## Wireframe Documentation

# **CROP ANALYSIS**

## **MAIN PAGE**

This is the main or first page of our analysis. This page describes the original problem statement, names of project members who had participated on this project and various buttons which we had made for visualization.

Main Page State Wise District Wise Coconut Time Series Production Metrics

#### **Problem Statement**

This dataset provides a huge amount of information on crop production in India ranging from several years. Based on the Information the ultimate goal would be to predict crop production and find important insights highlighting key indicators and metrics that influence the crop production.

#### **Project Members**

. KRISH CHAUDHARY





#### **Buttons Meaning**

- State Wise (State Wise Visualisations will be in this page)
- District Wise (District Wise Visulaisation will be in this page)
- Time Series (How production is performing in all years)
- -Metrices (Production is presented in form of numbers)
- -Insight (Insight for Respective Page)

## STATE WISE ANALYSIS

#### This page shows -

- Top 3 states on production
- Season wise total production of those states.
- 2 cards are there which displays total production and total area of production.
- We can filter out zone and year to see top3 states vs. production of that particular zone and year.



#### Insight page of state wise production

#### Top 3 crops as per Production in India

- . Sugarcane
- Rice
- . Wheat

#### **Total production of Sugarcane is Highest Among All Crops**

- · Utter Pradesh is having Highest Production and Cultivation area among all state
- · Maximum Production of Sugarcane Comes When It Sown in Whole Year Season

#### Total production of Rice is Second Highest Among All Crops

- · West Bengal is having Highest Production, but Cultivation area is highest in Uttar Pradesh
- Maximum Production of Rice Comes When It Sown in Kharif Season

#### **Total production of Wheat is Third Highest Among All Crops**

- · Utter Pradesh is having Highest Production and Cultivation area among all state
- Maximum Production of Wheat Comes When It Sown in Rabi Season

North India Is Having Maximum Production Among All Zones

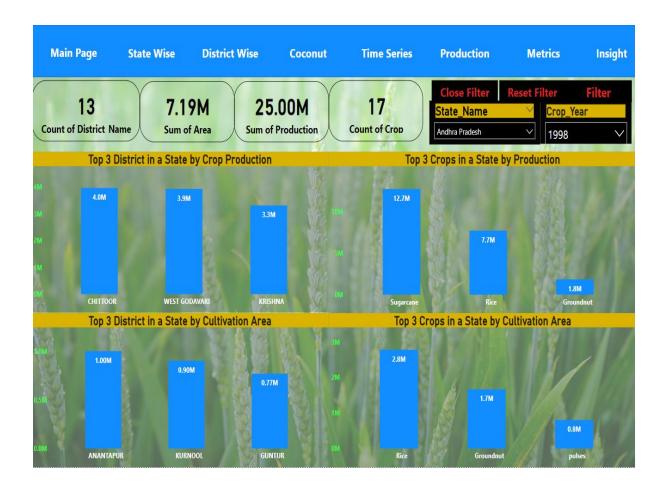
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## DISTRICT WISE ANALYSIS

Here we used some cards to show total production, number of crops produces of those districts, total area of production and total number of district.

Different bar graphs are used to show different insights-

- Top 3 district of a state vs. production
- Top 3 crops of that state
- Area wise top three district



#### Insight page of District wise production

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- -- Top 3 Districts in production and cultivation area belongs to Utter Pradesh
- -- In Every state some Districts are Dominating in Production and cultivation area like In West Bengal - Murshidabad, Midnapur west, Bardhman Are Dominating In Utter Pradesh - Muzzfer Nagar, Kheri, Bijnor
- -- If variety of crops are higher in state Dosent mean maximum production will come from same state
- --Kranatka is having highest counts of Crops but maximum production comes from other state lowest variety of crops belong from Chandigarh
- --38 different types of crops are cultivating in 646 districts of India

## **COCONUT PRODUCTION ANALYSIS**

#### This page describes

- Total production of coconut
- State wise production of coconut
- Analyze the top zone where huge amount of coconut production happens
- Time series analysis of coconut production



#### Insight page of coconut production

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- -- Coconut is having highest production of India
- -- North Zone is having zero production of coconut
- -- South zone is having highest coconut production
- -- Kerla is having maximum production in South Zone which is approx 75% of total coconut production
- -- Assam is having maximum production in East Zone
- -- Goa is having maximum production in West Zone

## TIME SERIES ANALYSIS

#### This page shows-

- Time series of yields
- Total production by crop year and seasons
- Time series analysis of total production vs. zone



