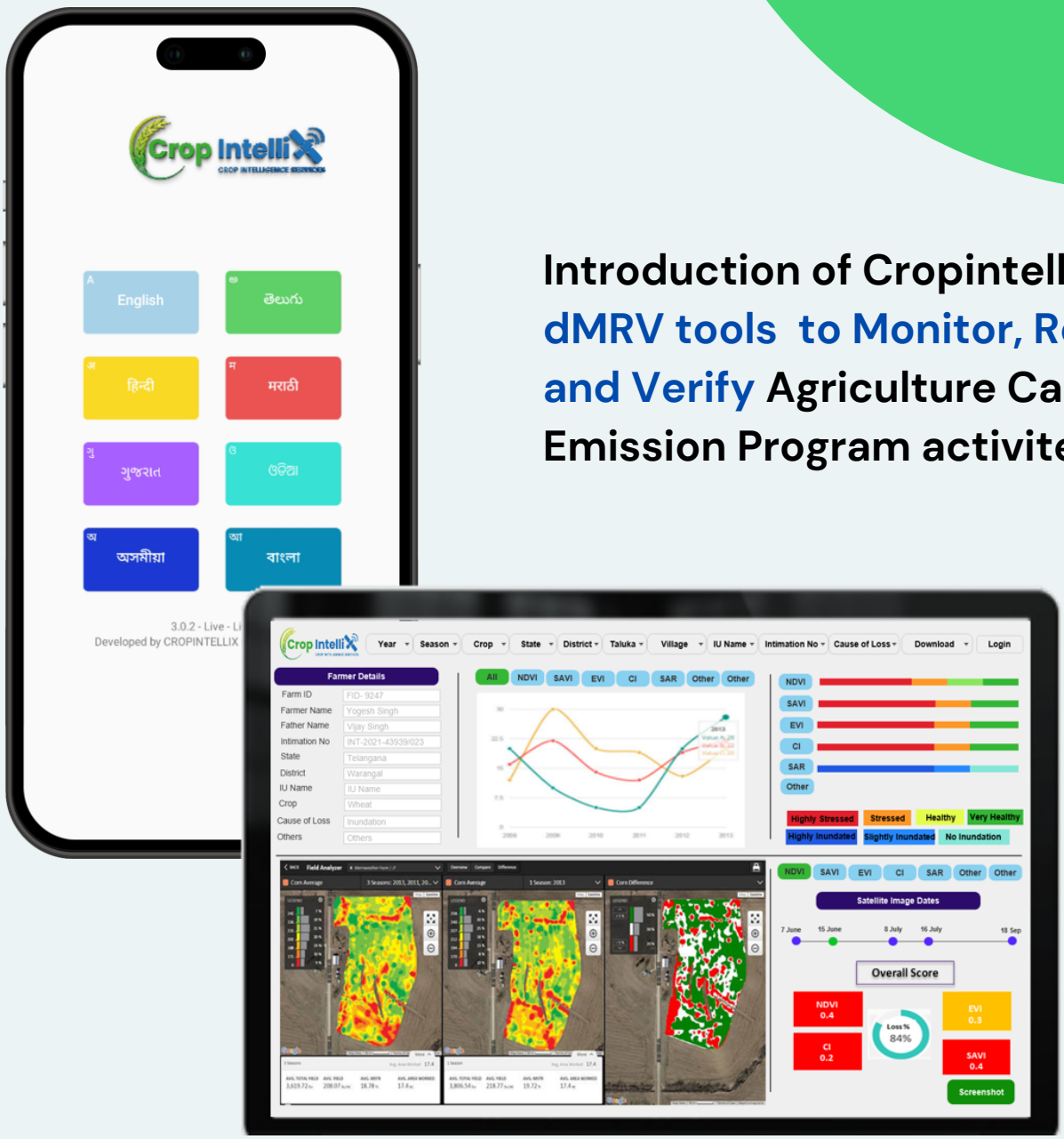
CARBON INTELLIX
DIGITAL APPLICATIONS



Introduction of Cropintellix's dMRV tools to Monitor, Review and Verify Agriculture Carbon Emission Program activites live.

www.cropintellix.com

KEY FEATURES

Coded in 8 local languages

Covers all Modules in AWD

- Geo-fencing (Farm Boundary creation) using AI & satellite image at backdrop
- Geo-tagging of field photographs with date, time and farm-id encoded
- Feature to avoid duplication of farm record, overlapping of farm boundary
- Conversion factors incorporated for local units with standard units
- Multi-level verification and reporting
- Live visualization of data for field survey and surveyor monitoring (tracking)

RATIONALE

Carbon farming is a capable strategy for more sustainable production of food and other related products. According to the food and agriculture organization (FAO), agriculture, forestry, and other land-use practices account for 24% of global greenhouse gas (GHG) emissions. Thus, efforts should be made to convince farmers to increase their resource-use efficiency and soil conserving ability to get maximum benefits from agriculture.

