

## CRITICAL EVALUATION OF PRADHAN MANTRI FASAL BIMA YOJANA

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### ABSTRACT

*The Pradhan Mantri Fasal Bima Yojana (PMFBY) is a significant initiative to provide financial protection to farmers in crop failure. The PMFBY was launched to address the vulnerability of Indian farmers to crop losses caused by natural calamities, pests, and diseases. This paper assesses the scheme's performance and proposes policy recommendations to optimise its impact. This paper evaluates the effectiveness of PMFBY, considering key aspects such as coverage, premiums, timeliness of payouts, awareness, risk management, and government support. Based on the evaluation, several policy recommendations are provided to enhance the scheme's efficiency, inclusivity, and sustainability.*

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**Keywords:** Pradhan Mantri Fasal Bima Yojana, Evaluation, Policy Recommendation, Agriculture, Insurance Premium, Agriculture Insurance.

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### Introduction

The Pradhan Mantri Fasal Bima Yojana (PMFBY) is a revolutionary agricultural insurance scheme launched by the Government of India in 2016. It aims to provide financial security to farmers who are vulnerable to unpredictable natural calamities, pests, and diseases, which can cause significant crop losses. This initiative is an essential step towards mitigating the economic impact of such crop losses and promoting the well-being of farmers across the nation.

The primary goal of PMFBY is to ensure food security and safeguard the livelihoods of farmers. It offers comprehensive coverage, affordable premiums, and timely compensation to empower farmers and create a more resilient and sustainable agricultural sector in India. Farmers can avail of the scheme by paying a nominal premium of 2% of the sum insured for all Kharif crops, 1.5% for all Rabi crops, and 5% for horticulture crops. The government has mandated the use of technology to ensure transparency, and it is now a mandatory requirement for all insurance companies to provide online services to farmers.

PMFBY is one of the first schemes to cover losses incurred by farmers from the time of sowing to harvesting. It is a collaboration between the government and private insurance companies, with both parties sharing the risk. If the losses exceed 110%, the government will cover them, and the profit that private insurance companies can earn through premiums is capped at 20%. This ensures that insurance companies focus on providing quality services to farmers rather than on earning profits.

Apart from providing financial security to farmers, PMFBY also plays a vital role in circulating money. It helps farmers pay off their loans while simultaneously helping banks reduce their Non-Performing Assets (NPAs). The scheme covers all food crops, oilseeds, and horticultural crops grown in India and has been extended to cover losses due to localized calamities such as hailstorms, landslides, and inundation.

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In conclusion, PMFBY is a vital tool in promoting agricultural stability in India. It represents a major step towards ensuring food security and safeguarding the livelihoods of farmers across the nation. With its comprehensive coverage, affordable premiums, and timely compensation, PMFBY is an excellent initiative that empowers farmers and creates a more sustainable and resilient agricultural sector in India.

