



# Solutions for the Agricultural Commodity Sector

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# Overview



- ✓ About US
  - ✓ WRMS & Prudent
- ✓ Agri-Commodity Sector Challenges
- ✓ Covering the risks
  1. Production Risk
  2. Transportation Risk
- ✓ Case study

# About US

## Weather Risk Management Services Private Limited WRMS

- ✓ Founded in 2004
- ✓ Global Climate Risk Management company
- ✓ Partnering with Prudent – India largest Insurance broking company
- ✓ With R&D base in premier research centres like IIT and IISC
- ✓ UPL, a 3 billion dollar company is our largest shareholder
- ✓ We also provide logistics solutions
  - ✓ Technical installations already completed in over 10,000 Vehicles

# Agri-Commodity Sector – A few Challenges

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- ▶ Raw material availability
  - ▶ Domestic crop vagaries
  - ▶ Seasonal fluctuation
  - ▶ Lack of complete farm solutions for the farmer
  - ▶ Lack of technology advisory
  - ▶ Lack of protection against weather
- ▶ Transportation Challenges
  - ▶ Pilferages
  - ▶ Delays
  - ▶ Product damages/deterioration





# Covering Risks

# I. Covering risks **Production Risk**

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## 1. Production Risk

### How can We help

- ▶ Availability Risk
  - ▶ Domestic crop vagaries
  - ▶ Seasonal fluctuation
  - ▶ Lack of complete farm solutions for the farmer
  - ▶ Lack of technology advisory
  - ▶ Lack of protection against weather
- 1. We provide complete farm management solutions for the farmer to help him plan his crops and manage risks
- 2. We provide weather forecasts and alerts for adverse situations
- 3. We also alert the farmers against probable disease outbreaks

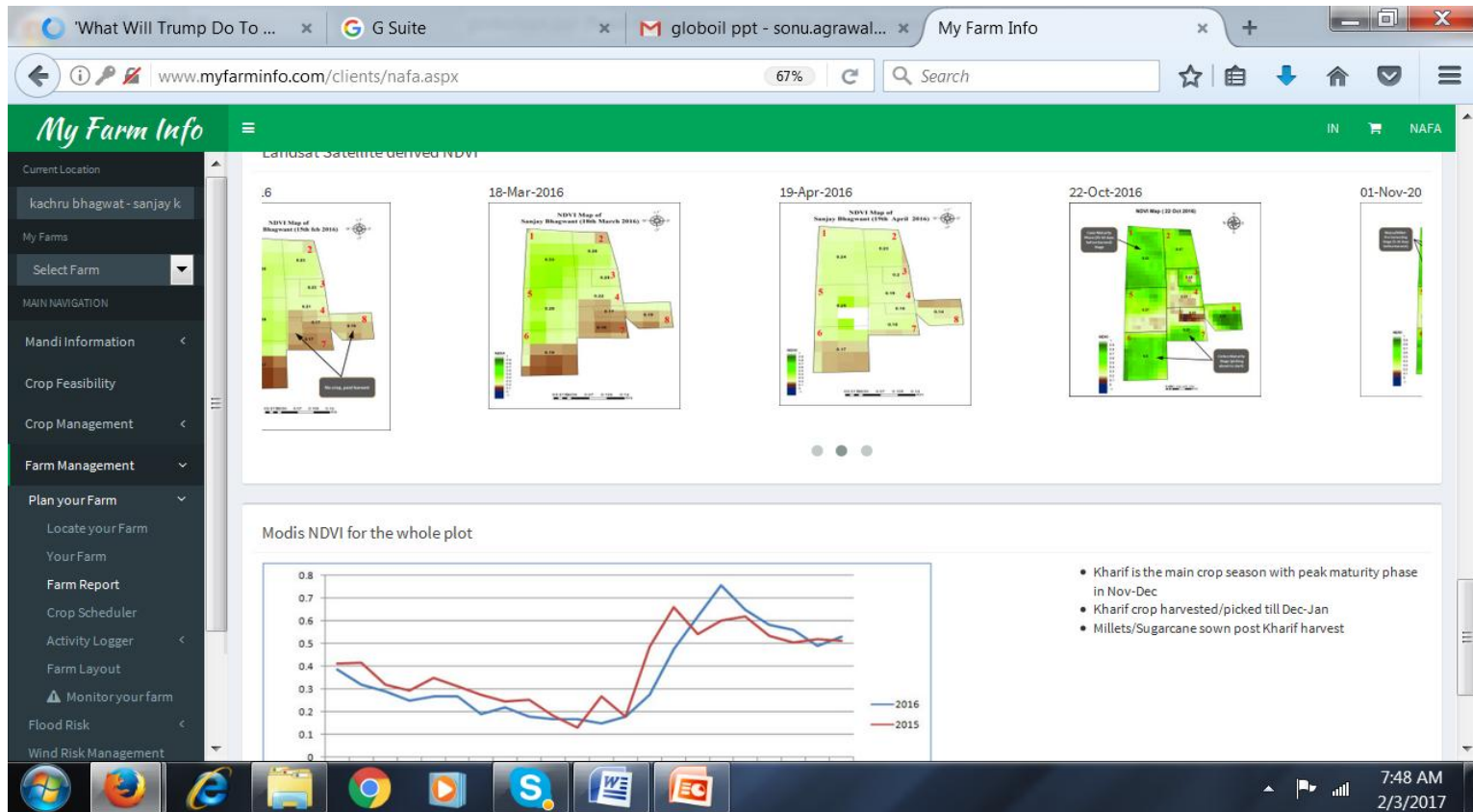
# 1. My Farm Info: Locating the field precisely

