

INDIA'S_AGRICULTURE_CROP _PRODUCTION_ANALYSIS

TEAM NM ID:NM2023TMID05937

INTERNAL MARKS

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INTRODUCTION :

This report delves into the captivating realm of India's agricultural cultivation, providing a comprehensive visual exploration of key aspects and trends in the agricultural sector. Through the visual representations, readers can gain valuable insights into crop production, seasonal variations, regional distribution, and overall production trends. These visualizations enable intuitive analysis, allowing stakeholders to uncover patterns, identify areas of growth or concern, and make data-driven decisions.

By harnessing the power of Tableau, this report not only presents the data in a visually appealing manner but also provides an interactive experience for readers to explore the intricacies of India's agricultural cultivation. To Extract the Insights from the data and put the data in the form of visualizations, Dashboards and Story we employed Tableau tool.

Says

What have we heard them say?
What can we imagine them saying?

Thinks

What are their wants, needs, hopes, and dreams?
What other thoughts might influence their behavior?

We need to improve crop yields to meet rising demand

How can we optimize irrigation to conserve water while maximizing yield.

Weather patterns have been unpredictable lately, affecting our harvest.

Technology has changed the way we monitor and manage crops.

Are changing climate patterns affecting our crop cycles.

Which crops are best suited for our region given the evolving conditions.



India's Agricultural Crop Production Analysis (1997-2021)

Collects data on soil quality, weather patterns, crop yields.

Concerned about the impact of climate change on crop productivity.

Utilizes advanced farming techniques like precision agriculture and GMOS.

Excited about adopting innovative techniques to boost efficiency.

Adopts modern technology such as drones and sensors for monitoring.

Frustrated when factors beyond control lead to poor harvests.

