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## CONSTRAINTS FACED BY THE BENEFICIARIES OF PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY) IN TIRUCHIRAPPALLI DISTRICT OF TAMIL NADU

Iniya V<sup>1\*</sup>, Padma S R<sup>2</sup> and Karthikeyan C<sup>3</sup>

<sup>1\*</sup>Ph.D. Scholar (Agricultural Extension), Department of Agricultural Extension and Rural Sociology, Tamil Nadu Agricultural University, Coimbatore – 641 003, Tamil Nadu, India.

<sup>2</sup>Assistant Professor, (Agricultural Extension), Tamil Nadu Agricultural University, Coimbatore – 641 003.

<sup>3</sup>Professor, (Agricultural Extension), Department of Agricultural Extension and Rural Sociology, Tamil Nadu Agricultural University, Coimbatore – 641 003, Tamil Nadu, India.

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### ABSTRACT

Crop insurance is a crucial tool for risk management that helps farmers deal with possible risks brought about by climate change in an efficient manner. The third-largest crop insurance programme, PMFBY (Pradhan Mantri Fasal Bima Yojana), serves as an assistance programme for farmers who have lost crops due to natural disasters. This study attempts to identify the major constraints faced by the farmers while availing the crop insurance programme. The research was conducted in the Tiruchirappalli district of Tamil Nadu, specifically focusing on the Thuraiyur and Uppiliyapuram blocks due to their significant horticulture crop coverage under the Pradhan Mantri Fasal Bima Yojana (PMFBY). Six villages were purposefully selected from these blocks, considering the number of PMFBY beneficiaries. Employing a proportionate random sampling method, the sample size of 120 was determined. A well-structured and tested interview schedule was used to conduct in-person interviews with the chosen respondents. The constraints were ranked using the Rank-Based Quotient (RBQ) method. The primary challenges faced by the beneficiaries included high premium rates, lack of understanding of the crop insurance programme, lack of trust among farmers about the programme and delay in receiving compensation for crop losses. Clarifying the procedure of getting insurance, lowering the premium rate, organizing training sessions on online insurance applications for farmers' benefit, preventing delayed payment of compensation and establishing initiatives to inform farmers about PMFBY enables all farmers to benefit from it.

**KEYWORDS:** Climate change, Crop insurance, Constraints, Farmers, Pradhan Mantri Fasal Bima Yojana, Rank Based Quotient

### 1. INTRODUCTION

Compared to other economic sectors, agriculture plays a significant part in ensuring the food needed for the world's growing population. The consensus in agriculture is that there exists a lack of certainty

and that the main causes of crop failure or lower yields are unfavourable meteorological occurrences (drought, excessive precipitation, and floods), with pests and diseases (Ezat and Najafi, 2002). Producers developed several risk management strategies over time, including insurance programmes, to control these risks. A person may be able to convert an anticipated, certain and reduced spending (premium) from a future and unknown expenditure (loss), which is often high, under specific insurable conditions (Mehrad and Prabhu, 2021). One of the options to farmers in times of risk is crop insurance. Farmers face a multitude of risks and natural disasters, including plant diseases, pests and weather-related incidents. For this reason, insurance is extremely important. Although there are more programmes in place for farmers, most of them are unknown to them. With the goal of “one nation, one scheme”, the government introduced the Pradhan Mantri Fasal Bima Yojana (PMFBY) in June 2016. By taking into account more crops and risk factors, the programme has made an effort to enhance the expansion of insurance coverage and lower the insurance premium to some extent (Chakraborty *et al.*, 2020). The Pradhan Mantri Fasal Bima Yojana (PMFBY) is farmer-friendly, but many people living in rural areas find it difficult to comprehend and accept this (Hani *et al.*, 2022). It is imperative to consult beneficiaries who are actively involved in utilising PMFBY benefits when developing an extension strategy. Within this framework, the current study was designed to comprehend the constraints encountered by the beneficiaries and gather their helpful recommendations for the efficient execution of the crop insurance programme.

