

Milestone 2: Data Collection & Extraction

Activity 1: Downloading the dataset

File

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Wrap Text

General

Conditional Formatting

Format as Table

Cell Styles

Insert

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AutoSum

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Sort & Find & Filter

Select

Editing

POSSIBLE DATA LOSS

Some features might be lost if you save this workbook in the comma-delimited (.csv) format. To preserve these features, save it in an Excel file format.

Don't show again

Save As...

A1

State

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	State	District	Crop	Year	Season	Area	Area Unit	Production	Production Yield											
2	Andaman	NICOBAR	Areca nut	2001-02	Kharif	1254	Hectare	2061	Tonnes	1.643541										
3	Andaman	NICOBAR	Areca nut	2002-03	Whole Yr	1258	Hectare	2083	Tonnes	1.655803										
4	Andaman	NICOBAR	Areca nut	2003-04	Whole Yr	1261	Hectare	1525	Tonnes	1.209358										
5	Andaman	NORTH AN	Areca nut	2001-02	Kharif	3100	Hectare	5239	Tonnes	1.69										
6	Andaman	SOUTH AN	Areca nut	2002-03	Whole Yr	3105	Hectare	5267	Tonnes	1.696296										
7	Andaman	SOUTH AN	Areca nut	2003-04	Whole Yr	3118	Hectare	5182	Tonnes	1.661963										
8	Andaman	NICOBAR	Banana	2002-03	Whole Yr	213	Hectare	1278	Tonnes	6										
9	Andaman	NICOBAR	Banana	2003-04	Whole Yr	266	Hectare	1763	Tonnes	6.62782										
10	Andaman	SOUTH AN	Banana	2002-03	Whole Yr	1524	Hectare	10882	Tonnes	7.14042										
11	Andaman	SOUTH AN	Banana	2003-04	Whole Yr	1530	Hectare	11558	Tonnes	7.554248										
12	Andaman	NICOBAR	Black pepi	2002-03	Whole Yr	63	Hectare	13.5	Tonnes	0.214286										
13	Andaman	NICOBAR	Black pepi	2003-04	Whole Yr	75.5	Hectare	15.86	Tonnes	0.210066										
14	Andaman	SOUTH AN	Black pepi	2002-03	Whole Yr	487	Hectare	102.5	Tonnes	0.210472										
15	Andaman	SOUTH AN	Black pepi	2003-04	Whole Yr	497	Hectare	104.37	Tonnes	0.21										
16	Andaman	NICOBAR	Cashew nut	2001-02	Whole Yr	719	Hectare	192	Tonnes	0.267038										
17	Andaman	NICOBAR	Cashew nut	2002-03	Whole Yr	719	Hectare	208	Tonnes	0.289291										
18	Andaman	NICOBAR	Cashew nut	2003-04	Whole Yr	717	Hectare	208.5	Tonnes	0.290795										
19	Andaman	NORTH AN	Cashew nut	2001-02	Whole Yr	81	Hectare	33	Tonnes	0.407407										
20	Andaman	SOUTH AN	Cashew nut	2002-03	Whole Yr	81	Hectare	24	Tonnes	0.296296										
21	Andaman	SOUTH AN	Cashew nut	2003-04	Whole Yr	116.5	Hectare	26.14	Tonnes	0.224378										
22	Andaman	NICOBAR	Coconut	2001-02	Whole Yr	18190	Hectare	64430000	Nuts	3542.056										
23	Andaman	NICOBAR	Coconut	2002-03	Whole Yr	18240	Hectare	67490000	Nuts	3700.11										

India Agriculture Crop Producti

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Activity 1.1: Understand the data

Data consists of 345409 rows and 10 columns that correspond to different values.

Column Description of the Dataset:

FIELDS	DESCRIPTION
State	The name of the Indian states.
District	The name of the districts of Indian states.
Crop	Name of different crops grown in India

Year	Date
Season	India has 5 seasons for crop cultivation: kharif, rabi, autumn, winter and summer
Area	Area for crop cultivation in acres
Production	Production of crops in tonnes
Yield	Yield by the crops under cultivation

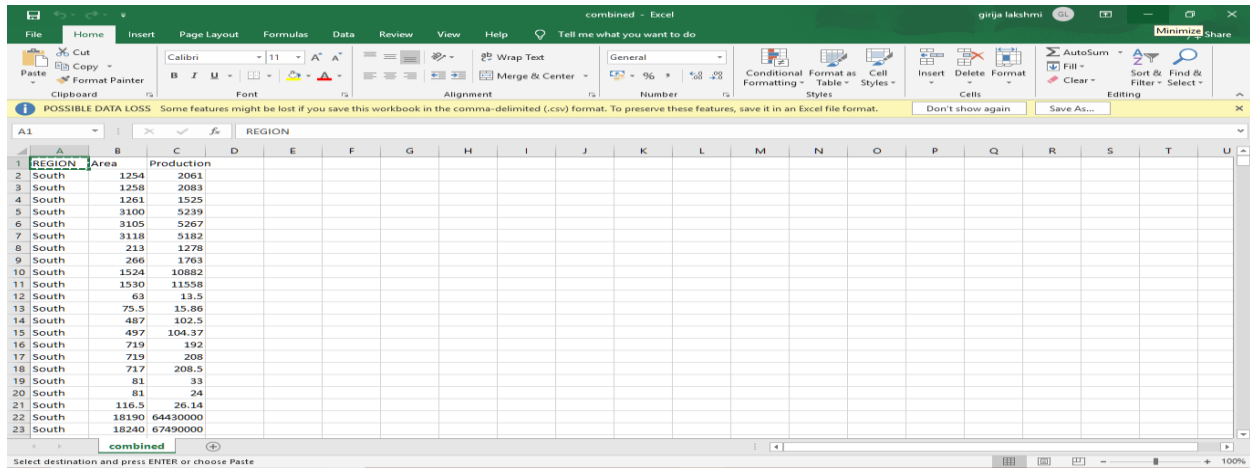
Activity 3: Connect Dataset with Tableau

The screenshot shows the Tableau Public interface with the following components:

- Connections Panel:** Lists the connected data source 'India Agriculture Crop Production.csv' (Text file).
- Files Panel:** Shows the file 'India Agriculture Crop Production.csv' and options like 'Use Data Interpreter' and 'New Union'.
- Main View:** Displays the dataset 'India Agriculture Crop Production.csv' with 10 fields and 345,407 rows. A message 'Need more data? Drag tables here to relate them. [Learn more](#)' is visible.
- Data Source Table:** A preview of the data source table with columns: Name, State, District, Crop, and Year. The data shows entries for Maharashtra, AMRAVATI, and AURANGABAD districts across the years 2004-0 to 2005-0.
- Fields Table:** A table listing the fields in the dataset, including State, District, and Year.

