, spent the amount for farming purposes only. The outstanding borrowed amount per reported household is accounted for Rs. 90,000. No single borrower is reported to have paid the instalments as per schedule. On the other hand, of the total borrowing households borrowed from commercial Banks 89.47 percent of the borrowers utilized the amount for farming purposes and 10.53 percent of borrowers utilised the amount for non-farming purposes. The total outstanding amount per reported borrower is accounted for Rs. 91,429. Glancing over non-institutional sources, it is observed that the money lenders played a dominant role than other sources. Of the total borrowers borrowed from moneylender 88.89 percent of borrowers utilised the amount for farming purposes 11.11 percent of borrowers utilised the amount for non-farming purposes. The total outstanding amount per reported borrower borrowed from money lenders is reported to be Rs. 1,66,500. About 1.47 percent of borrowers have paid the instalments as per schedule. Among the total borrower borrowed the amount from land lords 62.50 percent of borrowers utilised the amount for farming purposes and 37.50 percent of borrowers utilised the amount for non-farming purposes. The total outstanding amount per reported borrower is Rs. 99,091. All the households borrowed from traders and commission agents spent the amount for farming purposes only and the outstanding amount per reported borrower is Rs. 1,68,571. Out of those households borrowed from relatives and friends, 60 percent of the borrowers utilized the amount for the farming purposes and 40 percent of borrowers spent the amount for non-farming purposes. The outstanding amount per borrower is reported to be Rs. 1,10,714. The borrowers borrowed loans from landlords, money lenders, traders and Commission agents, relatives and friends @24 percent of interest.

3.10. Summary:

Two districts, Guntur and Ananthapur are selected for the purpose of analysis of primary data 13 suicide cases from Guntur and 17 suicide cases from Ananthapur district are studied. Of the total sample of 30, 53.33 percent are illiterates, 26.67 percent of victims are reported to have studied up to matriculation, about 13.33 percent reported to have middle school education and 6.67 percent higher secondary education. Out of the total sample 76.67 percent have committed suicide by consuming poison and 23.33 percent by hanging of the total suicides, 66.67 percent were taken place in the house and 33.33 percent at farm.

All the victim families are mainly dependent farming activity. About 86.67 percent of the victim families reported to be nuclear and 13.33 percent are joint families.

Of the total sample 43.33 percent are marginal holdings, 33.33 percent are small holdings, 13.33 percent are medium holdings and only 10 percent of the victim families reported to be large holdings. While glancing over the area of the victim families 16.49 percent are marginal (0.01 to 2.50 acres) holdings and 13.11 percent are small (2.51 to 5.00 acres) holdings about 21.41 percent are reported to be medium (5.1 to 10.00 acres) holdings and 29.99 percent are large (10.01 and above acres) holdings.

The average operated area per household is reported to be 4.06 acres of which 69.46 percent is irrigated area. The per household gross cropped area is reported as 5.46 acres of which 77.29 percent is irrigated area. The per household intensity of cropping is reported to be 134.45 percent while the intensity of irrigation is accounted for 155.21 percent.

The per household irrigated area is reported to be 2.82 acres of which 37.23 percent is through tube-well irrigation, 33.10 percent of area is irrigated by canal, 16.55 percent of the area is irrigated by open-wells and only 13 percent of the area is irrigated by tanks.

The arrange leased-in land of irrigated area per household is reported to be 1.70 acres. About 0.27 acres of un-irrigated area is reported to be taken as lease. The rental value paid per acre of irrigated area is Rs.10,300 and Rs.6000 for un-irrigated area. On the other hand per household irrigated area given out for lease is reported to be 0.35 acres and rental value received per acre is Rs.12,000/-.

The total per household income is reported to be Rs.71056 of which 45.56 percent represent the income from agriculture. The income from agricultural wages, dairy and animal husbandry are reported to be 15.72 percent and 6.73 percent respectively. About 28.99 percent of income is obtained through services (salary and pension). It is found that those victim families who are having pensions and those doing services outside the villages were able to maintain their daily lives even in failure of agricultural income. Out of the total expenditure of Rs.54534, 37.90 percent was spent towards food and 62.10 percent was spent towards non-food items. All the victim families without exception have expressed that the consumption expenditure has been increased over the last five years.

The per household total area cultivated is reported to be 3.66 acres in Kharif and 4.03 acres in rabi season. The percentage of cropped area in total cultivated area is reported to be 67.09 in kharif, 29.55 in rabi and 3.36 as perennial. The crop wise production per reported household in kharif is accounted for 71.71 quintals in case of Paddy, 5.00 quintals in case of Greengram, 23.33 quintals in case of cotton, 16.67 quintals in case of chilli and Groundnut and Red gram crops accounted for 15.67 quintals and 13.67 quintals respectively. Moreover, the production per household in rabi season are reported as 55 quintals Paddy, 147.50 quintals Maize, 18 quintals Greengram, 22 quintals black gram and 21.67 quintals in case of Groundnut. The production of perennial crop is reported as 80 quintals per household.

The low crop yields were observed in case of Greengram, Cotton, Groundnut and Redgram in Kharif and Green gram and Groundnut in Rabi season. The low yields in respect of the above crops are due to erratic monsoons and inadequate irrigation facilities. Accordingly the price received per quintal is also low in respect of the above crops which have resulted in low returns per acre. While observing the per acre net returns of various crops grown in kharif, groundnut crop should negative returns. This is due to continuous drought conditions and lack of required rainfall in the kharif season. Moreover in rabi season meager returns per acre were received by the Groundnut growers. Glancing over per household returns of the crops the same above situation is observed in case of cotton and groundnut crops. While discussing with the district officials and sample households about the yields of the various crops that are grown, they have expressed that almost all crops have yielded low returns due to unfavorable seasonal conditions.

While glancing over the institutional sources of credit out of the total 30 sample households 20 percent of the households have borrowed credit from cooperative societies

and 63.33 percent of households from commercial banks including Regional Rural Banks (RRBs). The outstanding borrowed amount per reported household is accounted for Rs.90,000. All those households borrowed for cooperative society spent the amount for farming purposes only. No single borrower is reported to have paid as per schedule. Other hand, of the total borrowing households borrowed from commercial banks 89.47 percent of borrowers utilized the amount for farming purpose and 10.53 percent of borrowers utilized the amount for non-farming purposes. The total outstanding amount per reported borrower is accounted for Rs.91429. Looking over non-institutional sources, it is observed that the money lenders played a dominant role than other sources. The outstanding amount per reported borrower borrowed from money lenders is reported to be Rs. 1,66,500. About 1.47 percent of borrows have paid the installments as per schedule. Out of those borrowed amount from land lords 62.50 percent of borrowers utilized the amount for farming purposes and 37.50 percent of borrowers utilized the amount for non-farming purposes. The total outstanding amount per reported borrower is Rs. 99,091. All the households borrowed from traders and commission agents spent the amount for farming purposes only and the outstanding amount per reported borrower Rs. 168571. For those households who borrowed from relatives and friends the outstanding amount per borrower is reported to be Rs. 1,10,714.

