



PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY) Ensuring Comprehensive Crop Insurance for Indian Farmers



Ministry of Finance, Government of India
March 6, 2024



Tulsipriya Rajkumari

Backgroun

d



Evolution of Crop Insurance Schemes in India

- * 1970s - pilot schemes in select regions
- * Comprehensive Crop Insurance Scheme (CCIS), 1985
- * National Agricultural Insurance Scheme (NAIS), 1999
- * Technology integration and supporting reforms
- * PMFBY 2016



Importance of Crop Insurance for Indian Farmers

- * Risk Mitigation, Investment, Debt Reduction, Income stability, innovative and modern agricultural practices, Sustainable agriculture



Launch of PMFBY in 2016

- * To provide financial support to farmers in the event of non-preventable risks of crop failure due to natural calamities, pests, or diseases, ensuring their economic stability and livelihood security.
- * Introduced a uniform premium rate for farmers, making crop insurance more accessible and affordable for all categories of farmers, including small and marginal farmers.

PMFBY v/s earlier crop insurance schemes?



FEATURE		EARLIER CROP INSURANCE	PRADHAN MANTRI FASAL BIMA YOJANA
Capping on Premium/Sum Insured		Capping on Centre's share in premium leading to proportional reduction in sum insured above capped premium rates	No cap on premium. Farmers get claim against full sum insured
Upper limit on government		Yes	No. Even if balance premium is 90%, government pays
Risk Coverage	Area approach	Natural risk on Standing crops	All non-preventable natural risk of crop cycle - Pre sowing to post harvest
	Plot level Assessment	Hailstorm, landslide,	Hailstorm, landslide, inundation, Cloud burst, natural fire (localized calamities)
Post-harvest Losses coverage		Only coastal areas-for cyclonic rain	All India - for cyclonic unseasonal rain and hail storm
Use of Technology for quicker claim settlement		Ad Hoc	Mandatory
For extremely localized calamities or post-harvest losses		Considered a larger reference unit area rather than the affected insured field of the individual farmer	Unit of Insurance for loss assessment is the affected insured field of the individual farmer

Key Features of PMFBY (1/4)



Area of Coverage:

Geographical Extent:

- * All states and union territories of India
- * Covers agricultural land and crops cultivated by farmers in rural areas



Coverage of Crops:

- * food crops, oilseeds, pulses, and commercial crops



Premium Rates: Subsidized Premiums for Farmers:

- * Uniform Premium Rates – 2% for Kharif, 1.5% for Rabi, and 5% for commercial
- * Mandatory credit linked insurance
- * Subsidized Premiums by Centre and State
- * Premium shared between the central government, state government, and farmers in a pre-defined ratio
- * Farmers have the option to pay the premium amount in installments, Discounts/rebates offered to farmers who pay their premiums promptly

Key Features of PMFBY (2/4)

Coverage and Risks: Insured Events and Losses Covered



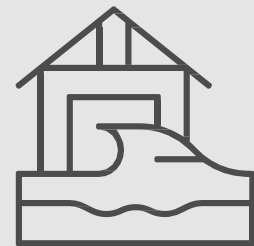
Yield Losses (standing crops, on notified area basis): due to non-preventable risks, such as (i) Natural fire and lightning (ii) Storm, hailstorm, cyclone, typhoon, tempest, hurricane, tornado etc. (iii) Flood, inundation and landslide (iv) Drought, dry spells (v) Pests/diseases etc.



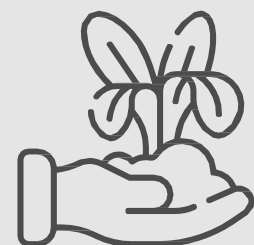
Prevented Sowing (on notified area basis): due to adverse weather conditions, farmers shall be eligible for indemnity claims up to a maximum of 25 per cent of the sum-insured.