Milestone 3: Data Preparation

Activity 1: Prepare the Data for Visualization



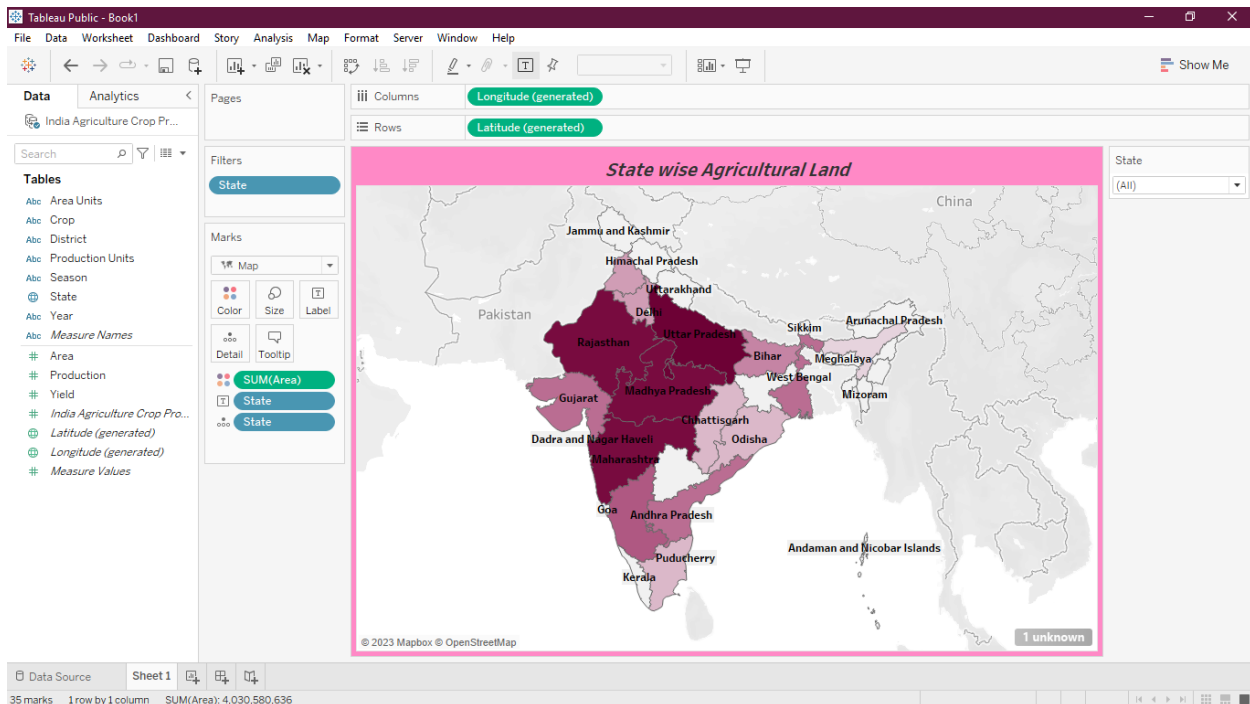
REGION	Area	Production
South	1254	2061
South	1256	2083
South	1261	1525
South	3100	5239
South	3105	5267
South	3118	5182
South	213	1278
South	266	1763
South	1524	10882
South	1530	11558
South	63	13.5
South	75.5	15.86
South	487	102.5
South	497	104.37
South	719	192
South	719	208
South	717	208.5
South	81	33
South	81	24
South	116.5	26.14
South	18190	64430000
South	18240	67490000

Milestone 4: Data Visualization

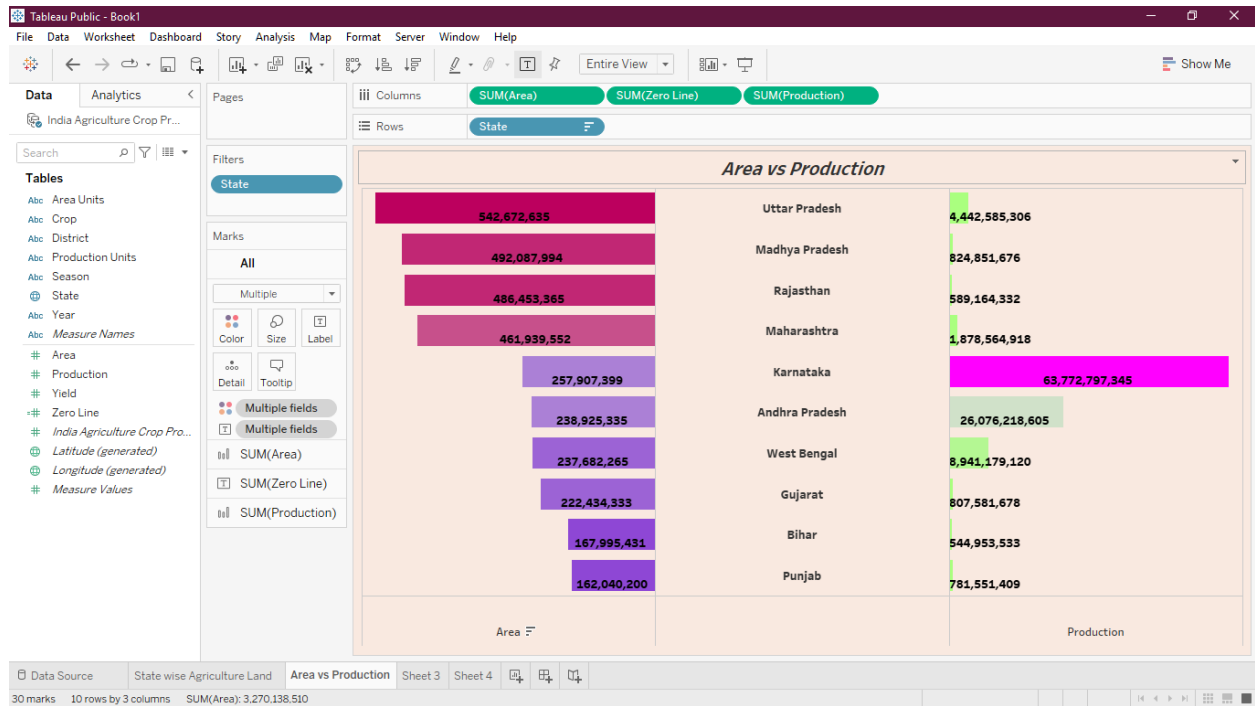
Activity 1: No of Unique Visualizations

The number of unique visualizations that can be created with a given dataset.

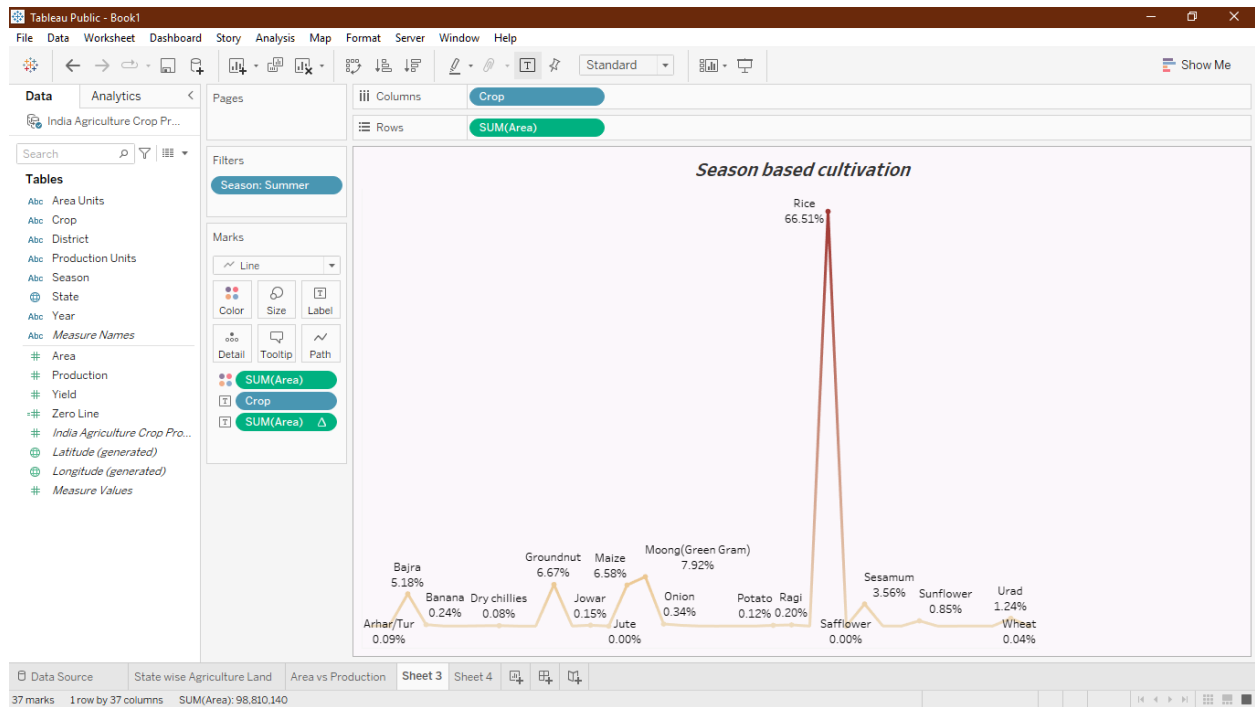
Activity 1.1: State wise Agricultural Land



