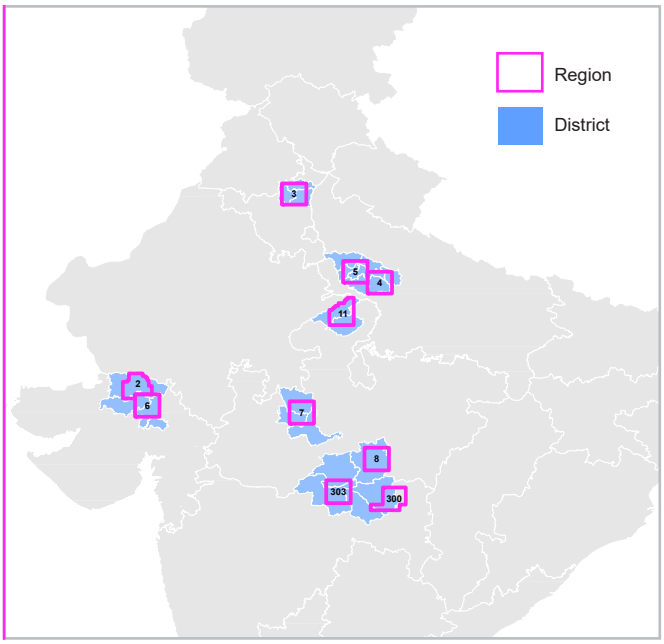
WHEAT

Agriota cropdata
Connecting Farmers

Wheat is the second most important cereal crop of India after Rice and plays a vital role in the food and nutritional security of the country. Wheat has been cultivated since prehistoric times in the world. From all possible records, it seems that it's center of origin in South-Western Asia. It is believed that Aryans brought wheat grains to India and since then it has been grown in India. Major wheat-growing states in India are Uttar Pradesh, Punjab, Haryana, Madhya Pradesh, Rajasthan, Bihar, and Gujarat.

Focus Regions



Metric Tons (MT)

Region ID.	State	Production	Risk Free Production	Available Production	Available Risk Free Production
R-3	Haryana	18,18,671	17,18,009	36,373	34,360
R-7	Madhya Pradesh	11,20,074	10,29,016	22,401	20,580
R-4	Uttar Pradesh	9,43,666	9,06,627	18,873	18,133
R-5	Uttar Pradesh	9,25,186	8,94,314	18,504	17,886
R-8	Madhya Pradesh	6,61,761	6,18,888	26,470	24,756
R-11	Madhya Pradesh	5,04,874	4,88,787	30,292	29,327
R-6	Gujarat	1,70,478	1,63,050	17,048	16,305
R-2	Gujarat	72,228	71,201	7,223	7,120
R-300	Maharashtra	1,10,241	95,804	11,024	9,580
R-303	Maharashtra	96,135	93,121	9,614	9,312

Major varieties grown in different agro-climatic zones of India

Agro-climatic zone	State	Region ID.	Major Districts	Varieties
Gujarat Plains and Hills (GPH)	Gujarat	R-2	Banas Kantha	GDW 1255, GW 190, GW 273, GW 366, LOK 1, WH 2265, WH 410, WHD 912, Pusa Tejas (HI 8759), HD 4728 (PUSA MALWI), GW-496, GW-322, GW-463
		R-6	Patan, Mahesana, Gandhinagar	
Trans-Ganga Plains Region (TGP)	Haryana	R-3	Karnal, Kurukshetra, Kaithal	PBW 660, DBW 173, PDW 233, HD 1981 (Pratap), HD 2687 (Shresth), HD 3059, HD 3086 (Pusa Gautami), PBW 396, PBW 502, PBW 550, Unnat PBW 343 (PBW 723), WH 1142, PBW-725, DBW-222, HD-2967, WH-1105, DBW-187
Central Plateau and Hills (CPH)	Madhya Pradesh	R-7	Shajapur, Rajgarh, Sehore	Pusa Tejas (HI 8759), HD 4728 (Pusa Malwi), HI 8498 (Malvashakti), HI 8737 (Pusa Anmol), HI 8381 (Malvashree), HI 8663 (Poshan), LOK 1, MPO 1106 (SUDHA), MP 4010, MP 1215, MP 3211, SITARI, GW-322, HI-1544, SHRIRAM SUPER-111, SHRIRAM SUPER-252, HARSHITA, BIOSEED-2006, SHRIRAM SUPER-303, MAHYCO-GOL, VNR-601, PUSA MANGAL
		R-8	Chhindwara	
		R-11	Gwalior, Morena	
Upper Gangetic Plains Region (UGP)	Uttar Pradesh	R-4	Mainpuri, Etah, Farrukhabad	PDW 215, PDW 233, WHD 896, HI 8498 (Malvashakti), HD 2285 (GOBIND), HD 2329, GW 190, GW 273, WH 1124, WH 1080, HD 3171, PBW-550, DBW-17, HD-2967, PBW-502, PBW-550, HD-3086, PBW-373 PBW-154, WH-711, WH-1105, PBW-226, HD-3086. Gujarat: GDW 1255, GW 190, GW 273, GW 366, LOK 1, WH 2265, WH 410, WHD 912, Pusa Tejas (HI 8759), HD 4728 (PUSA MALWI), GW-496, GW-322, GW-463
		R-5	Etah, Firozabad, Kasganj, Hathras, Aligarh	
Western Plateau and Hills (WPH)	Maharashtra	R-300	Nagpur	AKAW 4627, AKW-381, HD 1605 (Pusa Ujala), HD3090 (Pusa Amulya), HI 8381 (Malvashree), HI 8663 (Poshan), LOK 1, MACS 2846, MACS 3949, MACS 4028, UAS 446
	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	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
GPH	R-2, R-6				Rabi				
TGP	R-3				Rabi				
CPH	R-7,R-8				Rabi				
	R-11				Rabi				
UGP	R-4, R-5				Rabi				
WPH	R-300, R-303				Rabi				