### Evaluation

- **Coverage:** The Pradhan Mantri Fasal Bima Yojana (PMFBY) provides a comprehensive insurance coverage to farmers across India. However, it is important to note that regional variations can impact the effectiveness of the scheme. To ensure that the insurance coverage is more effective, it is crucial to fine-tune the scheme to account for the diverse agricultural practices and risks that are specific to each state and crop. This could involve an increased focus on tailor-made policies and specialized support services that cater to the unique needs of farmers in each region. By doing so, the PMFBY could provide more comprehensive and effective coverage to farmers across India.
- **Premiums and Subsidies:** The current insurance scheme is designed to make insurance affordable for farmers; however, there is a need for further consideration when it comes to the premiums for small and marginal farmers. Despite the attempt to make insurance more accessible, the premiums may still be too high for the most vulnerable farmers. Therefore, policy adjustments should be made to ensure that the premiums are truly within reach for the most vulnerable farmers. This should be done through careful evaluation of the current policy framework and the identification of specific areas where adjustments can be made to ensure the accessibility of insurance for all farmers, regardless of their size or financial position. It is important that the insurance scheme is equitable, and that all farmers are able to benefit from it in a meaningful way.
- **Timeliness of Payouts:** The timely settlement of claims is crucial to ensure that farmers receive the financial assistance required to mitigate losses caused by natural disasters or other unforeseen events. To expedite payouts and ensure that claim settlements are prompt, it is recommended that the process be enhanced through technology and streamlined processes. Currently, it takes farmers 5-6 months to receive their claim settlements, which is a significant amount of time considering they require financial assistance before the start of the next season. Therefore, it is suggested that the claim settlement process should be completed within two months of filing the claim to ensure that farmers receive the financial assistance they require promptly. To achieve this objective, it is recommended that the claim settlement process be simplified and expedited through technology such as online claim filing and tracking systems. This would speed up the process and make it more transparent and efficient. Furthermore, it is suggested that implementing a streamlined process would help reduce the time and resources required for manual processing of claims, thereby reducing the overall time it takes to complete the process. This would benefit both the farmers and the insurance companies by ensuring that claims are settled promptly and efficiently.
- **Awareness and Accessibility:** Despite the various efforts made to increase the awareness of farmers regarding the scheme, the level of awareness still remains lopsided. According to recent studies, only 55% of farmers have access to information about the scheme, which indicates that a significant proportion of them are still unaware of the scheme's benefits. Further, only 57% of farmers are aware of the premium deduction in the scheme, which is an essential aspect of the scheme that enables farmers to participate in it. Given these findings, policy measures should focus on improving the communication channels to ensure that farmers receive accurate information about the scheme. One way to achieve this could be by leveraging digital platforms, such as social media, to reach out to farmers in a more effective manner. Additionally, establishing local information centers could also be an effective strategy to facilitate enrollment and provide guidance to farmers. These centers could act as a one-stop-shop for farmers to learn about the scheme's features, eligibility criteria, and application process. Overall, such measures could help ensure that all farmers have access to the scheme's benefits, irrespective of their location or socio-economic status.
- **Assessment and Management:** In order to effectively manage risks, it is essential to continuously refine risk assessment models. These models should consider a wide range of factors, such as historical data, industry trends, and current market conditions. By doing so,

insurers can gain a better understanding of the potential risks associated with a particular policy and adjust their pricing accordingly. Furthermore, it is important to incentivize risk mitigation practices in order to minimize potential losses and improve overall risk management. This can be achieved through various means, such as offering discounts for implementing certain safety measures or providing training programs for policyholders. Finally, exploring differential premium rates based on risk levels is also crucial. This allows insurers to tailor their pricing to the specific risk profile of each policyholder, rather than relying on a one-size-fits-all approach. By doing so, insurers can more accurately reflect the actual risks associated with each policy and improve their overall profitability.

- **Feedback from Farmers:** It is essential to actively seek out and listen to farmers' experiences in order to gain a detailed understanding of the challenges and areas for improvement in the scheme. Gathering feedback from farmers can provide valuable insights into the effectiveness of the scheme and highlight any gaps in its implementation. To ensure that the scheme remains responsive and adaptive, it is crucial to strengthen the feedback mechanisms. This can be achieved by establishing regular channels of communication with farmers, such as surveys or focus group discussions. By doing so, farmers can feel more included in the decision-making process and can contribute to the scheme's continuous improvement. Overall, prioritizing farmers' feedback can lead to constructive and effective enhancements to the scheme, benefiting both farmers and the wider community.
- **Data Accuracy:** Having accurate and up-to-date data is essential for effective risk assessment and claim settlement. In the insurance industry, data is the cornerstone of risk assessment and underwriting decisions. Therefore, it is imperative that data be accurate and up-to-date to ensure informed decision-making. To minimize errors and ensure data accuracy, it is recommended that robust data management systems be put in place. This includes using technology to collect and process data, such as data analytics tools and machine learning algorithms. Conducting regular audits of the data management system can also help identify and correct any errors or discrepancies. When it comes to crop insurance, collecting Crop Cutting Experiments (CCEs) data at the individual level can result in more accurate yield data. This is because CCEs data collected at the individual level provide a more detailed picture of the crop's health and yield potential. However, in some villages, weather stations are not available. In such cases, it is essential to deploy proper technology to gather accurate weather data. This technology could include satellite imagery or advanced weather monitoring tools that can provide accurate data on temperature, precipitation, and other weather patterns.
- **Continuous Improvement:** Since the implementation of the scheme, there has been a consistent effort to periodically review and update it based on evolving agricultural dynamics, technological advancements, and feedback from stakeholders. The purpose of these reviews is to ensure that the scheme remains effective and relevant in meeting the needs of those it serves. By closely monitoring changes in the agricultural sector, the scheme can adapt to new challenges and opportunities as they arise. Additionally, incorporating feedback from stakeholders helps to ensure that the scheme is meeting their expectations and needs, and that their voices are heard and taken into account. Overall, this ongoing process of review and update underscores the commitment to continuously improve and refine the scheme to better serve the agricultural community.