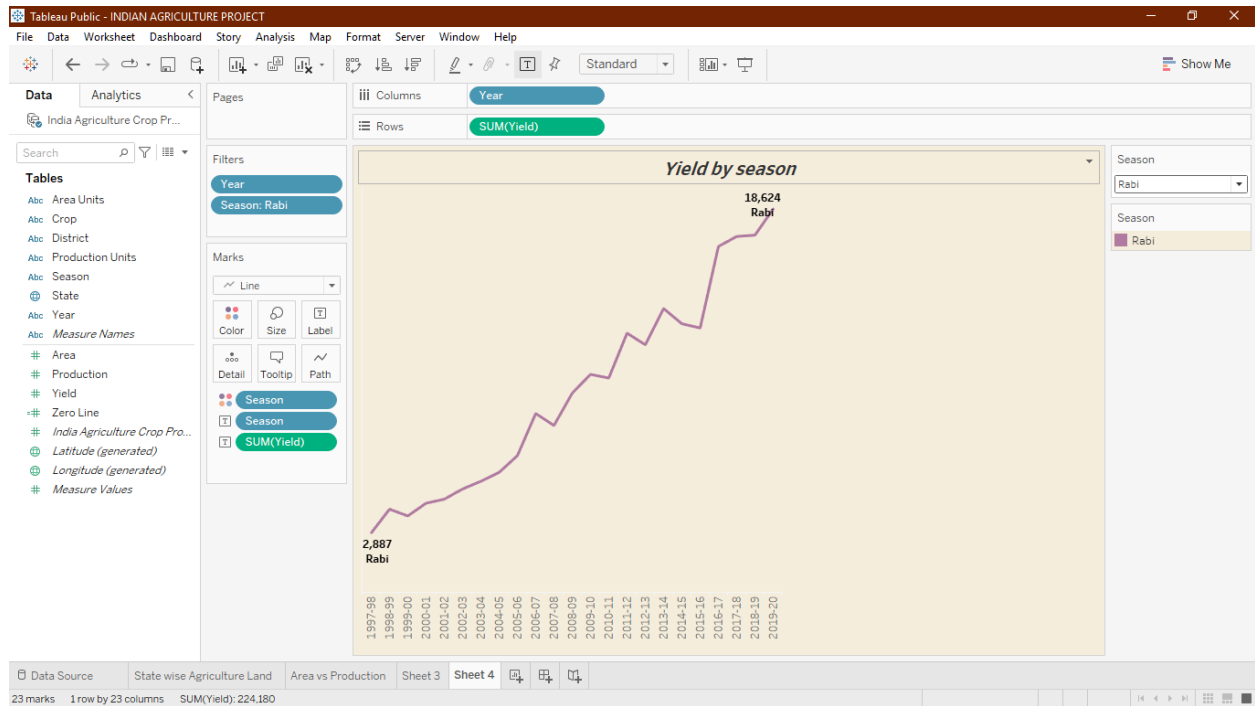
Activity 1.2: Area vs Production



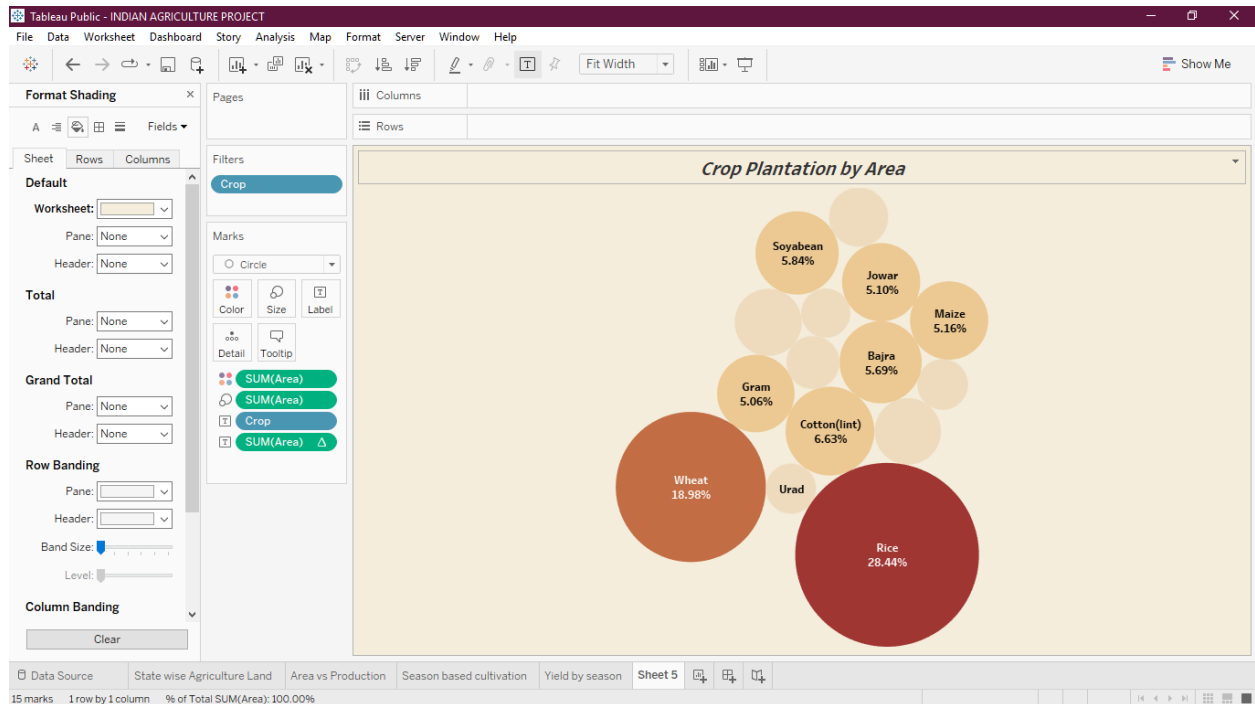
Activity 1.3: Season based cultivation



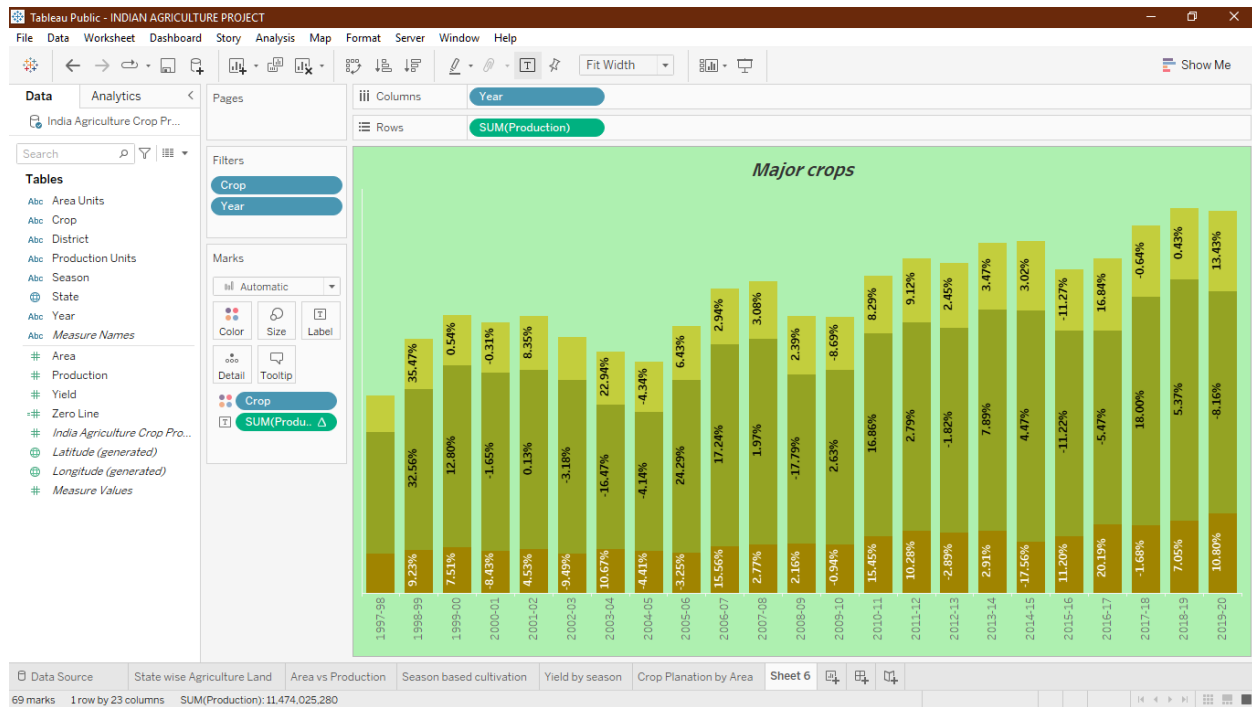