Post-Harvest Losses (individual farm basis): Coverage is available up to a maximum period of 14 days from harvesting for those crops which are kept in “cut & spread” condition to dry in the field after harvesting



Localised Calamities (individual farm basis)



Exclusions: War & kindred perils, nuclear risks, riots, malicious damage, theft, act of enmity, grazed and/or destroyed by domestic and/or wild animals, other preventable risks.

Implementation Process (1/3)

Central Government:

- ✦ Provides policy direction, funding, and oversight for PMFBY.
- ✦ Subsidizes premium payments to reduce financial burden on farmers.
- ✦ Collaborates with state governments to implement the scheme effectively.
- ✦ National Crop Insurance Portal.



Insurance Companies:

- ✦ Provide crop insurance coverage to farmers under PMFBY.
- ✦ Assess risks, calculate premiums, and manage insurance policies.
- ✦ Conduct crop cutting experiments (CCEs) for yield assessment and claim settlement.

State Governments:

- ✦ Implement PMFBY at the state level, adapting it to local needs and conditions.
- ✦ Facilitate farmer registration, premium collection, and claim settlement processes.
- ✦ Contribute to premium subsidy and operational expenses of the scheme.



**Stakeholders
Involved: Central and
State Governments,
Insurance
Companies, and
Farmers**

Farmers:

- ✦ Mandatory credit linked insurance for loanee farmers, non-loanee farmers can enroll to avail crop insurance coverage for their crops.
- ✦ Pay subsidized premiums as per the scheme guidelines.
- ✦ Report crop losses and file insurance claims in case of crop failure or damage.

Implementation Process (3/3)

Crop Cutting Experiments (CCEs): Methodology for Yield Assessment

Sample Plot Selection:

- * Agricultural experts randomly select plots within the insured area where the crop is grown, providing a representative sample of agricultural land coverage.

Plot Preparation:

- * Selected plots are marked and prepared, with clear boundaries for accurate measurement and assessment.

Crop Harvesting:

- * Crops from selected plots are harvested, either manually or using machinery, and carefully weighed to determine total yield.

Crop Cutting:

- * A predefined portion of harvested crops is randomly cut for measurement, representing the entire plot's yield.

Weighing and Calculation:

- * Harvested samples are weighed accurately and extrapolated to estimate total yield per unit area.

Data Recording:

- * Yield data, including crop type, plot details, and sample weight, are recorded meticulously for accurate assessment.

Validation and Control:

- * Stringent quality control measures ensure accuracy, with random checks and cross-verification techniques employed.

Reporting:

- * Yield assessment data from CCEs are reported for analysis, used in insurance claims, premium calculations, and policy adjustments under PMFBY.

Claim Settlement

Reporting & assessment of Crop Loss

- * Localised calamities and post-harvest losses assessed at the level of the individual insured farm and lodging of loss intimation by the farmer/designated agencies is essential.
- * For wide-spread calamities, lodging of intimation for claims is not essential.
- * Claims calculated based on the loss assessment report at District level and/or average yield submitted by concerned State Government.

Claim Settlement Process: Timelines and Mechanism

- * Claims paid by the insurance companies within 2 months of completion of CCE/harvesting period subject to availability of yield data and release of total State share of premium subsidy from concerned State Government within time.
- * Reasons for delay: delayed transmission of yield data; late release of their share in premium subsidy and/or yield data by some States, yield related disputes between insurance companies and States, non-receipt of account details of some farmers for transfer of claims and National Electronic Fund Transfer (NEFT) related issues, etc.