CHAPTER – IV

CAUSES AND AFTER EFFECT OF SUICIDES

4.1. Introduction:

The present chapter deals with the causes and after effect of suicides of sample farmers. Various aspects like social causes, farming related causes and debt related causes are examined to identify the situation which probed to take the ultimate step of committing suicide

4.2. Symptoms observed and causes of suicide:

4.2.1 Symptoms observed by family members before suicide.

To know the general behaviour of the farmer before commitment of suicide, information is elicited from family members and his own community members, and neighbouring households and friends. About 96.67 percent of family members and his own community members reported that the farmer who committed suicide used to mingle with them and maintained cordial relations. About 90 percent of neighbouring households/friends reported that the victim used to mingle with them prior to the commitment of suicide. While asking about the food habits of the victim 78.67 percent of sample families reported that the victim used to consume food regularly. Moreover 70 percent of victim families reported that the farmers used to get adequate sleep during nights prior to commitment of suicide. This inferences that some of the victims could not express or reveal their mental agony even with their family members, neighbourers and friends. All the above details are presented in table 4.1.

Table-4.1: Symptoms observed by family members before suicide

Sl.No	Symptoms enquired	Percent of HH who answered Yesto total sample
1	Was victim mingling with his/her own family member?	96.67
2	Was victim mingling with his/her own community?	96.67
3	Was victim mingling with his/her neighbouring households/friends?	90.00
4	Was victim consuming food regularly?	76.67
5	Was victim sleeping adequately during nights?	70.00

Source: Field Survey

4.2.2. Social Causes of Suicide:

The information is elicited from family respondents and neighbourers/relatives/friends of farmers committed suicide, to know the cause for the commitment of suicide. Out of the total sample of 30 suicide farmers, 6.67 percent of the family respondents and neighbourers/relatives/friends reported that though the **farmers'** families are above poverty level, they committed suicide because, in spite of adequate expenditure on inputs and other aspects they could not receive positive results. On the other hand 83.33 percent of the family respondents reported that the commitment was happened due to their poor economic conditions. Moreover 10 percent of the samples having AAY (Antyodaya Anna Yojana) cards have reported that the food-grains supplied are not adequate and also faced the crop failure together lead them for commitment of suicide. Neighbourers/relatives/friends expressed the same opinion.

About 3.33 percent of family respondents of total sample reported that the commitment was happened due to dowry related issues and the same percent of family neighbourers/relatives/friends expressed the same impression. On the other hand, 3.33 percent of neighbourers and friends reported that the commitment of suicide was due to extra marital affairs.

Moreover, 40 percent of the sample family respondents reported the cause of social functions, 30 percent of sample families reported due to daughters marriage and 13.33 percent reported the reason as sons marriage. Similar percentages of family neighbourers and friends reported the above three causes. About 50 percent of family respondents reported that the commitment of suicides have occurred due to frequent quarrels among the family members. Nearly 70 percent of sample family neighbourers reported that the commitment of suicide was due to frequent family quarrels. About 10 percent of the sample respondents reported about the commitment of suicide was due to illness and alcoholic addiction. Nearly 6.66 percent of sample family neighbourers expressed the cause of gambling. Finally 33.33 percent of respondents reported that the commitment of suicides have occurred due to fall in social reputation. All the above details are presented in table 4.2.

Table 4.2: Social causes of suicide

Sl.No	Causes	Percent of HH to totalsample who answered Yes	
		As per respondent	As per Neighbourers / relatives / friends
1	Poverty		
a	APL	6.67	6.67
b	BPL	83.33	83.33
c	AAY	10.00	10.00
2	Property dispute		
a	Partition of land	0.00	0.00
b	Partition of house	0.00	0.00
c	Partition of income	0.00	0.00
d	Partition of jewelleryes	0.00	0.00
e	Others (specify).....	0.00	0.00
3	Marriage related issues		
a	Dowry related issues	3.33	3.33
b	Extra marital affairs	0.00	3.33
c	Divorce	0.00	0.00
d	Love failure	0.00	0.00
e	Others (specify).....	0.00	0.00
4	Family problems/Commitments		
a	Social functions,	40.00	40.00
b	Daughter's marriage	30.00	30.00
c	Son's marriage	13.33	13.33
d	Frequent quarrel among the family members	50.00	70.00
e	Others	0.00	0.00
5	Illness	10.00	10.00
6	Drug abuse/Alcoholic addiction	10.00	16.66
7	Gambling/betting /chit fund	0.00	6.66
8	Fall in social reputation	33.33	33.33

Source: Field Survey

4.2.3. Farming related causes of suicide:

Various farming related causes of suicides are expressed by the victim families. They invariably expressed that due to continuous crop-losses during 2014-15 & 2015-16, the suicides were taken place. Of the total sample of victim families, 23.33 percent have expressed that the crop losses were due to pests and diseases while 53.33 percent of families expressed that due to lack of access to irrigation water, they had to face the crop losses.

About 16.67 percent of victim families reported the crop loss due to cyclonic effect whereas 76.67 percent reported lack of rainfall. Moreover, 30 percent of the sample families reported failure of wells while 6.67 percent reported the quarrels between the victim and others.

All the victim families reported that due to failure of expectations towards crops also lead to commit suicides. About 90 percent of sample families expressed that they have shifted to commercial crops expecting higher output but their expectations failed due to crop loss which led to suicides. On the other hand 83.33 percent of victim families reported that they have expected higher prices to their commercial crops but owing to seasonal conditions they have faced absolute crop losses. This in-turn led to commit suicide. Around 10 percent of families reported that the main cause for committing suicides is the institutional credit while 76.67 percent of families reported the cause of non-institutional credit. About 10 percent of the families expressed that due to delay in payment for the sold output is another reason for the commitment of suicide. All the above details can be viewed from the table 4.3.

Table 4.3: Farming related causes of suicides

Sl.No	Causes	Percent of HH to total sample who answered Yes	
		2014-15	2015-16
1	Failure of crop/s		
a.	Pests & diseases	23.33	23.33
b.	lack of access to irrigation water	53.33	53.33
c.	others specify	0.00	0.00
2	Due to natural calamities		
a.	Cyclone effect	16.67	16.67
b.	Failure of rainfall/drought	76.67	76.67
c.	Accidental fire	0.00	0.00
d.	others specify	0.00	0.00
3	Inability to sell output	0.00	0.00
4	Well failures	30.00	30.00
5	Quarrel between the victim & others	6.67	6.67
6	Expectations of:		
a.	Higher output	90.00	90.00
b.	Higher prices	83.33	83.33
c.	Loan waiving	0.00	0.00
d.	Institutional credit	10.00	10.00
e.	Non-institutional credit	76.67	76.67
7	Lack of extension services	0.00	0.00
8	Delayed payment/ payment in installments for the sold output	10.00	10.00
9	Insurance for the cultivated crop	0.00	0.00

Source: Field Survey

4.2.4. Indebted related causes of suicide:

The victim families reported that due to continuous indebtedness towards institutional and non-institutional sources during 2014-15 and 2015-16 was the main reason

which resulted in commitment of suicides. Glancing over the details of indebtedness presented in table 4.4, one can observe that 86.67 percent of victim families reported the indebtedness towards non-institutional loan while 76.67 percent of the families attributed the reason for suicides towards crop loan. Moreover, 66.67 percent of families reported the cause of indebtedness towards non-agricultural loan. Only 10 percent of the families expressed the reason for indebtedness towards farm equipment loans. Observing between institutional and non-institutional sources, about 83.33 percent of victim families reported to be indebted towards non-institutional sources (i.e., mainly moneylenders).

