

700
FARMING DISTRICTS

6,50,000
VILLAGE BOUNDARIES
CODED

180 MN
FARMING HECTARES
MAPPED

170 MN FARM OWNERSHIP DATA 20 MAJOR CROPS

RMSI Cropalytics is an agri-tech company that focuses on data analytics and provides information and decision support to governments, lenders, crop insurers, input sector, commodity trading and social sector. Incorporated in 2019, RMSI Cropalytics was formed to address the emerging need arising from the rapid growth of institutional financing of the agriculture sector through crop loans and crop risk financing (insurance), which requires comprehensive and well-organized data and analytics.

We carry out farm and village level crop acreage, health and yield forecast and estimations using remote sensing, advanced modeling, artificial intelligence and machine learning. This, combined with other datasets, supports timely distress mitigation, village prioritization for better prospecting, farmer credit rating, better portfolio risk management for lenders and insurers, early insurance claim settlement, high-resolution crop monitoring, efficient communication with farmers and early claim settlement.

RMSI Cropalytics is a subsidiary of RMSI, a global leader in geospatial and engineering solutions. These solutions address global issues of climate change, natural calamities, human habitation, food security, autonomous transportation, smart utilities and networks.







Best Agri Start-up in Application of Digital Technologies



Profile and Information of Crop Exposure and Risk

An End-to-End Solution for Crop Information Management

RMSI Croplaytics' award winning solution PInCER™ is a SaaS-based portal that provides government and agri-sectors, crop acreage and yield estimates faster, more accurately and at higher resolution, using satellite, drone and Al/ML technologies. These estimates input into sector-specific applications including precision farming, farm credit rating, digital exchange and price discovery. PInCER™ platform helps to derive remote-sensing based crop-wise estimate of acreage and yield of the area under cultivation for districts/blocks/villages/farms.

Yield and Acreage Outlook and Estimation

Get country, state or district wise yield and acreage outlook and estimation for all major crops

Premium Pricing and Portfolio Risk Assessment



Arrive at premium pricing to bid for various clusters and adopt a suitable reinsurance strategy

In-Season Tracking of Farm, Village or District



Track crop growth during the season, to get early heads-up on distress hotspots and estimate likely output

Farmer Credit Rating and Verification



Verify crop insurance policies to assess the probability of moral hazard, and manage faster claim settlement

Farmer Advisory and Communication Platform



An integrated web and mobile-app platform that allows geo-coding and twoway communication with farmers

Yield and Acreage Outlook and Estimation

We have developed hazard-vulnerability functions and Al/ML-based models for determining acreage, yield and health estimations at resolution up to 10mx10m or higher, using multiple technologies - drones, satellite imagery, synthetic aperture radar, IoT and mobile apps.

We estimate crop yield at village level for the Government of India in several districts, for several crops across the country.

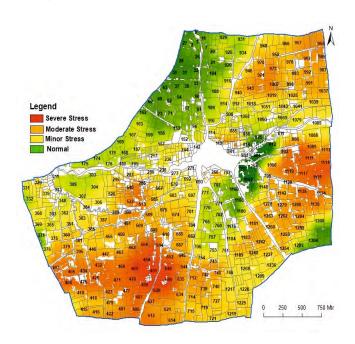
Premium Pricing and Portfolio Risk Assessment

PInCER™ implements a highly efficient actuarial process coupled with NatCat risk modeling to compute the premium rate of all crops notified under the PMFBY and WBCIS across all districts of India. Output includes threshold yield, base premium rate and four additional covers (prevented sowing, mid-season calamity, localized event cover and post-harvest loss). These calculations are based on NatCat modeling techniques that utilize the most comprehensive database in peril coverage and time series.