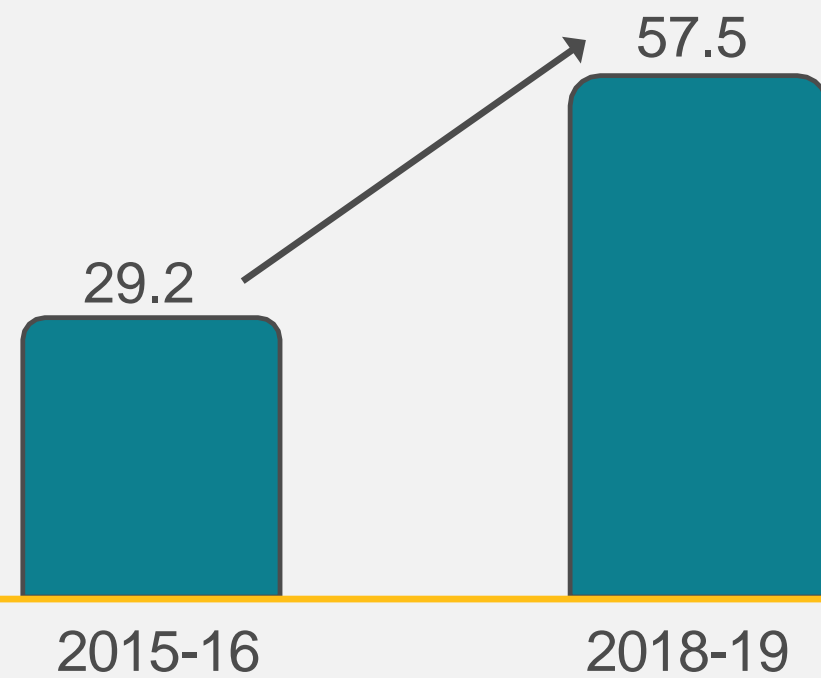


Stratified Grievance Redressal Mechanism

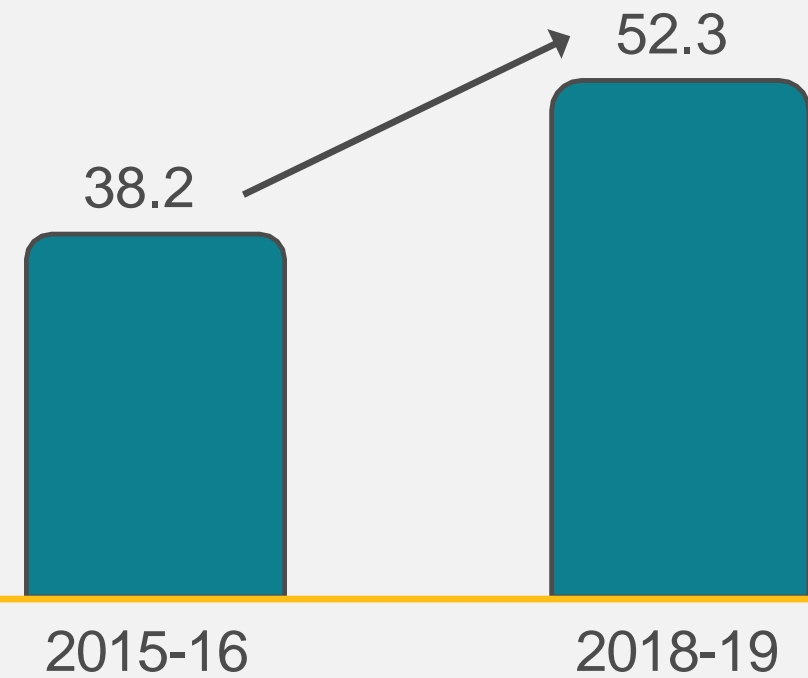
- * District Level Grievance Redressal Officer: Designated at taluka and district levels to respond to grievances within 7 days.
- * District Level Grievance Redressal Committee (DGRC): Chaired by District Magistrate/Collector, resolves issues within 15 days, can invite specialists.
- * State Level Grievance Redressal Officers: Nominated to handle grievances not under district officer's purview.
- * State Level Grievance Redressal Committee (SGRC): Chaired by Principal Secretary/Secretary, resolves unresolved district-level grievances within 15 days.