Activity 1.4: Yield by season



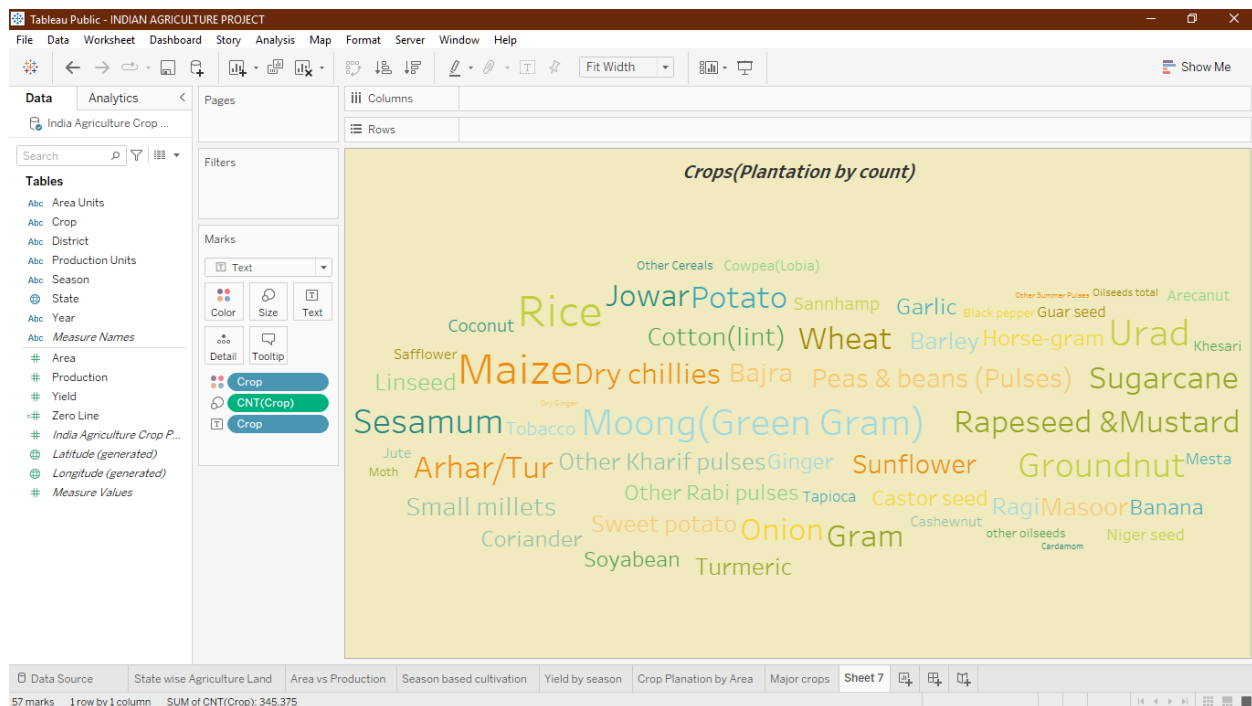
Activity 1.5: Crop plantation by area



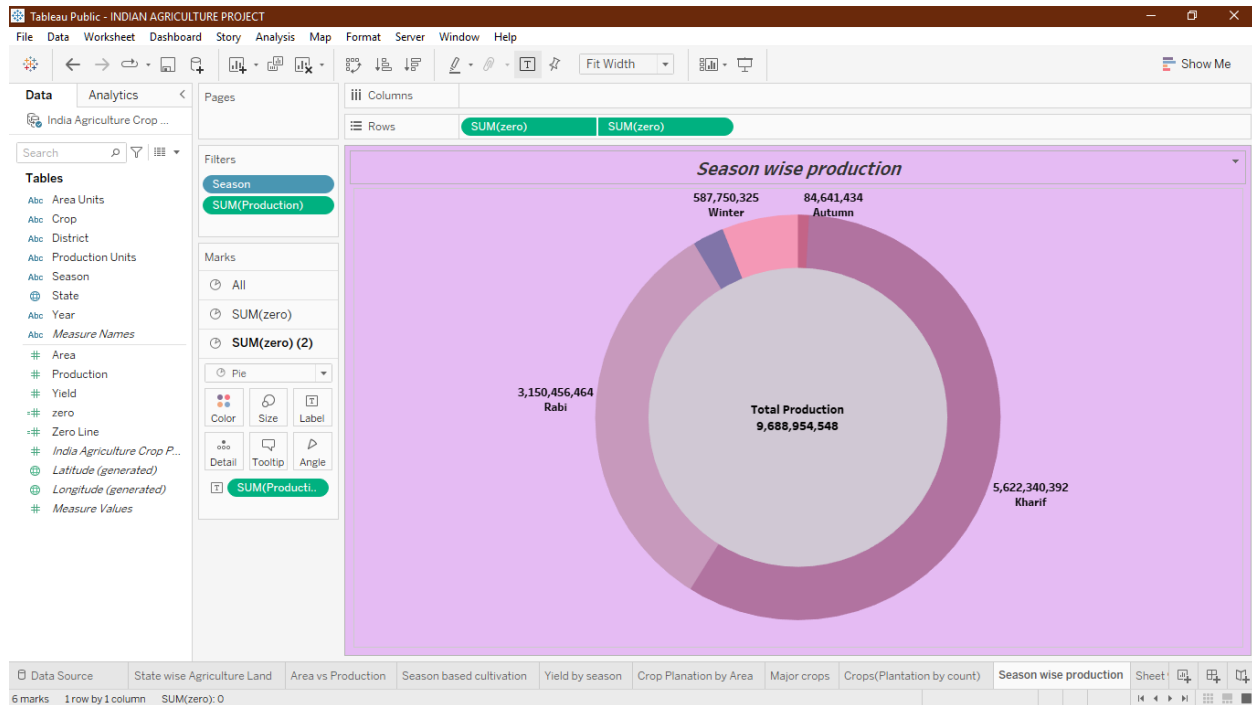
Activity 1.6: Major crops growth year on year.



