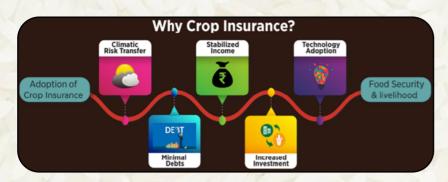


Science-based Crop Insurance



Who can benefit from Crop Insurance?

Both loanee and non-loanee farmers who cultivate the notified crops under PMFBY can register for the scheme and insure their crops. In Odisha, crops which are covered under this scheme are:

Kharif season:

Rice

Groundnut

Maize

Pigeon Pea

Ginger

Cotton

Turmeric

Crop

Insurance

Process

Rabi season:

Rice

Black gram

Green gram

Groundnut

Mustard

Onion

Potato

Sugar cane

Sunflower

Crop insurance is a strategy to cope with risks due to natural hazards, by transferring them to another party at a minimum cost (premium) and thereby reducing the impact of yield loss on farmers. The Government of India along with the State Governments is implementing Prime Minister Fasal Bima Yojana (PMFBY) with up to 80% premium subsidy.

- Crop insurance provides financial safety to farmers when there is crop loss due to natural hazards
- Encourages farmers to invest more in new technologies and enhance their production
- Helps farmers sustain their income and livelihood

Risks covered by the PMFBY scheme

- Prevented sowing/planting/germination losses due to deficit rainfall or adverse weather conditions
- Standing crop loss due to non preventable natural calamities, pests/disease outbreaks
- Losses resulting from occurrence of identified localized calamities / risks
- Post-harvest losses

Crop insurance registration is done at the beginning of the season (July 31st in Kharif and December 31st in Rabi)

Prevented Sowing Assessment (if 75% of the Gram Panchayat (GP) is unable to take up sowing / transplanting / germination failure due to drought / flood). Claim is settled and insurance terminates if any

Standing crop yield loss estimation through 4 crop cutting experiments (CCEs) per GP

Notification of GPs under loss for claim settlement

Post-harvest loss assessment due to unseasonal rainfall if any (loss assessment at individual plot level)

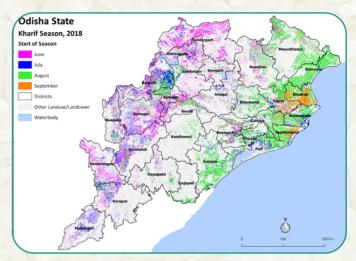
Crop loss assessment due to localized natural calamities (like hailstorm, lightning, storm, landslide, inundation, and fire) if any, by the committee

Challenges in the implementation of PMFBY

- Low uptake by farmers, generally due to low awareness and literacy among the farmers
- Delay in yield loss estimation and claim settlement (on average 8-12 months) due to the requirements of a large number of CCEs and administrative processes involving multiple stakeholders
- Prevalence of basis risk as average yield loss estimation at GPs is not representing farmer level individual losses



Farmer awareness training program through a stylized video intervention



Start of Season Rice Area Map generated using remote sensing

Filling the Gaps through technology and other interventions

- Use of Remote Sensing technology and modelling assist in providing real-time and accurate information on crop area, yield, and loss assessment
- Use of satellite and drone data to estimate the extent of damage in case of natural calamities (floods, drought and cyclone etc.)
- Experiments suggest that the key indicators of crop insurance need to be aligned with farmers' preferences in order to increase the coverage
- Video and simulation app are found to be effective in creating widespread awareness among the farmers about holistic agricultural risk management strategies, mainly crop insurance and STRVs
- Coupling insurance with stress-tolerant rice varieties increases farmers' participation

For more information, please contact: