

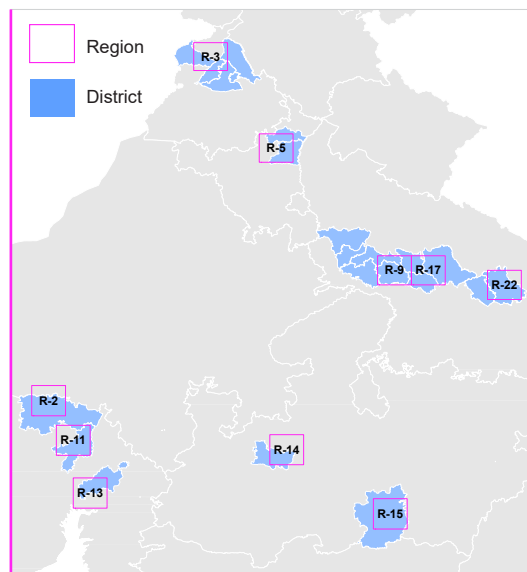
# POTATO



Potato is the largest non-cereal food crop worldwide and ranked as the world's fourth most important food crop after rice, wheat, and maize. In India, it is grown in about 2.11 lakh ha area with a production of 43.4 metric tonnes. Uttar Pradesh stands first in the area and production of potatoes followed by West Bengal. Other major growing states are Himachal Pradesh, Punjab, Madhya Pradesh, Gujarat, Maharashtra, Karnataka, Bihar, and Assam.

Metric Tons (MT)					
Region ID.	State	Production	Risk Free Production	Available Production	Available Risk Free Production
R-17	Uttar Pradesh	28,72,875	26,37,427	57,458	52,749
R-10	Uttar Pradesh	28,07,631	27,54,230	56,153	55,085
R-9	Uttar Pradesh	16,87,863	16,16,351	33,757	32,327
R-2	Gujarat	10,53,624	10,28,837	31,609	30,865
R-22	Uttar Pradesh	7,54,109	7,12,743	30,164	28,510
R-26	Bihar	3,55,997	3,55,666	32,040	32,010
R-3	Punjab	2,56,560	2,53,769	25,656	25,377
R-5	Haryana	2,09,003	2,06,885	20,900	20,689
R-11	Gujarat	1,91,879	1,86,412	19,188	18,641
R-14	Madhya Pradesh	1,48,006	1,42,959	14,801	14,296
R-15	Madhya Pradesh	81,662	81,649	8,166	8,165
R-13	Gujarat	60,352	55,786	6,035	5,579