Activity 1.7: Crops



Activity 1.8: Season wise production

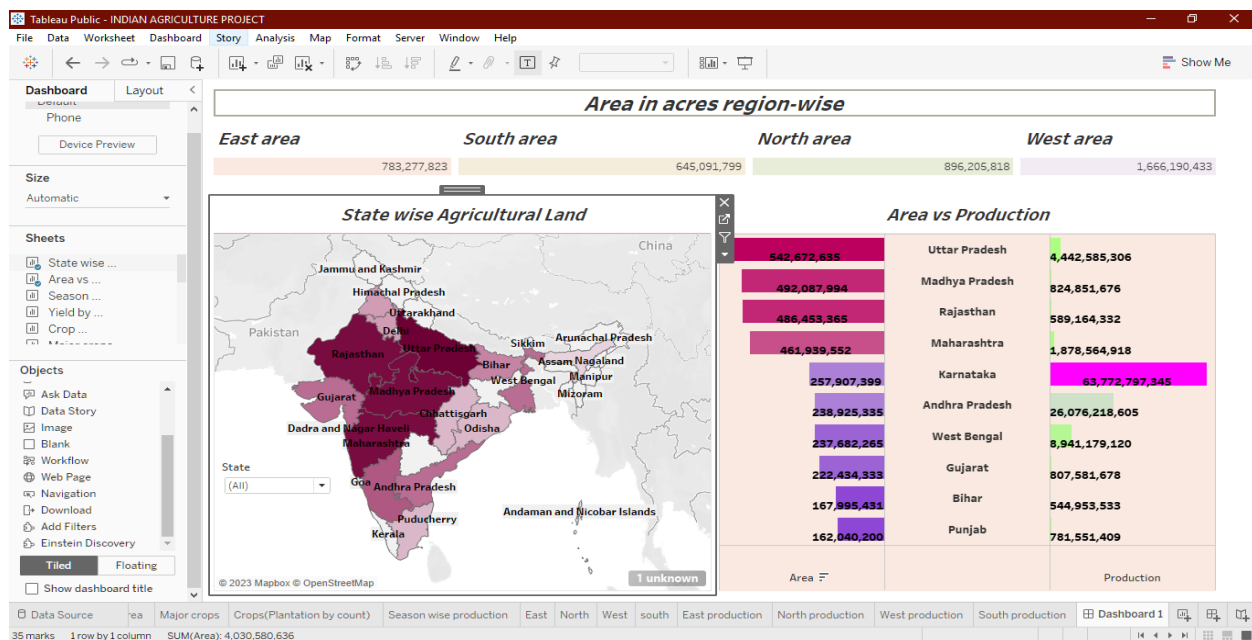


Milestone 5: Dashboard

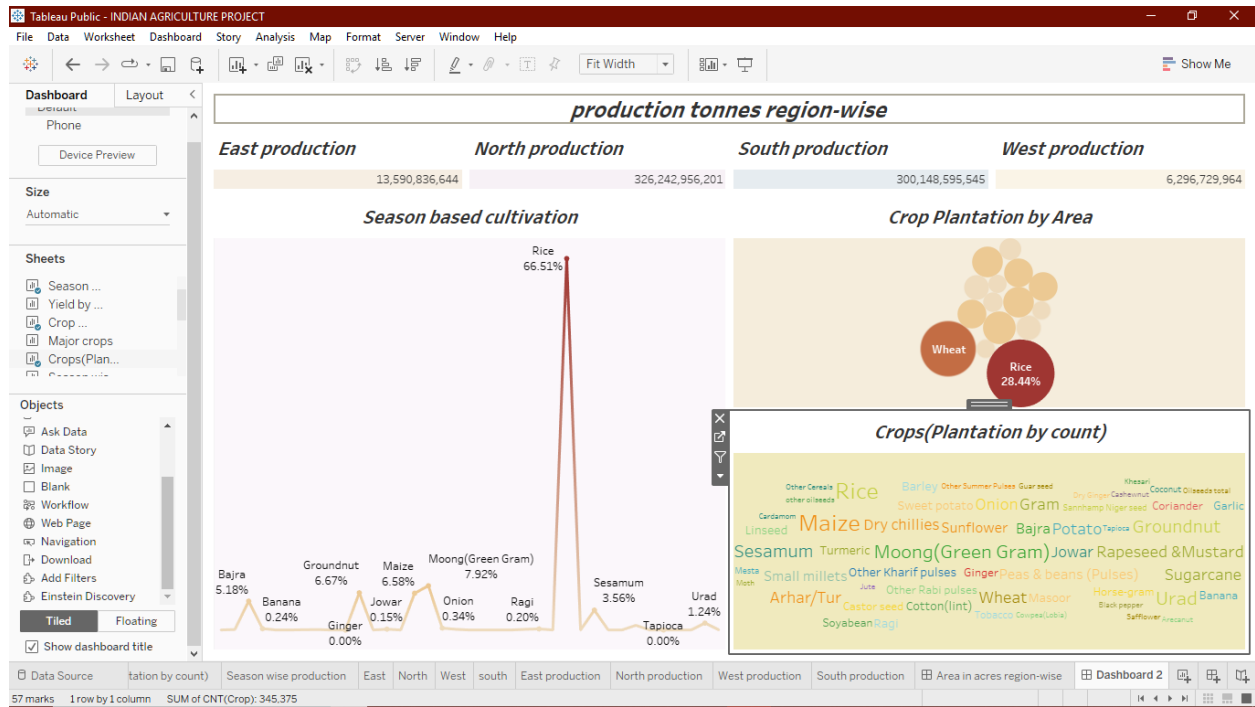
Activity 1: Responsive and Design of dashboard

Once you have created views on different sheets in Tableau, you can pull them into a dashboard.