The screenshot displays the 'My Farm Info' web application. At the top, there is a green header with the logo and a user profile icon labeled 'IN'. Below the header, a sidebar on the left contains navigation options: 'Current Location' (set to 'kachru bhagwat - sanjay kachru'), 'My Farms' (with a 'Select Farm' dropdown), and 'MAIN NAVIGATION' (including 'Mandi Information', 'Crop Feasibility', 'Crop Management', 'Farm Management', 'Useful Services', 'More', and 'Admin'). The main content area features two dropdown menus for 'Farmers' (selected: 'Sanjay Kachru Bhagwat') and 'Farms' (selected: 'Farm 1'), with a green 'Submit' button below them. A map section shows '8 farms found' with a 'Map' and 'Satellite' toggle. The satellite view shows a grid of fields with several green location pins. One pin is highlighted with a tooltip that reads 'sanjay kachru bhagwat-14'. To the right of the map is a zoomed-in satellite view of a specific green field. Further right, a detailed information panel for the selected farm is displayed.

<b>Farm Name</b>	sanjay kachru bhagwat-14
<b>Farmer Name</b>	kachru bhagwat
<b>State</b>	Maharashtra
<b>District</b>	Aurangabad
<b>Registration Date</b>	27-Dec-2016 04:31:46 PM
<b>Farm Area</b>	1.07 acres
<b>Farm Coordinates</b>	20.0764, 75.1251
<b>Crop</b>	Gram
<b>Variety</b>	Bharati (ICCV-10)
<b>OtherNutrient</b>	null
<b>Sow Date From</b>	12/1/2016 12:00:00 AM
<b>Sow Date To</b>	5/15/2017 12:00:00 AM

The farmer is geo-tagged for all his fields, precise details of which can be viewed by just hovering over the location on myFarmInfo

# 1. My Farm Info: Monitoring Crops



The farmer is geo-tagged for all his fields, precise details of which can be viewed by just hovering over the location on myFarmInfo



# My Farm Info: Checking crop diseases

The screenshot displays the 'My Farm Info' application interface. At the top, there is a green header with the app name and navigation icons. A dark sidebar on the left contains a menu with categories like 'Current Location', 'My Farms', 'MAIN NAVIGATION', and 'Crop Management'. The main content area shows a form to select a crop ('Soybean - Mosaic & Rust - MP') and a 'Get Disease Forecast' button. Below this is a weather forecast table for the next eight days, including temperature, weather conditions, and humidity/wind data.

**My Farm Info** IN **NAF**

Current Location  
kachru bhagwat - sanjay kac

My Farms  
Select Farm

MAIN NAVIGATION

Mandi Information

Crop Feasibility

Crop Management

Pest and Disease

Vulnerability

Forecast Advisory

Contract Spraying

Nutrition

Weed

Nematode

Water

Farm Management

For which crop do you want to know Crop feasibility?  
Soybean - Mosaic & Rust - MP

Get Disease Forecast

Input

Disease not predicted in coming days

THURSDAY 02 Feb	FRIDAY 03 Feb	SATURDAY 04 Feb	SUNDAY 05 Feb	MONDAY 06 Feb	TUESDAY 07 Feb	WEDNESDAY 08 Feb	THURSDAY 09 Feb
32°/14°	32°/15°	33°/14°	32°/15°	31°/15°	32°/14°	33°/15°	32°/15°
Normal	Warm	Warm	Warm	Warm	Warm	Warm	Normal
Humidity Wind	Humidity Wind	Humidity Wind	Humidity Wind	Humidity Wind	Humidity Wind	Humidity Wind	Humidity Wind
49% 3 m/s	50% 3 m/s	51% 3 m/s	50% 3 m/s	51% 3 m/s	42% 3 m/s	44% 3 m/s	39% 4 m/s