#### Policy Recommendations

- **Aadhar-link:** Farmers have been enrolling in the government's scheme from various sources, resulting in duplicate records. To tackle this issue, the Pradhan Mantri Fasal Bima Yojana (PMFBY) and Aadhar servers should be linked. This will help save time and effort, reduce duplication of records, and facilitate faster claim settlements.
- **No Claim Bonus:** The insurance industry widely uses the concept of No Claim Bonus (NCB) to reward policyholders with a decrease in premiums for every claim-free year. By implementing this mechanism in crop insurance, farmers are encouraged to adopt better farming practices, which mitigate risks and reduce the frequency of claims. NCB results in a reduction in premium costs for farmers, thereby rendering crop insurance more affordable, particularly for small and marginal farmers. This also alleviates the burden on the government. The longer a farmer goes without filing a claim, the more significant the reduction in premiums, leading to a more

sustainable and affordable long-term solution. Tailoring the NCB system to account for regional variations and crop-specific risks ensures that the incentive structure is pertinent and effective across diverse agricultural landscapes.

- **Increased Role of Insurance Agents:** Insurance agents need to play an active role in enrolling farmers into the scheme. They should encourage farmers to participate in the program. Many agents at the ground level work on a contract basis and may lack enthusiasm. It is important to offer insurance agents and surveyors more job security so that they can take their jobs seriously.
- **Technology Adoption:** Encourage the use of advanced technology, such as satellite imagery and remote sensing, for accurate yield estimation and faster claim processing. Integrate mobile and digital platforms for seamless enrollment. Smartphone use should be encouraged to promote data accuracy in yield estimation for localized calamities. Farmers should be allowed to upload photos of their crop to conduct CCEs.
- **Customization for Regional Needs:** Allow flexibility for state governments to customize the PMFBY to better suit the specific needs of their farmers. Recognize and address regional variations in agricultural practices and risks. The list of notified crops is limited, due to which many farmers are unqualified for enrolment. Thus, the list of notified crop must be diversified.
- **Monitoring and Evaluation:** Establish a robust monitoring and evaluation framework to assess the performance and impact of the scheme regularly. Utilize feedback from farmers and stakeholders for evidence-based improvements.
- **Integration with Agricultural Policies:** Ensure alignment and integration with broader agricultural policies to promote a holistic approach to sustainable farming practices.