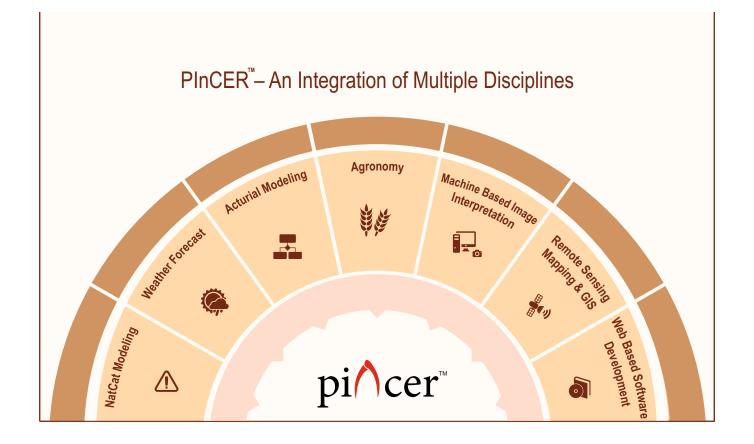
The tool also helps to optimize the market participation and reinsurance strategy by analyzing multiple target portfolios and generating EP curves and return period losses.

In-Season Tracking of Farm, Village or District

An efficient, satellite-based solution combined with on-ground intelligence, to provide real-time update of crop progress, at farm or village level for timely stress detection. Particularly suitable for tracking seed production, loanee or insured acreage.



Tracking loanee acreage



Farmer Credit Rating and Verification

An AI/ML and data-based solution that helps banks and insurance companies pre-approve loans, formulate lending strategies and verify hundreds of thousands of crop insurance loan applications and insurance policies.

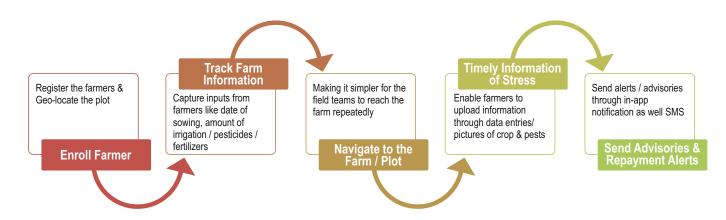


Farmer credit rating dashboard screen on PInCER platform

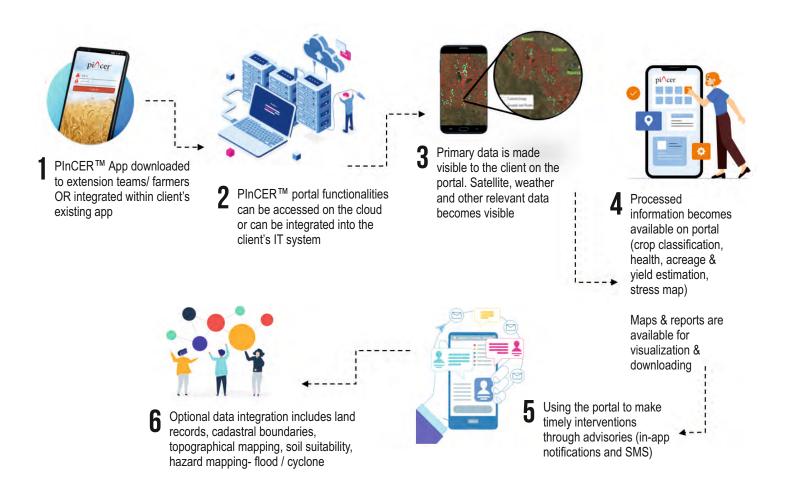
Farmer Advisory and Communication Platform

Our integrated web and mobile-app platform allows geocoding, and two-way communication with millions of farmers. The platform cuts lag in communication between extension/field teams and the head office, helps consolidate field information through spatial mapping and backend dashboard, and offers extensive functionality for recording crop cutting experiments, assessing crop loss, capturing pest and disease outbreaks and accessing previous visits information. The tool has a dynamic, customisable interface editable through the portal and offers integration with client applications.





Integration of PInCER™ with Client System



About RMSI Cropalytics

RMSI Cropalytics focuses on agri-tech that combines advanced modeling, machine learning, and agri and meteorological domain expertise to provide detailed information and data analytics on Indian agriculture. RMSI Cropalytics is a subsidiary of RMSI.

www.rmsicropalytics.com

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