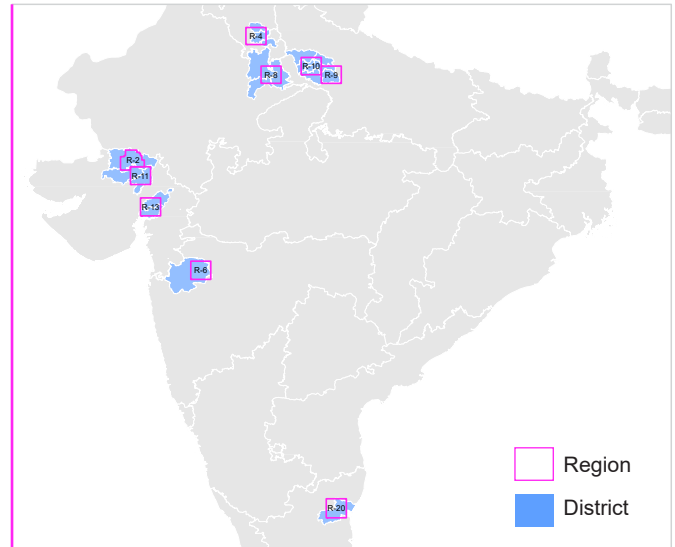




## Focus Regions

India is one of the largest producers of Bajra in the world. Rajasthan is the highest producing state followed by Maharashtra, Gujarat, Uttar Pradesh, Haryana, Karnataka, Tamil Nadu, and Andhra Pradesh. Bajra is known for its high nutritive value because of its high iron and zinc content. The major export markets are the United Arab Emirates (UAE), Yemen, Tunisia, and the United Kingdom (UK).

Metric Tons (MT)					
Region ID.	State	Production	Risk Free Production	Available Production	Available Risk Free Production
R-8	Rajasthan	2,39,650	2,28,602	23,965	22,860
R-10	Uttar Pradesh	2,36,252	2,24,825	23,625	22,482
R-2	Gujarat	1,93,056	1,87,175	19,306	18,718
R-13	Gujarat	1,39,300	1,34,307	13,930	13,431
R-9	Uttar Pradesh	86,034	83,411	8,603	8,341
R-4	Haryana	73,071	69,645	7,307	6,965
R-6	Maharashtra	58,818	49,407	5,882	4,941
R-11	Gujarat	45,158	42,708	4,516	4,271
R-20	Tamil Nadu	38,253	35,833	3,825	3,583



## 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, R-11, R-13	Banaskantha, Anand, Mahesana, Kheda, Patan	JKBH 1008, HHB 272, MPMH 21, 86M01, HHB 234, Dhanshakti, MH-2114, RHB 223, Hi Pearl 51+, HHB-67, Nandi-5, Nandi-61, Nandi-64, Nandi-75, GHB-905, KBH 108, 86M89, KBH 3940
Trans Gangetic Plain (TGP)	Haryana	R-4	Jhajjar, Gurgaon, Rohtak	JKBH 1008, HHB 272, MPMH 21, 86M01, Dhanshakti, RHB 223, HHB-67, Nandi-75, MH 1928, PB 1705, XMT 1497, Bio 8145, 86M82, KBH 108, 86M89, KBH 3940
Western Plateau and Hills (WPH)	Maharashtra	R-6	Nashik	86M01, 86M88, NBH 5767, NBH 5061, Dhanshakti, Hi Pearl 51+, HHB-67, Nandi-65, Nandi-75, HHB 299, Mahabeej1005, Phule Adishakti, 86M13
Western Dry Zone (WDZ)	Rajasthan	R-8	Alwar, Bharatpur, Dausa	JKBH 1008, HHB 272, Proagro Tejas, HHB 234, Dhanshakti, BHB-1202, Nandi-75, MH 1928, 86M84, GHB-905, Nandi-72, KBH 108, 86M89, Balwan, KBH 3940
Upper Gangetic Plain (UGP)	Uttar Pradesh	R-9, R-10	Aligarh, Etah, Firozabad, Mainpuri, Hathras, Kasganj	86M01, Dhanshakti, MH-2114, I.C.M.V.-221, Hi Pearl 51+, HHB-67, Nandi-75, MH 1928, GHB-905, XMT 1497, JKBH 1100, Bio 8145
Southern Plateau and Hills (SPH)	Tamil Nadu	R-20	Tiruvannamalai, Villupuram	CO (Cu) 9,X 7, CO 7, CO (Cu) 10, AIMP 92901 (Samrudhi), Dhanshakti, HB 3, PHB 47, MH 180, MH 179 (ICMH 451), Pusa 23 (MH 169), ICMH 356, MBH 160, Nandi 30, RHRBH 8924 (Saburi), CoHCu 8, Nandi 35, Pratap (MH 1642), Bio 448 (MH 1671)



