

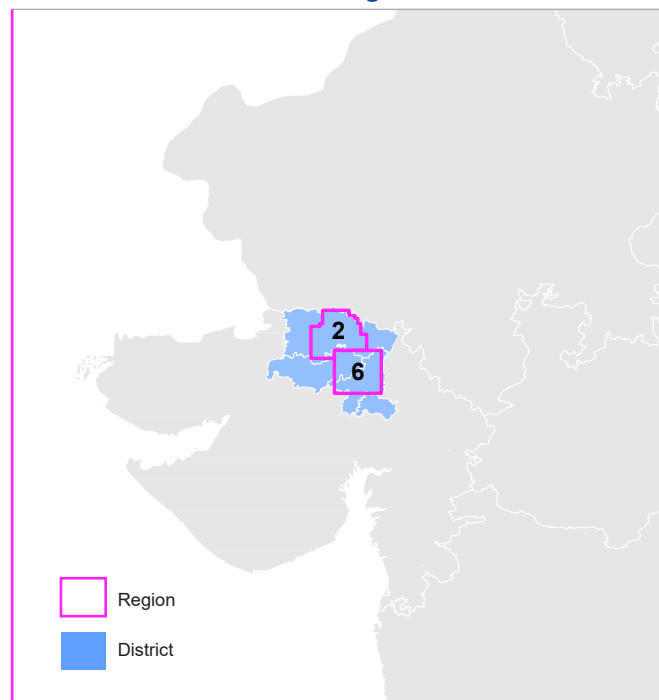
FENNEL



Fennel, generally known as “Sauf” is an aromatic herb grown for its edible shoots, leaves, and seeds. Native to southern Europe and Asia Minor, fennel is an important commercial cash crop of the arid and semi-arid region. Fennel is widely cultivated in the temperate and subtropical regions of the world. France, Germany, Romania, Russia, Italy, India, and the United States are the major fennel-growing countries. In India, it is mainly cultivated in Gujarat, Andra Pradesh, Rajasthan, Karnataka, Maharashtra, Uttar Pradesh, Punjab, and Bihar. Gujarat alone accounts for 78 percent of the fennel production in the country.

Metric Tons (MT)					
Region ID.	State	Production	Risk Free Production	Available Production	Available Risk Free Production
R-6	Gujarat	22,675	22,504	2,267	2,250
R-2	Gujarat	12,719	12,422	1,272	1,242

Focus Regions



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	Avani 1818, Gujarat Fennel 1, Gujarat Fennel 2, Gujarat Fennel 11, PF 35, RF 101, RF 125, RF 143, RF 205, Western Haryali
		R-6	Patan, Mahesana	



Seasonal Calendar

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

Agro-climatic zone	Region	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
GPH	R-2, R-6									

Note: GPH Gujarat Plains and Hills

■ Sowing
 ■ Mid season
 ■ Harvesting



Contract Summary

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

Lot ID	LOT03FE16
HSN Code	09096139
Commodity	Fennel Seed
Variety	Gujarat Fennel 2
Grade	Grade-II (Band-I)
Aggregation Unit	Metric Tons (MT)
Minimum Lot Size	8.00 MT
Bid Window Termination	48 Hr
Allowable Lot Variance (+)	1.60 MT
Allowable Lot Variance (-)	0.80 MT
Rights per Lot (No.)	5
Current Lot Size	9.00 MT
Contract Price (Per Unit)	₹67,000
Fees	0.70%
Taxes	0.00%
Packaging Size (Per Bag)	50 Kg
Contract Value	₹6,07,221
Logistic Hub Location	OM Exim Corporation, S-24, Shilp Arcade, Sardar Chowk, Unjha, Unjha - 384170, Mehsana



Quality Specifications

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

Fennel seed		Band - 1	Band - 2	Band - 3	Band - 4	Band - 5
No.	Tradable parameters	431	432	433	434	435
I	Moisture (% by wt)	01.00 - 08.00	08.01 - 09.00	09.01 - 10.00	10.01 - 11.00	11.01 - 12.00
II	Foreign matter (% by wt)	01.00 - 01.50	01.00 - 01.50	01.00 - 01.50	01.51 - 03.50	03.51 - 04.50
III	Other edible seeds (% by wt)	00.01 - 01.00	00.01 - 01.00	00.01 - 01.00	01.01 - 01.50	01.51 - 02.00
IV	Damaged/Broken seeds (% by wt)	01.00 - 01.50	01.00 - 01.50	01.00 - 01.50	01.51 - 03.00	03.01 - 04.00
V	Immature / Shriveled / discoloured / blackened seeds (% by count)	01.00 - 02.50	01.00 - 02.50	01.00 - 02.50	02.51 - 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.