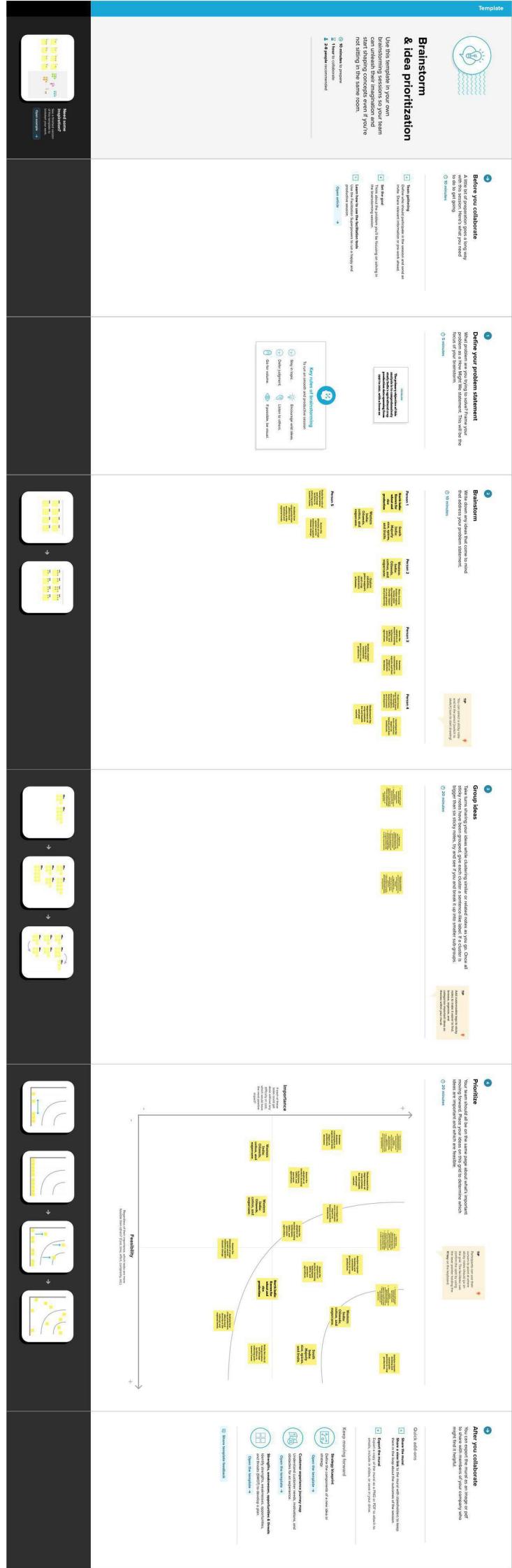
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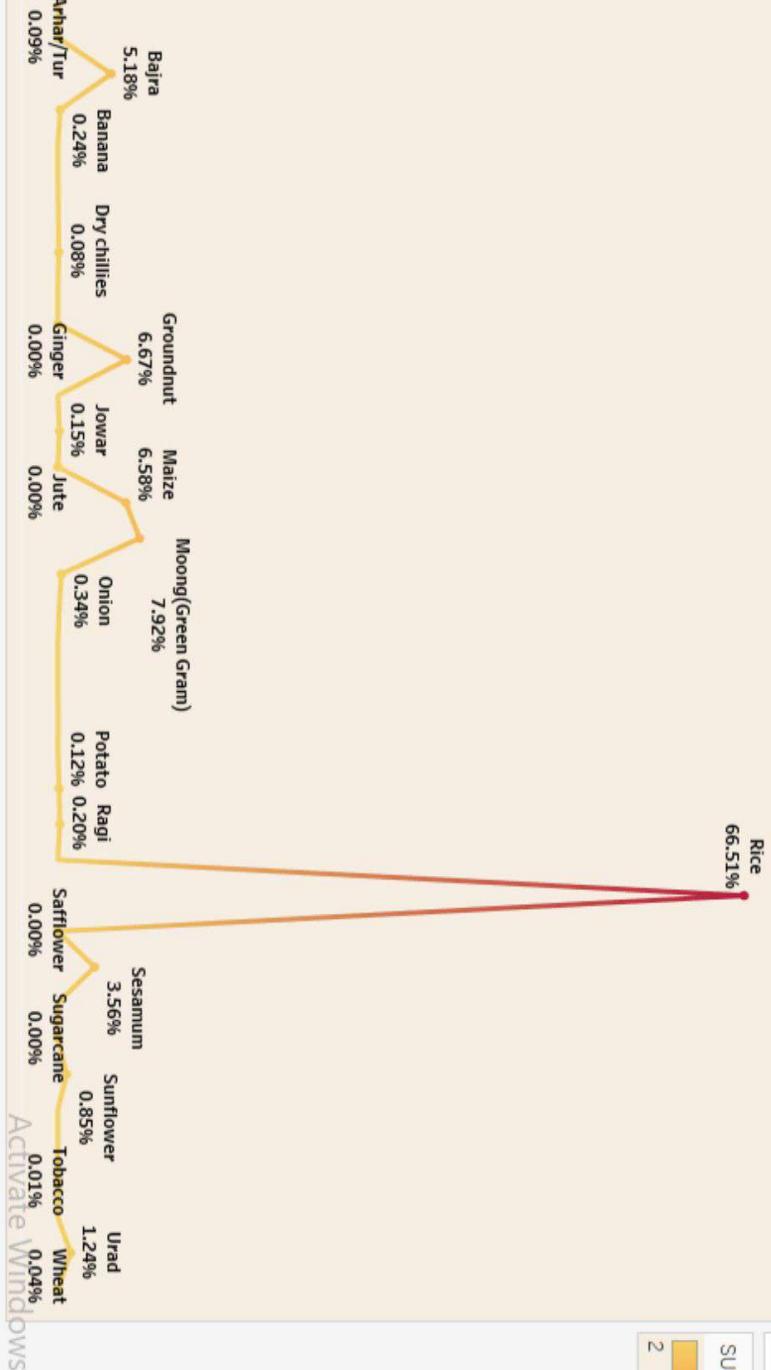
What behavior have we observed?
What can we imagine them doing?

Feels

What are their fears, frustrations, and anxieties?
What other feelings might influence their behavior?

See an example





Activate Windows
Go to Settings to activate Windows

Data Source	State Wise Agricultural Land	Area Vs Production	Season Based cultivation area	Yield by season	Crop Plantation by Area	Major Crops	Crops (Plantation by count)
37 marks	1 row by 37 columns	SUM(Area): 98.810.140					

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help



Analytics < Pages

India Agriculture Crop Pr...

iii Columns Year

Rows

SUM(Yield)

