



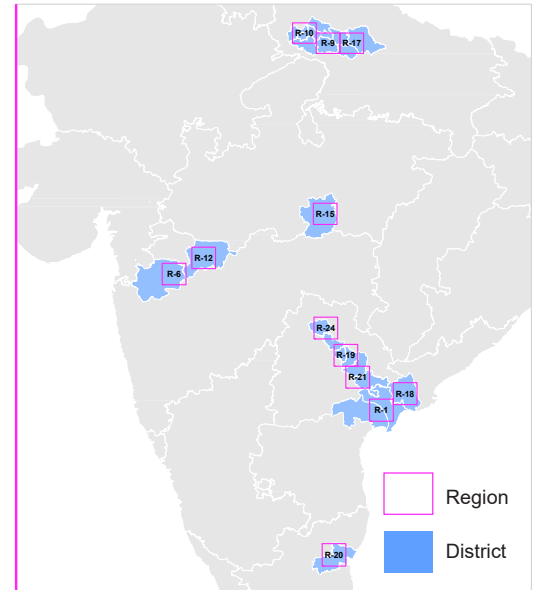
# MAIZE



## Focus Regions

Globally, maize is known as the queen of cereals because of its highest genetic yield potential among the cereals. In India, maize is the third-most important food crop after rice and wheat. Maize is cultivated throughout the year in all states of the country. Major maize-growing states are Karnataka, Madhya Pradesh, Bihar, Tamil Nadu, Telangana, Maharashtra and Andhra Pradesh. Nepal, Bangladesh, Vietnam, Pakistan and the Philippines are the export markets for maize.

Region ID.	State	Production	Risk Free Production	Available Production	Metric Tons (MT)	
					Available Risk Free Production	
R-19	Telangana	3,56,694	3,27,372	32,102	29,463	
R-12	Maharashtra	3,07,580	2,63,366	30,758	26,337	
R-18	Andhra Pradesh	2,20,900	2,14,408	22,090	21,441	
R-6	Maharashtra	2,20,484	1,85,268	22,048	18,527	
R-9	Uttar Pradesh	1,94,592	1,87,238	19,459	18,724	
R-17	Uttar Pradesh	1,56,430	1,41,293	15,643	14,129	
R-21	Telangana	1,34,466	1,25,718	13,447	12,572	
R-1	Andhra Pradesh	1,15,806	1,13,077	11,581	11,308	
R-24	Telangana	1,05,037	99,682	10,504	9,968	
R-20	Tamil Nadu	96,534	91,358	9,653	9,136	
R-15	Madhya Pradesh	89,829	78,983	8,983	7,898	
R-10	Uttar Pradesh	61,651	58,599	6,165	5,860	
R-26	Bihar	36,678	32,902	3,668	3,290	



## Major varieties grown in different agro-climatic zones of India

Agro-climatic zone	State	Region ID.	Major Districts	Varieties
East Coast Plains & Hills (ECPH)	Andhra Pradesh	R-1	Krishna, Guntur	BH-1576 (DHM111), Buland (JH6805), Chandramani (R 2005-2), CoH (M)8 (CMH 08-292), DHM 119 (BH 4062), HM-8 (HKH1188), Prabal, Pro 311, Pusa HM8 (AQH-8), Seed Tech 2324, Vivek QPM 9 (FQH 4567), HQPM 5
		R-18	West Godavari	
	Tamil Nadu	R-20	Villupuram	
Southern Plateau & Hills (SPH)	Telangana	R-19	Warangal, Warangal Urban	CoH (M)7 (CMH 08-287), Karimnagar Makka-1, KNMH-4010141, Kohinoor, Pusa HM8 (AQH-8), Pusa Vivek QPM-9 (APQH9), HQPM 5
		R-21	Khammam, Mahabubabad	
		R-24	Karimnagar, Jagtial	
Western Plateau and Hills	Maharashtra	R-6	Jalgaon, Nashik	P-3533, Pro 311, Prabal, Pusa HM8 (AQH-8), Pusa Vivek QPM-9 (APQH9), HM-8 (HKH1188) Vivek Maize Hybrid-27 (FH 3288, BH-1576 (DHM111), CoH (M)8 (CMH 08-292), Narmada Moti (IC-9001), Chandramani (R 2005-2), P-3544
		R-12	Jalgaon	
Upper Gangetic Plains (UGP)	Uttar Pradesh	R-9	Mainpuri, Etah, Farrukhabad, Kannauj	Bio 9681, DKC 9081, HM-12 (HKH 313), Malviya Hybrid Makka-2 (V-33), NK 61, PAU-352 (JH3982), PMH-1 (JH10655), Pro 311, Pusa HM9 (AQH-9), Seed Tech 2324, Sunny NMH 777, Vivek Hybrid-5
		R-10	Etah, Kasganj, Firozabad, Hathras	
		R-17	Kannauj, Farrukhabad, Hardoi	
Central Plateau & Hills (CPH)	Madhya Pradesh	R-15	Chhindwara	Bio 9782, DHM 121 (BH 41009), DK-701 (F 7001), DKC 9081, DMRH1301, HM-12 (HKH 313), Malviya Hybrid Makka-2 (V-33), Pusa HM9 (AQH-9), Shaktiman 1, Shaktiman 2, Shaktiman 3, Shaktiman 4, HQPM 5
Middle Gangetic Plains (MPH)	Bihar	R-26	Saran, Vaishali, Muzaffarpur, Siwan, Gopalganj, Purbi Champaran	



