

MAKING INDIA'S CROP INSURANCE MORE INCLUSIVE THROUGH TECHNOLOGY

Evaluating the effectiveness of an intervention based on mobile phone campaign and remote sensing data to enhance farmers' access to crop insurance and claims

OBJECTIVE OF THE STUDY

The Pradhan Mantri FasalBimaYojna (PMFBY) is an Indian crop insurance program. Since its launch in 2016, it has faced several challenges related to claim settlement and loss assessment among others. The study set out to test if technology-driven interventions could help in making PMFBY more inclusive and enhancing the outcomes for farmers. In particular it sought to evaluate the effectiveness of:

- Mobile phone-based outreach in Improving financial awareness and literacy among farmers in order to promote PMFBY uptake and acquaint them of potential claims.
- Remote sensing-based satellite data in enhance access to insurance payouts under the Prevented Sowing and Mid-Season Calamities payment stipulations of PMFBY.

MAIN RESULTS

- The information and awareness gap about PMFBY could be bridged through mobile phone-based outreach. There was no conclusive evidence that the intervention particularly influenced PMFBY adoption given the small sample size and the increased adoption rates among both treatment and control groups of farmers. We believe further research with a larger sample and over a longer time period is merited, along with further investigation of other factors such as logistical and financial barriers.
- Remote sensing data covering key moments of crop phenology is appropriate for tracking agricultural activity, and crop loss and stress relevant for PMFBY. The continuous engagement with the insurance companies throughout the project revealed their interest to deploy remote sensing data for loss detection and assessment. Actual take-up will be influenced also by other factors, including the PMFBY's design. Finding use cases outside a strictly regulated and complex scheme like PMFBY might be a more viable approach.



Project

Making India's crop insurance more inclusive through technology



Partners

Earth Analytics India, Endeava Precision Development



Region

Bargarh and Sambalpur (Odisha, India)



Main risks

Crop loss



Policyholder

Paddy farmers



Insurance asset

Agricultural crops