## **2. METHODOLOGY**

An ex-post facto research design was used to conduct this study. The study was carried out in the Tiruchirappalli district of Tamil Nadu and the two blocks, namely Thuraiyur and Uppiliyapuram, were purposively chosen because they have substantial coverage of horticulture crops under the Pradhan Mantri Fasal Bima Yojana. Six villages were purposefully picked from two chosen blocks based on the number of PMFBY beneficiaries. The sample size for each of the chosen villages was calculated using a proportionate random sampling technique. A total sample of 120 farmers was contacted after a list of them was compiled and a simple random sampling procedure was used. Through the use of a pre-tested structured interview schedule, the data were collected from the PMFBY beneficiaries. The gathered information was tabulated and analysed using the appropriate statistical methods and tools, including Frequency, Percentage and Rank Based Quotient (RBQ) method.

This method was used to assign ranks to the constraints. The data gathered on the problems encountered by the respondents was quantified based on the number of respondents who assigned each rank. The ranks given to various problems, along with the frequency of respondents assigning these ranks, were used to compute the Rank Based Quotient (RBQ). The formula for calculating RBQ is as follows:

$$RBQ = \frac{\sum_{i=1}^n (F_i)(n+1-i)}{N_n} \times 100$$

Where,

$F_i$  = Frequency of respondents for  $i^{th}$  rank

$N$  = Number of respondents

$n$  = Number of ranks

$\sum_{i=1}^n$  it directs to sum multiple factors

$$\sum_{i=1}^n (F_i)(n + 1 - i) = F_1 \times n + F_2 \times n - 1 + F_3 \times n - 2 \dots \dots \dots F_n \times 1$$

Obstacles faced by PMFBY beneficiaries during the plan of action are referred to as constraints. It is impossible to transfer technologies across farming communities without prior assessments where one of the essential aspects of extension research is the identification of constraints. When the respondent farmers in the current study are ready to enrol themselves by way of subscribing to the crop insurance policy under PMFBY, they do encounter a variety of restrictions. The constraints are categorised according to their social, financial, promotional, and operational limitations (Sushree *et al.*, 2019), which are discussed sequentially with sufficient data shown in the tables below in the order of their discussion.

### **3. RESULTS AND DISCUSSION**

The words “restrictions,” “bottlenecks,” “problems,” and “hindrances” all refer to situations that make it difficult for someone to get where they’re going, follow a decision, or accomplish a stated goal. The various categories of constraints faced by the beneficiaries were discussed subsequently, accordingly with the findings of the study.

#### **3.1. Social Constraints**

Decisions or actions in a social setting impact both the societal organization and the individuals involved. For farmers in the crop insurance program, challenges arise from their attitudes, perceptions, and understanding of the PMFBY. To understand this, the researcher examined these constraints and gathered data from respondents, as detailed in the following table.

**Table 1. Distribution of the beneficiaries according to Social Constraints (n=120)**

S.No.	Constraints	RBQ Value	Rank
1.	Negative attitude towards the scheme	51.65	IV
2.	The process of crop insurance is challenging	74.15	II
3.	Dispute while establishing claims	61.44	III
4.	Lack of reliability	80.81	I

Table 1 reveals that the primary social obstacle confronting the program is the farmers' mutual lack of trust. Additional challenges include the intricate crop insurance application process and the emergence of disputes during claims settlement, ranking as the second and third social constraints, respectively. A noteworthy constraint is the farmers' unfavourable perception of the program, constituting a significant social concern. This skepticism may be attributed to several factors.

The scheme's guidelines emphasize evaluating claims within specified areas rather than individual assessments, aiming to distribute aid proportionally based on crop loss. However, the complexity of procedures erodes trust within the farming community, constituting a key social hindrance. The crop insurance process, starting at the crop year's outset and taking nearly a year to assess losses, involves multiple financial institutions and implementing organizations. Farmers find the lengthy and intricate disbursement process, requiring the involvement of numerous officials, as the second major social constraint. Despite various restrictions, some optimism prevails regarding the transparent claim settlement process, especially as farmers were less affected by conflicts during that period, marking it as the third constraint. The widely recognized Pradhan Mantri Fasal Bima Yojana, operational for seven years with high farmer enrolment, is viewed positively due to perceived adherence to procedures and regulations, resulting in a comparatively lower negative attitude and ranking as the fourth limitation.

### **3.2. Financial Constraints**

A constraint is something limiting or regulating actions. Decisions to forego unmet desires due to insufficient funds are driven by financial constraints. Today's generation aspires to financial stability, and any rejection of innovation, technology, or policy stems from financial limitations. The study catalogued financial difficulties faced by respondent farmers subscribing to PMFBY, detailed in the table below.

**Table 2. Distribution of the beneficiaries according to Financial Constraints (n=120)**

S.No.	Constraints	RBQ Value	Rank
1.	Provided compensation is less	65.42	III
2.	Government credit assessment is poor	59.31	IV
3.	Hefty premiums	86.27	I
4.	There is no predetermined level of insurance needed	41.37	V
5.	Lengthy formality for credit	74.28	II

According to Table 2, the leading financial constraint is the perceived high premium rate in the scheme, ranking as the top concern. Subsequent constraints include the time-consuming credit formality process (2<sup>nd</sup>) and insufficient compensation amounts (3<sup>rd</sup>). Additionally, issues like poor credit assessment (4<sup>th</sup>) and the absence of a predetermined insurance level (5<sup>th</sup>) are noted. Farmers are reluctant to pay high premiums due to a lack of awareness about crop insurance benefits and uncertainties about returns. The similar findings were imported by Nagesh *et al.*, (2022). Cumbersome credit formalities discourage scheme enrolment and farmers feel the compensation received is inadequate. The government's credit assessment is deemed insufficient, emphasizing the need for a policy framework aligning with the severity of crop loss. Returns vary based on land ownership, impacting the insurance amount for each farmer.

### 3.3. Promotional Constraints

Promotion, as a communication method, aims to inform and persuade audiences about the merits of a product, service, idea, or brand. Its goals include raising awareness and generating interest within target communities. Promotion aids in conveying essential information from implementing agencies to recipients. Constraints in promotion hinder the diffusion of innovations or ideas, contributing to a lack of awareness about the benefits of social assistance programs, as highlighted in the table by the researcher.

**Table 3. Distribution of the beneficiaries according to Promotional Constraints (n=120)**

S.No.	Constraints	RBQ Value	Rank
1.	Lack of knowledge of crop insurance scheme	83.71	I
2.	Public extension systems are lacking	46.82	V
3.	Lack of widespread awareness campaigns	69.81	III
4.	Lack of involvement of insurance agents among the farming community	76.53	II
5.	Inadequate training programme	54.87	IV

The table 3 reveals that the foremost constraint for the targeted community in that particular area is a lack of understanding of the crop insurance scheme. Similar findings were reported by Jadhav and Patil (2016). Subsequent constraints include the limited involvement of insurance agents (2<sup>nd</sup>) and a scarcity of widespread awareness campaigns (3<sup>rd</sup>). Inadequate training programs (4<sup>th</sup>) and the absence of a public extension system (5<sup>th</sup>) further impede implementation. These results were in accordance with Dayal *et al.*, (2017). The primary factor behind these limitations is the scarcity of information, slowing the scheme's diffusion rate. Rural areas lack insurance agents, hindering promotion. Government and non-government entities face time constraints for awareness campaigns. Inadequate training and the absence of a public extension system contribute to the challenges in implementing the plan.

### 3.4. Operational Constraints

The success of any well-planned program or strategy relies on its correct and effective implementation. The challenges faced by both the implementers and beneficiaries during execution can vary, making operations complex. In the current study, operational flaws affecting the crop insurance plan have been identified and documented in the table below by the researcher.

