



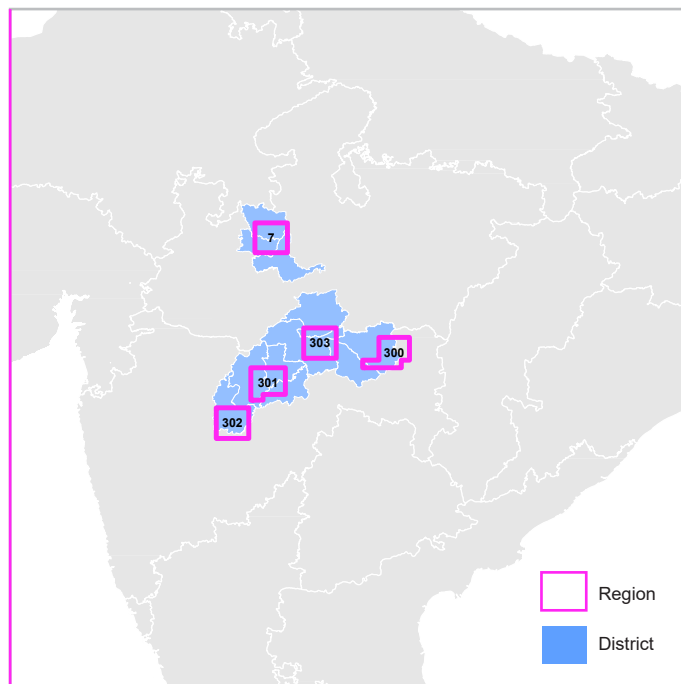
SOYBEAN



Focus Regions

Soybeans, known as the “Golden Bean” of the 20th century, are the most important oil-seed crop in India. India is one of the largest producers and consumers of Soyabean in the world. It is extensively cultivated in Madhya Pradesh, Maharashtra and Rajasthan, contributing to more than 70% of the total soybean production in India. Indore, Ujjain, Dewas, Mandsaur in Madhya Pradesh, Akola, Sangli, Nagpur in Maharashtra and Kota in Rajasthan are major trading centres in India.

Region ID.	State	Production	Risk Free Production	Metric Tons (MT)	
				Available Production	Available Risk Free Production
R-7	Madhya Pradesh	1,42,416	1,16,429	14,242	11,643
R-300	Maharashtra	55,284	36,419	5,528	3,642
R-301	Maharashtra	2,97,828	2,23,927	17,870	13,436
R-302	Maharashtra	64,854	43,262	6,485	4,326
R-303	Maharashtra, Madhya Pradesh	1,23,944	1,12,605	12,394	11,260



Major varieties grown in different agro-climatic zones of India

Agro-climatic zone	State	Region ID.	Major Districts	Varieties
Central Plateau & Hills (CPH)	Madhya Pradesh	R-7	Rajgarh, Sehore, Shajapur	JS 95-60, JS 97-52, JS-2029, JS-2034, JS-2069, JS 2098, JS-335, JS-9305, MAUS-158, NRC-86 (Ahilya), Phule Kalyani (DS-228), TAMS-38
Western Plateau and Hills (WPH)	Maharashtra	R-300	Nagpur	JS 95-60, JS 97-52, JS-2029, JS-2034, JS-2069, JS 2098, JS-335, JS-9305, MAUS-158, NRC-86 (Ahilya), Phule Kalyani (DS-228), TAMS-38
		R-301	Buldhana, Akola, Washim	
		R-302	Jalna	
	Maharashtra, Madhya Pradesh	R-303	Wardha, Betul, Amravati	



Seasonal Calendar

The seasonal details are depicted in the calendar by their agro-climatic zones

Agro-climatic zone	Region	May	Jun	Jul	Aug	Sept	Oct
CPH	R-7			Kharif			
WPH	R-300, R-301, R-302, R-303			Kharif			

Note: CPH Central Plateau and Hills, WPH Western Plateau and Hills

Sowing Mid season Harvesting



Quality Specifications

Quality by both standard post-harvest parameters and specific biological indicators for better price realisation

Soybean		Band - 1	Band - 2	Band - 3	Band - 4	Band - 5
No.	Tradable parameters	341	342	343	344	345
I	Moisture (% by wt)	01.00 - 07.00	07.01 - 08.00	08.01 - 09.00	09.01 - 10.00	10.01 - 12.00
II	Foreign matter (% by wt)	01.00 - 01.50	01.00 - 01.50	01.00 - 01.50	01.51 - 02.00	02.01 - 03.00
III	Damaged seeds (% by wt)	01.00 - 03.00	01.00 - 03.00	01.00 - 03.00	03.01 - 05.00	05.01 - 07.00
IV	Other edible seeds (% by wt)	00.01 - 01.00	00.01 - 01.00	00.01 - 01.00	01.01 - 03.00	03.01 - 06.00
V	Weevil Seeds (% by count)	01.00 - 03.00	01.00 - 03.00	01.00 - 03.00	03.01 - 04.00	04.01 - 05.00
Biochemical Parameters						
I	Oil content (% by wt)	Above 20	Above 20	18.01 - 20.00	13.01 - 18.00	01.00 - 13.00



Contract Summary

A brief overview of the commodity traded in the Agriota E-Marketplace.

