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## **Farmers Perception towards Pradhan Mantri Fasal Bima Yojana in Salem District**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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### **ABSTRACT**

The aim of the study is to ascertain the perception of farmers towards Pradhan Mantri Fasal Bima Yojana (PMFBY). The research design adopted for this study is an ex-post facto. The present investigation was carried out in Konganapuram and Kadayampatti block of Salem district of Tamil Nadu. The duration of the study is from 2020-2021. As per the list provided by Joint Director of Agriculture and other officials farmers were selected from each village, who have registered under P.M.F.B.Y. Respondents were selected from each village through proportionate sampling method and the sample size was 117. Based on judges' opinion and review of literature, the well-structured interview schedule was prepared and used to collect data from the respondents. The collected data were coded, quantified, classified, tabulated and analyzed with the help of frequency and percentage to get the inference. The statement like all farmers can pay the amount of premium under crop insurance ranked as 1 (MS - 2.52) followed by the damage caused by fire and electricity must be included in Insurance (MS - 2.44), It is mandatory for all farmers to get crop insurance (MS - 2.42) were ranked as 2 and 3 respectively. As crop insurance protects the farmers from the

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uncertainty of risk in farming like natural calamities (floods, droughts, cyclones, and earth quakes, etc.). That crop insurance is mandatory for every type of farmer; Government should take the initiative to give subsidies for small scale farmers and large-scale farmers as a basis of proportion to their income levels.

**Keywords:** PMFBY; perception; crop insurance; agriculture; loanee farmers.

## 1. INTRODUCTION

Agriculture is backbone of Indian economy. The share of agriculture and allied sector in total Gross Domestic Product (GDP) is 16.00 per cent in Indian economy. In India about 70 per cent of population depends on agriculture. Progress of our nation is impossible without the development of the agriculture. However it involves high risk and uncertainty such as drought, cyclone, floods, landslides, storms, earthquake etc. All these events affect farmers' income adversely and they are out of control. Crop insurance is considered to be solution for ensuring farm income by promoting and encouraging technology, investment and credit flow. Agricultural Insurance is a tool to prevent farmers from financial losses arises due to uncertainties. It is not only stabilizes the farm income but also helps the farmers to initiate production activity after a bad agricultural year. It moderate the shock of crop losses by providing farmers with a minimum amount of protection Goudappa et al. [1].

In India, insurance in agriculture emerged during 1947-48 thus it recommends homogenous area approach and later crop insurance bill in 1965 and then expert committee headed by Dharam Narian report denying crop insurance scheme in 1971. Later, Dandekar in 1976 advocated crop insurance and pilot crop insurance scheme (PCIS) was implemented in 1979 with the involvement of General Insurance Corporation (GIC) which covered 13 states and 6.27 Lakhs of farmers till 1984-85. During 1985 comprehensive crop insurance scheme (CCIS) was implemented and replaced by National Agricultural Insurance Scheme (NAIS) in 1999 to include non-loanee farmers which continued till 2015- 16. To remove the arguments on the merits and demerits of NAIS, a new scheme, Modified National Agricultural Insurance Scheme (MNAIS) based on actuarial premium rates expected to generate more benefits to farmers through coverage of prevented sowing/planting risk and post-harvest losses, higher indemnity level of minimum 70 per cent with more precise calculation of threshold yield was implemented during 2010. Between the years 1985 - 2013, the performance of the crop

insurance schemes has been modest Jamanal [2].

In June 2016 the government has launched PMFBY (Prime Minister Fasal Bima Yojana) with the objective of "one nation, one scheme". The scheme has attempted to reduce the insurance premium to some extent and improve the expansion of insurance coverage by including more crops and risk factors into consideration but still it has faced a sharp decline in the take up of the insurance scheme by farmers during the year 2017-2018 Chakraborty et al. [3]. PMFBY that will replace the existing two schemes NAIS as well as MNAIS which have had some inherent drawbacks. The farmers' premium would be 1.5 per cent for Rabi food grains and oilseeds crops, while 2.0 per cent for kharif food grains and oilseeds crops. For horticultural and cotton crops it has been fixed at up to 5.0 per cent for both the seasons Devi [4]. Crop insurance can surely be considered as a shield against anticipated loss by which farmers can stabilize farm income and investment it can also guard against disastrous effect of losses due to natural hazards. Keeping the importance of crop insurance, the present study was carried out in Konganapuram and kadayampatti block of Salem district to know the Perception of Farmers towards Pradhan Mantri Fasal Bima Yojana (PMFBY).

### 1.1 Objective of the Study

1. To know the farmers perception towards the PMFBY scheme.

## 2. MATERIALS AND METHODS

The present investigation was carried out in the Salem district of Tamil Nadu. The research design adopted for this study was ex-post-facto. Salem district comprises 20 blocks, out of which Konganapuram and Kadayampatti block from which three villages each were purposively selected as it has had a higher number of beneficiaries of PMFBY since 2016. As per the list provided by JDA and other officials, farmers were selected from each village who have registered under PMFBY. respondents were

selected from each village through a proportionate sampling method, and the sample size was 117. To understand the level of perception on pmfby scheme among the respondents, a scale developed by Jain et al. [5] was adopted after slight modifications. The interview schedule prepared was pre-tested (with 5 percent of sample size in a non-sample area) and proceeded for interviews.