Table 4.4: Indebted related causes of suicides

Sl.No	Causes	Percent of HH to total sample who answered Yes	
		2014-15	2015-16
1	Indebtedness – Institutional & Non-Institutional		
a.	Due to crop loan	76.67	76.67
b.	Due to farm equipment's' loan	10.00	10.00
c.	Due to non-agricultural loan	66.67	66.67
d.	Due to non-institutional loan	86.67	86.67
2	Due to pressure from institutional sources	10.00	10.00
3	Due to pressure from non-institutional sources (mainly money lenders)	83.33	83.33

Source: Field Survey

4.2.5. Ranking of the social, farming and indebted causes of suicides:

A. Social Causes: Out of the social causes reported the reason for commitment of suicides, poverty occupied the first rank, followed by family problems/commitments. Fall in social reputation occupies the third position while the drug abuse being the fourth rank. Illness, gambling, marriage related issues and property disputes occupied the subsequent ranks five, six, seven and eight respectively.

B. Farming related Causes: Observing farming related causes for suicides, failure of crops occupied the first position, followed by natural calamities. Failure of wells occupied the third position while inability to sell the output referred to fourth position. Quarrels between the victim and others reported to be last position.

Moreover, while delayed payment/payment in instalments for the sold output occupied the first position, the second position occupied by lack of extension services. Lack of insurance for the cultivated crop reported the third position.

C. Indebtedness related Causes: Glancing over indebtedness related causes, pressure from non-institutional sources (moneylenders) occupied the first rank; while indebtedness towards institutional and non-institutional sources occupied the second rank, pressure from institutional sources reported to be the third position of ranking. All the above details can be observed from the table 4.5.

Table4.5: Ranking of the social, farming and indebted causes of suicides

Causes	Sl.No	Causes	Ranking as per answer
Social causes	1	Poverty	1
	2	Property dispute	8
	3	Marriage related issues	7
	4	Family problems/Commitments	2
	5	Illness	5
	6	Drug abuse/Alcoholic addiction	4
	7	Gambling/betting /chit fund	6
	8	Fall in social reputation	3
Farming related causes	1	Failure of crop/s	1
	2	Due to natural calamities	2
	3	Inability to sell output	4
	4	Well failures	3
	5	Quarrel between the victim & others	5
	6	Expectations of:	
	7	Lack of extension services	2
	8	Delayed payment/ payment in instalments for the sold output	1
	9	Insurance for the cultivated crop	3
Indebtedness related causes	1	Indebtedness – Institutional & Non-Institutional	2
	2	Due to pressure from institutional sources	3
	3	Due to pressure from non-institutional sources (mainly money lenders)	1

Source: Field Survey

4.3. Impact of Suicides on Family Members:

While eliciting information about the impact of suicides on family members, the family members expressed various effects. About 10 percent of the families reported to have stopped agricultural activities while 13.33 percent of the families reported to have lack of earning member in the house. Nearly 20 percent of the families reported that they have stopped schooling of their children. About 13.33 percent of families reported to have sold their land while 26.67 percent reported the sale of other assets.

Nearly 3.33 percent of families reported the sale of houses while 3.33 percent of families reported the serious illness of the family members. Insecurity in the family members is reported by 16.67 percent of sample families while 6.66 percent of families reported that their family members are under depression. All the above details can be observed from the table 4.6.

Table 4.6: Impact on HH household after committing suicide

Sl.No	After effect	Percent of HH to total sample who answered Yes
1	Agricultural activities stopped	10.00
2	No earning member	13.33
3	Schooling of the children stopped	20.00
4	Land sold	13.33
5	House sold	3.33
6	Other assets sold (specify) gold	26.67
7	Postponement of son/daughter's marriage	0.00
8	Family member/s fell seriously ill	3.33
9	Family member/s under depression	6.66
10	Insecurity in the family	16.67
11	Others	0.00

Source: Field Survey

4.4. Suggestions from Families to Avert Suicides in Future:

All the sample families invariably expressed to provide loans at low rate of interest from institutional sources and to provide high prices for their produce. On the other hand, 53.33.percent of families reported to provide dairy business while 36.67 percent of families asked to provide loans at low rate of interest for the tenant farmers. Only 16.67 percent of families expressed to provide alternative income sources for the better sustenance of their lives. The details can be viewed from the table 4.7.

Table 4.7: Suggestions to prevent the suicides in future

Sl.No	Suggestion	Percent of HH to total sample who suggested
1	give dairy business	53.33
2	give loans low interest from institution loans	100.00
3	Provide alternative income sources	16.67
4	give loans low interest for leased farmers	36.67
5	provide high prices for agri.-production	100.00

Source: Field Survey

4.5. Summary:

About 96.67 percent of family members and own community members of victim farmer reported that the farmer who committed suicide used to mingle with them and maintained cordial relation. Nearly 78.67 percent of sample families reported that the victim

had good food habits. Around 70 percent of victim families reported that the victim farmers used to get adequate sleep during nights prior to commitment of suicide. The above things inferences that some of the victims could not express or reveal their mental agony even with their family members, neighbours and friends.

About 83.33 percent of the family respondents reported that the commitment was happened due to their poor economic conditions.

About 3.33 percent of family respondents of total sample reported that the commitment was happened due to dowry related issues and same percent of neighbours and friends reported that the commitment of suicide was due to extra marital affairs. Around 50 percent of family respondents and 70 percent of sample family neighbours reported that the commitment of suicide have occurred due to frequent family quarrels among the family members. About 33.33 percent of respondents reported that due to fall in social reputation the commitment of suicides have occurred.

All the victim families expressed that due to continuous crop losses during 2014-15 and 2015-16 the suicides were taken place. Of the total sample of victim families, 23.33 percent have expressed that the crop losses were due to pests and diseases while 53.33 percent of families expressed that due to lack of access to irrigation water, they had to face the crop losses. About 16.67 percent of victim families reported the crop loss due to cyclonic effect whereas 76.67 percent reported lack of rainfall.

About 90 percent of sample families expressed that they have shifted to commercial crops expecting higher output but their expectations failed due to crop loss which led to suicides. On the other hand 83.33 percent of victim families reported that they expected higher prices to their commercial crops but owing to seasonal conditions they have faced absolute crop losses. About 76.67 percent of families reported the cause of non-institutional credit for commitment of suicides.

Glancing over the details of indebtedness one can observe that 86.67 percent of victim families reported the indebtedness towards non-institutional loan while 76.67 percent of the families attributed the reason, for suicides, towards crop loan. Moreover, 66.67 percent of families reported the cause of indebtedness towards non-agricultural loan. Observing between institutional and non-institutional sources, about 83.33 percent of victim families reported to be indebted towards non-institutional sources (i.e., mainly moneylenders).

Out of the social causes reported the reason for commitment of suicides; poverty occupied the first rank, followed by family problems/commitments. Fall in social reputation occupies the third position while the drug abuse being the fourth rank. Illness, gambling, marriage related issues and property disputes occupied the subsequent ranks five, six, seven and eight respectively.