Lot ID	LOT09SY02
HSN Code	12019000
Commodity	Soybean
Variety	JS 95-60
Grade	Grade-2 (Band-I)
Aggregation Unit	Metric Tons (MT)
Minimum Lot Size	12.00 MT
Bid Window Termination	48 Hr
Allowable Lot Variance (+)	2.40 MT
Allowable Lot Variance (-)	1.20 MT
Rights per Lot (No.)	5
Current Lot Size	14 MT
Contract Price (Per Unit)	₹ 60,100
Fees	2.00%
Taxes	0.00%
Packaging Size (Per Bag)	50 Kg
Contract Value	₹ 8,58,228
Logistic Hub Location	Om Prakash Chouhan, Maruti WareHouse, Machbai, Tehsil Budni, Sehore District, Madhya Pradesh 466445



Dynamic Crop Calendar (DCC)

It is a real-time tool that tracks and forecasts stresses and their severity by commodity, variety and phenophase wise. The DCC helps to estimate crop health, yield and risk for individual fields at various temporal and geo-spatial levels. DCC also helps in customised monitoring, alert generation and advisory activities.

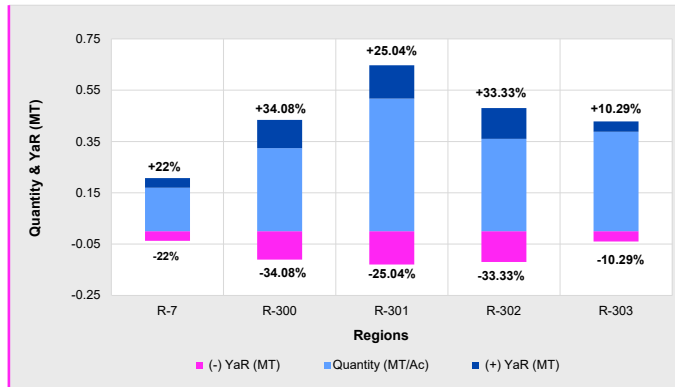
MONTHS	Jun				Jul				Aug				Sep			
WEEK	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
STAGES	Seedling		Vegetative		Flowering		Pod Formation				Pod Filling				Maturity	
BIOTIC STRESS			 Disease : WL, DRR, YMV, RS													
			 Insect Pest : SF, WF, SL, GB, TC													
ABIOTIC STRESS			 Low Temperature : < 20°C													
			 High Temperature : > 38°C													
			 Rain: >90 mm/ Day													
			 Drought: 8 - 20 Days													
			 High RH: > 92%													
			 Hail Storm													

NOTE: WL Wilt, DRR Dry Root Rot, YMV Yellow Mosaic Virus, RS Rust, SF Stem Fly, WF White Fly, SL Semilooper, GB Girdle Beetle, TC Tobacco Caterpillar



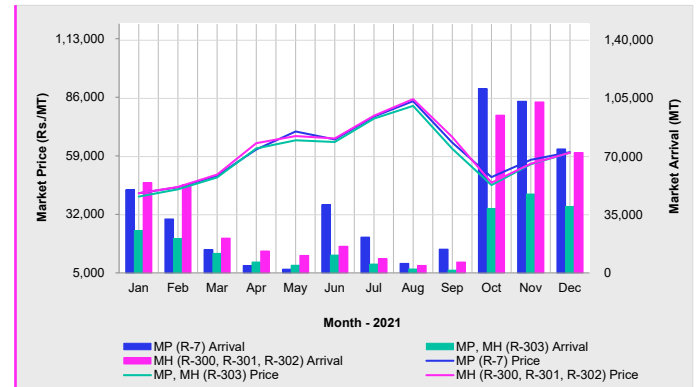
Yield at Risk (YaR) - Stability

The fluctuation/risk in yield or productivity varies from region to region. The region-wise variation on the yield is depicted in the graph below.



Price Volatility

The monthly fluctuations in price for different benchmark markets are shown below.



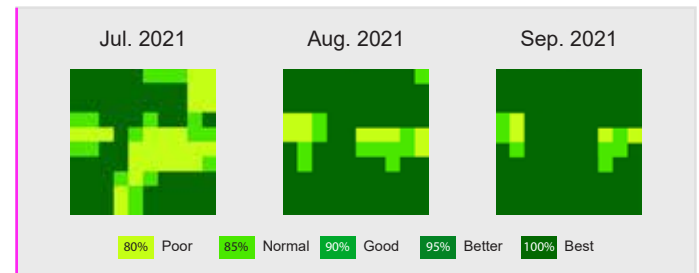
Aerial Photo

Aerial photo provides the visual representation of the field periodically.



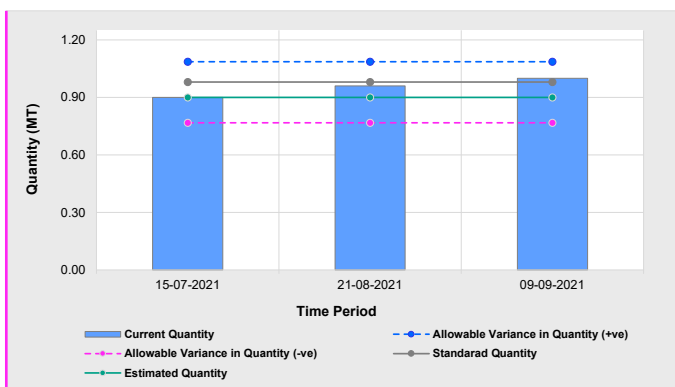
Multispectral Yield Analysis

Tool that provides a Normalised Differential Vegetation Index (NDVI) analysis of individual fields to ground-truth indices. It is standardised across time periods for quick visual interpretation.



Ground-Truth Risk Report

Real-time estimation of yield and its threshold at various stages of crop growth, based on field monitoring of plant health and detection of stress.



Multispectral Analysis

Normalised Differential Vegetation Index (NDVI) comparison of field versus regional indices across commodity, variety and phenophase.