Yield by season

Season Kharif

Data Tables

Search ↵

Area Units

Crop

District

Production Units

Season

State

Year

Measure Names

Area

Production

Yield

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Measure Values

Filters

Year
Season: Kharif

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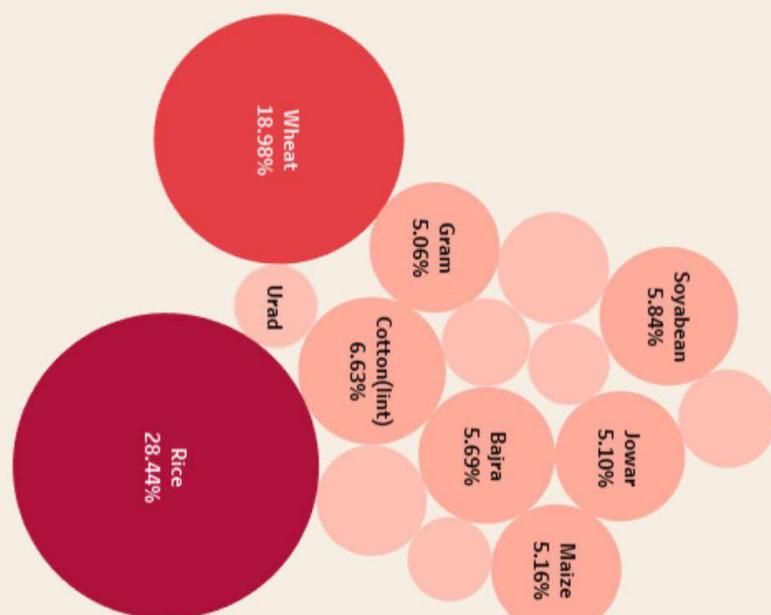
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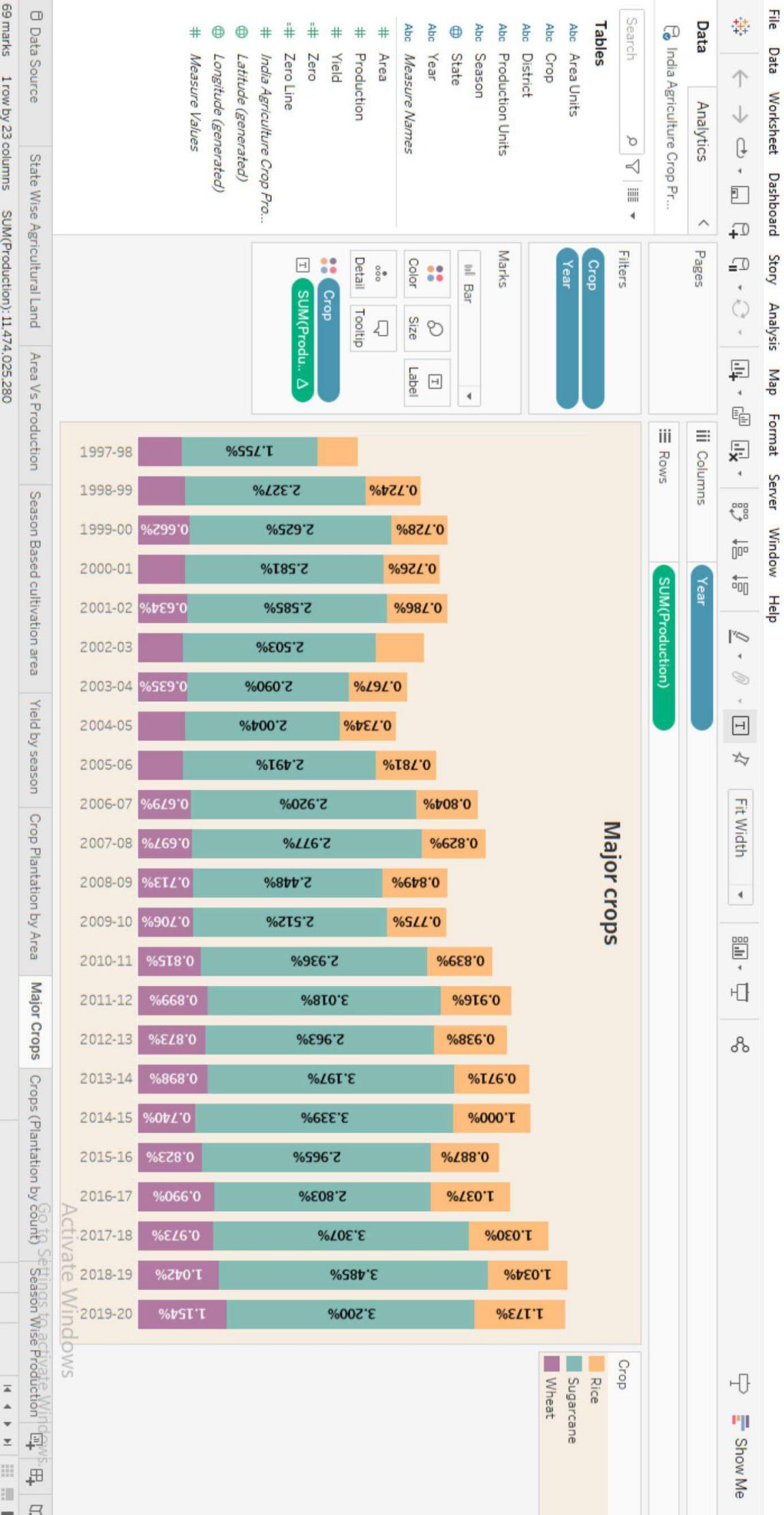
File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