Observing farming related causes for suicides, failure of crops occupied the first position, followed by natural calamities. . Failure of wells occupied the third position while inability to sell the output ranks the fourth position. Quarrels between the victim and others reported to be the last position.

Moreover, while delayed payment/payment in instalments for the sold output occupied the first position, the second position occupied by lack of extension services, lack of insurance for the cultivated crop reported to be the third position.

Glancing over indebtedness related causes; pressure from non-institutional sources (money lenders) occupied the first rank, while indebtedness towards institutional and non-institutional sources occupied the second rank, pressure from institutional sources reported to be the third position of ranking.

Information about the impact of suicides on family members explain that, about 10 percent of the families reported to have stopped agricultural activities while 16.67 percent of the families reported to have lack of earning member in the family.

Around 20 percent of the families reported that they have stopped schooling of their children. Nearly 13.33 percent of families reported to have sold their land while 26.67 percent reported the sale of other assets. About 3.33 percent of families reported the sale of houses while 3.33 percent of reported the serious illness of the family members. Insecurity in the family members is reported by 23.33 percent while 13.33 percent of families are reported that their family members are under depression.

All the sample families invariably expressed to provide loans at low rate of interest from institutional sources and to provide high prices for their produce.

About 53.33 percent of families reported to provide dairy business while 36.67 percent of families asked to provide loans at low rate of interest for the tenant farmers. Only 16.67 percent of families expressed to provide alternative income sources for the better sustenance of their lives.

CHAPTER –V

Conclusions and Policy suggestions

5.1. Introduction:

Agriculture in Andhra Pradesh is basically small farm agriculture. Under the conditions of decelerating/stagnating crop yields, the small size of the holdings and its decline over time had a significant impact on the agricultural incomes and the levels of living of the farm households. The decline in per capita agriculture output and increase in the cost of cultivation per unit of output lead to the decline in the incomes of the farmer and increase in the dependence on credit for carrying out the farm activities. With the breakdown of extension services and lack of access to institutional credit, small and marginal farmers are becoming increasingly dependent upon private traders for credit and extension services, especially in the context of emerging high input use, high risk apricots. In the absence of public regulation of such services, the resource poor and innocent farmers are being exploited by unscrupulous traders and money lenders interested in selling spurious pesticides and seeds and falling into a distress situation. The farmers who are not able to cope up with this distress are resorting to the extreme step of putting an end to their life by committing suicide.

5.1.1 Main Objectives and Scope of the study:

In some areas it is the cropping pattern followed by the farmers i.e. unsuitable to the area, with the anticipation that they can earn higher agricultural incomes the farmers taken-up cultivation of commercial crops which are high input use, and high risk crops. Due to Insufficient knowledge and Extension services, crop management becomes difficult resulting in crop loss. Many farmers are the victims of the deceit of the pesticide dealers who supply spurious pesticides that cannot contain the pest attack. Often it is the low quality seed that result-in low yields. As more and more farmers are shifting to commercial crops that involve high investments in the event of crop failure or price fall the household faces food insecurity. Recently agriculture in India has become more a gamble either recurring droughts or floods and the farmers undergo a lot of mental tension until they receive the crop. Marketing of the produce is another problem for the farmers due to uncertain prices and they may not receive expected returns in the event of price crash. Majority of the small and marginal farmers who dispose off their produce in the village itself face problems like under weighment or receive less than the prevailing market price. Those who take the product to the market are exploited at

various stages by commission agents, Weighment etc., such exploitation cause loss of expectations of the cultivators leading to disappointment and distress. Thus there are various factors such as socio-psychological factors, agri-economic factors, loss of expectations, absence of proper institutional support and proper policy break up that lead to the distress of the farming community. In order to improve the situation and mitigate the farmers distress a comprehensive study of the problems faced by the farmers that vary from region to region is necessary.

In this connection the Ministry of Agriculture, Government of India has asked its Agro-Economic Research Centres (AERCs) to undertake a comprehensive study and to chalk out policy measures that can mitigate the problems of the farmers in the respective states. The Agro-Economic Research Centre (AERC), Andhra University, Visakhapatnam has taken up the study in Andhra Pradesh with the following objectives:

The specific objectives of the study are:

1. To analyse the incidence and spread of farmers suicides in the selected state of Andhra Pradesh to map the hotspots of suicides.
2. To study the socio-economic profile, cropping pattern and profitability of victim farm households.
3. To Study causes leading to farmer's suicides and
4. To recommend suitable policies to alleviate the incidence of farmers' suicides.

5.1.2 Data & Methodology:

The present study is mainly based on both primary and secondary data. The secondary data for the study was collected from, government offices like Commissionerate of Agriculture, Directorate of Economics and Statistics and from officials associated with the problem at the village level. As suggested by the coordinator of the study a sample size of 30 suicides farmers' families from two districts viz, Guntur and Ananthapur in which highest number of suicides were taken place are selected. Among the two districts, one district Guntur being the representative from Coastal Districts Region and another district Ananthapur being the representative of Rayalaseema Region are taken for the study. In Guntur district 13 sample suicide families are selected taking each case from 13 villages located in 3 mandals. Similarly in Ananthapur district 17 suicide families from 16 villages located in 10 mandals are selected for canvassing. Thus

total a sample of 30 suicide families from two districts are canvassed with a structured questionnaire. Moreover log liner growth rates ($\ln Y = a + bt + ut$) for the period 1998 to 2015 were calculated to identify the rate of farmers' suicides over a period in the state as well as in selected districts. To observe the variation across the districts the coefficient of variation is estimated ($CV = \frac{\sigma}{\mu} \times 100$) The reference period for collecting the primary data is the agricultural year 2015-16.

5.1.3 Structure of the Report:

The present study is divided into five chapters. The first chapter being the introductory chapter, the second chapter presents the Farmers' Suicides Scenario in the state. The analysis of primary data is presented in third chapter while the fourth chapter provides the causes and after effect of suicides. Finally the fifth chapter deals with the conclusions and policy suggestions. In addition, some case studies of farmers' suicides are also appended at the end of the report.

5.2. Farmers' Suicide Scenario in the State:

5.2.1. District-wise Details of Farmers Suicide case of suicides reported in the state.

During 2015-16 the cases of suicides reported in the state are 79. The numbers of farmers' suicides per lakh hectare of net sown area are reported as 1.30 and the numbers of farmers' suicides per lakh hectare of gross cropped area are reported as 1.05 in the state. On the other hand the numbers of farmers' suicides per lakh farming families are reported as 1.04 in the state. Moreover, in Guntur the number of farmers' suicides per lakh farming families are reported to be 2.63 and 6.12 in Ananthapur. The suicides per lakh farming families varied from 0.15 in Kurnool district to 6.12 in Ananthapur district. It is observed that higher percentages of suicides were taken place in September and October months of 2015. Observing across the months the percentage of suicide cases varied from 18.99 per cent in October, 2015 to 2.53 percent in March, 2016.