The perception scale had 15 statements, and the responses were collected in a three-point continuum with a score of 3 for 'complete

perception' and 2 and 1 for 'partial' and 'no' perception. To get the mean score for each statement – the sum of responses recorded was divided by the total number of respondents. Further statements were ranked based on the mean score obtained.

### 3. RESULTS AND DISCUSSION

The distribution of respondents according to perception towards PMFBY were collected, analyzed and presented in Table 1.

**Table 1. Perception of the respondents on PMFBY**

S.No	Statements	Category			Mean score (MS)	Rank
		Complete	Partially	Never		
1.	It is mandatory for all farmers to get crop insurance.	60 (51.30%)	46 (39.30%)	11 (9.40%)	2.42	III
2.	Increase the risk coverage of Crop cycle – pre-sowing to post-harvest losses.	47 (40.20%)	47 (40.20%)	23 (19.70%)	2.21	V
3.	Use of Remote Sensing Technology, Smartphones & Drones for quick estimation of crop losses to ensure early settlement of claims.	28 (23.90%)	59 (50.40%)	30 (25.60%)	1.98	X
4.	All farmers can pay the amount of premium under crop insurance.	67 (57.30%)	44 (37.60%)	6 (5.10%)	2.52	I
5.	Crop damage under crop insurance must be assessed with the help of satellite.	16 (13.70%)	66 (56.40%)	35 (29.90%)	1.84	XIV
6.	The compensation claim amount must be received on time under crop insurance.	39 (33.30%)	57 (48.70%)	21 (17.90%)	2.15	VIII
7.	It is very important for the farmer to be educated to protect his crop from damage.	28 (23.90%)	50 (42.70%)	39 (33.30%)	1.91	XIII
8.	The damage caused by fire and electricity must be included in insurance.	61 (52.10%)	47 (40.20%)	9 (7.70%)	2.44	II
9.	Only the large farmers can afford crop insurance.	40 (34.20%)	36 (30.80%)	41 (35.00%)	1.99	IX
10.	Assessment of damage must be on the basis of particular fields, not on the basis of patwarihalka.	47 (40.20%)	46 (39.30%)	24 (20.50%)	2.20	VI
11.	If the farmer adopts all the technical measures then his premium amount should be reduced.	28 (23.90%)	57 (48.70%)	32 (27.40%)	1.97	XI
12.	Payment of claim amount for damaged crop must be within 15days.	63 (53.80%)	39 (33.30%)	15 (12.80%)	2.41	IV
13.	Provision of claims upto 25% of sum insured for prevented sowing.	41 (35.00%)	40 (34.20%)	36 (30.80%)	1.96	XII
14.	Small and marginal farmers cannot reduce their losses by paying insurance	17 (14.50%)	57 (48.70%)	43 (36.80%)	1.78	XV
15.	All crops must be notified under crop insurance	42 (35.90%)	55 (47.00%)	20 (17.10%)	2.19	VII

The results depicted from Table 1 shows that the statement all farmers can pay the amount of premium under crop insurance ranked as I (MS - 2.52). All categories of farmers such as small, marginal and big farmers were getting loan from bank, so the bank would easily deduct the premium amount from the loan availed by the farmers which makes it easy for farmers to repay the premium amount. Following it, the statements damage caused by fire and electricity must be included in Insurance (MS - 2.44) and It is mandatory for all farmers to get crop insurance (MS - 2.42) were ranked II and III. The farmers perceived that payment of claim amount for damaged crop must be within 15 days (MS - 2.41), Increase the risk coverage of crop cycle – pre-sowing to post-harvest losses (MS - 2.21), and assessment of damage must be on the basis of particular fields, not on the basis of patwarihalka (MS - 2.20), therefore occupied the ranks of IV, V, VI. The statements ranked VII and VIII were that all crops must be notified under crop insurance (MS - 2.19), and the compensation claim amount must be received on time under crop insurance (MS- 2.15). Following statements are only the large farmers can afford crop insurance (MS -1.99), use of remote sensing technology, smart phones & drones for quick estimation of crop losses to ensure early settlement of claims (MS - 1.98), if the farmer adopts all the technical measures then his premium amount should be reduced (MS - 1.97), provision of claims up to 25% of sum insured for prevented sowing (MS - 1.96), it is very important for the farmer to be educated to protect his crop from damage (MS - 1.91), crop damage under crop insurance must be assessed with the help of satellite (MS - 1.84) and Small and Marginal farmers cannot reduce their losses by paying insurance (MS - 1.78) were ranked accordingly. It could be concluded that farmers have a positive perception towards PMFBY so they are requesting government to notify all the crops under it. The findings were in line with the study of Jain et.al (2020).

#### 4. CONCLUSION

The crop insurance owns the risks of the farmers from uncertainty in farming like natural calamities like natural calamities (floods, droughts, cyclones, and earth quakes, etc.). Crop insurance is better off for every type of farmer; Government should take the initiative to give subsidies for small scale farmers and large-scale farmers as a basis of proportion to their income levels. The findings suggested that insurance

agencies may take up a step forward to educate the farmers about crop insurance benefits, and may reduce the premium rates and arrange to smoothen the claim settlement procedures. From the study it is revealed that statement like all farmers can pay the amount of premium under crop insurance ranked as I followed by the damage caused by fire and electricity must be included in insurance (rank II) is mandatory for all farmers to get crop insurance and payment of claim amount for damaged crop must be within 15 days were ranked III and IV.

#### DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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