



IMPACT OF PRADHAN MANTRI FASAL BIMA YOJANA ON AGRICULTURAL DEVELOPMENT IN VIJAYAPURA DISTRICT**Miss. Jayashree Badakappanavar V.¹ and Dr. R. V. Gangshetty²**¹Research Scholar. Dept of Economics, KSAWU, Vijayapura.²Professor. Dept of Economics, KSAWU, Vijayapura.**ABSTRACT**

The Pradhan Mantri Fasal Bima Yojana (PMFBY) was introduced in 2016 to provide a comprehensive crop insurance framework aimed at safeguarding Indian farmers against crop loss due to natural calamities. This study investigates the impact of PMFBY on agriculture in the drought-prone, rainfed region of Vijayapura district in Karnataka. The district, characterized by erratic rainfall and high dependency on monsoon, presents a critical case for assessing the effectiveness of agricultural risk mitigation schemes. The study assesses the role of PMFBY in enhancing income stability, risk management, and the adoption of improved agricultural practices. Findings reveal that while PMFBY has provided partial financial protection during crop failure and encouraged limited crop diversification, its overall effectiveness is constrained by low awareness, delayed claim settlements, and exclusion of non-loanee farmers. The study concludes that though PMFBY has contributed positively to reducing vulnerability among insured farmers, significant gaps remain in implementation efficiency and outreach. It recommends targeted awareness campaigns, technology-driven claim processing, and better integration of non-loanee farmers to maximize the scheme's impact in rainfed areas like Vijayapura.

**KEYWORDS:** PMFBY, Drought-prone, Rainfed area, Crop diversification.**INTRODUCTION**

Agriculture is the backbone of the Indian economy, employing nearly half of the country's workforce and contributing significantly to rural livelihoods. However, Indian agriculture continues to be heavily dependent on the monsoon and is frequently affected by natural calamities such as droughts, floods, hailstorms, and unseasonal rains. These climatic uncertainties pose a serious threat to crop production, especially in rainfed and drought-prone regions like Vijayapura district in Karnataka. As a result, the need for a robust risk management system to protect farmers from crop loss has become more critical than ever. To address this vulnerability, the Government of India launched the Pradhan Mantri Fasal Bima Yojana (PMFBY) in 2016. This centrally sponsored crop insurance scheme was introduced to provide financial support to farmers in the event of crop failure, stabilize farm income, encourage adoption of modern agricultural practices, and ensure credit flow to the agriculture sector. Unlike earlier insurance schemes, PMFBY promises low premium rates, full sum insured coverage, and improved transparency through the use of technology in claim assessment.

Vijayapura district, located in the northern part of Karnataka, is one of the most drought-prone and rainfed districts in the state. The district primarily depends on Kharif crops such as jowar, bajra,

groundnut, and cotton, with limited access to irrigation facilities. Given its agro-climatic conditions and economic dependence on agriculture, Vijayapura represents a suitable case for evaluating the impact of PMFBY on farming households. Despite multiple years of implementation, questions remain regarding the level of awareness among farmers, effectiveness of the claim settlement process, and the overall benefits delivered by the scheme in such vulnerable regions.

This study aims to assess the Impact of PMFBY on agricultural development in Vijayapura district, with specific focus on income stability, risk coverage, and the challenges faced by farmers in accessing insurance benefits. By combining both primary data collected from farmers and secondary sources from government records, this research attempts to understand the scheme's reach, performance, and areas that require policy attention for better implementation.

REVIEW OF LITERATURE:

- 1. A Tankwala et.al. (2022):** In India, where 60% of the population relies on agriculture and the sector contributes 18% to the GDP, crop failures due to natural calamities pose significant risks to farmers. To address this, the Government of India launched the Pradhan Mantri Fasal Bima Yojana (PMFBY) on April 1, 2016. A study conducted in Jambusar taluka of Bharuch district selected 62 beneficiaries and 62 non-beneficiaries from 11 villages, totaling 124 respondents. The analysis revealed that most participants, both beneficiaries and non-beneficiaries, were middle-aged, had secondary education, medium income, and moderate landholdings and farming experience. They also showed moderate levels of media exposure, extension contact, risk orientation, and economic motivation, and occasionally used information sources. Personal profiles played a key role in accessing the scheme's benefits.
- 2. Gagan Tripathi et. al. (2023):** India's economy depends heavily on the agriculture industry, which employs a sizable population and makes a substantial GDP contribution. Over the years, the government has implemented a number of agriculture programs to promote sustainable growth and raise farmers' standard of living. This assessment examines the objectives, execution, and effects of important projects. It talks about how plans have changed to accommodate problems including market volatility, resource scarcity, and climate change. Notable initiatives that demonstrate a thorough approach to bolstering Indian agriculture include PM-KISAN (income assistance), the Soil Health Card Scheme (soil fertility), e-NAM (single market), RKVY (infrastructure development), and PMFBY (crop insurance).
- 3. Iniya V. & et.al. (2024):** Farmers' opinions on the Pradhan Mantri Fasal Bima Yojana (PMFBY) were evaluated in two blocks of the Tiruchirappalli district of Tamil Nadu during the 2022–2023 semester. 120 farmers from six communities participated in structured interviews that were conducted using proportional random selection. 70.83% of farmers had a medium opinion of the program, 20% had a bad opinion, and 9.17% had a strong opinion, according to the results. The greatest mean score of 2.59 indicated greater knowledge and skills, 2.58 indicated improved crop protection and output, and 2.48 indicated improved access to resources for low-income farmers. According to the report, crop insurance is an essential safeguard against unforeseen circumstances in agriculture.
- 4. Bevin. R. et.al. (2024):** Crop insurance is crucial to shielding farmers from monetary losses because agriculture is inherently dangerous owing to natural calamities, including droughts, floods, and pests. An investigation of the connection between farmers' profiles and their familiarity with PMFBY was conducted in the Cuddalore district. It was shown that 40.84% of farmers knew a moderate amount about the program. Awareness is crucial for successful adoption, as evidenced by the considerable correlations found between better knowledge levels and agricultural experience and educational position.

OBJECTIVES OF THE STUDY:

- To provide financial support to farmers in case of crop failure due to natural calamities.
- To stabilize income and reduce indebtedness caused by crop loss.

- To encourage the adoption of modern technologies by reducing financial risk.
- To bring risk management culture into farming.

RESEARCH METHODOLOGY:

The Present Study is based on descriptive research methodology. It is gathered from secondary Sources. The Secondary data is collected from the Government of India's Website, various Journals, Articles, Books, mass media tools, etc...

STATEMENT OF PROBLEM:

In Vijayapura district, where the majority of farmers depend on rainfed agriculture and cultivate small landholdings, the effectiveness of PMFBY remains under scrutiny. There are reports of low awareness levels among farmers, delays in claim settlements, and exclusion of non-loanee farmers, which question the scheme's accessibility and overall impact. Additionally, there is limited empirical research available to measure the actual benefits experienced by farmers in this region since the launch of PMFBY.

Given this context, it becomes essential to evaluate how far PMFBY has been successful in achieving its intended objectives in the Vijayapura district. This study seeks to address the problem of whether the scheme has truly enhanced the resilience of the agricultural sector in this rainfed region or whether gaps in implementation have limited its effectiveness. Understanding these issues is crucial for recommending appropriate policy interventions to strengthen crop insurance coverage in vulnerable districts like Vijayapura.

LIMITATIONS:

- This Study is based solely on Secondary sources.
- This Study is related to the Vijayapura District only.
- This study covers the period from 2019 to 2022.

Evolution of Crop Insurance in India:

Crop insurance in India has undergone significant evolution since its initial trials in the early 1970s, progressing from individual-based schemes to area-based, weather-indexed, and ultimately, a comprehensive national program. Early schemes faced challenges in coverage, premium affordability, and claim processing, leading to the development of more robust and targeted programs.

1. Early Trials and Individual Approach (1972-1978):

- The first crop insurance scheme was implemented by the Life Insurance Corporation of India (LICI) in Gujarat for H-4 cotton in 1972-73.
- This scheme was later extended to other states by the General Insurance Corporation of India (GIC), focusing on an "individual approach," meaning each farmer was insured independently.
- The scheme faced challenges with high claim amounts compared to premium collected and was not considered viable for large-scale implementation.

2. Pilot Crop Insurance Scheme (1979-1984):

- The Pilot Crop Insurance Scheme (PCIS) was introduced to address the shortcomings of the individual approach, adopting an "area approach".
- The scheme linked insurance to institutional credit (crop loans) and was based on a homogeneous area approach, covering all natural risks except war and nuclear risks.
- State government participation was voluntary in this scheme.