Our Crop Management solutions provide disease forecasts for all major crops and are easily available to all farmers on a SMS

# Alert Messages for Weather conducive conditions for pests

India's 1st real time plant disease diagnosis service



PLANT  
DOCTOR 

Whatsapp a photo of your plant to receive an instant disease diagnosis from our experts

**99924 22669**



24/7 Free Service for Indian Farmers

[www.weather-risk.com](http://www.weather-risk.com)

# Spraying of pesticides



# 2. My Farm Info: Crop Nutrition

**My Farm Info** IN NAFA

Current Location  
kachru bhagwat - sanjay kac

My Farms  
Select Farm

MAIN NAVIGATION

- Mandi Information
- Crop Feasibility
- Crop Management
- Pest and Disease
- Nutrition
- Weed
- Nematode
- Water
- Farm Management
- Useful Services

**Nutrition Management** Get essential nutrition information for your farm [Home](#) > [Crop Management](#) > [Nutrition Management](#)

Input

Crop: Wheat Season: Rabi Soil: Loamy Irrigation: Good Irrigation Nutrition Status: Low Fertile

Submit

**NITROGEN**  
1/3 application during basal, 2/3 application during first node stage at around 40-45 days after seeding of 120 kgs of N/ ha

**PHOSPHORUS**  
Basal application of Phosphorus through SSP or DAP of 60 kgs/ha

**POTASSIUM**  
Four equal split application during basal, tillering, pancile initiation stage and heading stage of 40 kgs/ha

**MICRONUTRIENTS**  
Apply 5 kg of zinc sulphate mixed with 50 kg dry sand during basal application, spray 2.5 Kg manganese sulphate with 500 Liters of water after 3 to 4 days of first irrigation

**FYM APPLICATION**  
Apply 5t/ha of FYM or compost, or 2.5t/ha of green leaf manure before ploughing

Our Crop Management solutions provide nutrition advisory for all major crops and are easily available to all farmers on a SMS

# 3. My Farm Info: Market Solutions

**My Farm Info** IN NAFA

Current Location: kachru bhagwat - sanjay kac

My Farms: Select Farm

MAIN NAVIGATION

- Mandi Information
- Mandi Prices
- Optimal Mandi
- Best Mandi
- Crop Feasibility
- Crop Management
- Farm Management
- Useful Services
- More
- Admin

### Mandi Prices

Check Commodity Prices From Nearby Mandies

Nearby Mandies: Aurangabad - 32 KM

Map Satellite

Commodity Variety Price(Rs) / Quintal Date

Commodity	Variety	Price(Rs) / Quintal	Date
More	Amla(Nelli Kai)	1300	03-Jan-17
More	Apple	9000	24-Jan-17
More	Bitter Gourd	2400	31-Jan-17
More	Chikoos(Sapota)	2000	19-Jan-17
More	Garlic	6000	28-Jan-17
More	Ginger(Dry)	1300	19-Jan-17

We provide updated information about all the nearby agricultural markets to ensure a win-win for the farmer and other players in the agri-supply chain

# 4. My Farm Info: Insuring the Crop

The screenshot shows a user interface for 'My Farm Info: Insuring the Crop'. The user is logged in as 'kachru bhagwat - sanjay kachru'. The 'Product' is set to 'Wheat Product'. The main section is titled 'Pest & Disease Risk Analysis' and displays a table of risk analysis for four different diseases. Each row in the table shows the disease name, the pathogen load in the area (High), the weather conducive condition (High), and the insurance purchase status (Yes).

PEST & DISEASE	PATHOGEN LOAD IN YOUR AREA	WEATHER CONDUCIVE CONDITION	PURCAHASE INSURANCE AND VALUE
<b>Karnal Bunt</b>	<b>High</b>	<b>High</b>	<b>Yes</b>
<b>Loose Smut</b>	<b>High</b>	<b>High</b>	<b>Yes</b>
<b>Powdery Mildew</b>	<b>High</b>	<b>High</b>	<b>Yes</b>
<b>Strip Rust/Yellow Rust</b>	<b>High</b>	<b>High</b>	<b>Yes</b>

The field crop is assed against soil, weather and disease conditions and the insurance cover is suggested accordingly to ensure maximum protection

## II. Covering risks *Production Risk*

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### 1. Production Risk

- ▶ Availability Risk
  - ▶ Domestic crop vagaries
  - ▶ Seasonal fluctuation
  - ▶ Lack of complete farm solutions for the farmer
  - ▶ Lack of technology advisory
  - ▶ Lack of protection against weather