**Table 4. Distribution of the beneficiaries according to Operational Constraints (n=120)**

S.No.	Constraints	RBQ Value	Rank
1.	It takes longer time to receive compensation	91.35	I
2.	Farmers should be aware of the claim stage	68.34	V
3.	Farmers insured were not involved at the assessment stage	77.82	IV
4.	Lack of co - operative's participation	87.63	II
5.	Participation of a few insurance companies	80.31	III
6.	Inadequate availability of weather data	59.43	VI

The aforementioned table indicates that insured farmers encounter a primary challenge, wherein compensation for crop loss is not promptly disbursed, leading to a time-consuming process that constitutes the foremost obstacle. The findings were also in accordance with Darshan *et al.*, (2021) and Singh and Mazhar (2023). Subsequent constraints in the program's execution include the absence of cooperative participation (2<sup>nd</sup>) and the limited involvement of insurance companies (3<sup>rd</sup>). Another significant limitation is the lack of beneficiary engagement during the assessment stage, ranking as the fourth constraint. The farmers' uncertainty about the precise stage for making a claim is the fifth constraint, while insufficient meteorological data presents a major concern as the sixth constraint. These issues may be attributed to several factors.

Given that dealing with crop insurance is not the sole focus of institutions, organizations and individuals, their involvement in various activities on behalf of different sectors leads to varying efforts, sincerity and time allocations. The disengagement of cooperatives may stem from their limited direct involvement with money compared to banks. The low participation of insurance companies results from their reluctance to invest significant time and labour for the relatively small premiums anticipated from covered farmers. Conflicts between functionaries and insured farmers, causing unseen conditions, may have hindered engagement in the assessment process. Farmer misconceptions about automatic compensation upon ensuring their crops contribute to delayed claims, exacerbated when farmers lack complete information about the claim stage. Despite some farmers being aware of the claim process, inadequate information exacerbates the issue.

#### **Suggestions expressed by the beneficiaries for effective implementation of PMFBY**

Table 5 shows the rankings of the suggestions expressed by PMFBY beneficiaries enhance its implementation effectively.

**Table 5. Distribution of the beneficiaries according to their suggestions for effective implementation of PMFBY (n=120)**

S.No.	Suggestions	Frequency	Percent	Rank
1.	The scheme's procedure needs to be clarified	115	95.83	I
2.	The premium rate can be lowered	113	94.17	II
3.	Organise training courses on online insurance applications for farmers' benefit	109	90.83	III
4.	Prevent paying compensation late	107	89.17	IV
5.	Establish activities to educate farmers about PMFBY	103	85.83	V
6.	Premium payments by the government for farmers below the poverty regarding PMFBY	98	81.67	VI
7.	More number of extension agents needed	96	80.00	VII
8.	Continue to provide all crops, a universal premium	95	79.17	VIII
9.	Avoid corruption when resolving disputes	92	76.67	IX
10.	Units of area could be at the individual or village level.	89	74.17	X
11.	Improve the farmers' socio-economic circumstances	88	73.33	XI
12.	Increase the number of insurance agents in rural locations	85	70.83	XII
13.	Increase the connection between banks and farmers	83	69.17	XIII
14.	Arrangements for training of experts in the insurance industry	81	67.50	XIV
15.	Creation of adult education night schools	76	63.33	XV

16.	Getting rid of the bad reputation that comes with buying crop insurance	70	58.33	XVI
17.	Finance scale expansion based on actual crop farming costs	68	56.67	XVII
18.	The establishment of enough banks in remote areas	65	54.17	XVIII
19.	Cover all crops, including vegetables	61	50.83	XIX

\*Multiple responses

The suggestions received from PMFBY beneficiaries were ordered by proportion in order of diminishing relevance and shown in table 5. The top five suggestions, rated highest by beneficiaries, include the need for clarity in the scheme's procedures (95.83%), a potential reduction in the premium rate (94.17%), organizing training programs for farmers on online insurance applications (90.83%), avoiding delays in compensation disbursement (89.17%) and conducting activities to educate farmers about PMFBY (85.83%). Subsequent suggestions include government payment of premiums for farmers below the poverty (81.67%), the requirement for more extension agents (80.00%), offering universal coverage for all crops (79.17%), preventing corruption in dispute resolution (76.67%), considering area units at the individual or village level (74.17%), improving farmers' socio-economic conditions (73.33%), increasing the number of insurance agents in rural areas (70.83%), enhancing the connection between banks and farmers (69.17%) and providing training for insurance industry experts (67.50%). The least prioritized suggestions encompass the establishment of adult education night schools (63.33%), dispelling the negative reputation associated with buying crop insurance (58.33%), scaling finances based on actual crop farming costs (56.67%), ensuring sufficient banks in remote areas (54.17%), and including all crops, including vegetables (50.83%).