The carbon farming initiatives (CFI) demand agro-environmental policies to incentivize farmers to adopt best farm management practices. However, it is usually difficult to get farmers involved in such programs mainly because of the complex scheme-design and its implementation or conflicting targets of policy-makers and the farmers. Various other factors are also known to affect the adoption and implementation of new farm management practices, which include personal interests of landholders, farm or land features. Some of the barriers in carbon farming are directly associated with the landholders' interests, in addition to inadequate skills or management abilities.

To overcome these challenges, project developers conduct farmer's training and awareness programs, on-board interested farmers into carbon program, collect data with respect to farmer, farms and activities implemented for reducing emission. This is one of the critical phases as any error in data may result in incorrect results.

The most common areas of getting error at data collection are..

- Farmer with multiple farms
- Area of farm on ground versus on Gvt records
- Area of farm under cultivation versus total area of farmer
- Overlapping of boundaries with adjacent farmers
- Duplication of records if same farmer is interviewed by multiple surveyors
- Incomplete data & mismatch of field photographs with records

The most common areas of challenge faced at verification

- Large volume of records in non-digital format
- Time gap between data collection and verification process
- Data with no geographic coordinates
- Physical check with collected and reported records
- Lack of authenticity in data collected
- Incomplete data & mismatch of data

"Considering these challenges faced by project developers/proponents and VVBs (verification bodies), CropIntellix has developed a suite of application comprising of Mobile app for field data collection along with a dashboard for data viewing, analysis, verification and reporting. This application is developed with an aim to bring consistency in data, error free data and easy-to-use technology"

OBJECTIVES OF CARBON INTELLIX

OBJECTIVES

Carbon Intellix application is developed to meet the following objectives

- Digitalization of farm and farmer's record under agriculture carbon program
- To make the data collection error free, reliable and will very limited human intervention
- To make the data available for faster audit
- To bring the data completeness, consistent, transparent and accurate
- To bring uniformity is data collected by different users from differentgeographic location
- To make the measurement, reporting and verification digital, easy-to-use and quicker