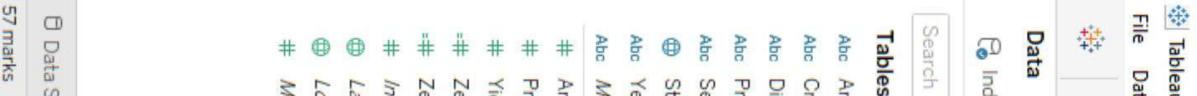
① Data Source	State Wise Agricultural Land	Area Vs Production	Season Based Cultivation area	Yield by season	Crop Plantation by Area	Major Crops	Crops (Plantation by count)
23 marks	1 row by 23 columns	SUM(Yield): 327,019					

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Crops (Plantation by Count)

Masoor	Banana	Cashewnut
Tobacco	Sweet potato	Niger seed
Jute	Sunflower	Tapioca
Rice	Arhar/Tur	other cereals
Maize	Gram	Arecanut
Potato	Bajra	Castor seed
Peas & beans	Dry chillies	Wheat
(Pulses)	Other Rabi pulses	Gardamom
Sesamum	Urad	Groundnut
Jowar	Turmeric	Horse-gram
Moong(Green Gram)	Cotton(lint)	Cowpea(Lobia)
Rapeseed & Mustard	Garlic	Khesari
(Other oilseeds)	Groundnut	Saflower
Linseed	Coriander	Barley
Ragi	Black pepper	Coconut
Dry chillies	Dry ginger	Mesta
Onion	Sannhamp	Ginger
Soyabean		



Data Analytics < India Agriculture Crop Pr...

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Season

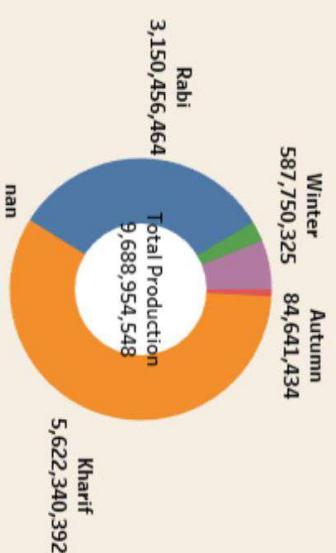
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Rows

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Season Wise Production



Tables	
Abc	Area Units
Abc	Crop
Abc	District
Abc	Production Units
Abc	Season
Abc	State
Abc	Year
Abc	Measure Names
#	Area
#	Production
#	Yield
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□ Data Source	State Wise Agricultural Land	Area Vs Production	Season Based cultivation area	Yield by season	Crop Plantation by Area	Major Crops	Crops (Plantation by count)	Go to Season Wise Production	Activate Windows
7 marks	1 row by 1 column	SUM(Zero): 0							

Dashboard

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State Wise ...

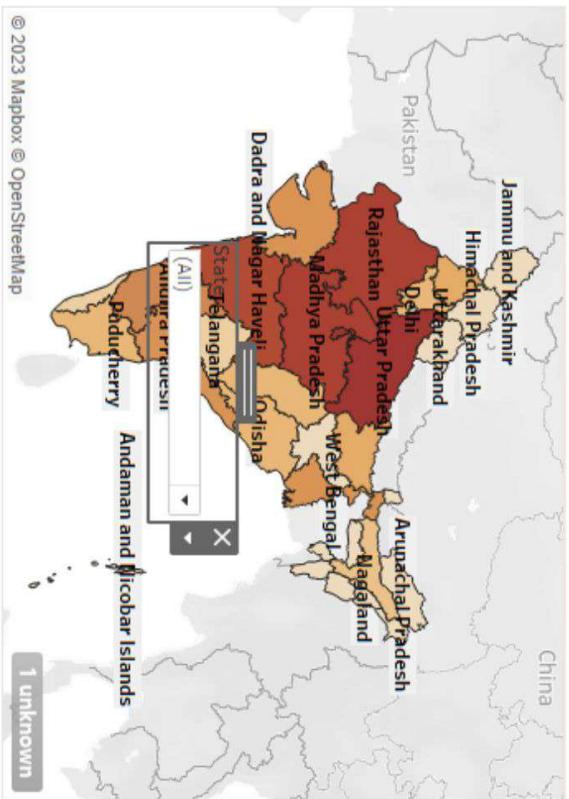
Area Vs ...

Season Based...