Impact

Average Coverage of Farmers (in million)



Average Area of Farmers Insured (million hectares)



Uptake in States

- Punjab did not implement the Scheme since the beginning whereas Bihar and West Bengal withdrew from 2018 and 2019, respectively.
- Andhra Pradesh, Gujarat, Telangana and Jharkhand did not implement the Scheme in 2020.
- Financial constraints of the State Governments and low claim ratio during normal seasons cited as major reasons. most of the withdrawing States are implementing their own Schemes.
- Telangana rejoined 3 days ago.

Source: <https://pmfby.gov.in/>

Intended Benefits

- ✧ Financial Security for Farmers: Mitigation of Crop Losses
- ✧ Income Stabilization: Protection against Price Fluctuations
- ✧ Encouragement of Risk-taking: Boosting Agricultural Investments
- ✧ Socio-economic Impact: Improvement in Farmer Welfare and Rural Economy

Latest figures (as on 30.11.2023)

As on 30.11.2023, 43.5 million and 68.9 million farmer applications have been enrolled under the scheme during Rabi 2022-23 and Kharif 2023 seasons respectively.

Number of farmer applications grew 33.4% and 41% year-on-year during 2022-23 and 2021-22, respectively.

Growth of 28.9% in farmers insured in Kharif 2023 season (upto 30 November, 2023) as compared to Kharif 2022.

Challenges

- ✧ Operational Challenges: Assessment of crop losses, Delayed Premium Payments, Data Accuracy, etc.
- ✧ Withdrawal of States from PMFBY - owing to mainly financial constraints in providing timely State share of subsidy.
- ✧ Offices and officials of Insurance Companies (ICs) implementing PMFBY are non-existent at Tehsil level in several Districts resulting in hardship to the farmers.
- ✧ Delay on account of procedural aspect in taking action against the defaulting ICs .
- ✧ Yield related disputes between Insurance Companies and States and delayed transmission of Yield Data.



Scheme revamped with effect from 2020

- ✧ Voluntary participation for all farmers (loanee/non-loanee) with no change in premium share.
 - ✧ Premium subsidy sharing: 90:10 for Centre and North Eastern States, 50:50 for others.
 - ✧ Central subsidy for areas/crops with gross premium rate up to 25% for irrigated and 30% for un- irrigated.
 - ✧ Insurance companies selected by states for 3 years (instead of 1 year) to increase commitment.
- Insurance companies to compulsorily spend atleast 0.5% of the total gross premium collected by them for Information, Education and Communication (IEC) activities
- ✧ States choose sum insured based on average yield or Scale of Finance.
 - ✧ Option for states to choose additional risk covers besides yield-based cover.
 - ✧ States delaying subsidy release can't participate in upcoming seasons. Insurance companies have to pay penal interest @12% per annum to the farmers for the period beyond the stipulated period
 - ✧ Universalization of smart sampling technique through satellite data for crop-cutting experiments.
 - ✧ Technological solutions to address delay in submission of crop yield data.
 - ✧ Provision for earmarked administrative expenses at 3% for infrastructure and technology strengthening.
 - ✧ Land record integration with NCIP



Case Studies – Success is a culmination of all factors in unision

A PMFBY Success Story - Tiruvallur District, Tamil Nadu

Benefits to farmers:

- doubling of cropping intensity, resulting in farmers being fully occupied for two crop seasons.
- Net Area Sown increased significantly by 20-30%
- Agricultural returns rose substantially, ranging from Rs. 30,000 to Rs. 50,000 per hectare per annum.
- Timely investment in fertilizers enhancing productivity.
- Women farmers engaged in large-scale vegetable cultivation

Role of State Government:

- State government actively coordinating stakeholder discussions.
- Regular reviews by the Agricultural Production Commissioner & Principal Secretary
- Training programs for Agriculture department staff
- Effective PMFBY implementation during the severe drought of 2016-17.
- Special Cell for PMFBY at the Joint Director of Agriculture's office

Awareness Drive:

- Extensive awareness programs conducted in villages, PACS, CSCs, and banks.
- Distribution of leaflets, newspaper advertisements, radio, and van campaigns heightened awareness.
- Public meetings and Kisan Melas organized to educate farmers about PMFBY.