## Seasonal Calendar

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

Agro-climatic zone	Region	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
ECPH	R-1														
	R-18														
	R-20														
	R-19														
SPH	R-21, R-24														
UGP	R-9, R-10, R-17														
MGP	R-26														
WPH	R-6														
	R-12														
CPH	R-15														

Note: ECPH East Coast Plains & Hills, SPH Southern Plateau & Hills, UGP Upper Gangetic Plains, TGP Trans-Gangetic Plains, MGP Middle Gangetic Plains, WPH Western Plateau and Hills, CPH Central Plateau & Hills

■ Sowing ■ Mid season ■ Harvesting



## Contract Summary

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

Lot ID	LOT15MA09
HSN Code	10059000
Commodity	Maize
Variety	Prabal
Grade	Grade-2 (Band-I)
Aggregation Unit	Metric Tons (MT)
Minimum Lot Size	12.00 MT
Bid Window Termination	48 Hr
Allowable Lot Variance (+)	0.17 MT
Allowable Lot Variance (-)	0.33 MT
Rights per Lot (No.)	2
Current Lot Size	13.00 MT
Contract Price (Per Unit)	₹ 17,600
Fees	2.00%
Taxes	0.00%
Packaging Size (Per Bag)	50 Kg
Contract Value	₹ 2,33,376
Logistic Hub Location	Sri Venkateshwara, APSWC., Beside Govt. Hospital, Sultanabad, Tenali, Guntur, Andhra Pradesh 522202



## Quality Specifications






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

Maize		Band - 1	Band - 2	Band - 3	Band - 4	Band - 5
No.	Tradable parameters	221	222	223	224	225
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	Foreign matter (% by wt)	00.01 - 01.00	00.01 - 01.00	01.01 - 01.50	01.51 - 02.00	02.01 - 03.00
III	Admixture/Other edible grains (% by wt)	00.01 - 01.00	00.01 - 01.00	00.01 - 01.00	01.01 - 02.00	02.01 - 03.00
IV	Damaged/immature & Shriveled grains (% by wt)	01.00 - 05.00	05.01 - 06.00	06.01 - 07.00	07.01 - 10.00	10.01 - 15.00
V	Weevil Grains (% by count)	01.00 - 02.00	02.01 - 03.00	03.01 - 04.00	04.01 - 06.00	06.01 - 10.00



## 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.

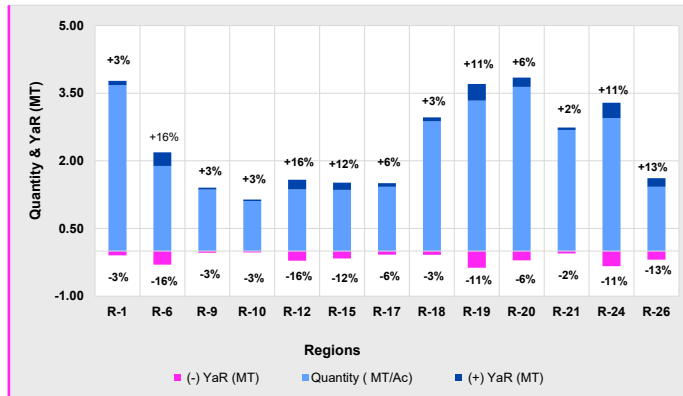
MONTHS	Jun				Jul				Aug				Sep	
WEEK	1	2	3	4	1	2	3	4	1	2	3	4	1	2
STAGES	Seedling			Vegetative			Tasseling	Silking	Milking	Grain Filling			Maturity	
BIOTIC STRESS				 Disease : CR, DM, MLB, TLB, BLSB										
	 Insect Pest : RKN, CN, FAW, PSB, AP													
ABIOTIC STRESS	 Low Temperature ≥ 13°C													
							 High Temperature ≤ 33.8°C							
					 Bright Sun Shine hrs ≤ 3-9.4 hrs									

