

# RISK PERCEPTION OF INDIAN FARMERS : A CASE STUDY

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## ABSTRACT:

*Agricultural in India involves variety of risk this risk arise from climate variability frequent natural disasters, manmade disaster, pest out breaks accidental factors, borrowing money can also be risky with sudden changes in interest, risk also occurs as a result of changes in government policies, rural infrastructure, finally there are risks related to the health and well-being of the farmer and his family and the supply of labour for the farm, all these event severally affect farmers through loss in production and farm income and they are beyond the control of the farmers. These factors not only endanger the farmer's livelihood and income but also undermine the viability of the agriculture sector and its potential to become a part of the solution to the problem of endemic poverty of the farmer's and the agricultural labor. Risk management is involves choosing among alternatives that uncertain outcome and varying levels of expected returns. Risk perception can vary from farmer to farmer which depend on his experience and on the degree of his/her risk aversion. Farmers risk exposure varies substantially from Indian to other; Indian farmers run their farm business in limited infrastructure and gamble with monsoon. The strategies to manage risk include transferring the risk to another party, minimizing the risk controlling the downside or reducing the negative effect of the risk and accepting some or all of the consequences of a particular risk. The inability to manage risk and accumulate and retain wealth sometimes referred to as "the poverty trap".*

**Key words:** Risk, Risk Perception, Risk Management.

## 1. Introduction

Government of India has already recognized the prominence of risk management in agriculture and has made great application to investigate the possibilities of national level risk management system; the need to protect farmers against risk has a business of agriculture plan. Once farmers have decided to engage in farming activities, the production strategy selected is an important means of mitigating the risk of crop failure. Risk reducing strategies are often used in combined with one another, because no single strategy can cover all of the risk likely to be encountered, farmer's need to consider the risks simultaneously and to develop an integrated approach for better management. They need to recognize the advantages and disadvantages of each risk management option both individually and in combination. Individual farmers should select an appropriate strategy based on their goals, attitudes towards risk and their personal and financial situations. Agricultural producers should not limit their risk management strategies only to reducing and offsetting the problems caused by weather and natural events. Their effective responses to the diver's professional, economic and political challenges are also gain crucial to successful farming. Beside it is also equally important to answer the question. How farmer perceive the important of risk factors stir their activities and the adequacy of the tools and methods of treating such risk? Geographical research

focused originally on understanding human behavior in the face of natural hazards, later it has been broadened to include technological hazards as well. Risk perception is related to psychological and emotional factors that have mountainous impact on behavior. Farmers differ widely in their trait, these traits might include management style, perceptions and beliefs and how long they take to revise them, competence with different enterprises, communication skills, attitude towards risks, social circles of influence, and availability of physical resources like credit, land and labour. Predominantly people's perceptions of risk can be categorized into three types. In some people's mind; the relationship between risks and benefits is negative that is high risk equals with low benefit but in aggregate, the real risk benefit relationship in the external environment is positive that is high risk is allied with high benefit. People have different risk profiles and each individual has a different attitude towards risky behavior. Personal attitude and past experiences mould the risk profile of each individual person. Risk assessment involves liberal use of statistical tools, in using one project the future based on past events all the relevant risks need to be analyses carefully, to mitigate the down-side impact of those risks as far as it is possible and economic to do so. Agriculture has always been the ministry of India economy because of its high share in employment and livelihood creation not withstanding its reduced contribution to the nation's gross domestic product (GDP). The share of agriculture in the gross domestic product has registered a steady decline from 36.4 percent in 1982-83 to 17.7 percent in 2010 yet this sector continues to support more than half a billion people in India providing employment to 47.9 % of the workforce in the year 2010. Risk is one of the factors affecting agriculture producer directly or indirectly, risk stretches in the absence of effective mechanism for protection against risk has several adverse implications for stability of agriculture production, farm income, and livelihood, investment in farming and application and adoption of improved technology. In the recent times the farmer's suicides are increasing, because of agriculture distress. Farmers course of action to low risk low yield cropping pattern instead of high risk and high yield cropping pattern to mitigate the twin risk of yield and price. It is to be noted that the suicides of farmers as an indication of our failure to manage risks in agriculture. Agricultural risk is associated with negative outcomes that stem from imperfectly predictable biological, climatic and price unpredictable. There is a need to control the negative aspect or reduce the negative effect of the risk from its consequences. According to ISO, organizations manage risk by identifying it, analyzing it and then evaluating whether the risk should be modified by risk treatment in order to satisfy their risk criteria. According to IEC the standards on risk management deals with risk assessment concepts risk assessment process, selection of risk assessment techniques, and also highlighted the questions. According to ISO risk management can be applied to an entire organization, at its many areas and levels, at any time, as well as to specific function, projects and activities. With these new standards in risk management, present study focused on risk management in agriculture on farming activity, thus provides the scope for our present study.