## Seasonal Calendar

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

Agro-climatic zone	Region	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
GPH	R-2, R-11, R-13		Summer			Kharif					
TGP	R-4					Kharif					
WPH	R-6					Kharif					
WDZ	R-8					Kharif					
UGP	R-9, R-10					Kharif					
SPH	R-20					Kharif					

Note: GPH Gujarat Plains and Hills, TGP Trans Gangetic Plain, WPH Western Plateau and Hills, WDZ Western Dry Zone, UGP Upper Gangetic Plain, SPH Southern Plateau and Hills

■ Sowing ■ Mid season ■ Harvesting



## Contract Summary

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

Lot ID	LOT12BA04
HSN Code	10082920
Commodity	Bajra
Variety	HHB 272
Grade	Grade-I (Band-III)
Aggregation Unit	Metric Tons (MT)
Minimum Lot Size	15.00 MT
Bid Window Termination	48 Hr
Allowable Lot Variance (+)	0.22 MT
Allowable Lot Variance (-)	0.44 MT
Rights per Lot (No.)	4
Current Lot Size	16.20 MT
Contract Price (Per Unit)	₹ 20,000
Fees	1.00%
Taxes	0.00%
Packaging Size (Per Bag)	50 Kg
Contract Value	₹ 3,27,240
Logistic Hub Location	Shyamilal, Plot No. G-162 to 165 & F-166 to 171, Brij Ind. Area, Behind Nafed Plant, Phase-II, Hathni Road, Bharatpur, Rajasthan 321001



## Quality Specifications

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

Bajara		Band - 1	Band - 2	Band - 3	Band - 4	Band - 5
No.	Tradable parameters	251	252	253	254	255
I	Moisture (% by wt)	01.00 - 10.00	10.01 - 11.00	11.01 - 12.00	12.01 - 14.00	14.01 - 16.00
II	Admixture (% by wt)	00.01 - 01.00	00.01 - 01.00	00.01 - 01.00	01.01 - 02.00	02.01 - 03.00
III	Immature & Shriveled grains (% by wt)	01.00 - 04.00	01.00 - 04.00	01.00 - 04.00	04.01 - 06.00	06.01 - 08.00
IV	Foreign matter (% by wt)	00.01 - 00.10	00.01 - 00.10	00.01 - 00.10	00.11 - 00.60	00.61 - 01.00
V	Other edible grains (% by wt)	01.00 - 03.00	01.00 - 03.00	01.00 - 03.00	03.01 - 04.00	04.01 - 06.00
VI	Damaged/Discoloured grains (% by wt)	01.00 - 03.00	03.01 - 04.00	04.01 - 05.00	05.01 - 07.00	07.01 - 10.00
VII	Weevilled Grains (% by count)	01.00 - 02.00	01.00 - 02.00	01.00 - 02.00	02.01 - 04.00	04.01 - 06.00