## Focus Regions



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

State	Region ID.	Major Districts	Varieties
Punjab	R-3	Amritsar, Hoshiarpur, Jalandhar, Kapurthala	Kufri Anand, Kufri Arun, Kufri Badshah, Kufri Chipsona-1, Kufri Chipsona-2, Kufri Chipsona-3, Kufri Pushkar, Kufri Sadabahar, Kufri Sutlej, Kufri Surya, Kufri Jyoti, Kufri Garima, Kufri Gaurav, Kufri Ashoka, Kufri Chandramukhi, Kufri Jawahar, Kufri Khyati, Kufri Pukhraj
Haryana	R-5	Karnal, Kurukshetra	
Madhya Pradesh	R-14	Shajapur	Kufri Chandramukhi, Kufri Badshah, Kufri Jawahar, Kufri Pukhraj, Kufri Jyoti, Kufri Sindhuri, Kufri Arun, Kufri Anand, Kufri Chipsona-1, Kufri Chipsona-2, Kufri Chipsona-3, Kufri Pushkar, Kufri Sadabahar, Kufri Sutlej, Kufri Surya, Kufri Garima, Kufri Bahar, Kufri Frysona, Kufri Lauvkar
	R-15	Chhindwara	
Bihar	R-26	Gopalganj, Muzaffarpur, Purbi Champaran, Saran	Kufri Ashoka, Kufri Chandramukhi, Kufri Arun, Kufri Chipsona-1, Kufri Chipsona-2, Kufri Chipsona-3, Kufri Lalima, Kufri Pukhraj, Kufri Pushkar, Kufri Sutlej, Kufri Surya, Kufri Jyoti, Kufri Kanchan, Kufri Bahar, Kufri Gaurav, Kufri Sindhuri
Uttar Pradesh	R-9	Etah, Farrukhabad, Kannauj, Mainpuri	Kufri Anand, Kufri Arun, Kufri Badshah, Kufri Chipsona-1, Kufri Chipsona-2, Kufri Chipsona-3, Kufri Pushkar, Kufri Sadabahar, Kufri Sutlej, Kufri Surya, Kufri Jyoti, Kufri Garima, Kufri Gaurav, Kufri Ashoka, Kufri Chandramukhi, Kufri Jawahar, Kufri Khyati, Kufri Pukhraj
	R-10	Aligarh, Etah, Firozabad, Hathras	
	R-17	Farrukhabad, Hardoi, Kannauj	
	R-22	Barabanki, Lucknow	
Gujarat	R-2	Banas Kantha	Kufri Chandramukhi, Kufri Badshah, Kufri Jawahar, Kufri Pukhraj, Kufri Jyoti, Kufri Sindhuri, Kufri Arun, Kufri Anand, Kufri Chipsona-1, Kufri Chipsona-2, Kufri Chipsona-3, Kufri Pushkar, Kufri Sadabahar, Kufri Sutlej, Kufri Surya, Kufri Garima, Kufri Bahar, Kufri Frysona
	R-11	Banas Kantha, Mahesana	
	R-13	Kheda	



## Seasonal Calendar

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

Agro-climatic zone	State	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
TGP	R-3, R-5												
UGP	R-9, R-10, R-17												
	R-22												
GPH	R-2, R-11, R-13												
MGP	R-26												
CPH	R-14, R-15												

Note: TGP Trans-Gangetic Plains, UGP Upper Gangetic Plains, GPH Gujarat Plains & Hills, MGP Middle Gangetic Plains, CPH Central Plateau & Hills

■ Sowing
 ■ Mid season
 ■ Harvesting



## Contract Summary

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

Lot ID	LOT15PT07
HSN Code	07019000
Commodity	Potato
Variety	Kufri Chipsona-1
Grade	Grade-2 (Band-I)
Aggregation Unit	Metric Tons (MT)
Minimum Lot Size	12.00 MT
Bid Window Termination	48 Hr
Allowable Lot Variance (+)	0.16 MT
Allowable Lot Variance (-)	0.32 MT
Rights per Lot (No.)	1
Current Lot Size	13.50 MT
Contract Price (Per Unit)	₹ 15,500
Fees	0.02%
Taxes	2.50%
Packaging Size (Per Bag)	55 Kg
Contract Value	₹ 2,09,292
Logistic Hub Location	Patel Warehouse, Near FCI Godown, Rampur Road, Viramgam, Ahmedabad, Gujarat 382150



## Quality Specifications

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

Potato		Band - 1	Band - 2	Band - 3	Band - 4	Band - 5
No.	Tradable parameters	621	622	623	624	625
I	Size (diameter of the equatorial section) mm	60.01 - 70.00	50.01 - 60.00	40.01 - 50.00	25.01 - 40.00	≤ 25.00
II	Defects (% by count)					
	Cracks/cut (5 mm to 20mm)	01.00 - 05.00	01.00 - 05.00	01.00 - 05.00	05.01 - 10.00	> 10.01
	Greening (1-3 sq cm of total surface area)	01.00 - 02.00	01.00 - 02.00	01.00 - 02.00	02.01 - 03.00	> 03.01
	Holes	00.01 - 01.00	00.01 - 01.00	00.01 - 01.00	01.01 - 02.00	> 02.01
	Mechanical injury	01.00 - 02.00	01.00 - 02.00	01.00 - 02.00	02.01 - 03.00	> 03.01