5.2.2. Procedure Adopted and criteria for compensation:

The government of Andhra Pradesh has initiated an action plan for addressing the issue of farmers' suicides in the vulnerable villages/mandals of 5 vulnerable districts viz., Kurnool, Ananthapur, Kadapa, Chittoor and Prakasam based on the reasons identified by the three

member committee. Subsequently the Guntur district is also included along with the five vulnerable districts. Sanction of budget under International Fund for Agricultural Development (IFAD) and Green Climate Fund to mitigate drought situation in all the Rayalaseema districts and Guntur and Prakasam districts is under process. The government has also identified some of the thrust areas for making state as drought proof and provide much needed water resource to the farm lands. Moreover the proposal regarding simplification of the verification procedure followed in deciding genuineness of the farmers' suicides is under consideration. Upon completion of verification process within three weeks by the divisional committee, certain measures of providing comfort to the distressed families were taken immediately without waiting for the final sanction of financial assistance.

After careful examination government observed that the financial assistance envisaged in 2004 is not commensurate with the present socio-economic circumstances and thereby enhanced the ex-gratia and the loan settlement ceiling limit to the family members of the deceased farmers vide G.O.Ms.No. 62 dated 19th February, 2015; enhancement of ex-gratia from 1 lakh to 3.50 lakhs to the family of the deceased farmer towards rehabilitation of the family; enhancement of loan settlement from Rs. 50,000 to Rs. 1.50 lakh to the persons (debtors) entitled; as one time settlement and to wipe off all the liabilities on the part of deceased families of farmers.

5.2.3. Reasons for delay in payments of Ex-Gratia to the deceased farmer families form the Government:

While implementation of the financial assistance to the farmers, the benefit could not be reached to all the deceased farmer families due to delay in release of ex-gratia amount. After receiving the forensic lab reports and relevant necessary documents the three member committee submit the report to the district collector and the district collector in turn submit the proposal for release of ex-gratia to the families of deceased farmers. As the forensic lab report comes late, release of ex-gratia amount will be delayed to that extent. As a result, the financial assistance would not be reached to all the deceased farmer families at a time.

The total amount of compensation paid in the state during the year 2015-16 is accounted for Rs. 233.34 lakhs. Of which Rs. 45 lakhs were paid as compensation in Guntur district and Rs. 118.34 lakhs were paid in Ananthapur district. On an average the compensation

amount paid per family is reported to be Rs. 4.96 lakhs in the state. Moreover Rs. 5 lakhs were paid as compensation in Guntur district and Rs. 4.93 lakhs in Ananthapur district.

The government has taken steps to prevent farmers' suicides in future by implementing the schemes as follows:

- 1) The Andhra Pradesh Land Licenced Cultivators Act, 2011.
- 2) Vaddileni panta runalu and
- 3) Crop loans to farmers
- 4) Crop insurance
- 5) National Calamities and input subsidy
- 6) Agricultural Debt Redemption Scheme on crop loans
- 7) Chandranna Rythu skhetralu
- 8) Micro-nutrient application based on soil test results
- 9) Polam pilosthondi programme
- 10) Farm mechanization
- 11) Organic farming and
- 12) Multi-purpose Extension officers.

In addition to the above, the training programmes and exposures visits are organised regularly for farmers and farm women for their technical up-gradation and capacity enhancement.

5.3. Analysis of Primary Data.

5.3.1 Socio-Economic Profile of the Victim:

Two districts, Guntur and Ananthapur are selected for the purpose of analysis of primary data 13 suicide cases from Guntur and 17 suicide cases from Ananthapur district are studied. Of the total sample of 30, 53.33 percent are illiterates, 26.67 percent of victims are reported to have studied up to matriculation, about 13.33 percent reported to have middle school education and 6.67 percent higher secondary education. Out of the total sample 76.67 percent have committed suicide by consuming poison and 23.33 percent by hanging of the total suicides, 66.67 percent were taken place in the house and 33.33 percent at farm.

5.3.2 Socio-Economic Profile of Victim's Family:

All the victim families are mainly dependent farming activity. About 86.67 percent of the victim families reported to be nuclear and 13.33 percent are joint families.

Of the total sample 43.33 percent are marginal holdings, 33.33 percent are small holdings, 13.33 percent are medium holdings and only 10 percent of the victim families reported to be large holdings. While glancing over the area of the victim families 16.49 percent are marginal (0.01 to 2.50 acres) holdings and 13.11 percent are small (2.51 to 5.00 acres) holdings about 21.41 percent are reported to be medium (5.1 to 10.00 acres) holdings and 29.99 percent are large (10.01 and above acres) holdings.

5.3.3 Characteristics of operational holdings:

The average operated area per household is reported to be 4.06 acres of which 69.46 percent is irrigated area. The per household gross cropped area is reported as 5.46 acres of which 77.29 percent is irrigated area. The per household intensity of cropping is reported to be 134.45 percent while the intensity of irrigation is accounted for 155.21 percent.

5.3.4 Sources of Irrigation:

The per household irrigated area is reported to be 2.82 acres of which 37.23 percent is through tube-well irrigation, 33.10 percent of area is irrigated by canal, 16.55 percent of the area is irrigated by open-wells and only 13 percent of the area is irrigated by tanks.

5.3.5 Leasing of Land:

The arrange leased-in land of irrigated area per household is reported to be 1.70 acres. About 0.27 acres of un-irrigated area is reported to be taken as lease. The rental value paid per acre of irrigated area is Rs.10,300 and Rs.6000 for un-irrigated area. On the other hand per household irrigated area given out for lease is reported to be 0.35 acres and rental value received per acre is Rs.12,000/-.

5.3.6 Source wise Income and Items of Expenditure:

The total per household income is reported to be Rs.71056 of which 45.56 percent represent the income from agriculture. The income from agricultural wages, dairy and animal husbandry are reported to be 15.72 percent and 6.73 percent respectively. About 28.99 percent of income is obtained through services (salary and pension). It is found that those victim families who are having pensions and those doing services outside the villages were able to maintain their daily lives even in failure of agricultural income. Out of the total expenditure of Rs.54534, 37.90 percent was spent towards food and 62.10 percent was spent towards non-food items. All the victim families without exception have expressed that the consumption expenditure has been increased over the last five years.

5.3.7 Cropping Pattern and Returns from cultivation:

The per household total area cultivated is reported to be 3.66 acres in Kharif and 4.03 acres in rabi season. The percentage of cropped area in total cultivated area is reported to be 67.09 in kharif, 29.55 in rabi and 3.36 as perennial. The crop wise production per reported household in kharif is accounted for 71.71 quintals in case of Paddy, 5.00 quintals in case of Greengram, 23.33 quintals in case of cotton, 16.67 quintals in case of chilli and Groundnut and Red gram crops accounted for 15.67 quintals and 13.67 quintals respectively. Moreover, the production per household in rabi season are reported as 55 quintals Paddy, 147.50 quintals Maize, 18 quintals Greengram, 22 quintals black gram and 21.67 quintals in case of Groundnut. The production of perennial crop is reported as 80 quintals per household.

