

## Factors Influencing the Participation of Non-loanee Insured Farmers Under PMFBY in Telangana State

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**Abstract:** Crop insurance serves as a strategy to minimize risk in agriculture in the areas where there is high prevalence of risk due to weather events. In this background the present research on Factors influencing the participation of nonloanee insured farmers under PMFBY in telangana state undertaken to study the different factors that affect the farmers decision to participate in crop insurance programme in telangana state. For the study 2 districts are selected purposively based on highest number of farmers covered under PMFBY in the state and districts and villages are randomly selected. The data obtained is analysed through logit regression model. The factors like production risk, contact with extension agencies, positive feedback from the experienced farmers and social group participation and income of farmers found to be significant variables which are affecting farmers participation.

**Keywords:** Crop Insurance, PMFBY, Nonloanee insured farmers, Factors influencing participation.

### INTRODUCTION

Agriculture, unlike any other sector, is highly exposed to the vagaries of nature. Unpredictable climate variability, natural catastrophes, pest and diseases infestation pose great threat to the consistent performance of crop production. Farmers, who are poor and have limited means and resources to bear these risks, determine the domestic food supply and hence the stability of the economy as a whole. In these conditions, crop insurance can help the farmers to reduce the production risk to some extent.

Government of India introduced various crop insurance schemes since 1979. These crop insurance schemes failed to achieve the desired objectives. Due to this a new crop insurance scheme PMFBY introduced in the country from kharif 2016 onwards.

Telangana state is geographically located in semi-arid area and has a predominantly hot and dry climate. Most of the farmers in Telangana

depend on rainfall for raising their crops. Mahabubnagar and Karimnagar districts of Telangana state are purposively selected for the present study as in these regions a greater number of farmers covered under PMFBY and also remained on the forefront in deriving benefits from PMFBY. Under these circumstances, the present study was undertaken with the specific objective to study the factors influencing the participation of non-loanee insured farmers under PMFBY in Telangana state.

Multistage sampling technique was used in selection of Districts, Mandals and Villages. In the first stage two districts namely Mahbubnagar and Karimnagar were selected based on highest number of farmers covered under the scheme and a greater number of farmers benefitted from the scheme. Similarly, Mandals and villages were selected based on highest number of farmers covered and benefitted from the scheme. From each selected village 45 farmers were randomly chosen representing 15 loanee insured, 15 non-loanee insured and 15 noninsured. The required primary data on factors influencing participation of non-loanee insured farmers was obtained through a pretested schedule through interview method. The collected data was analyzed using logit regression model to arrive at valid conclusions.

### **Factors Influencing Participation of Non-loanee Insured Farmers under PMFBY**

From the estimates of logit model for Mahbubnagar district, it is found that except age of the farmer all the other variables are positively affecting the adoption of crop insurance by non-loanee farmers. Fluctuations in the production between years (Production risk) and the regular contact with the extension agencies found to be highly significant. Opinion of the experienced farmer about the benefits of crop insurance is also found to be significant in the adoption of crop insurance. Odds ratio of production risk shows that there is 6.8 times more probability of adopting crop insurance. Positive opinion of experienced farmer about benefits from crop insurance programme shows that there is 4.9 times more chances of participation than those farmers who didn't receive any positive response. Frequent contacts with extension agencies also increasing the chances of participation by nearly 5.4 times than those farmers who do not have regular contact with extension agencies.

For Karimnagar district it is found from the results of logistic regression analysis for participation of non-loanee farmers in crop insurance that the significant variables which influencing the participation are positive opinion of experienced farmer and frequent contact with extension agencies. These

**Table 1: Factors influencing participation of non-loanee insured farmers under PMFBY in Mahabubnagar district**

<i>Variables</i>	<i>Description</i>	<i>B</i>	<i>S.E.</i>	<i>Significance</i>	<i>Exp(B)</i>
Age	Age of farmer (in years)	-0.035	0.0483	0.464	0.9652
Education	Education (years)	0.185	0.179	0.300	1.203
Experience	Farming experience (years)	0.046	0.0457	0.311	1.047
Income	Income of farmer	3.31E-05	2.6E-05	0.214	1.000033
Land size	Land size (acres)	0.250	0.2612	0.337	1.284
S. part.	Social group participation (1 for Yes, 0 for No)	0.480	0.8899	0.589	1.616
Opinion	Opinion of experienced farmer (1 for Yes, 0 for No)	1.590	0.874	0.069*	4.906
P. risk	Production risk (1 for Yes, 0 for No)	1.918	0.767	0.0124**	6.813
E. cont.	Contact with extension agencies (1 for Yes, 0 for No)	1.690	0.837	0.043**	5.420

Note: \*\* and \* show significance at 5% and 10% levels respectively.

are factors which found to be significant at 5 percent level and the factors like production risk and income levels of farmers are found to be significant at 10 percent level. Other factors like education, land size, social group participation, also found to be positively influencing in participation in crop insurance. Age of the farmer is negatively influencing in adoption of crop insurance. A positive opinion of experience farmer about crop

**Table 2: Factors influencing participation of non-loanee insured farmers under PMFBY in Karimnagar district**

<i>Variables</i>	<i>Description</i>	<i>B</i>	<i>S.E.</i>	<i>Significance</i>	<i>Exp(B)</i>
Age	Age of farmer (in years)	-0.047	0.0523	0.3713	0.944
Education	Education (years)	0.191	0.1955	0.3263	1.2115
Experience	Farming experience (years)	0.018	0.0466	0.6966	1.0183
Income	Income of farmer	5.64E-05	3.1E-05	0.0699*	1.000056
Land size	Land size (acres)	0.270	0.2824	0.3389	1.31
S.part.	Social group participation (1 for Yes, 0 for No)	0.879	0.868	0.3108	2.410
Opinion	Opinion of experienced farmer (1 for Yes, 0 for No)	1.882	0.8925	0.0349**	6.567
P.risk	Production risk (1 for Yes, 0 for No)	1.302	0.7931	0.0958*	3.679
E.cont.	Contact with extension agencies (1 for Yes, 0 for No)	1.730	0.8786	0.0488**	5.645

Note: \*\* and \* show significance at 5% and 10% levels respectively.

insurance increases the probability of participation nearly by 6.5 times than those farmers who didn't receive any positive opinion from other experienced farmers. Frequent contact with extension agencies increases participation by 5.6 times than who had no contacts with extension agencies. Odds ratio of income of farmer shows that 1000 rupees increase in income increases chance of participation by 5.6 percent. Farmers perceived risk in production due to various reasons increases the probability of participation by nearly 3.7 times.

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