KEY FEATURES

MOBILE APP

- Farmer Unique ID generation for easy tracking and traceability at any step
- Geo-fencing (Farm Boundary creation) using satellite image at backdrop
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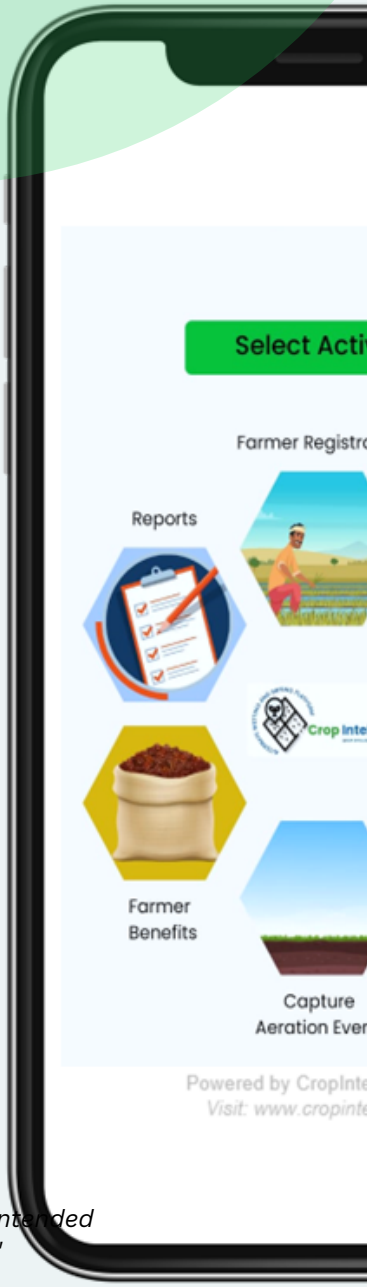
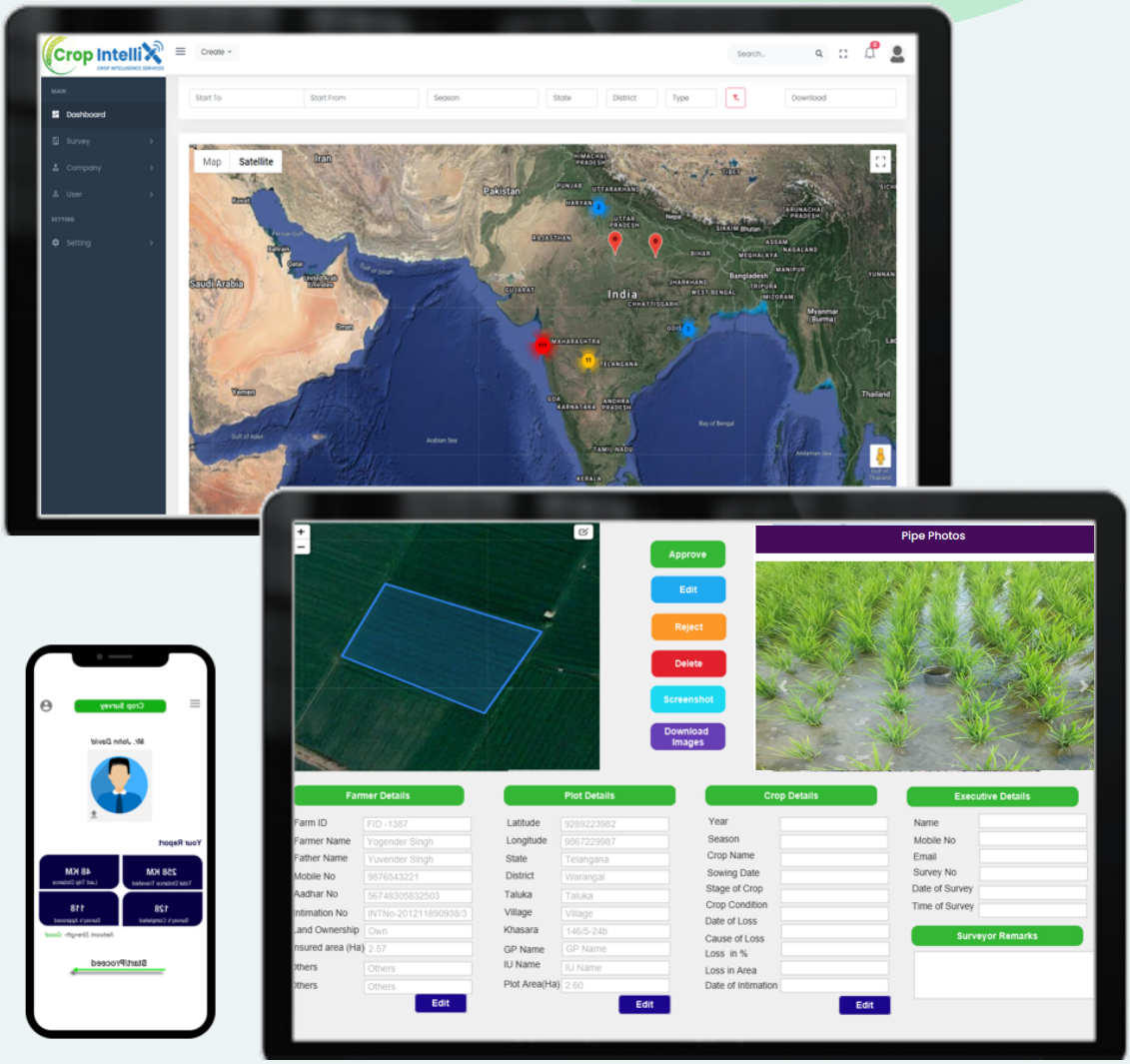


KEY FEATURES
WEB DASHBOARD

- Live visualization of data for field survey and surveyor monitoring (tracking)
- Multi-level verification and reporting
- First level data verification on quality of data collected with editing, approval and rejection options
- Second level of verification on implementation activities and to check the editing done at first level
- Analytical option to view and generate reports with filters
- Data downloading option as excel format and GIS compatible format
- Live visualization of data for field survey and surveyor monitoring (tracking)