### **Objectives:**

- To explain the concepts of risks, risk management and risk perception.
- To survey the opinion of farmers on risk and risk management strategies in agriculture among the farmers of dry land farming.
- To examine crisis situations and their possible causes and on consequences.
- To survey the risk management strategies and problems experienced while dealing with risk.
- To analyze farming risk and compare different types of risk.

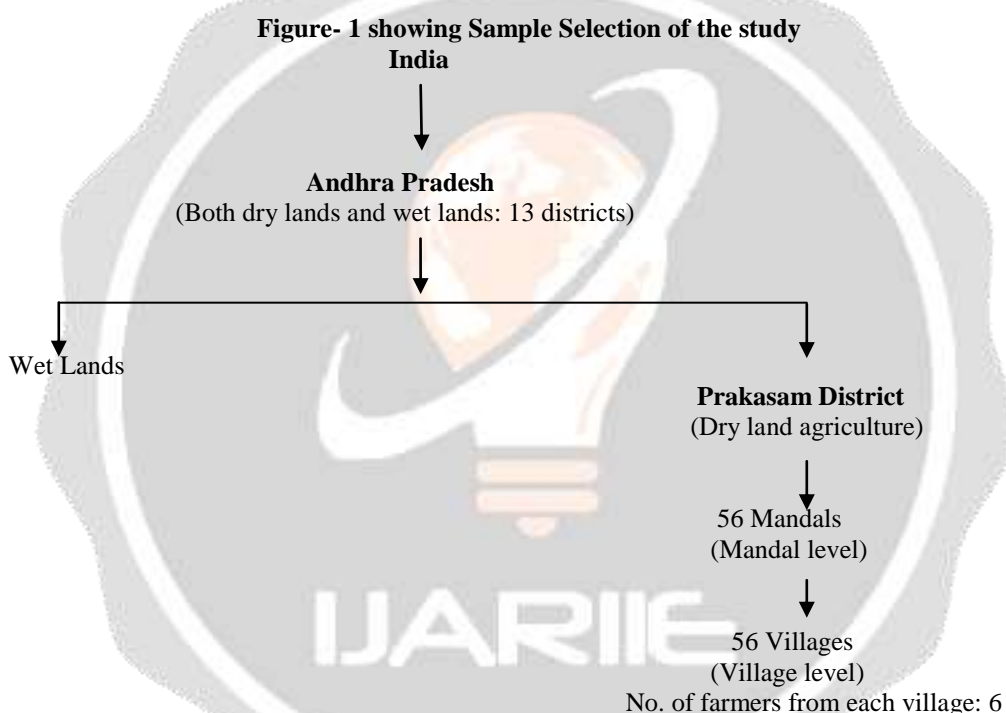
### **Research Methodology:**

Survey conducted in Prakasam district of Andhra Pradesh, survey method is used for data collection, to collect primary data on farmers risk perception, experience, and information source from among the farmers of the district. Personal interview schedule is used for data collection, information collected by using face-to-face information collection mode. Stratified sampling method is used for sampling plan and for analysis purpose; percentages, averages, rating scale method are used.

### **Review of Literature:**

According to Binswanger (1980), who conducted investigation with individuals in rural India with real monetary payoffs, 300 individuals were randomly picked from the six villages that formed the field subjects for the ICRISAT study. In his experiment, Binswanger offered the subjects the choice of lotteries with different payoffs. From the choices made by the subjects, it is possible to infer their risk aversion. From analyzing the pattern of such choices, Binswanger found that most farmers in the ICRISAT villages were intermediate to moderately risk averse. To