## Conclusion

The evaluation highlights several key areas for consideration. Coverage should be fine-tuned to account for regional variations in agricultural practices and risks. Tailor-made policies and specialised support services should be implemented to provide more comprehensive and effective coverage to farmers across India. Secondly, there is a need to ensure that insurance premiums are truly affordable for small and marginal farmers. Policy adjustments should make premiums accessible for the most vulnerable farmers, ensuring the scheme's equity and inclusivity. Thirdly, the timeliness of claim settlements is crucial. By enhancing the claim settlement process through technology and streamlined procedures, farmers should receive financial assistance promptly within two months of filing a claim. Fourthly, efforts should be made to improve awareness and accessibility of the scheme. Communication channels, such as leveraging digital platforms and establishing local information centres, should provide accurate information and guidance to farmers, ensuring all farmers have equal access to the scheme's benefits. Fifthly, risk assessment models should be continuously refined to manage risks effectively. Incentivising risk mitigation practices and exploring differential premium rates based on risk levels can improve insurers' overall risk management and profitability. Additionally, actively seeking and incorporating feedback from farmers is essential for scheme improvement. Regular communication channels, such as surveys or focus group discussions, should be established to include farmers in the decision-making process. Accurate and up-to-date data is crucial for effective risk assessment and claim settlement, and robust data management systems, including technology such as data analytics tools and machine learning algorithms, should be implemented. Finally, the scheme should continuously improve through regular reviews and updates based on changing agricultural dynamics, technological advancements, and stakeholder feedback. Policy recommendations include linking PMFBY with Aadhar servers to reduce duplication of records, implementing a No Claim Bonus (NCB) system to encourage better farming practices, increasing the role of insurance agents, adopting advanced technology for accurate yield estimation and faster claim processing, customisation of the scheme to cater to regional needs, establishing a robust monitoring and evaluation framework, and ensuring alignment with broader agricultural policies.

The policy recommendations aim to refine and strengthen PMFBY by addressing premium affordability, enhancing technological integration, fostering public-private partnerships, and customising the scheme to regional needs. Implementing these recommendations can significantly impact farmers' lives and ensure a resilient and secure future for Indian agriculture.

**References**

1. [www.pmfby.gov.in](http://www.pmfby.gov.in)
2. Department of Farmers Welfare and Agriculture Development, Govt of Madhya Pradesh.
3. Revamped Operational Guidelines of PMFBY
4. Raju, S. S., and Ramesh Chand (2008). Agricultural Insurance in India: Problems and Prospects; NCAP Working Paper 8. National Center for Agriculture Economics and Policy Research.
5. J.P. Yadav and Abhishek Sharma (2016). Agriculture Insurance in India: Reaching The Unreached. International Journal of Interdisciplinary Research Centre (IJIRC) ISSN: 2455-2275(E) Volume II, Issue 11 November 2016.
6. Navdeep Singh Kainth, Dr. Gurusharan Singh Kainth, Dr. Rajinder Singh Bawa (2016). Pradhan Mantri Fasal Bima Yojana Challenges and Way Forward. Guru Arjan Dev Institute of Development Studies, Amritsar (IDSAsr).
7. Sharma, Hari Om and Rathi, Deepak (2018) "Performance Evaluation of Pradhan Mantri Fasal Bima Yojana (PMFBY) in Madhya Pradesh" Research Study No. 124, Agro-Economic Research Centre, JNKVV, Jabalpur
8. Ruchbah Rai. (2019). Pradhan Mantri Fasal Bima Yojana: An Assessment of India's Crop Insurance Scheme", *ORF Issue Brief No. 296*, Observer Research Foundation.
9. Tiwari, Rajesh, Khem Chand, and Bimal Anjum (2020). Crop Insurance in India: A Review of Pradhan Mantri Fasal Bima Yojana (PMFBY). *FIIB Business Review* 9: 249–55.
10. Shehrawat, A., Sharma, N., Shehrawat, P. and Bhakar, S. (2020). Awareness and performance of agricultural development schemes in context of farmers' welfare in Haryana. *Economic Affairs*, **65**(2): 167-172.
11. Niyati Thakur, Shilpa Sharma (2022). *Journal of the Indian Society of Agricultural Statistics* 76(3) 2022 159–168
12. Parthiban and Anjugam (2023); *Asian J. Agric. Ext. Econ. Soc.*, vol. 41, no. 3, pp. 145-153, 2023; Article no.AJAEES.97423.