Yield by season

Crop Plantatio...

n



Area Vs Production

Area in acres region-Wise

Activate Windows

	Area	Production
Uttar Pradesh	542,672,635	4,442,585,306
Madhya Pradesh	492,087,994	824,851,676
Rajasthan	486,453,365	589,164,332
Maharashtra	461,939,552	1,878,564,918
Karnataka	257,907,399	63,772,797,345
Andhra Pradesh	238,925,335	26,076,218,605
West Bengal	237,682,265,8	941,179,120
Gujarat	222,434,333	807,581,678
Bihar	167,995,431	544,953,533
Punjab	162,040,200	781,551,409

Area in acres region-Wise

Season

Summer

Activate Windows

Crops (Plantation by Count)

Major crops

Crop Plantation by Area

Yield by season

Season Based

cultivation area

Kharif

26,457

Rice

66.51%

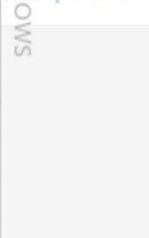
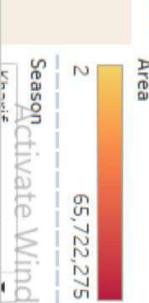
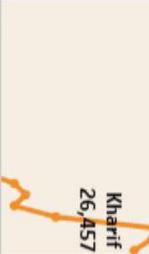
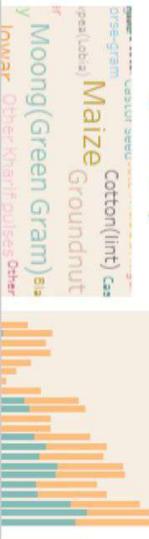
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65,722,275

Season

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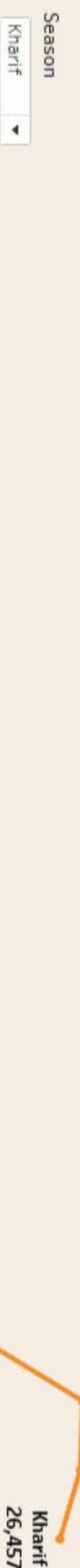
Dashboard

Default

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Device Preview

Layout



Size

Desktop Browser (1000 x 8...)

Sheets

State Wise ...

Area Vs...

Season Based...

Yield by season

Crop Plantatio...

Objects

Horizontal Container

Vertical Container

Text

Extension

Ask Data

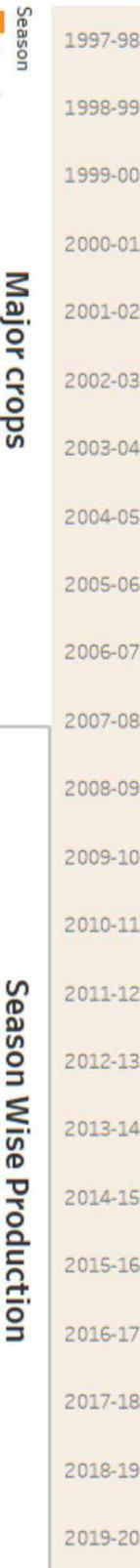
Data Story

Image

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Workflow

Web Page

**Season Wise Production**

Winter 587,750,325
Autumn 84,641,434

Activate Windows

Data Source	ased cultivation area	Yield by season	Crop Plantation by Area	Major Crops	Crops (Plantation by count)	Season Wise Production	Kpi's	Dashboard 1	Dashboard 2	Dashboard 3	Windows
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Story 1



< Yield By Season >

Major Crops State Wise Agriculture

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Season
Kharif ▾

Season
Kharif
26,457



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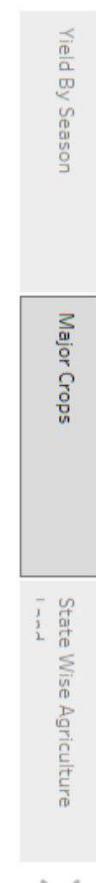
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Story (1016 x 964)

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Data Source	ion area	Yield by season	Crop Plantation by Area	Major Crops	Crops (Plantation by count)	Season Wise Production	Kpi's	Dashboard 1	Dashboard 2	Dashboard 3	Story 1
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Story 1



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Story (1016 x 954)