understand whether farmer’s risk attitudes are a constraint for undertaking new money invested and the adoption of new technologies, Lipton and Longhurst (1989) point out that although poor people often give uncertainty as a reason for delaying or refusing adoption, the effect of risk aversion is not straightforward. In the semi-arid tropics, digging wells and purchasing fertilizer are two most risky cash-intensive decisions (Walker and Ryan (1990). Present study aims on risk perception and experience in indian agriculture. The objective of the survey is to explore farmer’s point of view and his experience on risk and risk management, for the purpose face-to-face survey method is used to collect information. Tests applied to analyze the opinions of farmers regarding each risk factor, the reasons and consequences of crises. For statistical analysis purpose, rating scale method, statistical techniques and simple statistical tools are used. Statistics is concern with the aggregate and not just the individual data items or isolated measurement of certain variables. Stratified sampling method is used for the survey; the point of this method is to divide the heterogeneous population into homogenous subgroups, so called strata. Strata are mutually exclusive, so every element in the population must be assigned to only one stratum. The elements of the sample are randomly selected from each stratum, the main characteristic of the proportional allocation is that it uses a sampling fraction in each of the strata that is proportional to that of one’s found in population the sample can be considered representation which makes it possible to examine the features of the population on a relatively small sample.



**2. RESULTS:**

**Risk perception and experience - Prakasam District of Andhra Pradesh**

**2.1 General information of the farmer**

**Table- 1 Age of Principal operator of the farm**

S. No.	Age	No. of Interviewed Partners	Contribution %
1	Below 30	41	8.13

2	30 - 40	40	7.93
3	40 - 50	161	31.94
4	50 - 60	179	35.51
5	60 and above	83	16.46
	<b>Total</b>	<b>504</b>	<b>100</b>

As per the table-1, farmers in the age below 30 age group are 41 (8.13%) followed by farmers age group from thirty to forty are 40 (7.93%), followed by the age group of 40 to 50 are 161 (31.94%), this is followed by the age group of 50-60 are 179 (35.51%), this is followed by the age group of 60 and above are 83 (16.46%). Hence it can be construed that majority of the farmers are in the age group of forty to fifty and fifty to sixty.

## 2.2 Type of farming

**Table- 2**  
**Type of farming activity taken up by the farmer as a derivation of income**

S. No.	Type of farming	No. of farmers	Contribution %
1.	Irrigated farming	152	30.15
2.	Dry farming	352	69.84
	<b>Total</b>	<b>504</b>	<b>100</b>
3.	Specialized farming	201	40.00
4.	Mixed farming	203	40.27
5.	Diversified farming	100	19.84
6.	<b>Total</b>	<b>504</b>	<b>100</b>

Tandon and Dhondyal considered social factors as another category of factors which affect the types of farming. The kind of people in the community and the provision of protection of crop against the hazards of birds and animals ravages may influence the community to change the cropping pattern in a certain directions. The cooperative spirit includes the farmers to put larger acreage under a crop. Farming is classified into six types based on the enterprise. (i) Specialized Farming, (ii) Diversified farming, (iii) Mixed farming, (iv) Dry Farming, (v) Irrigated Farming and (vi) Ranching. Operational decision of the farmer include how much to produce? Answer of this question relates to enterprise-mix. This decision has two aspects i.e., enterprise mix and resource use.

Enterprise mix involves degree of specialization or diversification of farming. Combination of crop and livestock enterprises depend on the level of resources available and land use capabilities in addition to the existence of complementary and supplementary relationships. With the above illustration it is asked in the schedule, type of farming activity taken up by the farmer as a source of income. As per the table-2, farmers in irrigated farming are 152 in (30.15%), farmers in dry farming are 352 in (69.84%), farmers of specialized farming are 201 in (40.00%), farmers of mixed farming are 203 in (40.27%), farmers of diversified farming are 100 in (19.84%).

## 2.3 Farmers opinion on Factors affecting farming activity

Success of agricultural production depends on the combined effect of several risk factors in case of which the

subjective opinion of the farmers define how risk they consider each of these factors. Decision of what resources and to what extent to use to offset these risks also depends on how farmers assess these factors. With the above illustration it is asked in the research schedule, factors affecting their farming activity.

