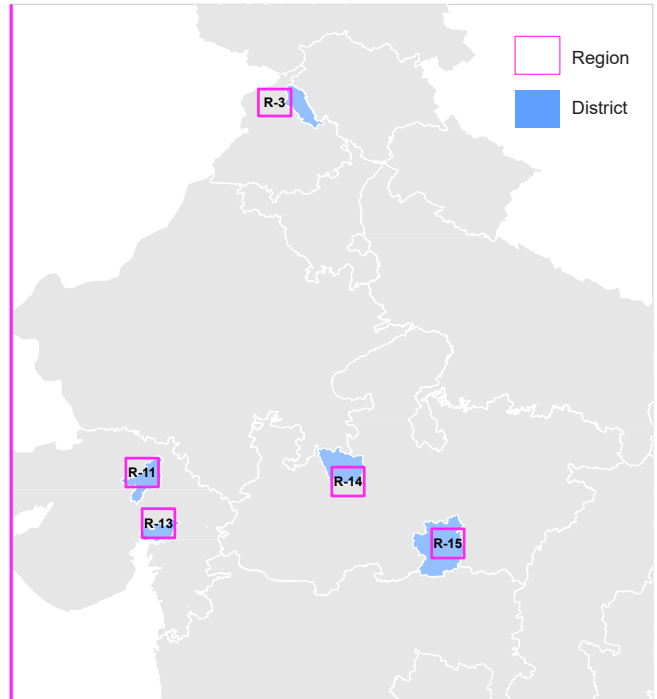




MANDARIN



Focus Regions



Mandarin orange, a loose skinned orange, is a very common and widely grown citrus fruit across all regions of the country. In India, there are three types of mandarin grown commercially which include Nagpur mandarin, Coorg mandarin, and Khasi mandarin. Nagpur mandarin is mainly grown in the Satpura hills (Vidarbha region) of Central India, Coorg mandarin is mainly grown in the hills of south India while Khasi mandarin is famous since centuries in the northeast region of the country. Major export markets include Bangladesh, Nepal, Sri Lanka, Canada, the United States of America (USA), the United Kingdom (UK), Germany, Saudi Arabia, the United Arab Emirates (UAE), Qatar, Bahrain, Kuwait, and Oman

Metric Tons (MT)					
Region ID.	State	Production	Risk Free Production	Available Production	Available Risk Free Production
R-15	Madhya Pradesh	23,791	23,788	1,665	1,665
R-11	Gujarat	11,773	10,588	1,177	1,059
R-14	Madhya Pradesh	10,769	10,676	1,077	1,068
R-13	Gujarat	5,273	5,237	527	524
R-3	Punjab	1,635	1,626	163	163

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-11, R-13	Mahesana, Kheda, Anand	Nagpur Mandarin
Central Plateau and Hills (CPH)	Madhya Pradesh	R-14, R-15	Rajgarh, Chhindwara	Nagpur mandarin
Trans Gangetic Plains (TGP)	Punjab	R-3	Amritsar, Hoshiarpur	Kinnow Orange, PAU Kinnow-1, Daisy, W. Murcott



Seasonal Calendar

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

Agro-climatic zone	Region	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
GPH	R-11, R-13														
CPH	R-14, R-15														
TGP	R-3														

Note: GPH Gujarat Plains and Hills, CPH Central Plateau and Hills, TGP Trans Gangetic Plains

Kharif Mig Bahar, Rabi Hasta Bahar, Summer Ambia Bahar

■ Sowing ■ Mid season ■ Harvesting



Contract Summary

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

Lot ID	LOT05MN10
HSN Code	08052100
Commodity	Mandarin
Variety	Nagpur Mandarin
Grade	Grade-I (Band-III)
Aggregation Unit	Metric Tons (MT)
Minimum Lot Size	5.00 MT
Bid Window Termination	48 Hr
Allowable Lot Variance (+)	0.31 MT
Allowable Lot Variance (-)	0.62 MT
Rights per Lot (No.)	1
Current Lot Size	6.20 MT
Contract Price (Per Unit)	₹ 32,000
Fees	1.00%
Taxes	0.00%
Packaging Size (Per Bag)	50 Kg
Contract Value	₹ 2,00,384
Logistic Hub Location	Rameshbhai, Unava, Unjha, Mahesana, Gujarat 384160



Quality Specifications

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

Orange (Mandarin)		Band - 1	Band - 2	Band - 3	Band - 4	Band - 5
No.	Tradable parameters	561	562	563	564	565
I	Size in mm (diameter of the equatorial section)	75.01 - 80.00	70.01 - 75.00	65.01 - 70.00	55.01 - 65.00	Above 80 & Below 55
II	Defects % by count :- Scratches scars, scrapes and blemishes (0.52 sq. cm. of total surface area)	01.00 - 02.00	01.00 - 02.00	01.00 - 02.00	02.01 - 05.00	05.01 - 10.00
III	Slight bruising/minor cut/ (0.5 to 2 sq cm of total surface area) %	01.00 - 02.00	01.00 - 02.00	01.00 - 02.00	02.01 - 05.00	05.01 - 10.00
Biochemical Parameters						
I	Total soluble solids (TSS) (minimum) in degree Brix	Not less than 10 degree brix				



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.