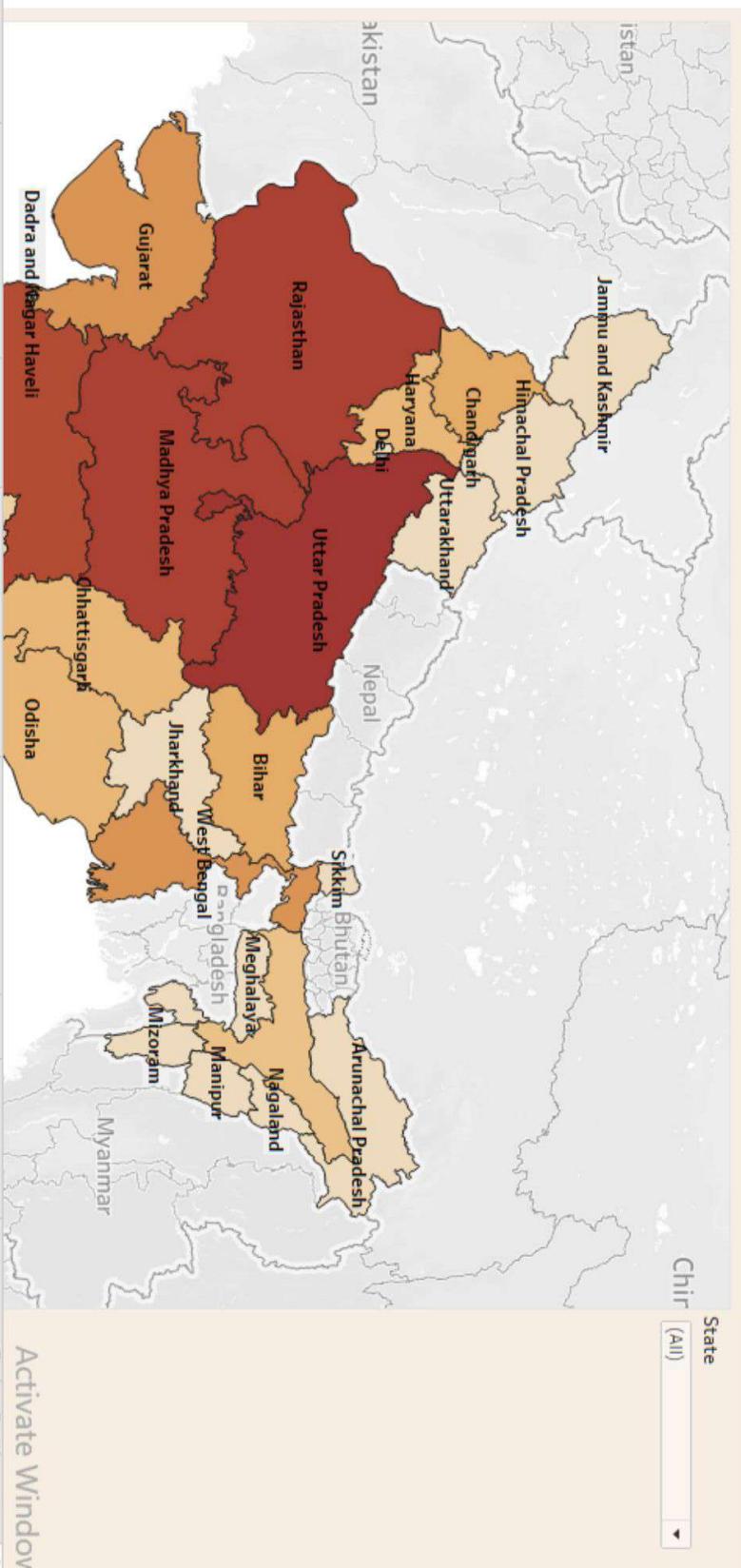
Size

Story (1016 x 954)

Story 1

- [Yield By Season](#)
- [Major Crops](#)
- [State Wise Agriculture](#)

State Wise ...
 Area Vs ...
 Season Based ...
 Yield by season
 Crop Plantatio ...
 Major Crops
 Crops ...
 Season Wise ...
 Kpi's
 Dashboard 1
 Dashboard 2



Show title

Size
Story (1016 x 964)

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Data Source	ion area	Yield by season	Crop Plantation by Area	Major Crops	Crops (Plantation by count)	Season Wise Production	Kpi's	Dashboard 1	Dashboard 2
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New story point