To significantly enhance the effectiveness and scope of this crucial program, comprehensive awareness campaigns, engaging platforms, regional languages and advanced technologies like mobile apps and satellite imagery could be employed. Implementing these comprehensive suggestions could make PMFBY more inclusive, farmer-centric and efficient, ensuring timely compensation in case of crop losses and safeguarding the livelihoods of those contributing significantly to our nation's growth.

#### **4. CONCLUSION**

In brief, the main obstacles encountered by PMFBY beneficiaries encompassed elevated premium costs, a limited grasp of the crop insurance initiative, farmers' skepticism regarding the program, and delays in obtaining compensation for crop losses. As a result, addressing these issues involves elucidating the procedures, reducing premium rates, conducting training sessions on online insurance

applications for farmers, averting delayed compensation payments and implementing initiatives to educate farmers about PMFBY for the overall welfare of the farming community.

### CONFLICTS OF INTEREST

The authors have no conflicts of interest.

### REFERENCES

1. Ezat A., Najafi A., (2002). Examine the possibility of future markets on the reducing price fluctuations in agricultural products in Iran, case study of pistachio market. *Iranian Journal of Agricultural Economics and Development Research*. 27: 41-42.
2. Mehrad, A., and Prabhu, M., (2021). Farmers Satisfaction towards Weather based Crop Insurance in Iran. *Journal of Emerging Technologies and Innovative Research (JETIR)*. 8(8): 1229-1239.
3. Chakraborty, S., S. Ghosh, U. Rai, S. Panda, L. Das, P. K. Pal and Mondal, S. (2020). Attitude of Farmers towards Crop Insurance in Coochbehar District of West Bengal. *International Journal of Current Microbiology and Applied Sciences*. 9(09): 2776-2779. <https://doi.org/10.20546/ijcmas.2020.909.344>
4. Sushree, P., Debasmita, N., Mita. M., and Parasar, B., (2019). Difficulties faced by the rice growers of Bhadrak district of Odisha for subscription of Pradhan Mantri Fasal Bima Yojana (PMFBY). *Journal of Pharmacognosy and Photochemistry*. 8(5):148-151.
5. Hani et al., (2022). Constraint Analysis of Pradhan Mantri Fasal Bima Yojana in Tumkur District of Karnataka. *Current Journal of Applied Science and Technology*. 41(4): 32-36.
6. Nagesh et al., (2022). Constraints faced by the beneficiaries of PMFBY and Suggestions given by them to Overcome the Constraints in Srikakulam District of Andhra Pradesh. *Current Journal of Applied Science and Technology*. 41(35): 40-43.
7. Jadhav, S.S., Patil, S.D., (2016). Constraints Faced and Suggestions Made by Crop Insurance Beneficiaries. *Advances in Life Sciences*. 5(5): 1868-1870.
8. Dayal, B.L., Bairathi, R., and Sharma, A. K., (2017). Perception of farmers towards Pradhan Mantri Crop Insurance Scheme. *Indian Research Journal of Extension Education*. 18(1):41-45.
9. Darshan et al., (2021). Constraints and Suggestions Encountered by the Beneficiaries under Pradhan Mantri Fasal Bima Yojana in Tumkur District of Karnataka. *Asian Journal of Agricultural Extension, Economics & Sociology*. 39(12): 33-37. <http://dx.doi.org/https://doi.org/10.9734/ajaees/2021/v39i1230800>
10. Singh, K.D., and Mazhar, S.H., (2023). Constraints and Suggestions of the Respondents about Pradhan Mantri Fasal Bima Yojana in East Champaran District of Bihar. *Asian Journal of Agricultural Extension, Economics & Sociology*. 41 (7):54-60.