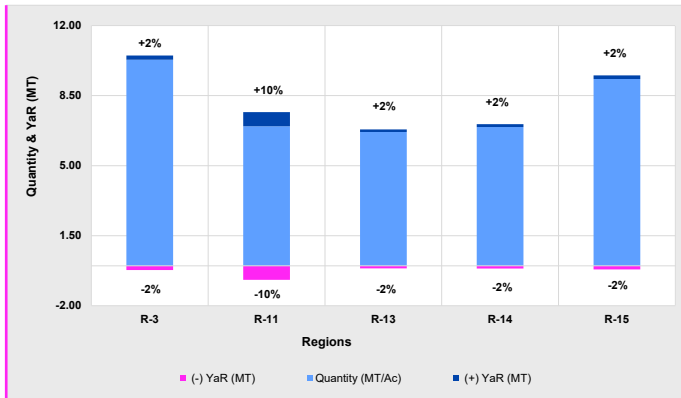
MONTHS	Jan				Feb				Mar				Apr				May				Jun				Jul				Aug				Sep				Oct			
WEEK	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
STAGES	New Flush				Flowering				Fruit Setting				Fruit Development				Colour Breaking				Fruit Maturity																			
BIOTIC STRESS																																								
ABIOTIC STRESS																																								

Note: CG Citrus Greening, CC Citrus Canker, AT Anthracnose, PM Powdery Mildew, CP Citrus Psylla, LM Leaf Minor, LB Lemon Butterfly, WF White Fly, BF Black Fly



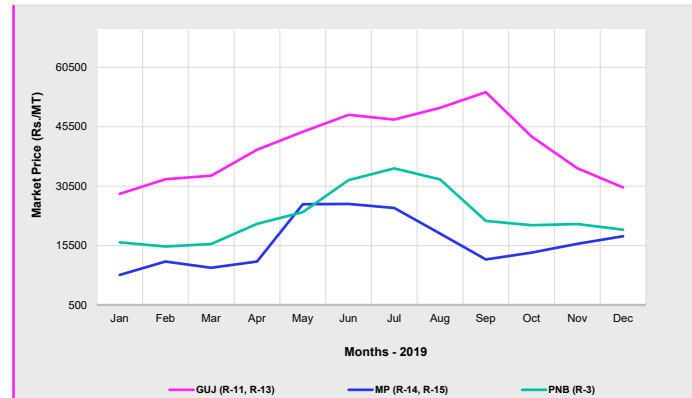
Yield at Risk (YaR) - Stability

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.



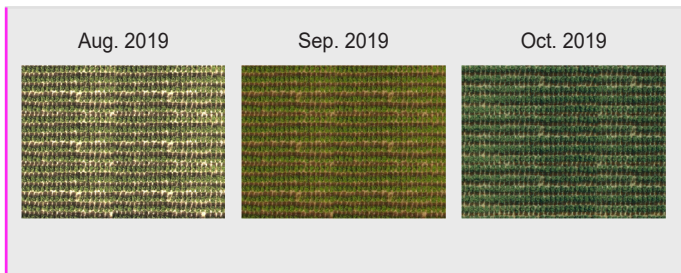
Price Volatility

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



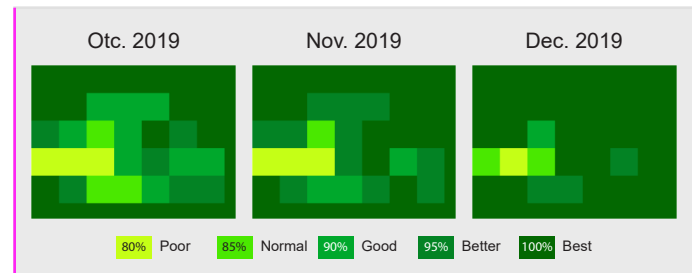
Aerial Photo

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



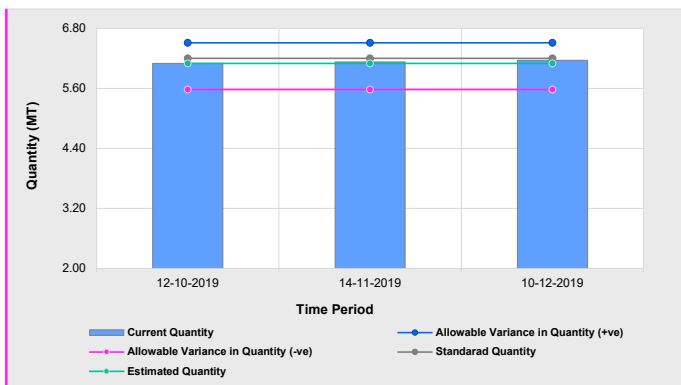
Multispectral Yield Analysis

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.