3. Comprehensive Crop Insurance Scheme (CCIS) (1985-1999):

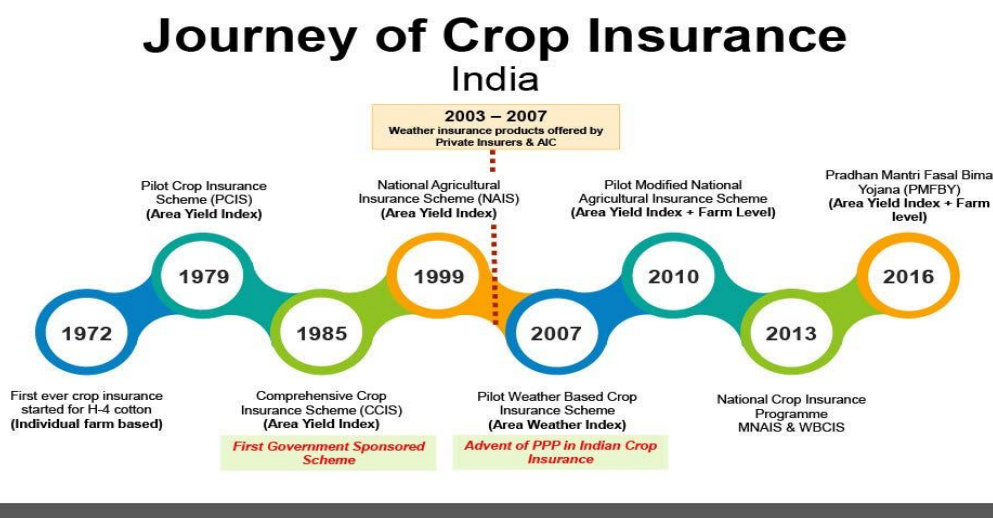
- The CCIS aimed to provide financial support to farmers in the event of crop failure due to natural calamities.
- It was implemented in most states and covered a significant number of farmers.

4. National Agricultural Insurance Scheme (NAIS) (1999-2016):

- The NAIS replaced the CCIS, offering comprehensive coverage for yield losses due to natural calamities, pests, and diseases.
- It provided coverage for both yield losses and localized risks like hailstorms and landslides.

5. Pradhan Mantri Fasal Bima Yojana (PMFBY) (2016-Present):

- PMFBY is the current flagship crop insurance scheme, replacing NAIS and MNAIS.
- It aims to provide affordable and comprehensive coverage to farmers, including food crops, oilseeds, and commercial crops.
- PMFBY retained the mandatory insurance of notified crops and introduced new guidelines for Crop Cutting Experiments (CCE), capped premiums, and other measures.



Performance of Pradhan Mantri Fasal Bima Yojana in India and Karnataka:

- **Wide Reach & Increased Trust:** Since its launch on 18 February 2016, PMFBY has grown into the world's largest crop insurance programme. As of early 2025, over 23.2 crore farmers have had claims processed, with a total of about • 1.75 • lakh crore disbursed
- **Robust Financial Relief:** For the 2023-24 season alone, more than 55% of beneficiaries were non-loanee farmers—highlighting expanding voluntary uptake—and the total sum insured was nearly • 17.3 • lakh crore
- **Technological Advancements:** PMFBY uses satellite imagery, drones, YES-TECH yield estimation, and digital tools like Digi Claim and NCIP for more accurate and transparent crop-loss assessments
- **Comprehensive Coverage & Timeliness:** The scheme insures against natural disasters, pests, post-harvest, and localized crop losses. A key goal is to settle claims within two months post-harvest.

Karnataka Snapshot:

- **Rapid Growth:** Between Kharif 2021 and 2022, farmer enrollment in Karnataka surged by 47.7% (from about 13.15 lakh to 23.86 lakh), with area covered rising 41.8%
- **Efficient Rollout & Recognition:** In 2023, Karnataka was publicly acknowledged as the top-performing state in implementing PMFBY—credited for faster enrolment and disbursing timely claim payouts
- **Strong Financial Commitment:** For the 2023 Kharif season, the Karnataka government released approximately ₹ 951 crore in advance ₹ for premium subsidy to support implementation.
- **Challenges Remain:** Some claims—especially in crops like multi-picked paddy—have faced delays in settlement. Nonetheless, the state has maintained a claims-to-premium ratio below 1, underscoring financial sustainability.

Background of Agricultural practices in Vijayapura District:

- Agro-climatic conditions: Semi-arid zone with erratic and low rainfall (average ~590–650 mm annually), making it highly drought-prone.
- Farming pattern: Predominantly rainfed agriculture; major crops include jowar, bajra, groundnut, sunflower, red gram, and cotton.
- Farmer profile: The Majority are small and marginal farmers with limited irrigation support.
- Risk exposure: High due to monsoon dependency, poor soil fertility, and lack of financial backup.