Note: CR Charcoal Rot, DM Downey Mildew, MLB Maydis Leaf Blight, TLB Turicum Leaf Blight, BLSB Banded Leaf Sheath Blight, RKN Root Knot, CN Cyst Nematode, FAW Fall Army Worm, PSB Pink Stem Borer, AP Aphids



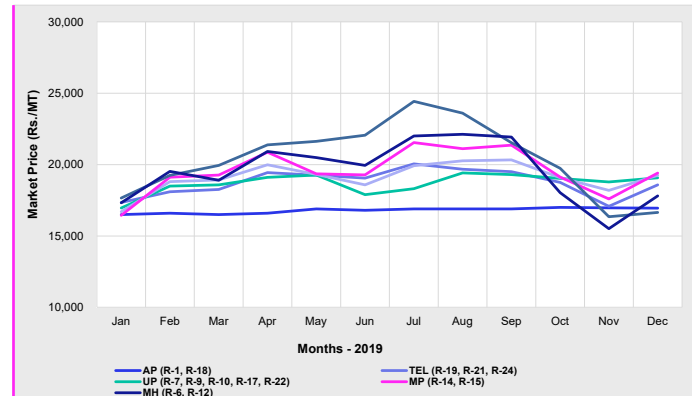
## Yield at Risk (YaR) - Stability

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.



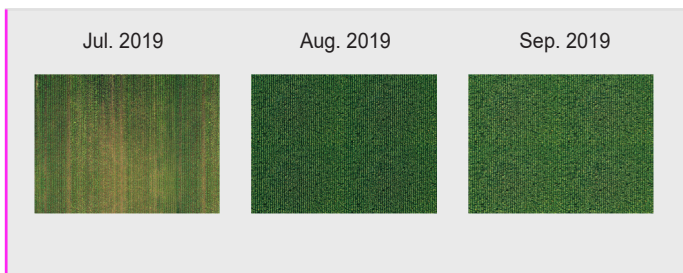
## Price Volatility

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



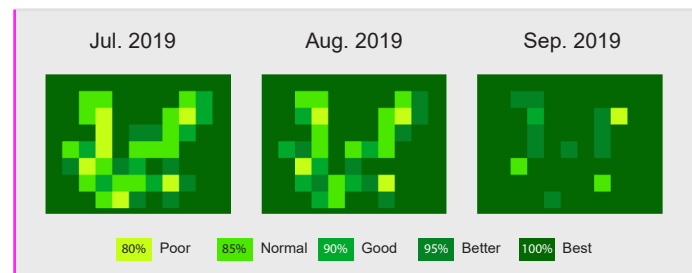
## Aerial Photo

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



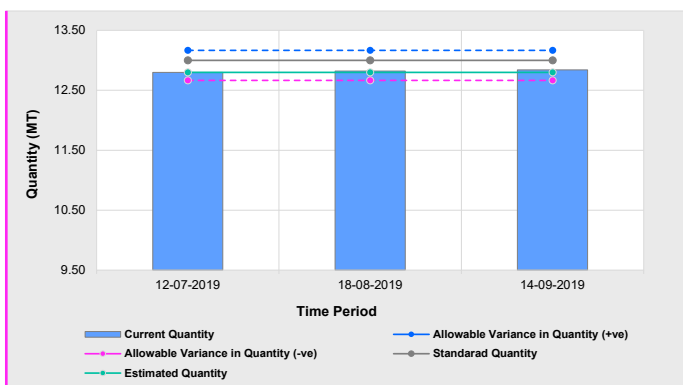
## Multispectral Yield Analysis

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.