#### Insights of time series analysis

- -- Sugarcane, Potato, Coconut is having highest yeilds (production/crop) among all crops.
- -- Total production and Total Cultivating area of India is decreasing continuously after year 2010.
- -- Crops whose yield is maximum, those crops generally sown in whole year season
- -- Crops whose Production is higher are also having higher yield
- -- North Zone has highest production in all years among all Zone
- -- Union Territory is having lowest production in all years among all Zones
- -- South Zone is having maximum production in whole year season
- -- North Zone is having maximum production from 1997 to 2003 in whole year season and from year 2003 to 2014 in kharif season
- -- West Zone is having highest production in whole year season and East Zone is having highest in Rabi Season

# PRODUCTION BREAKDOWN OVER YEAR

This page describes variation of production year over year



#### Insights of production breakdown.

- -- Maximum growth in production was in between year 2007-2008
- -- Maximum downfall of growth was in year 1997-1998.
- -- Production of North Zone is decreased and West Zone, Union Territory production increased.
- -- Production In Whole Year Season declined continuously after the year 2003 but production In Rabi and Kharif Season increased after year 2003.

## **METRICS**

# This page helps us to understand how the production of crops varies with different metrics

Main Page S		State Wise	District Wise		Coconut Tim		Series	Pro	oduction	Metrics	
State_Name	Sum of	Area Su	ım of Production	^	Crop	Av	erage of Area		Average of Production	area production yield	
Uttar Pradesh		43,36,22,306.00	3,23,44,92,662.70		Sugarcane		9	,844.10	7,10,90	4.75	
KHERI		1,26,73,591.00	24,49,73,686.00		Tapioca		2	,222.06	66,33	4.31	
HARDOI		1,18,68,401.00	5,72,43,379.00		Banana		1	,689.58	47,07	3.83	
BUDAUN		1,15,30,734.00	5,91,04,456.00		Potato		3	,229.28	61,71	2.79	
SITAPUR		1,09,20,142.00	13,48,64,863.10		Jute		5	,127.01	60,81	5.24	
SHAHJAHANPUR		1,04,76,161.00	7,45,61,329.00		Onion			902.77	10,37	2.71	
AZAMGARH		92,89,165.00	3,87,10,078.00		Dry ginger			405.00	3,36	5.87	
ALLAHABAD		92,74,343.00	2,25,13,315.00		Sweet potato			231.28	1,90	9.03	
BAREILLY		91,54,845.00	10,20,65,965.00		Fruits		1	,718.83	12,56	4.95	
ALIGARH		86,25,127.00	3,67,95,821.00		Garlic			581.83	2,73	3.68	
BAHRAICH		86,13,305.00	3,70,45,089.00		Turmeric			656.51	2,39	5.73	
JAUNPUR		82,79,988.00	3,07,58,890.00		Arecanut		3	,985.57	13,60	3.72	
GONDA		82,63,848.00	6,58,03,063.10		Wheat		59	894.71	1,69,59	2.16	
MORADABAD		80,73,046.00	8,62,27,783.10		Maize		8	,884.17	19,99	2.87	
UNNAO		79,94,761.00	1,96,54,381.00		Rice		49	,094.91	1,05,39	3.40	
JHANSI		77,69,822.00	99,48,895.10		Barley		2	,552.12	5,42	4.10	
ETAH		77,47,878.00	2,79,78,580.00		Cotton		35	,892.86	68,08	9.99	
BARABANKI		77,15,424.00	3,50,46,928.00		Other Vegetable	es l	1	,348.59	2,44	5.09	
BULANDSHAHR		76,65,952.00	7,63,59,869.10		Dry chillies		1	,563.87	2,76	7.11	
BANDA		75,01,982.00	88,80,002.00		Total foodgrain		81	,175.51	1,38,19	3.95	
BIJNOR		72,58,722.00	24,05,69,068.00		Tobacco		2	,456.99	3,98	0.34	
GHAZIPUR		71,94,875.00	2,38,19,030.10		Sannhamp			124.14	17	5.04	
FATEHPUR		71,76,822.00	2,36,07,848.00		Castor seed		3	,988.66	4,89	4.77	
LALITPUR		71,75,024.00	90,14,879.00		Groundnut		11	,836.25	12,87	7.75	
AGRA		70,88,627.00	3,36,69,079.10		Rapeseed &Mus	stard	11	,576.43	12,15	2.55	
PILIBHIT		70,50,728.00	7,89,68,255.10		Soyabean		42	,701.21	44,72	3.49	
GORAKHPUR		70,13,477.00	2,04,86,667.10		Bajra		12	,216.14	11,63	1.25	
RAE BARELI		69,77,601.00	1,78,42,834.00		Jowar		19	,763.38	16,45	3.45	
MUZAFFARNAGAF	2	69.54.727.00	26.89.93.239.30	V	Total		12	335.45	47,357	7.63	
Total		2,91,36,95,431.93	11,18,61,08,915.70		<		12,	233.43	41,331		

# THANK YOU