### How can We help

4. We offer crop insurance solutions to ensure improved production both in terms of quantity/quality and continuity

# Term Sheets A

## 1. Weather Index based Insurance Cover for Groundnut

<b>RESTRUCTURED WEATHER BASED CROP INSURANCE SCHEME (KHARIF 2016)</b>						
<b>TERM SHEET</b>						
State: ANDHRA PRADESH		District: Kurnool				
Crop: Groundnut		Reference Weather Station:				
<b>I. DEFICIT RAINFALL</b>						
		PHASE - I			PHASE - II	
		16-Jul	to	5-Aug	6-Aug	to 31-Aug
		INDEX Aggregate of rainfall over respective Phases				
IA. RAINFALL VOLUME		STRIKE I (<)	55	mm	90	mm
		STRIKE II (<)	25	mm	30	mm
		EXIT	0	mm	0	mm
		RATE I (Rs./ mm)	22.5		22	
		RATE II (Rs./ mm)	93.00		122.67	
		MAXIMUM PAYOUT (Rs.)	3000		5000	
		TOTAL PAYOUT (Rs.)	16000			





# Covering risks **Transportation Risk**

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## 2. **Transportation Risk**

### **How can We help**

- ▶ Pilferages and thefts
- ▶ With our proven solutions for Vehicle Tracking Systems which provide us tracking and sensor based understanding of suspicious activities, we ensure security of the shipment
- ▶ Insurance

# Security and Transparency with our Vehicle tracking Systems

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- ▶ Vehicle Tracking System (VTS)/ Stealth mode VTS
  - ▶ YOUR Friendly Logistics Cop
    - 24X7 Hijack Prevention / Anti-Pilferage/ Anti-Adulteration
- ▶ Track Shipments
  - ▶ ALERTS Customised For Your Business
    - Door Opening / Route Violation Alert/ Temperature Alert
- ▶ Check Unscheduled Stops
  - ▶ YOUASK WE REPORT
    - Route Violation / Unscheduled Stops / Herd Violation

# 5. Live Tracking of Shipment

Customer And Order Detail lays food ltd /646962002N

From Address : 12453.  
To Address : 133phguj  
Capacity : 10

Refrigerated Status : No  
Door Status : Open  
Order Date : 2017-01-27 17:10:40

Dispatch Date : 2017-01-27 17:32:10  
Schedule Arrival : 2017-01-28 17:32:10

Vehicle : UP 14 ET 9651  
Actual Arrival Date :



Serial	Track DocketNo	Order Date	From To Address	Dispatch Date	Schedule Arrival	Current Location	View
1	646962002N	2017-01-27 17:10:40	12453. (Central Delhi) to 133phguj (Calcutta)	2017-01-27 17:32:10	2017-01-28 17:32:10		

The exact location details, with tentative delivery time of the Shipment are being GPS tracked and presented Live to the Shipper on background of a geographical map.

# Case Study

- ▶ We helped a major milk packaging and distribution company in creating state of the art logistics management system by tracking over 2000 Trucks and Vans

<b>Problems</b>	<b>Solution Case</b>	<b>Impact</b>
<b>Delivery Delay</b>	<ul style="list-style-type: none"><li>•Tracked Shipment to ensure that driver cant take unscheduled stops or take different route</li></ul>	Better Logistics Planning and cost saving
<b>Pilferages and Adulteration</b>	<ul style="list-style-type: none"><li>•Door sensors were installed on all milk van doors</li><li>•Unscheduled stop alert has been provided</li></ul>	<ul style="list-style-type: none"><li>•Minimized Pilferages and Adulteration by over 50%</li></ul>
<b>Accountability of Quality Losses</b>	<ul style="list-style-type: none"><li>•Temperature Sensors were installed</li><li>•Quality losses due to AC stoppages by the driver could be detected</li></ul>	<ul style="list-style-type: none"><li>•Quality losses were minimized</li><li>•Company could charge transporter for quality losses</li></ul>

# Case Study

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<b>Problems</b>	<b>Solution Case</b>	<b>Impact</b>
<b>High Logistics and Management Costs</b>	<ul style="list-style-type: none"><li>•Automated the product tracking from sources to plant and from plant to sale points</li><li>•Transporter payments were linked to kilometres clocked as per the VTS device</li></ul>	<ul style="list-style-type: none"><li>•Reduced Manpower in logistics</li><li>•Reduced Transportation costs because of correct billing – 20% cost saving</li></ul>



# Thank You