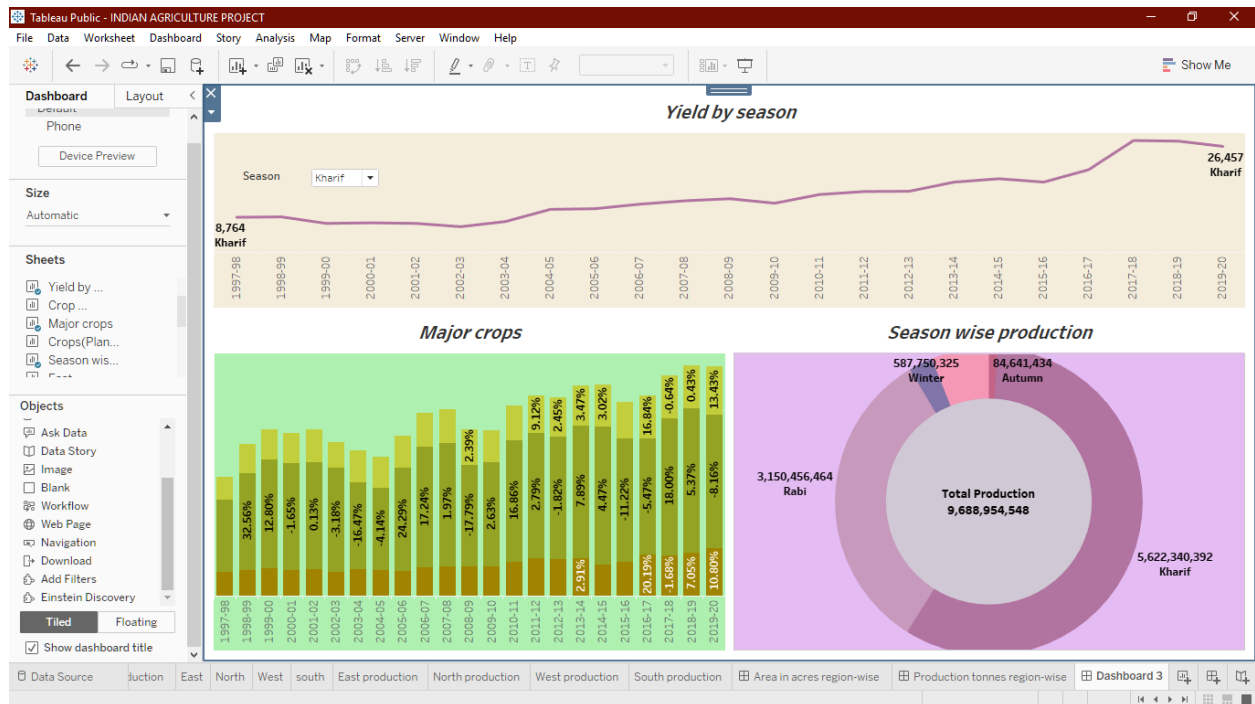
Activity 1.1: Dashboard 1



Activity 1.2: Dashboard 2



Activity 1.3: Dashboard 3

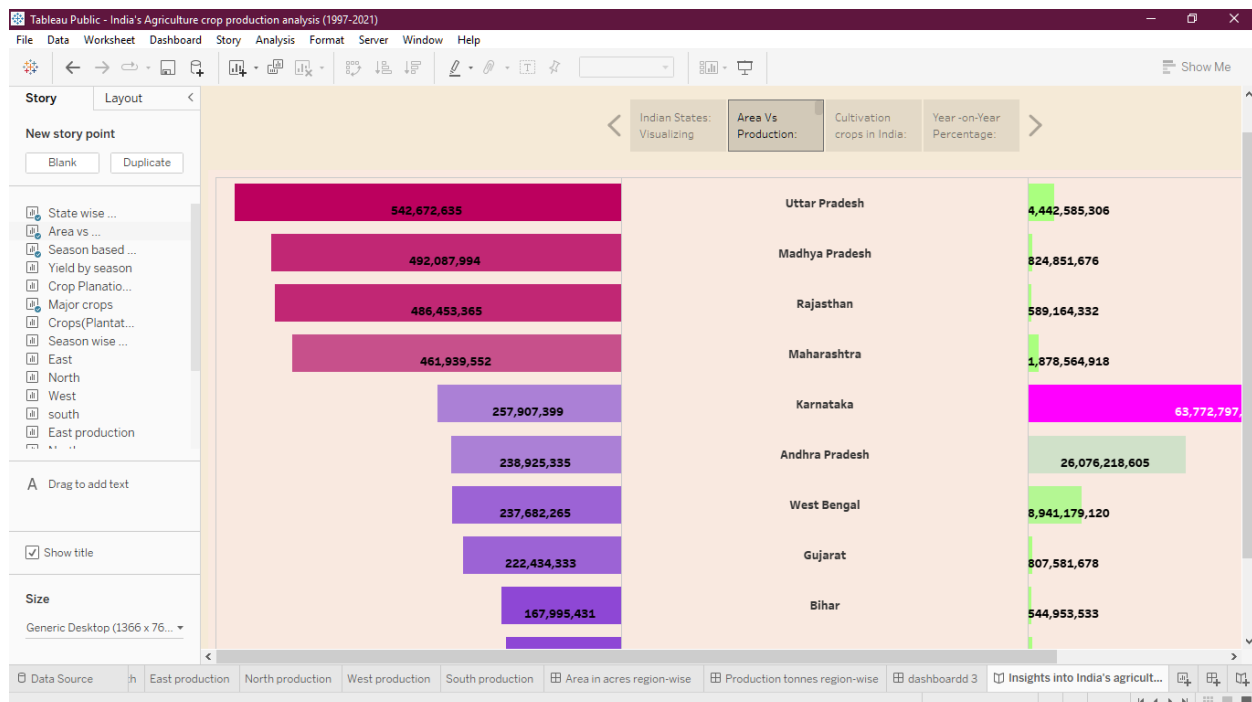
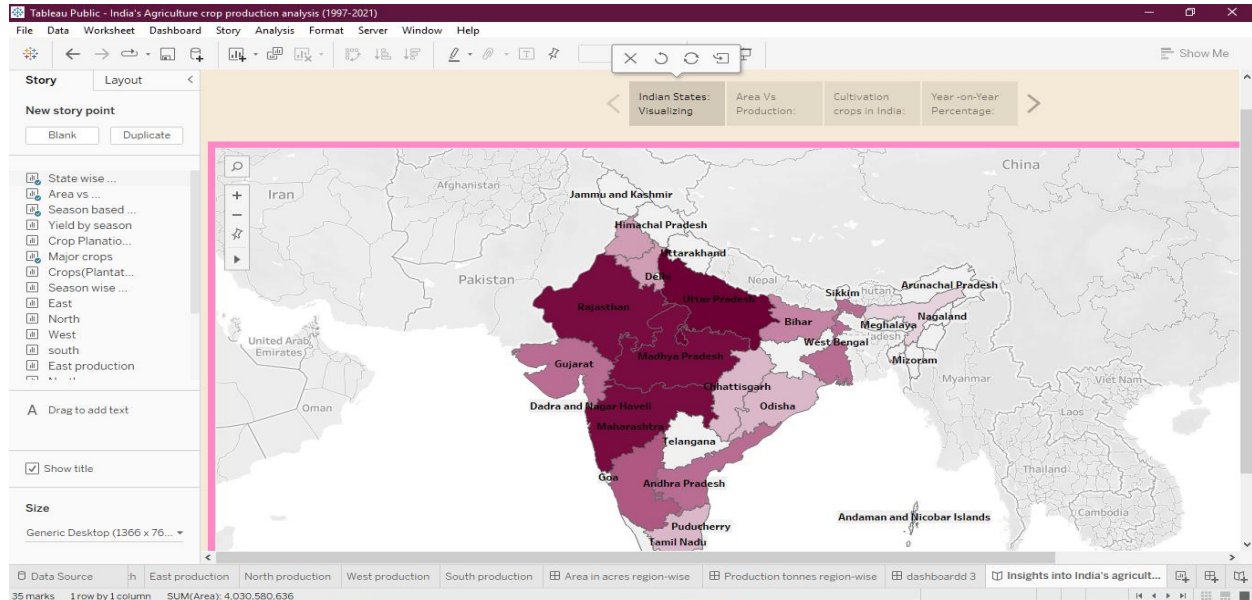