The low crop yields were observed in case of Greengram, Cotton, Groundnut and Redgram in Kharif and Green gram and Groundnut in Rabi season. The low yields in respect of the above crops are due to erratic monsoons and inadequate irrigation facilities. Accordingly the price received per quintal is also low in respect of the above crops which have resulted in low returns per acre. While observing the per acre net returns of various crops grown in kharif, groundnut crop should negative returns. This is due to continuous drought conditions and lack of required rainfall in the kharif season. Moreover in rabi season meager returns per acre were received by the Groundnut growers. Glancing over per household returns of the crops the same above situation is observed in case of cotton and groundnut crops. While discussing with the district officials and sample households about the yields of the various crops that are grown,

they have expressed that almost all crops have yielded low returns due to unfavorable seasonal conditions.

5.3.8 Credit Availed:

While glancing over the institutional sources of credit out of the total 30 sample households 20 percent of the households have borrowed credit from cooperative societies and 63.33 percent of households from commercial banks including Regional Rural Banks (RRBs). The outstanding borrowed amount per reported household is accounted for Rs.90,000. All those households borrowed for cooperative society spent the amount for farming purposes only. No single borrower is reported to have paid as per schedule. Other hand, of the total borrowing households borrowed from commercial banks 89.47 percent of borrowers utilized the amount for farming purpose and 10.53 percent of borrowers utilized the amount for non-farming purposes. The total outstanding amount per reported borrower is accounted for Rs.91429. Looking over non-institutional sources, it is observed that the money lenders played a dominant role than other sources. The outstanding amount per reported borrower borrowed from money lenders is reported to be Rs. 1,66,500. About 1.47 percent of borrows have paid the installments as per schedule. Out of those borrowed amount from land lords 62.50 percent of borrowers utilized the amount for farming purposes and 37.50 percent of borrowers utilized the amount for non-farming purposes. The total outstanding amount per reported borrower is Rs. 99,091. All the households borrowed from traders and commission agents spent the amount for farming purposes only and the outstanding amount per reported borrower Rs. 168571. For those households who borrowed from relatives and friends the outstanding amount per borrower is reported to be Rs. 1,10,714.

5.4.Causes and After Effect of Suicide:

5.4.1 Symptoms observed by family members before suicide:

About 96.67 percent of family members and own community members of victim farmer reported that the farmer who committed suicide used to mingle with them and maintained cordial relation. Nearly 78.67 percent of sample families reported that the victim had good food habits. Around 70 percent of victim families reported that the victim farmers used to get adequate sleep during nights prior to commitment of suicide. The above things inferences that

some of the victims could not express or reveal their mental agony even with their family members, neighbours and friends.

5.4.2 Social Causes of Suicide:

About 83.33 percent of the family respondents reported that the commitment was happened due to their poor economic conditions. About 3.33 percent of family respondents of total sample reported that the commitment was happened due to dowry related issues and same percent of neighbours and friends reported that the commitment of suicide was due to extra marital affairs. Around 50 percent of family respondents and 70 percent of sample family neighbours reported that the commitment of suicide have occurred due to frequent family quarrels among the family members. About 33.33 percent of respondents reported that due to fall in social reputation the commitment of suicides have occurred.

5.4.3 Farming related causes of suicide:

All the victim families expressed that due to continuous crop losses during 2014-15 and 2015-16 the suicides were taken place. Of the total sample of victim families, 23.33 percent have expressed that the crop losses were due to pests and diseases while 53.33 percent of families expressed that due to lack of access to irrigation water, they had to face the crop losses. About 16.67 percent of victim families reported the crop loss due to cyclonic effect whereas 76.67 percent reported lack of rainfall.

About 90 percent of sample families expressed that they have shifted to commercial crops expecting higher output but their expectations failed due to crop loss which led to suicides. On the other hand 83.33 percent of victim families reported that they expected higher prices to their commercial crops but owing to seasonal conditions they have faced absolute crop losses. About 76.67 percent of families reported the cause of non-institutional credit for commitment of suicides.

5.4.4 Indebted related causes of suicide:

Glancing over the details of indebtedness one can observe that 86.67 percent of victim families reported the indebtedness towards non-institutional loan while 76.67 percent of the families attributed the reason, for suicides, towards crop loan. Moreover, 66.67 percent of families reported the cause of indebtedness towards non-agricultural loan. Observing between

institutional and non-institutional sources, about 83.33 percent of victim families reported to be indebted towards non-institutional sources (i.e., mainly moneylenders).

5.4.5 Ranking of the social, farming and indebted causes of suicides:

Out of the social causes reported the reason for commitment of suicides; poverty occupied the first rank, followed by family problems/commitments. Fall in social reputation occupies the third position while the drug abuse being the fourth rank. Illness, gambling, marriage related issues and property disputes occupied the subsequent ranks five, six, seven and eight respectively. Observing farming related causes for suicides, failures of crops occupied the first position, followed by natural calamities. . Failure of wells occupied the third position while inability to sell the output ranks the fourth position. Quarrels between the victim and others reported to be the last position.

Moreover, while delayed payment/payment in installments for the sold output occupied the first position, the second position occupied by lack of extension services. Lack of insurance for the cultivated crop reported to be the third position.

Glancing over indebtedness related causes; pressure from non-institutional sources (moneylenders) occupied the first rank, while indebtedness towards institutional and non-institutional sources occupied the second rank. Pressure from institutional sources reported to be the third position of ranking.

5.4.6 Impact of Suicides on Family Members:

Information about the impact of suicides on family members explain that, about 10 percent of the families reported to have stopped agricultural activities while 16.67 percent of the families reported to have lack of earning member in the family.

Around 20 percent of the families reported that they have stopped schooling of their children. Nearly 13.33 percent of families reported to have sold their land while 26.67 percent reported the sale of other assets. About 3.33 percent of families reported the sale of houses while 3.33 percent of reported the serious illness of the family members. Insecurity in the family members is reported by 23.33 percent while 13.33 percent of families are reported that their family members are under depression.

5.4.7 Suggestions from Families to Avert Suicides in Future:

All the sample families invariably expressed to provide loans at low rate of interest from institutional sources and to provide high prices for their produce.

About 53.33.percent of families reported to provide dairy business while 36.67 percent of families asked to provide loans at low rate of interest for the tenant farmers. Only 16.67 percent of families expressed to provide alternative income sources for the better sustenance of their lives.

5.5. Policy suggestions:

The findings of our study on "Indebtedness and farmers' suicides in Andhra Pradesh" suggest that unless certain corrective measures are taken with firm policy back up, the distress of the farmers will have no end in the near future.

- The prevailing market imperfections in the input and product market must be eradicated.
 - a). The seed market is dominated by the private agencies that supply low quality seed, by deceiving the farmers through their demonstration plots. There is a need to regulate the unscrupulous activities of the private traders in the seed market.
 - b). In the case of pesticides also the farmers are misled by the traders and use pesticides indiscriminately. Very often the high value pesticides turn to be spurious ones. There is a need to educate the farmers on IPM methods through extension service and other media and regulate the activities of unscrupulous traders in pesticide market.
 - c). the irregularities in the regulated product market must be removed.
 - d). Establishment of seed Bank/Seed villages in every mandal of the district.
- Interest free credit facilities and extension of crop insurance benefits provide must be extended to small, marginal and tenant farmers.
- The practices of input credit tie-up should be discouraged. The state should ensure provision of cheaper credit through institutional sources and regulate the activities of money lenders.
- Assured irrigation sources must be developed public investment in irrigation should be raised so that the burden on the farmers in providing private source of irrigation can be reduced. To renovate tanks especially in the Rayalaseema region through the integration

of rural employment programmes. Promote watershed development through public investment for creating new structures and maintenance of the existing structure through people's participation.