**Table -3 Farmers opinion on Factors affecting farming activity**

S. No	Risk factors / source of risk	overall average respondents on scale (1 to 7)
1.	Illness	3.7 (Moderate Effect)
2.	Debt	5.23 (Large Effect)
3.	Political measures	3.67 (Moderate Effect)
4.	Technology process	2.63 (Negligible Effect)
5.	Weather and natural disasters	6.97 (Large Effect)
6.	Monsoon delay & climate change	5.73 (Large Effect)
7.	Animal disease and epidemic	2.21 (Negligible Effect)
8.	Difficulties in selling farm products	2.63 (Negligible Effect)
9.	Volatility of prices	5.68 (Large Effect)
10.	Input market	4.81 (Moderate Effect)

Respondents were asked to rate the listed factors according to farmers personal opinion. Respondents had the possibility to rate each factor on a scale of 1-7 where 1 means that the given factor has no effect on farming while in case at agricultural production. As per the table-3, overall average show that debit, delay in monsoon and effect of climate change, weather and Natural disasters volatility of price has large effect on farming, illness of the farmer political measures and inputs market has moderate effect and Technology process, animal disease and epidemic and difficulties in selling farm products has negligible effect.

#### 2.4 Farmers experience on risk and crisis

**Table -4 Farmers experience on risk and crisis**

S. No	Risk management tools	No of Respondents	Contribution in percentage %
1.	YES	488	96.82
2.	NO	16	3.18
3.	TOTAL	504	100

It is asked in the schedule about farmers experience on risk and crises situation in farming activity. In last five years, figure shows 488 farmers in (96.82%) responded says 'yes' where as 16 of the farmers 6 in (3.17%) says

'No'. Hence it can be construed that severity of risk is very high in the District.

## 2.5 Farmers Opinion on Main attributes of crisis situation

**Table-5 Farmers Opinion on Main attributes of crisis situation**

S. No	Attributes of Crisis	Crop Production	Live Stock Production
1.	Affected Revenue as a Percentage of Total Revenue	61.47	10.32
2.	Average frequency of crisis situation	02.96	01.44

Agriculture is associated with many types of risk that expose farmers to potential losses. It is important to understand what accidental loss occurs in farming, main attributes of crisis situation, affected revenue as a percentage of total livestock and frequency of crises situation. With the above illustration it is asked in the schedule attributes of crisis situation experienced in crop production. The overall average percentage loss in farming is 61.46 and number of occurrences of crises situation is overall average of frequency of crises situation that is 2.96 in average. It is also asked in the schedule attributes of crisis situation experienced in livestock production. The overall average of affected revenue as % of total revenue of live stock production is 10.32%. Overall average frequency of crisis situation is 1.44 in livestock production, according to the table-5.

## 2.6 Farmers Opinion on Causes for risk and crises situation

It is asked in the research schedule, causes for crises in farmers, from which farmers had to select type of risk affecting their farming farmers opinion on causes for crises situation in farming, climatic events 448 in (91.80%), Delay in monsoon and effect of climate change 422 in (96.72%), Market condition 473 in (96.93%), Farmers poor health 175 in (35.86%), Policy measures 39 in (7.9%) and biological aspects, Hence it can be construed that severity of risk is very high in farming, According to the table-6.

**Table-6 Farmers Opinion on Causes for risk and crises situation**

S. No	Causes for risk and crises situation	No of farmers	Contribution in percentage %
1.	Climatic events	448	91.8
2.	Delay in monsoon & affect of climate change	472	96.72
3.	Animal Disease & Epidemic(biological aspects)	131	26.84
4.	Policy measures	39	7.99
5.	Market conditions	473	96.93
6.	Farmers poor health	175	35.86
7.	Total	488	100

## 2.7 Farmers Opinion on Risks threatening crop production.

**Table-7**  
Farmers experience on risk threatening their crop production in prakasam district

S. No	Farmers experience on risk threatening crop production	No of farmers	Contribution in percentage %
1.	Insect pest	97	19.87
2.	Periodic deficit	332	68.03
	Diseases and epidemic	21	10.34
3.	Delay in monsoon	359	73.56
4.	Effect of climate change	252	51.63
5.	Floods	91	18.64
6.	Heavy rain	92	18.81
7.	Cyclone	117	3.97
	Biological aspects	153	31.35
	Total	488	100

While markets have been adverse to the farmer, cost of cultivation is increasing in the intensive agriculture models being pursued due to ever-increasing costs of seed, agri-chemicals, irrigation etc. Labour costs are rising too. Intensive agriculture models however lead to degradation / depletion of productive resources like land and water, the very basis of farm livelihoods. About the reason for farmer's low income, particularly small and marginal farmers - is the high cost external input in agriculture. Hence the urgent need to come out of most of the agriculture issues is to encourage family farming based on integrating system of farming with integrating of tree cropping, animal husbandry and agriculture produce, scientific prices for agriculture produce and not only support price.