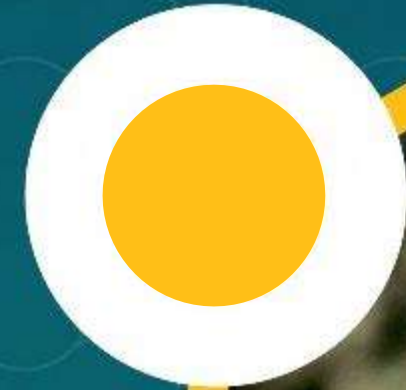
CCE Accuracy and Process Streamlining:

- Measures like geo-tagging, accurate plot measurement, and weighing ensure accuracy.
- Data updated in the portal from the field itself; CCE plot selection acknowledged by Village administration.
- Preparation and consolidation of CCE results completed within one month of crop harvesting.
- Insurance companies committed to processing claims within 30 days of receiving CCE yield data.

Nanded, Beed, Maharashtra Sivaganga, Tamil Nadu Uttarkashi, Uttarakhand West Tripura, Tripura

- **Initiatives Undertaken Awareness and Promotion Initiative**
- **Involvement of District Machinery**
- **Involvement of community/external Agencies – VLEs, SHGs, IC representatives**
- **Use of Technology/ICT**
- **Convergence with State schemes**

Thank You



Global Shield
Financing Facility

Key Features of PMFBY (3/4)

Determination of Sum Insured for Different Crops

- ✦ Flexibility in Sum insured, allowing farmers to choose coverage levels that align with their individual needs and the value of their crops.
- ✦ Sum Insured for individual farmer is equal to the Scale of finance/indicative cost per hectare multiplied by the area of the notified crop proposed by the farmer for insurance.
- ✦ Crop Yield Assessment: Determined through crop cutting experiments (CCEs) to estimate average yield.
- ✦ Historical Yield Data: Past performance data and agro-climatic conditions inform sum insured calculation.
- ✦ Coverage Level Selection: Farmers choose coverage level based on risk tolerance.
- ✦ Crop Specific Factors: Variability based on crop type, input costs, and production risks.



Key Features of PMFBY (4/4)

Premium Calculation:

- ✧ Actuarial Principles: Premiums calculated based on statistical risk assessment and actuarial principles.
- ✧ Crop-specific Factors: Consideration of crop type, historical yield data, and susceptibility to risks.
- ✧ Area-specific Factors: Incorporation of agro-climatic conditions, soil health, and geographic location.
- ✧ Premium Rate Determination: Determined by balancing risk exposure with affordability for farmers.
- ✧ Government Subsidy: Subsidies provided to reduce premium burden on farmers, making insurance more accessible.
- ✧ Technology Integration: Utilization of technology for accurate assessment and calculation of premiums.
- ✧ Transparency and Fairness: Premium calculation process designed to be transparent, fair, and objective. Farmers have access to information about how premiums are calculated, including the factors considered and the methodology used.



Implementation Process (2/3)

Enrollment Process: Farmer Registration and Insurance Enrollment

- * Registration Centers: Designated locations where farmers can register for the scheme and enroll their crops.
- * Digital Platforms: Online portals and mobile applications available for farmers to register and enroll their crops conveniently.
- * Crop Details Submission: Farmers provide information about their crops, including type, area of cultivation, and expected yield, during the enrollment process.

Premium Payment: Process and Subsidy Mechanism

- * Farmers pay the subsidized premium amount as per the scheme guidelines at the time of enrollment or within the specified timeframe.
- * Verification and Validation: Enrollment details are verified and validated by designated authorities to ensure accuracy and completeness.
- * Confirmation and Policy Issuance: Once enrollment is complete and premiums are paid, farmers receive confirmation of coverage and policy documents.