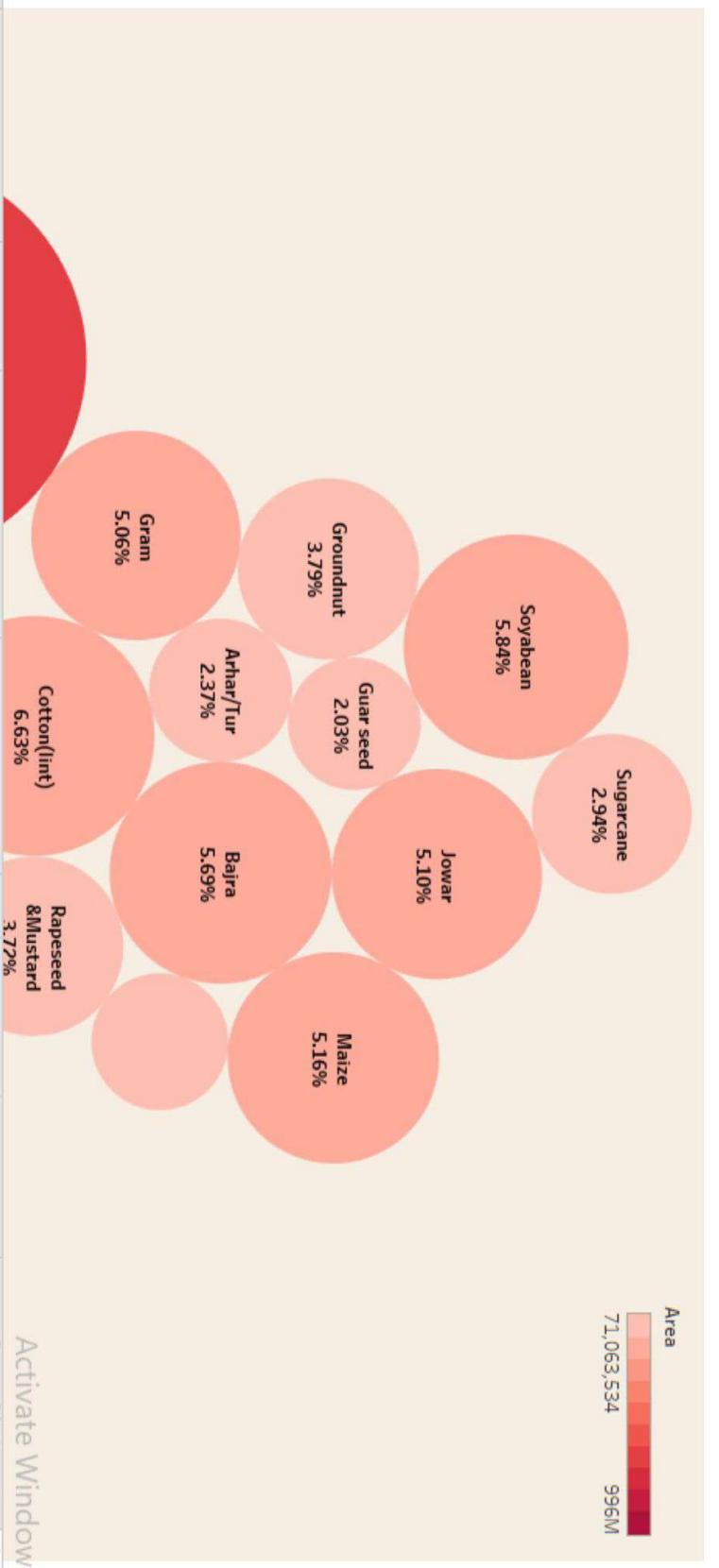
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Story Layout <

Crop Plantation

Season Wise

15



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Major Crops	Crops (Plantation by count)	Crop Plantation by Area	eld by season	Data Source
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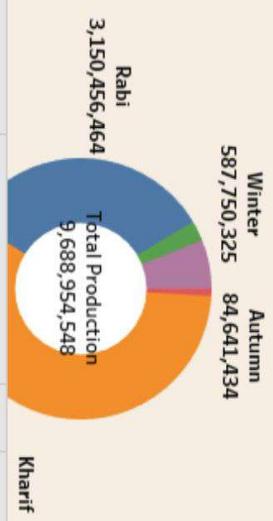
Season Wise Production	Kpis	田 Dashboard 1	田 Dashboard 2	田 Dashboard 3	Story 1	Story 2
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Story (1016 x 964)



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Data Source

ield by season

Crop Plantation by Area

Major Crops

Crops (Plantation by count)