- The cropping pattern should be regulated basing on the resource availability of the region, especially the irrigation.
- Policy formulation by state to solve the problems of tenant farmers and implementation of tenancy reforms to save them from distress.
- Drought-proofing of agriculture.
- Creation of more ancillary economic activities that could yield supplementary incomes.
- A credit mechanism which will
 - a. eliminate private lending
 - b. properly suit the repayment capacity of borrowers
 - c. is backed by technical advice that will prevent failure of investments
- A farmer, welfare authority should be set by each and every state Government with considerable Farmers' Welfare Fund to provide social security system for the farmers. This body should be headed by a professional (not bureaucrats) in order to design and implement effectively three core components of social security system, viz., Farmers' Pension scheme, Farmers' health insurance scheme.
- Rural non-farm and non-crop sectors have to be promoted in order to diversify the rural income base which will act as a buffer in the event of crop failure and reduce income uncertainties.
- Agriculture should be agro-processing and linked with industry in order to promote long run processing industry, which will generate huge employment in rural areas besides improving the farmers' income.
- In some stray cases, though the victim commits suicides for any other reason that commitment of suicides is attributed to the crop loss and indebted related problems. However, the genuineness of such cases cannot be proved because of local political forces.
- Toll free and helpline should be providing at village level to help counseling to those farmers who are in distress by the concerned officers and others.

Annexure - I

Case Studies on Suicides in Andhra Pradesh

1. Obul Naidu, 45 years old the suicide victim hails from Yadalankapalli village, Bukkapatnam mandal of Ananthapur district. His wife is Nagendramma. He has two children and both are studying. He cultivated groundnut crop in his land. He owned 5 acres of land. He planted two crops namely, Groundnut and Bengalgram. He has his own well but dried up totally. No irrigation facility is available. He has to depend on rains only. He is totally debt-ridden due to failure of monsoons. Both crops resulted in heavy losses to the victim. Crop loss occurred due to drought situation prevailed for the last seven consecutive years in the district. He borrowed Rs.5 lakhs for the purpose of agriculture activities. Due to continuous drought he could not pay back the loans. Due to pressures from institutional and non-institutional sources like private money lenders he had to commit suicide by consuming pesticides at his farm field on 26th July 2015.

2. Y. Haranath Reddy, 48 years old native of Vaddivaripalli village, ODC mandal of Ananthapur district. his wife namely Pushpalatha. The victim has two sons only. He owns 5.50 acres land. He has one bore well in a part of his land. he tried to dig bore wells for four times in his land but in-vain. Groundnut crop was grown in his land. He borrowed nearly Rs.14 lakhs from commercial banks and money lenders for the purpose of agricultural activities and medical expenses for his second son who was ailing from blood-clot in his brain. Nearly Rs.3 lakhs were spent for his son's medical expenses, meanwhile the victim himself met with an accident while crossing the road at his native place. he had to borrow money again from moneylenders for his treatment. Thus spent Rs.4 lakhs for digging bores, Rs.3 lakhs for his son's medical expenses and Rs.7 lakh for crop loan. Due to pressures from money lenders and his son's ailment made him to be depressed and suffered with great mental agony. As a result, one day he committed suicide by hanging nearby his house. He died on 6th April, 2015.

3. Sugali Laxman Naik, age 45 hails from Narasayanakunta village, Ananthapur mandal, Ananthapur district. his wife namely Eswaramma aged 40 years and he got two sons, one is Auto driver (21) and the second son is a daily wage labour (19). He owned 1.20 acres land on which he has grown Paddy. He got his own bore well in his field. They were leading a combined family. The total accumulated debts stood at Rs.8 lakhs. He lost two oxen worth of Rs.one lakh. In the meanwhile he met with an accident and got fractured.

Nearly Rs.3 lakhs were spent for operation and other medical expenses. In addition to his own land, he took 20 acres of leased-in land on crop sharing basis. Irrespective of the crop condition the tenant ought to pay the rent. Due to continuous drought during 2012-2015, he accrued heavy debts. Crop failure is one of the reasons for committing suicide of the victim. His wife is seriously from ill during the time. All the money that borrowed was from private moneylenders only. One day all money lenders raided on his house and shouted at him with abusive language in the presence of villagers. Facing the bitter insult, he consumed pesticides at his field and died there-itself on 11th February 2014.

4. C.K. Tati Reddy (Victim aged 53 years) is native of Marthadu, Garladinne mandal of Ananthapur district. His wife is C.K. Adi Lakshmi. He has 3 sons only. He has no land of his own. He survives by cultivating leased-in land to a turn of 9 acres. he owns a tractor. He has to pay Rs.2000 per acre towards rent for leased in land. He is having 3 bore wells and the river Tungabhadra passes through his land. He cultivated two crops paddy and Groundnut. There is a crop failure for one year. He used to borrow money from moneylenders, relatives and fellow villagers and there is no scope for him to get institutional credit as he has no land his own. All the loans together amounted Rs.11.50 lakhs. He bought two new tractors through loans from private money lenders. He failed to pay the back the monthly instalment. He agreed to pay Rs.60,000 per month as instalment. Due failure in paying monthly instalments on time, one of the financiers came and beaten him in the morning and another financier beaten him in the evening. Out of immolation and insult, he committed suicide by consuming pesticides at his farm field on the very next day i.e. on 5th September, 2014. Crop failure is not the main reason but it is one of the reasons for the victim's commitment of suicide. The main reason for the victim's death in purchase of two new tractors and spent huge amount for repairs there on for the old tractor.

5. B. Boya Naganna 54 years old hails from old Kalluru village, Garladinne mandal of Ananthapur district. Nagamma is his wife. He has two daughters and two sons. He has no land of his own. He used to cultivate 4 acres of leased-in land. He is supposed to pay Rs.60,000 rent for 4 acres leased-in land. On the land he cultivated Paddy only. The source of irrigation for his fields is bore well. He borrowed Rs.4 lakhs for crop loan and for daughter's marriage. Nearly two lakhs were spent for his daughter's marriage. and the rest of amount was spent for agricultural purposes. He borrowed the money from local money lenders, traders and relatives. Due to failure of crops, he could not pay back the amount to the money lenders who came to his house and quarrelled with him at his residence. With this incident, he fell into depression and took poison at his house while all the family

members were in deep sleep. The victim was found to be dead in the morning by the family members on 2nd November, 2014.

6. V. Govinda Reddy, aged 43, native of Lolur, Singanamala Mandal of Ananthapur district. He was living with his wife Anasuyamma and two children. The two male and female children were married. He owns 5 acres of land on which he has grown Groundnut crop. In addition, he owns five buffaloes for dairy purposes. He tried to dig bore wells five times and at the fifth attempt he could succeed for which he had to spent Rs. 1.50 lakh. He had spent nearly Rs. 11 Lakhs towards family functions and much of the amount was borrowed from institutional sources. With the mounting of huge amount the moneylenders, traders and relatives insulted him by abusive language. This created great mental agony. This mental agony led to the victim for committing suicide. He consumed pesticides and committed suicide at his house on 18th September, 2014. The main reasons for his commitment of suicide are daughter's marriage, family functions and digging of bore wells.