Agriculture is affected by many uncontrollable events that are often related to weather, including superfluous or insufficient rainfall, insect pests and diseases. Agriculture production is a biological process. i.e., the growth in agriculture takes a natural time and cannot be increase speed to the desired extent as can be done in the manufacturing sector. It is asked in the research shadier, risks threatening crop production. Farmers responded on their experience, risk threatening, and crop production. Delay in monsoon and affect by monsoon 359 farmers in (73.56%), periodic deficit 332 farmers in (68.03%), Insect pest 97 farmers in (19.87%), diseases and epidemic 21 farmers in (10.34%), floods 91 famers in (18.64%), heavy rains 92 farmers in (18.85%), cyclones 117 farmers in (23.97%) and biological aspects 153 farmers in (31.35%). Hence it can be construed that production risk affect farming at large extent.

## 2.8 Farmers Opinion on Problem related to availability, quality, and cost of an input

**Table-8**  
Farmer's problems like availability, quality and cost of an input experienced in his farming activity.

S. No	Farmer's problems like availability, quality and cost of an input experienced in his farming activity	No of Respondents	Contribution in percentage %
1.	YES	362	74.18
2.	NO	126	25.81
3.	TOTAL	488	100

Production as a source of risk concerns variation in output also arising from availability, quality and cost of an input. With the above assumption it is asked in the research schedule farmers experience on availability, quality and cost of an input. Respondents were asked to answer 'Yes' or 'No', on the problem of availability quality and cost of an input. 362 farmers in (74.18%), responded says 'Yes' and 81 in (25.81%) says 'No' as shown in the table-8.

### 2.9 Problems experienced by the farmers when selling their farm produced.

**Table-9**  
Problems experienced by the farmers of the district when selling their farm produced

S. No	Problems experienced by the farmers of the district when selling their farm produced	No of farmers	Contribution in percentage %
1.	Inability to deliver perishable products to right market place in right time	73	14.95
2.	Delay and non payment for goods	30	6.14
3.	Price penalty of low quality produce	--	--
4.	Lack of well regulated market yard	131	26.84
5	Lack of remunerative price	399	87.76
6.	No market in formation	68	13.93
7.	Volatility of price	462	94.67
8.	Lack of infrastructure	68	13.93
9	Total	488	100

Agriculture is a seasonal industry. Whereas most other industries are not seasonal Agricultural products are produced in a particular season, they cannot be produced throughout the year. Due to seasonal production of agriculture commodities; there is more supply of the products in the particular harvest ion season or month and prices go down. Most of the farm products are perishable in nature and generally cannot be stored for a long period under natural conditions. The period of perish ability of farm products varies from few hours to a few months. Example, milk, fruits, flowers, vegetables, grains etc. with the above assumptions it is asked in the research schedule problems experienced by the producer when selling their farm produced.



Farmers willing to experiment with more profitable crops like fruits and vegetables will find it difficult to diversify. Inadequate market support systems coupled with lack of warehousing and marketing infrastructure will increase the farmer's risks. The answer could lie in increased private investment. But policy support is lacking. Public research, extension and market support system are currently confined to food grains.

Farmer's responded for volatility of price 462 in (94.67%), lack of well regulated market yards 131 in (26.84%), lack of remunerative price 399 in (81.76%), delay and nonpayment of goods 30 in (6.14%) and inability to deliver perishable products to right market at right time 73 in (14.95%). Hence it can be construed that majority of the farmers believe in their experience that volatility of price and lack of remunerative price is a probe when selling their farm produced. Beside there are other problems live in ability to deliver perishable products to right market at right time and lack of well regulated market yards.

## 2.10 Farmers perception of access to credit

**Table-10**  
**Farmer's perception of access to credit among the farmers of the district**

S. No	perception of access to credit	No of farmers	Contribution in percentage %
1.	There is no access to credit at all	284	58.19
2.	Cost and conditions are reasonable but require long procedure	119	24.38
3.	There is timely access but with reasonable cost and conditions	73	14.95
4.	There is timely access but with hard conditions and high cost	12	2.45
7.	Total	488	100

Beside it is also asked about farmers perception of access to credit, farmers opinion on access to credit, there is no access to credit at all 284 in (58.19%), cost and conditions are reasonable but requires long procedure 119 (24.38%), there is timely access but with reasonable cost and conditions 73 in (14.95%), there is timely access but with hard conditions and high cost 12 (2.45%). Hence it is construed that majority of the farmers have mixed opinion on access to credit.