## 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.

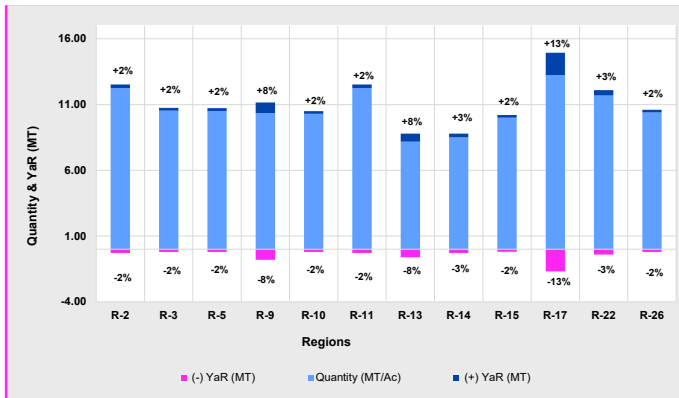
MONTHS	Oct				Nov				Dec				Jan			
WEEK	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
STAGES	Sprouting				Vegetative				Tuber Initiation				Tuber Development			
BIOTIC STRESS					Disease : BW, SR, BS, LB, LCV											
					Insect Pest: WG, AP, CW, PTM											
ABIOTIC STRESS					Temperature Min $\leq 15^{\circ}\text{C}$											
									Temperature Max $\geq 20^{\circ}\text{C}$							

Note: BW Bacterial Wilt, SR Soft Rot, BS Black Scurf, LB Late Blight, LCV Leaf Curl Virus, WG White Grub, AP Aphids, CW Cut Worms, PTM Potato Tuber Moth



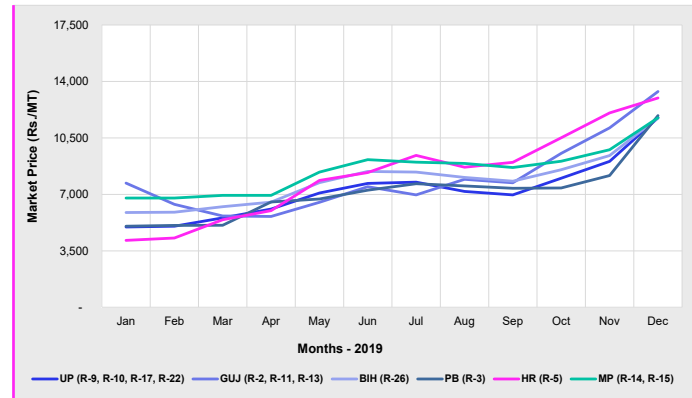
## Yield at Risk (YaR) - Stability

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.



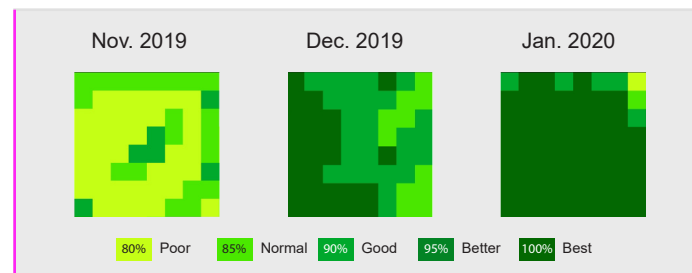
## Aerial Photo

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



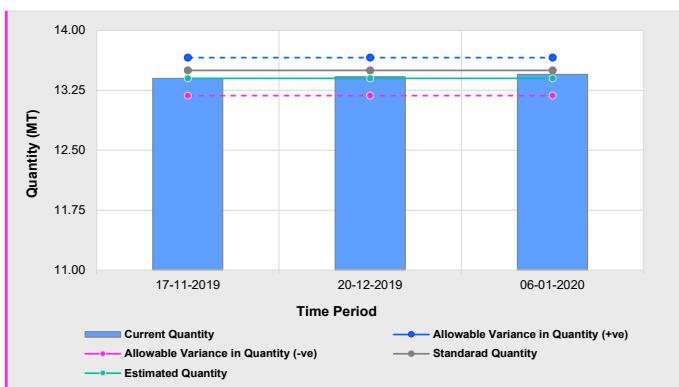
## Multispectral Yield Analysis

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.