Season Wise Production

Kpi's

Dashboard 1

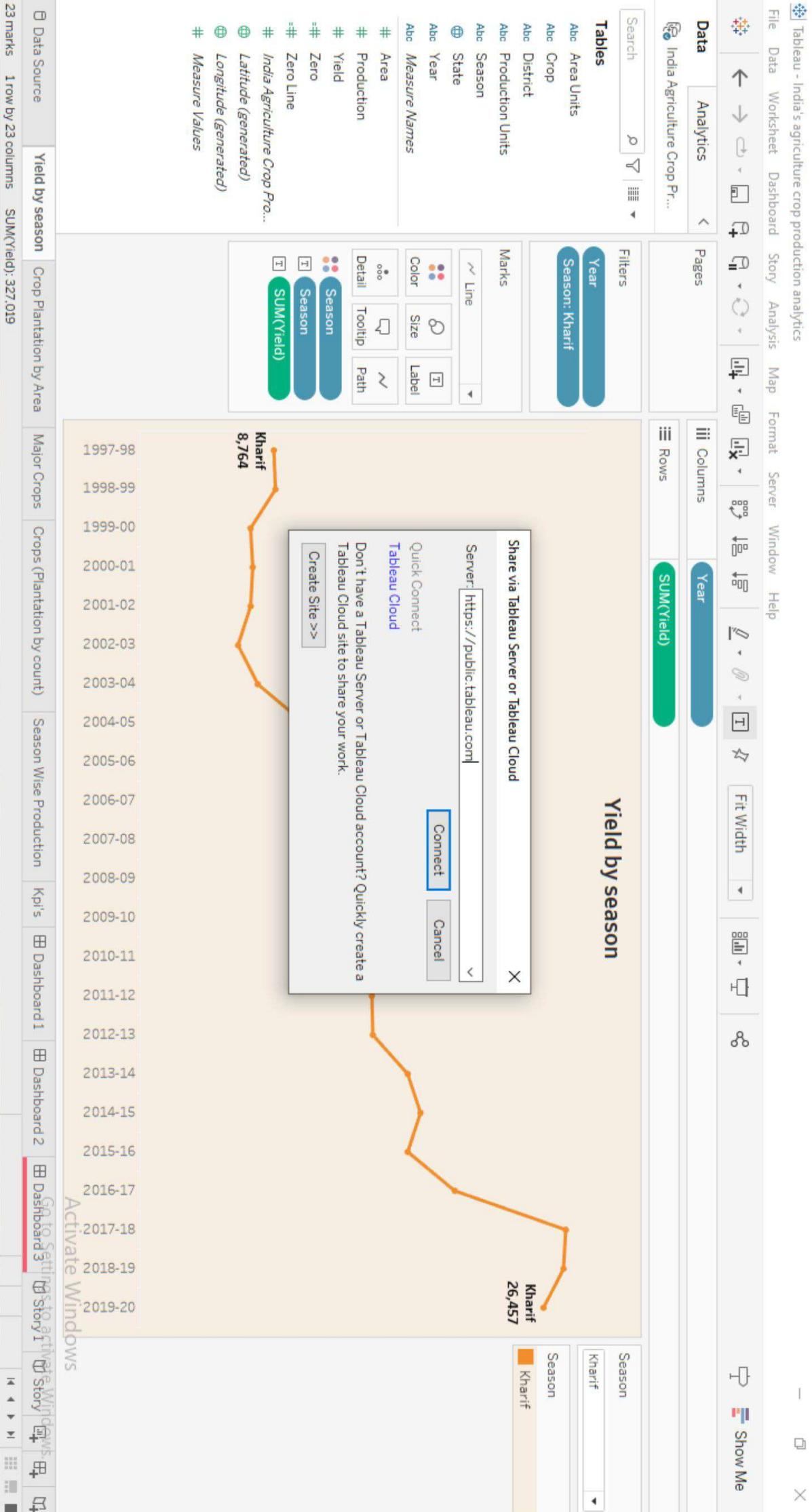
Dashboard 2

Dashboard 3

Go to Settings

Story 1

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Nishanth E

Edit Profile

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Following 0

Followers 0

Create a Viz



India's agriculture crop
production analytics

Nishanth E

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ADVANTAGE:

- 1.Diversity of Crops:** India is known for its diverse agro-climatic zones, which allow the cultivation of a wide variety of crops. This diversity helps in food security and contributes to a balanced diet.
- 2.Global Exporter:** India is a significant exporter of various agricultural commodities like rice, wheat, spices, and fruits. This contributes to the country's economy and helps in maintaining a favorable balance of trade.
- 3.Employment Generation:** Agriculture is a major source of employment in India. It provides livelihoods for a large percentage of the population, especially in rural areas.

DISADVANTAGES:

- 1.Small Land Holdings:** The average size of agricultural land holdings in India is small. This fragmentation limits economies of scale, making it challenging for farmers to adopt modern technologies and practices.
- 2.Dependence on Monsoons:** India heavily depends on the monsoon rains for agriculture. Irregular monsoons or droughts can lead to crop failures, affecting the livelihoods of millions.
- 3.Lack of Infrastructure:** Insufficient post-harvest infrastructure, like cold storage facilities and proper transportation, leads to significant post-harvest losses.

APPLICATION:

Creating an analysis of India's agricultural crop production for Tableau involves several steps. Here's a simplified guide to help you get started:

Data Collection and Preparation

Connect Data to Tableau

Create Worksheets

Combine Worksheets into a Dashboard

Add Interactivity

Apply Visualizations and Formatting

CONCLUSION:

Data Collection and Preparation: Obtain reliable and structured data on India's agricultural crop production, including details on crop types, production quantities, years, and regions.
Connect Data to Tableau: Import the prepared dataset into Tableau to begin the visualization process.

FUTURE SCOPE:

- 1.It Will be use for Integration of Real-Time Data**
- 2.It will be use for Machine Learning and Predictive Analytics**
- 3.it will be use for Geospatial Analysis**