## 2.11 Institutional changes and government policies affecting farming activity

**Table-11**  
**Farmers experience any institutional changes affect their farming activity.**

S. No	Institutional changes affect their farming activity	No of Respondents	Contribution in percentage %
1.	YES	68	13.93
2.	NO	420	86.06

3.	TOTAL	488	100
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Efforts of the government to help small farmers through 'land reforms' could not deliver expected results, Grains of "Community Development Programme" (CDP) reached the farmers belonging to higher income bracket-etc, mainly, leaving the small holders behind, Impact of programmes such as 'Intensive Agricultural District Programme (IADP) and Intensive Agricultural Area Programme (IAAP) on small holders were not discernible. Even after revamping some existing financial institutions to supply more credit to this category, a part from establishing new exclusive structures such as Regional Rural Banks (RRBs) the credit supply position to small holders which is one of the deciding factors of the overall development of this section could not be met satisfactorily.

Farmers are also affected by policies that are not specific to the agriculture sectors, monetary and fiscal policies are the most obvious examples. Also services like market organization service, input dealers service; government extension service, cooperative service and bank service have their effect on farmer's decision making, with this assumption. It is asked in the research schedule, farmers experience on institutional changes affecting their farming, it is also asked policies affecting their farming and policy instruments presently used by the farmer. Government programs and policies place restrictions on farm production and marketing programs. The farmer has to adjust the level of production and resources use according to government programs and policies. According to the table-11, institutional changes and government policies affecting farming activity, farmers responded 420 in (86.06%) 'No' and 68 in (13.93%) 'Yes'. Hence it is construed that majority of the farmers believe, government policies have less affect on farming.

## 2.12 Farmers opinion on government policies affects their farming

**Table-12**  
**Farmer's opinion on government policies affects their farming.**

S. No	Farmer's perception of access to credit	No of farmers	Contribution in percentage %
1.	No Answer	307	62.90
2.	Decision on storage programmes	14	2.86
3.	Decision on subsidy	68	13.93
4.	Decision on International Policy	--	--
5.	Decision on Production Policy	13	2.66
6.	Decision on acreage allotment	18	2.68
7.	Decision on tax policy	5	1.02
8.	Decision on crop insurance	18	3.68
9.	Decision on support price	156	31.96
	Total	488	100

According to the table-12, policies affecting their farming activity, farmers experience of government policies, decision on support price 156 in (31.96%), decision on crop insurance 18 in (3.68%), decision on tax policy 5 in (1.02%), decision on acreage allotments 18 in (2.68%), decision on subsidy 68 in (13.93%), decision on storage programs 14 in (2.86%) and farmers with no answer are 307 in (62.90%). Hence it is construed that decision on support price has affect on farming activity.

### 2.13 Farmers personal problems

**Table-13**  
**Personal problems such as death, injuring or poor health (illness)**  
**of the principal operator of the farm experience among the farmers of the district**

S. No	Institutional changes affect their farming activity	No of Respondents	Contribution in percentage %
1.	YES	92	18.85
2.	NO	396	81.14
3.	TOTAL	488	100

In Indian agriculture and farm business cannot be clearly separated from each other, farming combines a mode of life with the business. Farmers and his family member live there and work on the farm. Most industries are organized on a large scale corporate basis whereas; farming is organized on an individual owner operated family farm basis. To enhance personal managing skills of the farmer, field schools were organized at village level. Farmers field schools at village level with an intention to implement integrated pest management and to impart technical knowhow to assess by them about pest management. The pesticide consumption has fallen to a great extent in the recent years. To analyze the personal problems farmers it is asked in the schedule problems like death, injuring or poor health (illness) experienced by the principal operator of the farm. According to the table-13, farmers 396 in (81.14%) responded 'No' and 92 in (18.85%) responded 'Yes'.

### 2.14 Farmers opinion on crop insurance

**Table-14**  
**Farmers opinion on crop insurance is must and compulsory**  
**in the District**

S. No	Farmers Opinion on Crop Insurance is must and compulsory	No of Respondents	Contribution in percentage %
1.	YES	420	86.06
2.	NO	68	13.93
3.	TOTAL	488	100

It is asked in the research schedule farmers opinion on crop insurance is must and compulsory. Table-14 shows the respondent, farmers 420 in (86.06%) says 'Yes' and 68 in (13.93%) says 'No'. Hence it is construed that farmers believe that crop insurance is must and compulsory.