7. V. Siva Sankar Reddy, age 48 years, is a native of Korivipalli, Singanamala mandal of Ananthapur district. He was living with his wife and two sons. The elder son studied polytechnic and waiting for job and the youngest son got married. He owns 5 acres of land. He cultivated Paddy on two acres of his land and in the rest of 3 acres he was grown groundnut. The outstanding debts on his name was Rs.5 lakhs. He borrowed money from institutional sources and local money lenders. He was served with notices by commercial banks. He had frequent quarrels with local money lenders for repayment of debts. He tried to dig bore-wells for five times and in the fifth attempt, he could succeed. He had to pay Rs.40,000/- for one trial of digging bore-well. Due to pressures from bankers and local money lenders and since he has no alternative source of income to repay, he committed suicide at home on 28th May, 2015.

8. Bandaru Sreeramulu, aged 25 years, hails from Bukkaraya Samudram village, Siddarampuram mandal of Ananthapur district. He is survived by his wife namely Kamala Devi who was pregnant at the time of victims death. After his demise, a girl child was born. He owns 2 acres of land on which he usually grown yearly two crops namely Tomato and Coriander (2nd crop). In addition to this, he took 2 acres leased-in land on which Groundnut crop was cultivated. This crop failed due to continuous drought situation from 2010 onwards. He got dig 4 bore wells of which the fourth one was materialized. He pledged gold of his wife at commission agent and borrowed money for agricultural purposes. Knowing this, his father in law rushed to his village and scolded him like anything in the

presence of villagers and neighbourers. He got insulted and ashamed of it and consumed pesticides to end his life at farm site A by-passer found that the victim committed suicide and he informed the same to his wife and other family members on 23rd January 2015. Crop failure is one of the reasons for committing suicide but the main reason was quarrel with father in law for pledging gold for agricultural purposes.

9. Bhimireddy Peddareddy aged 53 years old, native of Sanjeevpuram, Bukkaraya-samudram mandal of Ananthapur district. He was living with his wife Narayanamma and two daughters and one son. All three are married. He has 10 acres of land. In addition to this he took two acres of leased-in land on which he cultivated paddy only. The leased-in land was taken on crop sharing basis. He has 3 buffaloes which adds income to his family. There has been a drought from 2010 onwards. He borrowed one lakh rupees from commercial banks as a crop loan and one lakh from relatives and Rs.4 lakhs from local money lenders. He tried to dig bore-wells on his field for 8 times and his effort were materialised in the eighth attempt. He spent a lot of money for digging of bore wells. Due to severe drought conditions, he could not pay back the loans. The money lenders came to his house and shouted with abusive language and tried to man handle him in the presence of villagers. As a consequence, he committed suicide by taking pesticide at his cattle shed adjacent to his house on 8th April, 2015. The reasons for death are daughters marriage, digging of bore-wells, crop failures due to drought and pressures from moneylenders.

10. Chinnavaddi Siva Reddy, aged 30 years, native of Narasapuram, Narpala mandal of Anantapur district. He was living with wife Varalakshmi and two sons. He owned 1.50 acres of land on which he has grown Banana plantation, a two years crop. The source of water is canal which is brought to his fields through motors. In addition to this, he took 8 acres of leased in land on which Onion crop was grown. This crop resulted in heavy loss to the victim. He had to incur high crop expenses and about Rs. 7.50 lakhs were spent as rent for leased-in land. He borrowed this amount from local moneylenders, traders and relatives. He took crop loan worth Rs.50000 from nearby Andhra bank. This amount was spent on his own land. Thus The total expenses amounted to Rs.8 lakhs. The local money lenders and traders asked for repayment of the money and scolded and tried to beat him in the presence of villagers. He was deeply hurt and took the extreme step to end his life by consuming pesticides at farm on 3rd July, 2014. Crop failure was the main reason for the victim's death.

11. Rage Narayana Swamy, aged 35 years old, is a native of Nayampalli, Narpala mandal of Ananthapur district. His wife is Jyothi. He has two school going sons. They are leading a joint family system. He owned 4 acres of land on which he has grown Banana. In addition to this he took 4 acres of leased in land and the rent per acre was Rs. 15,000/-. There was a bumper crop during the season. But there was no remunerative price for the produce. For digging of bores, he spent Rs. one lakh. He secured crop loan worth of Rs.1.70 lakh from syndicate bank and Rs.2 lakhs from his maternal uncle and the rest of Rs.5.30 lakhs from moneylenders and traders. He had to sell his produce at a lowest price. That's how he incurred heavy loss. As a result of which he could not pay back the dues. He could not cope-up with the situation. He went into depression for two months. Finally, he hanged himself at his farm on 22nd September 2015. Even after the victim's death his wife was able to do cultivation with the help of family members since theirs is a joint family.

12. Kolannkonda Edukondalu, aged 35 years is a native of vinigonla, pedakakani mandal of Guntur district. He owns 2.00 acres of land. In addition he took 18 acres of land for leased. His wife is Koteswaramma and has two sons. He had grown Cotton and Chillies crops on his own and rented land. The rent fixed for the chillies crop was Rs. 15,000/- per acre which is to be paid before cultivation. There was a total crop loss during the years 2013-2015. Due to crop loss, he had to pay Rs. 15 lakhs. The rent for Cotton crop per acre was Rs. 40,000/-. He took loan worth of 50,000/- from a Commercial bank and the rest was taken from local moneylenders, traders and relatives. Due to crop failure, he could not pay back the loan amounts he borrowed. Due to disgusting pressures from money lenders, traders and relatives, he took the ultimately of committing suicide by consuming pesticides at farm site on 6th October, 2015.

13. Avanigadda Laxman Rao, 43 years old is a native of Vadlamudi, Chebrolu mandal of Guntur district. He is living with his wife. He owns one acre of land and took 2.00 acres of leased-in land for cultivation. He has grown both paddy and maize crops on the land. There has been a continuous crop failure due to inadequate rainfall. He borrowed Rs. 5 lakhs from local moneylenders and relatives. He could not pay back the loans he borrowed on time. He lead a decent life in his village. The moneylenders abused him with a filthy language and tried to beat him in the presence of fellow villagers. On getting insulted he took the decision of committed suicide by consuming pesticides at farm on 5th September, 2016.

14. Srinivasarao, is a native of karampudipadu, Vatticherukuru mandal of Guntur. He is living with his wife and one daughter and one son. He has no own land. He took 4.00 acres of leased-in land on which he has grown two crops i.e., Paddy and Greengram. He borrowed Rs. 4.00 lakhs for the purposes of daughters marriage and crop loan from local moneylenders and relatives. He borrowed loan worth of Rs. 70,000/- against gold. Thus all the loans are amounted to Rs. 4.00 lakhs. Due to un favourable monsoons, there was a crop failure during 2013-15. As such he could not pay back the loan amount on time. He faced a lot of problems to clear all the dues but could not hence he has taken the finalists of committed suicide by consuming poison on 4th October, 2015.

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