## 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.

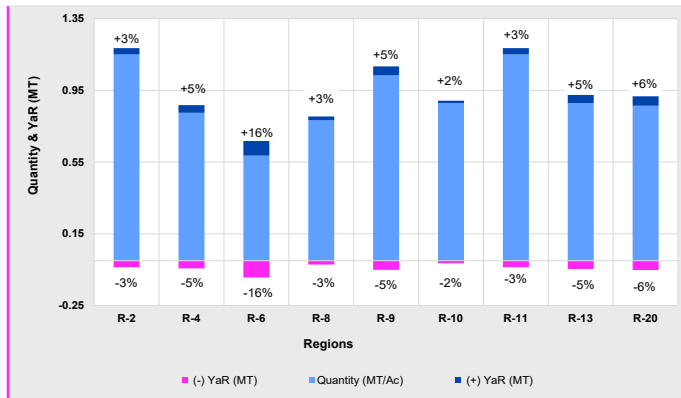
MONTHS	Jun				Jul				Aug			
WEEK	1	2	3	4	1	2	3	4	1	2	3	4
STAGES	Seedling				Vegetative				Grain Filling			
BIOTIC STRESS									Disease : ER, SM			
					Insect Pest : SB, PSB							
ABIOTIC STRESS	Low Temperature $\geq 21.8^{\circ}\text{C}$ - $23.2^{\circ}\text{C}$								High Temperature $\leq 26.6^{\circ}\text{C}$ - $33.6^{\circ}\text{C}$			
	Rain Fall 20.5 - 37.2 mm											

Note: ER Ergot, SM Smut, SB Stem Borer, PSB Pink Stem Borer



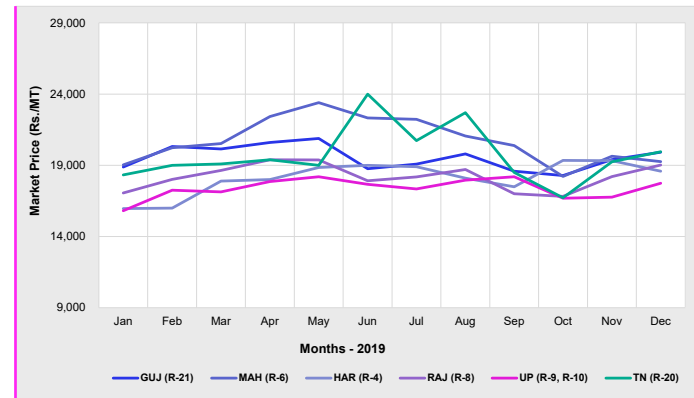
## Yield at Risk (YaR) - Stability

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.



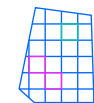
## Price Volatility

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



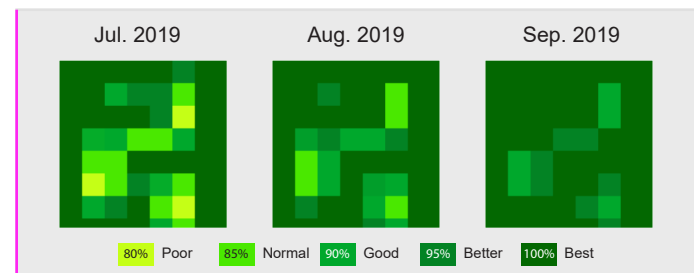
## Aerial Photo

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



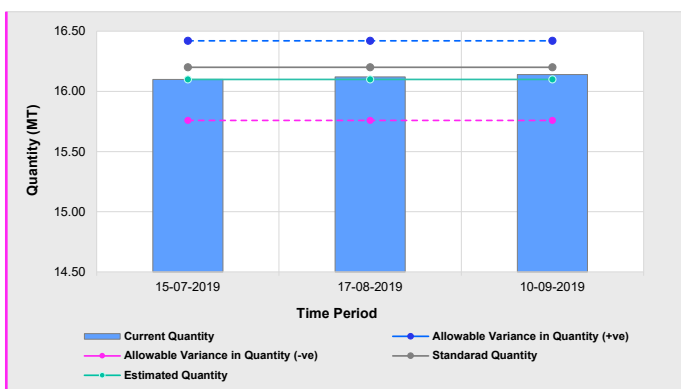
## Multispectral Yield Analysis

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.