### 2.15 Farmers causes for not preferring crop insurance in the District.

**Table-15**  
**Causes for not preferring crop insurance in the District**

S.I No	Causes for not preferring crop insurance	Number of respondents	Contribution in Percentage (%)
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1	No answer	6	8.83
2	Have bad experiences with insurance	8	11.26
3	Do not believe insurance can pay it off	46	67.64
4	Insufficient liquidity	8	11.76
5	Total	68	100

It is also asked in the research schedule farmer's opinion on causes for not preferring crop insurance. According to the table-15, farmers responded, insufficient liquidity 8 in (11.76%), have bad experiences with insurance 8 in (11.76%), no answer 6 in (8.82%) and do not believe insurance can pay off its cost 46 in (67.64%).

### 3. FINDINGS

- Most of the farmers are depending on specialized farming, income of the farmer is once in a year, those farming is of high risk and in low income, the resource of land, water other machinery are not in use for remaining period.
- Farmers of the district perceive production and price as the important risks and government policies, financial consequences and illness of the farmer and low risks.
- Perish ability risk is one of the most neglected risk for consideration by the farmers of the district. Avoidance of this type of risk is losing out the opportunity or potential profits, farmers consider perishable risk as beyond their control.
- 67.64% of the respondents do not believe insurance can pay it off, crop insurance as a risk sharing tool. It is found existence of crop insurance is limited in the district.
- Impact of events could be positive or negative, diversified farming is found an appropriate balance between the negative impact in the district, still only 19.84% diversified farming exist in the district.
- It is observed that farmers are of with no attitude towards farm business, they believe farming as survival source rather income source this behavior affects the age group of the farmer. According to the farmers of Prakasam District. Production risk factors and marketing risk factors have great effect on their farming activity. Compared with personal and financial risks.
- Farmers of Prakasam District climatic events, climate change, market conditions are the causes for crises situation.
- Risk is one of the most important factor affecting farming activities, more than one way beyond the control and correlative in later. There is a huge income loss due to natural events and market conditions in particular. An event affecting farmers more than once in four years make these losses. Farmers are unable recover from this disturbance in stability which makes farming high risk low income activity.
- Suicides of farmers as an indication of our failure, to manage risks in agriculture the study is an important step towards strengthening risk management in Indian agriculture. The agrarian distress of late is assuming lot of being significant and should be handled urgently. Sources of risk perceived by farmers of the five categories of risk that have been identified, price and production risk were perceived as the most important source among the

farmers of the District.

- In case of the District there is severe loss. The farmer's are ruined in times of natural calamities or the prevalence of a disease of the crop.
- The return in cash is mostly once in a year. If there is a good crop, the farmer's are getting more return otherwise not. It means, the return from agricultural products is irregular.
- In specially crops and vegetables, contract farming is gaining ground as a mechanism by which private processors obtain supplies from farmers. These crops are characterized by substantial market risks and contracting allows the transfer of these market risks from the farmer to the processor.
- Futures trading are a market based institution for trading price risks which allows farmers to hedge against market risks. However, transactions costs are a formidable barrier to the participation of farmers in futures markets.
- Rainfall and drought risks dominate agriculture in the District. At an aggregate level, irrigated agriculture is found to be more stable than un-irrigated agriculture, irrigation sources also depend on rainfall, and irregular rainfall and very low rainfall have effect on irrigated agriculture too.
- Due to increase in oral tenancy contracts, the accessibility for credit from formal financial institutions has been difficult, particularly for tenant farmers, raise in inputs cost and operational cost make the situation worst.
- Major policy measures influencing the wage increase are MNREGA and Minimum Wages Act implemented by the government.

#### 4. CONCLUSION

Risk exposing of agricultural holding will increase in the future which make farmers face huge losses more frequently. To deal with risk in agriculture it is the duty of the farmer to apply adequate risk management strategies and tools. Global economic environment, affect of climate change, poor management practices enhances the problem of risk in Indian agriculture. Applying low risk technologies, diversification, agricultural insurances, hedging, contracting, policy regulations, information support, effective use of natural resources and professional training will play an increasingly important role in the risk management practices of the farmers. There is a need for holistic approach to bring farm stability, profitability, effective use of natural resources, effective use of government programmes and skillful management; it is possible by selecting integrated farming as low risk activity.

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