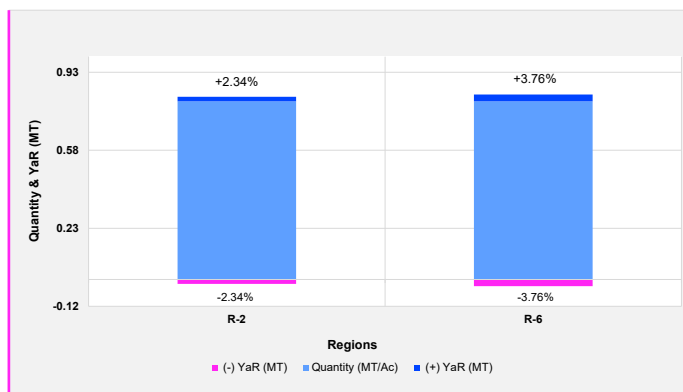
MONTHS	Oct				Nov				Dec				Jan				Feb				Mar				Apr			
WEEK	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
STAGES					Seedling				Vegetative				Flowering				Seed Development				Maturity							
BIOTIC STRESS																												
ABIOTIC STRESS																												

NOTE: AB Alternaria Blight, FW Fusarium Wilt, PM Powdery Mildew, AP Aphids, TH Thrips, CW Cut Worm, RKN Root Knot Nematode



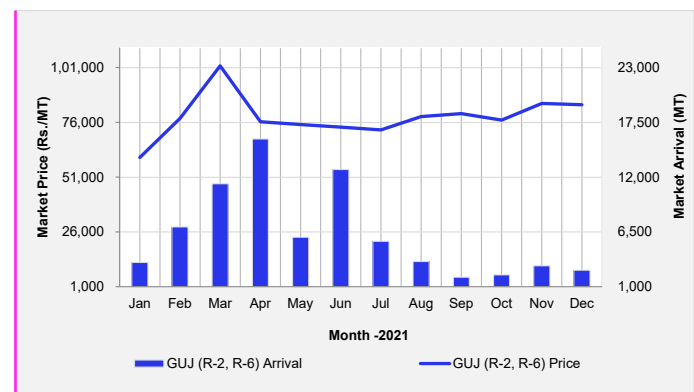
Yield at Risk (YaR) - Stability

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.



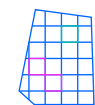
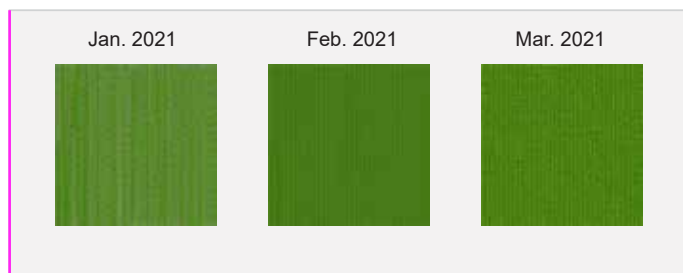
Price Volatility

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



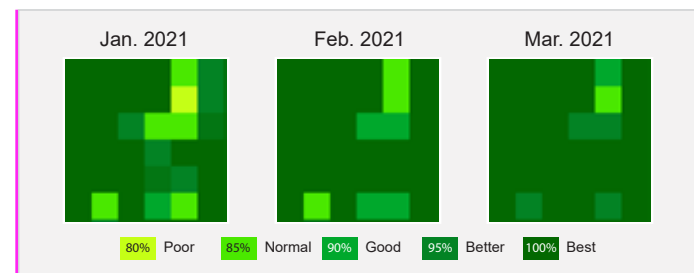
Aerial Photo

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



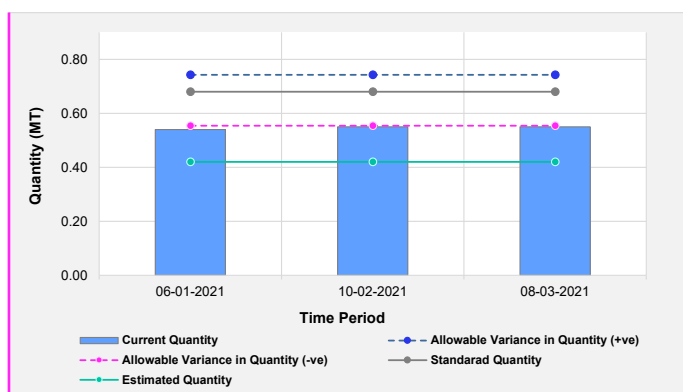
Multispectral Yield Analysis

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.