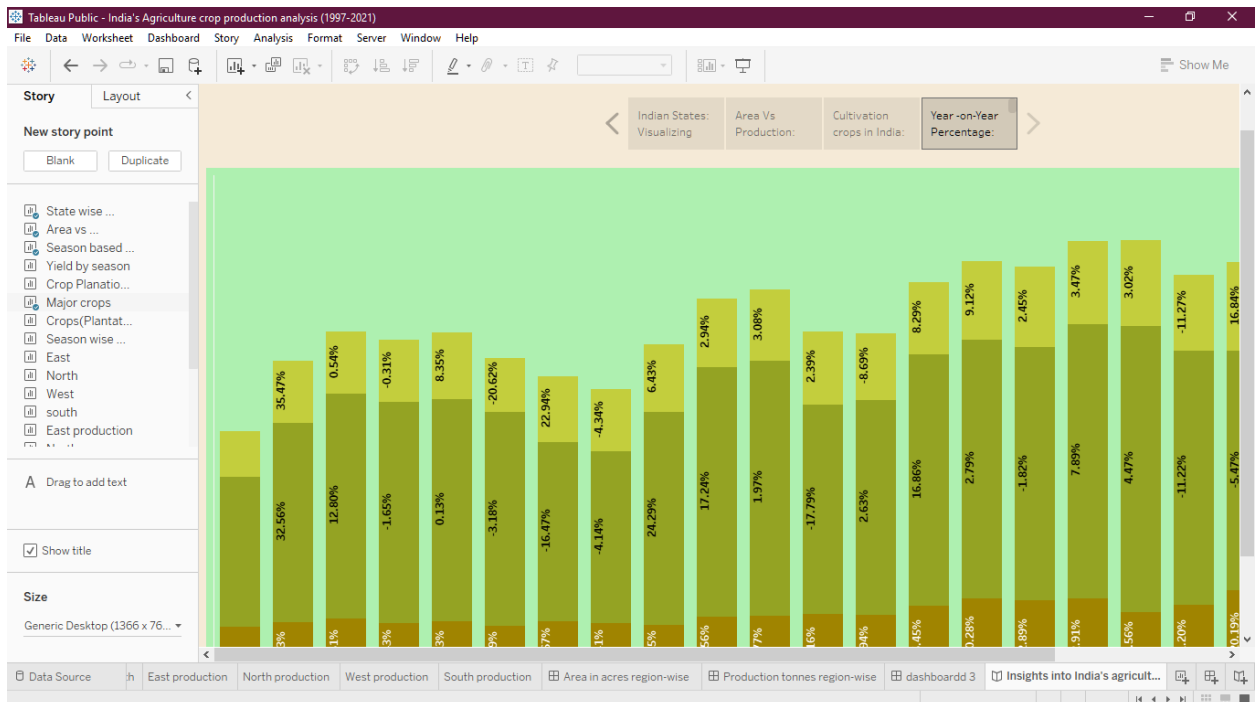
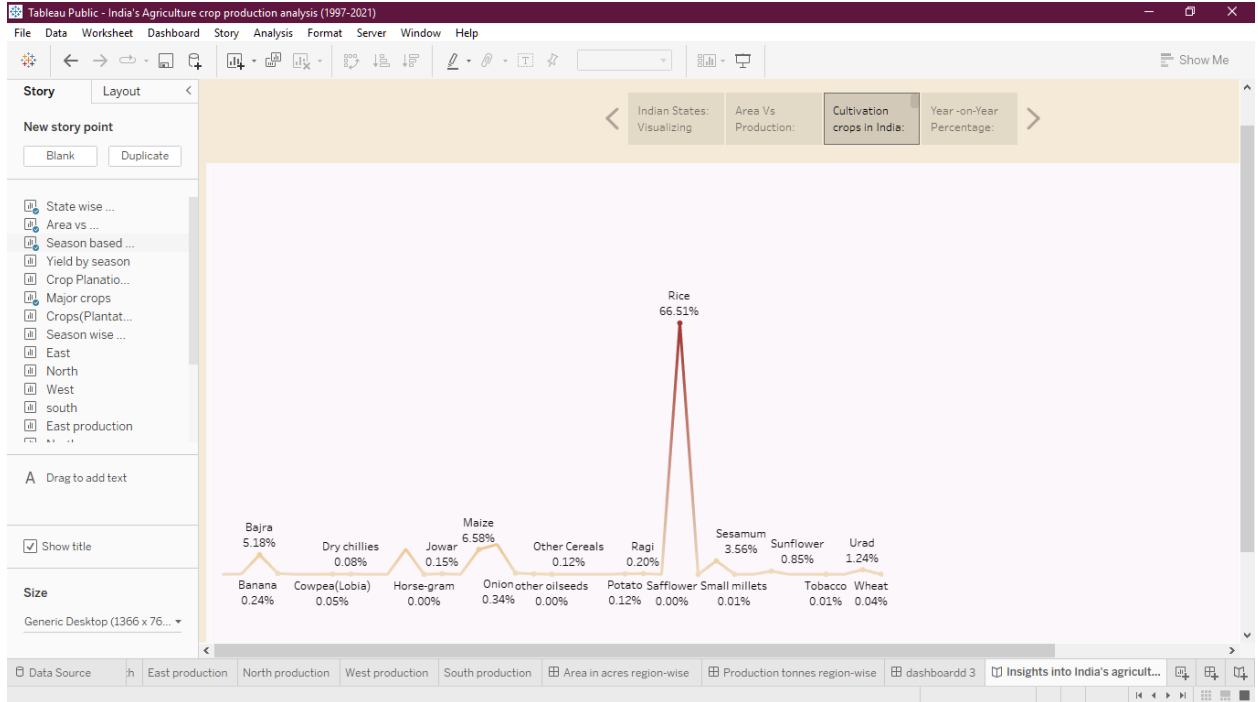
Milestone 6: Story