KEY MODULES

MOBILE APP

Farmer Registration

Register farmers for AWD Programme with all the information

1

Crop Data Capture

Captures crop data will all information required for AWD

2

Geo-Fencing of Plots

Geo-Fencing farmers plot with all corner coordinates of the field

3

Pipe Installations

Captures the pipes installed along with photos and time stamps etc

4

AWD Events Capture

Records AWD events with photos and time stamps

5

Farmer Benefits

Track & Records farmer benefits with photos and time stamps

6

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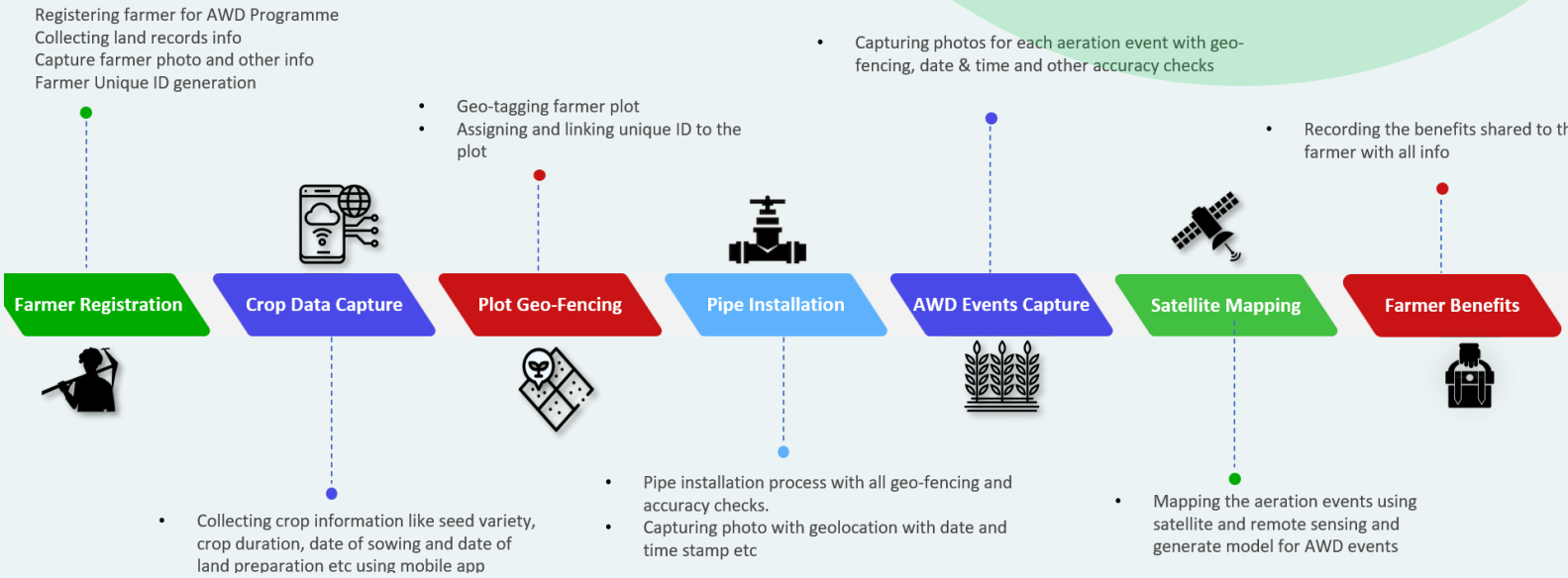
DATA COLLECTION FLOW
MOBILE APP



SUPPORTING ANALYSIS TOOL

SATELLITE MAPPING

- On the cloud satellite imagery based analytical tool
- Uses multiple satellite derived index and also has customizable index option
- Large volume of data can be analysed in short time
- Supports the data collected from other apllications