Note: **GPH** Gujarat Plains and Hills, **TGP** Trans-Ganga Plains Region, **CPH** Central Plateau and Hills, **UGP** Upper Gangetic Plains Region, **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

No.	WHEAT Tradable parameters	Band - 1 241	Band - 2 242	Band - 3 243	Band - 4 244	Band - 5 245
I	Moisture (% by wt)	01.00 - 09.00	09.01 - 10.00	10.01 - 11.00	11.01 - 12.00	12.01 - 14.00
II	Foreign matter (% by wt)	01.00 - 01.50	01.00 - 01.50	01.00 - 01.50	01.51 - 03.00	03.01 - 04.00
III	Admixture / Other edible grains (% by wt)	01.00 - 05.00	01.00 - 05.00	01.00 - 05.00	05.01 - 07.00	07.01 - 10.00
IV	Immature & Shriveled Grains (% by wt)	01.00 - 02.00	02.01 - 03.00	03.01 - 04.00	04.01 - 05.00	05.01 - 07.00
V	Damaged/Discoloured grains (% by wt)	01.00 - 03.00	01.00 - 03.00	01.00 - 03.00	03.01 - 05.00	05.01 - 07.00
VI	Weevilled Grains (% by count)	01.00 - 04.00	01.00 - 04.00	01.00 - 04.00	04.01 - 06.00	06.01 - 10.00

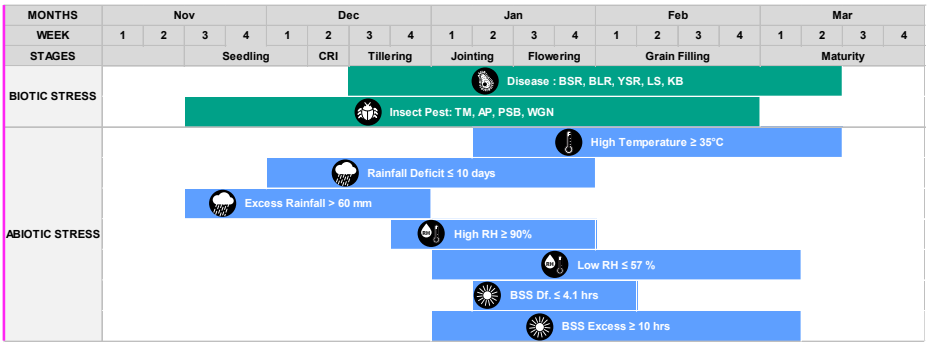
Contract Summary

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

Lot ID	LOT11WH09
HSN Code	10019910
Commodity	Wheat
Variety	PBW 660
Grade	Grade-I (Band-II)
Aggregation Unit	Metric Tons (MT)
Minimum Lot Size	15.00 MT
Bid Window Termination	48 Hr
Allowable Lot Variance (+)	3 MT
Allowable Lot Variance (-)	1.5 MT
Rights per Lot (No.)	3
Current Lot Size	17.00 MT
Contract Price (Per Unit)	₹ 18,300
Fees	1%
Taxes	0%
Packaging Size (Per Bag)	50 Kg
Contract Value	₹ 3,14,211
Logistic Hub Location	Om Logistics Ltd.Block No.1 Plot No. 22 Village Mohri, Tehsil Shahabad, Kurukshetra-136135, Haryana, India

Dynamic Crop Calendar (DCC)