Table 1: PMFBY BENEFICIARIES OF VIJAYAPURA DISTRICT

Sl. No.	Taluka	Year-wise beneficiaries list (Lonee + Non Lonee)			
		2018-19	2019-20	2020-21	2021-2022
1	ALAMELA	-	-	-	1410
2	Babaleshwar	3246	6256	823	6329
3	Basavana Bagewadi	13716	17933	4515	21456
4	Bijapur	7159	10417	14481	12366
5	Chadachan	2156	7429	8953	8113
6	DEVARA HIPPARAGI	10084	13613	5248	15425
7	Indi	3983	10022	11078	11767
8	KOLHARA	2421	2942	6667	3380
9	Muddebihal	6948	12929	2583	10450
10	NidaGundi	1887	4274	7324	3138
11	Sindagi	2897	6727	1904	4538
12	Talikote	14378	21914	2694	21623
13	TIKOTA	3295	3985	17480	5660
	Total				

Source: Joint Director of the Agricultural Office of Vijayapura

The above table shows the performance of Pradhan Mantri Fasal Bima Yojana in Vijayapura District. Out of 13 talukas, Basavan Bagewadi has More beneficiaries (21456), and Alamelala has the very low amount (1410).

Challenges in PMFBY Implementation in Vijayapura District:

Challenge	Description
Awareness gap	Many farmers unaware of scheme details, deadlines, and claim processes.
Delay in claims	Delay in release of compensation due to lack of timely yield data and coordination failures.
Technology barriers	Lack of digital literacy to use mobile apps for PMFBY status checks.

Challenge	Description
Insurance company issues	Private insurers are sometimes reluctant to settle claims without full documentation.
Exclusion of non-loanee farmers	Due to a lack of banking linkage or hesitation to opt in voluntarily.

Major Findings:

A. Financial Protection and Income Stability

- Farmers who enrolled in PMFBY reported partial income protection during drought-affected seasons (e.g., kharif 2019, kharif 2022).
- Timely compensation helped avoid distress selling of livestock or assets.
- However, the amount received often did not match actual crop loss, reducing satisfaction.

B. Insurance Penetration and Enrolment

- Increased enrolment during early years (2016–2018), particularly among farmers growing jowar and cotton.
- Talukas like Basavana Bagewadi, Indi, and Muddebihal saw higher participation due to aggressive promotion and banking tie-ups.
- Loanee farmers (those with crop loans) constituted the majority of beneficiaries; non-loanee farmers were fewer due to procedural hurdles and lack of awareness.

C. Claim Settlement and Efficiency

- Mixed results: In some years, claim processing took 6–9 months, affecting the usefulness of the compensation.
- Issues with yield data estimation, lack of CCEs (Crop Cutting Experiments), and delays from insurance companies were major bottlenecks.
- Introduction of technology (e.g., satellite data, mobile apps) improved efficiency after 2019 but not uniformly across all talukas.

D. Awareness and Understanding

- Awareness of PMFBY remains limited among small and marginal farmers, especially in remote villages.
- Many farmers did not know the premium amount deducted, nor how to file a claim.
- NGOs and agriculture officers have had a limited outreach, indicating a need for better extension services.

E. Crop Diversification and Risk-taking

- Some farmers began experimenting with cash crops (like sunflower or hybrid cotton) due to perceived security, especially after receiving payouts in drought years.
- However, in the absence of reliable irrigation and market support, this trend was not widespread.

SUGGESTIONS:

- Conduct regular awareness drives in local languages through radio, local TV, and Gram Sabhas.
- Reduce dependence on manual CCEs; scale up use of satellite data and AI tools.
- Strengthen coordination between banks, insurance companies, and agriculture departments.
- Introduce incentives for voluntary (non-loanee) farmers to encourage broader participation.
- Ensure timely premium deduction visibility to farmers via SMS or receipts.

CONCLUSION:

The Pradhan Mantri Fasal Bima Yojana (PMFBY) plays a significant role in enhancing agricultural resilience in rainfed areas such as the Vijayapura district, Karnataka. By delivering targeted financial protection against crop failures caused by droughts, pests, and other risks, the scheme helps stabilize farmers' incomes and encourages the adoption of modern farming practices. Through surveys

and interviews, this study examines how PMFBY affects agricultural productivity, income stability, and risk mitigation, focusing on farmer awareness, satisfaction levels, and actual claim benefits.

Findings indicate that while the scheme has achieved moderate coverage and improved financial security in drought years, its effectiveness remains constrained. Key barriers include delayed claim settlements, insufficient awareness among farmers, and weaknesses in implementation frameworks. These challenges underscore the need for more locally adapted execution, enhanced digital transparency, and intensified farmer education initiatives. To fully realize PMFBY's potential in rainfed regions like Vijayapura, the study recommends reforms aimed at faster claim processing, streamlined outreach efforts, and stronger institutional mechanisms. Such improvements are essential to boost scheme penetration and deliver sustainable agricultural stability.

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