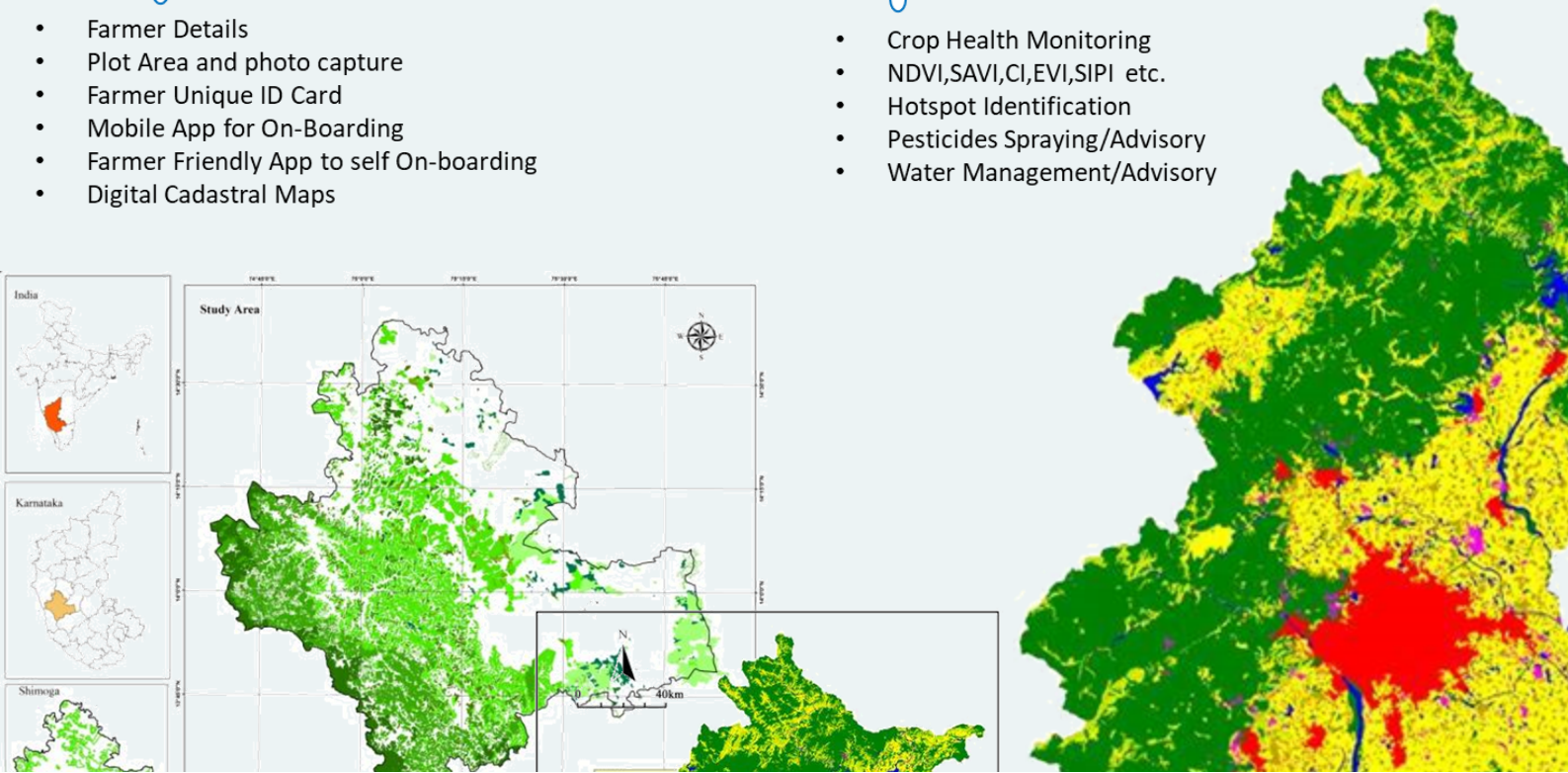
- Crop sowing status (Month wise)
- Agro Climatic Zonation Mapping
- Soil Mapping
- Past Disease/ Pest Incidences
- Crop Zonation Mapping
- Local Demand

- Crop Harvest Monitoring
- Harvesting Services/ Machinery
- Procurement/Trading Services
- Warehouse Management
- Others

Farmer Onboarding → **Crop Sowing Advisory** → **In-Season Monitoring** → **Harvest Monitoring/Services**

- Farmer Details
- Plot Area and photo capture
- Farmer Unique ID Card
- Mobile App for On-Boarding
- Farmer Friendly App to self On-boarding
- Digital Cadastral Maps

- Crop Health Monitoring
- NDVI,SAVI,CI,EVI,SIPI etc.
- Hotspot Identification
- Pesticides Spraying/Advisory
- Water Management/Advisory



Thank You..!!

Contact Us ...!!

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