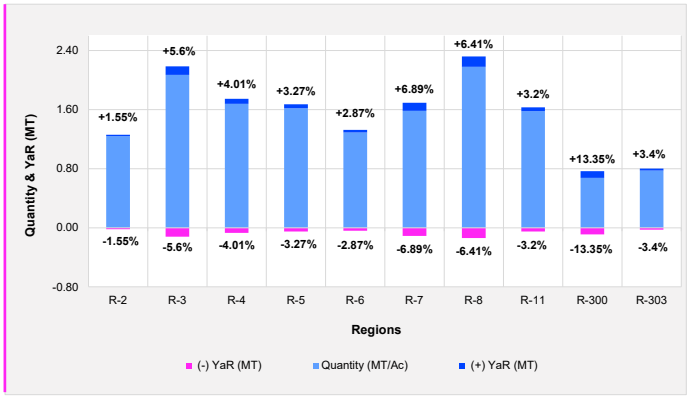
It is a real-time tool that tracks and forecasts stresses and their severity by commodity, variety and phenophase. The DCC helps estimate crop health, yield and risk for individual fields at various temporal and geo-spatial levels. DCC also helps in customised monitoring, alert generation and advisory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



NOTE: **CRI** Crown Root Initiation, **BSR** Black Stem Rust, **BLR** Brown Leaf Rust, **YSR** Yellow Strip Rust, **LS** Loose Smut, **KB** Karnal Bunt, **TM** Termite, **AP** Aphids, **PSB** Pink Stem Borer, **WGN** Wheat Gall Nematoade, **BSS** Df Bright Sunshine, **RH** Relative Humidity

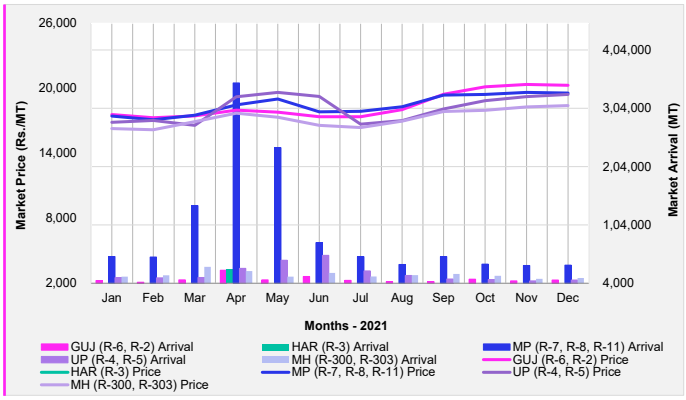
Yield at Risk (YaR) - Stability

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.



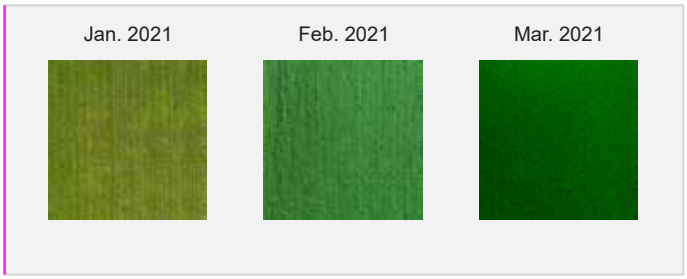
Price Volatility

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



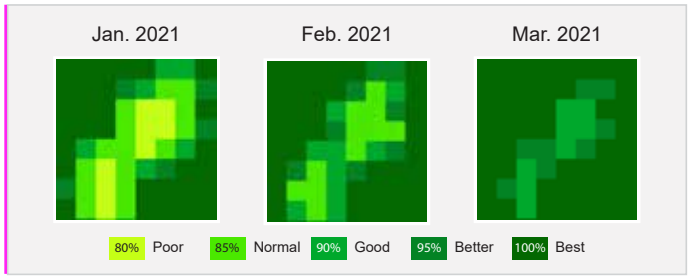
Aerial Photo

Aerial photo provides the visual representation of a the field periodically.



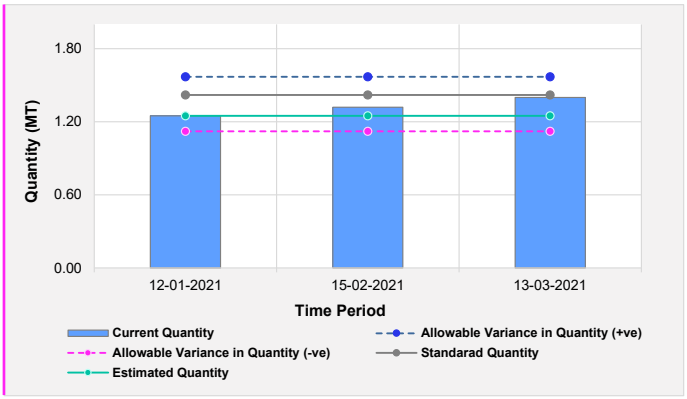
Multispectral Yield Analysis

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.