Activity 1: Number of scenes in a story

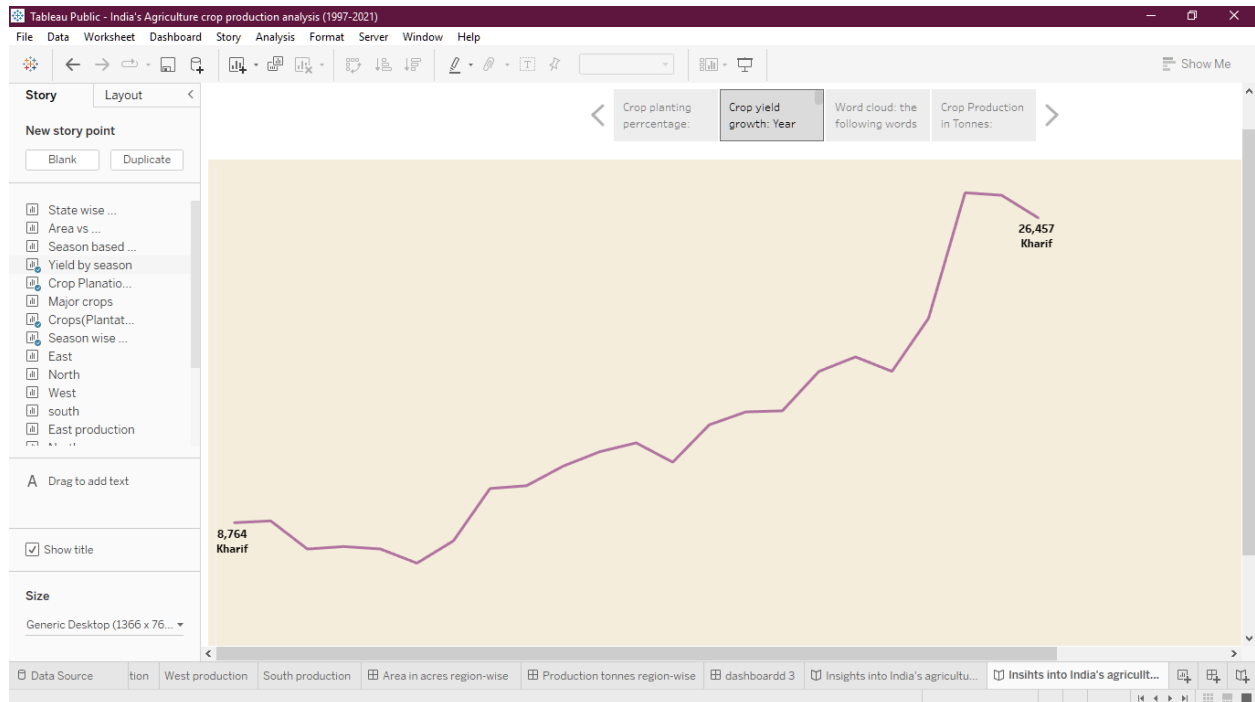
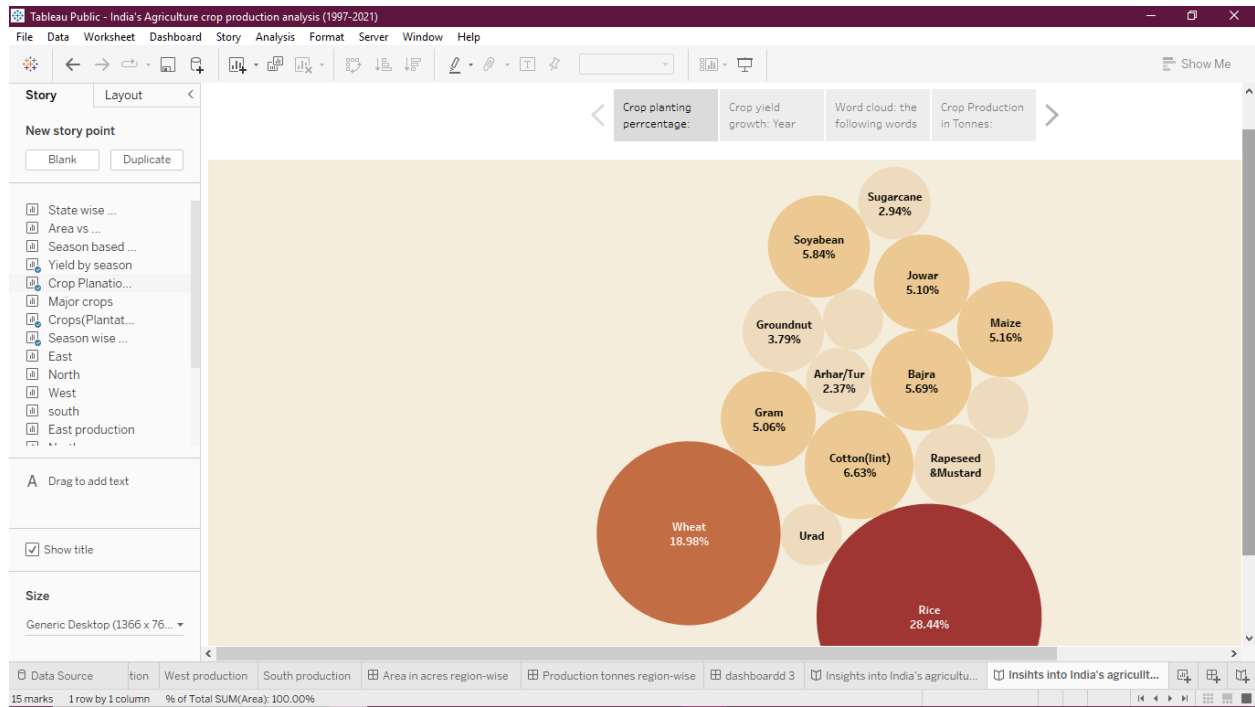
A storyboard is a visual representation of the data analysis process and it breaks down the analysis into a series of steps or scenes.

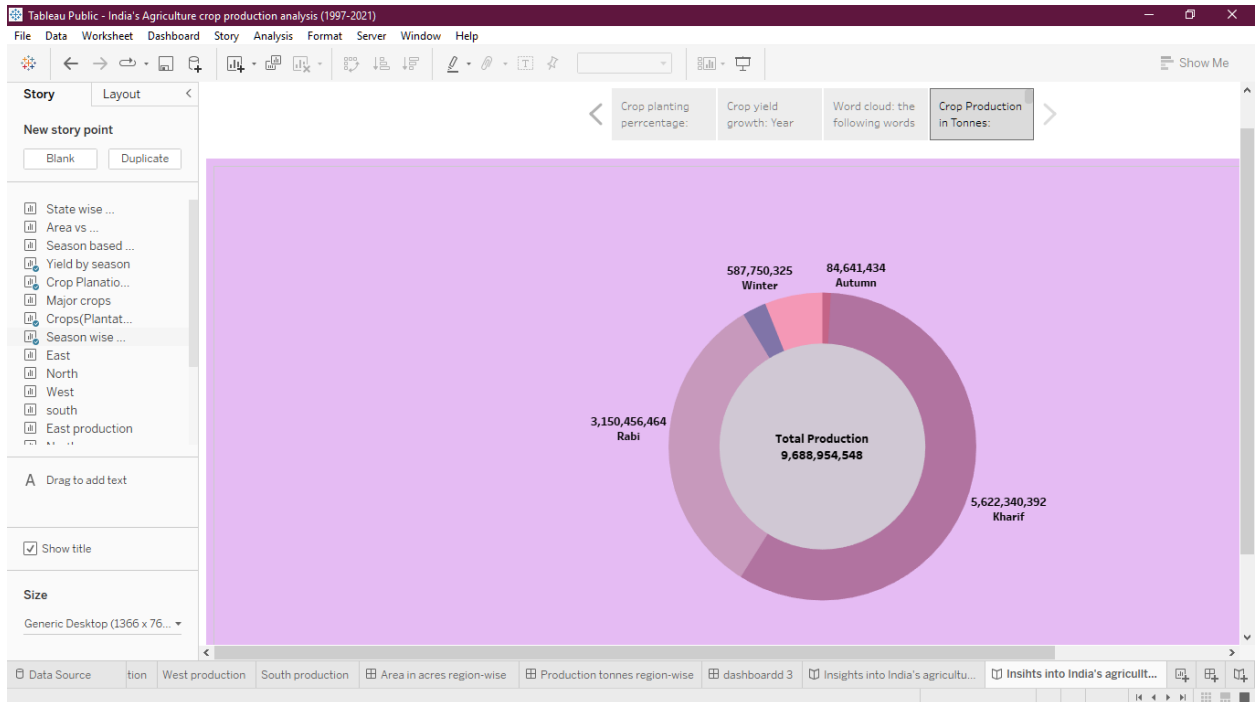
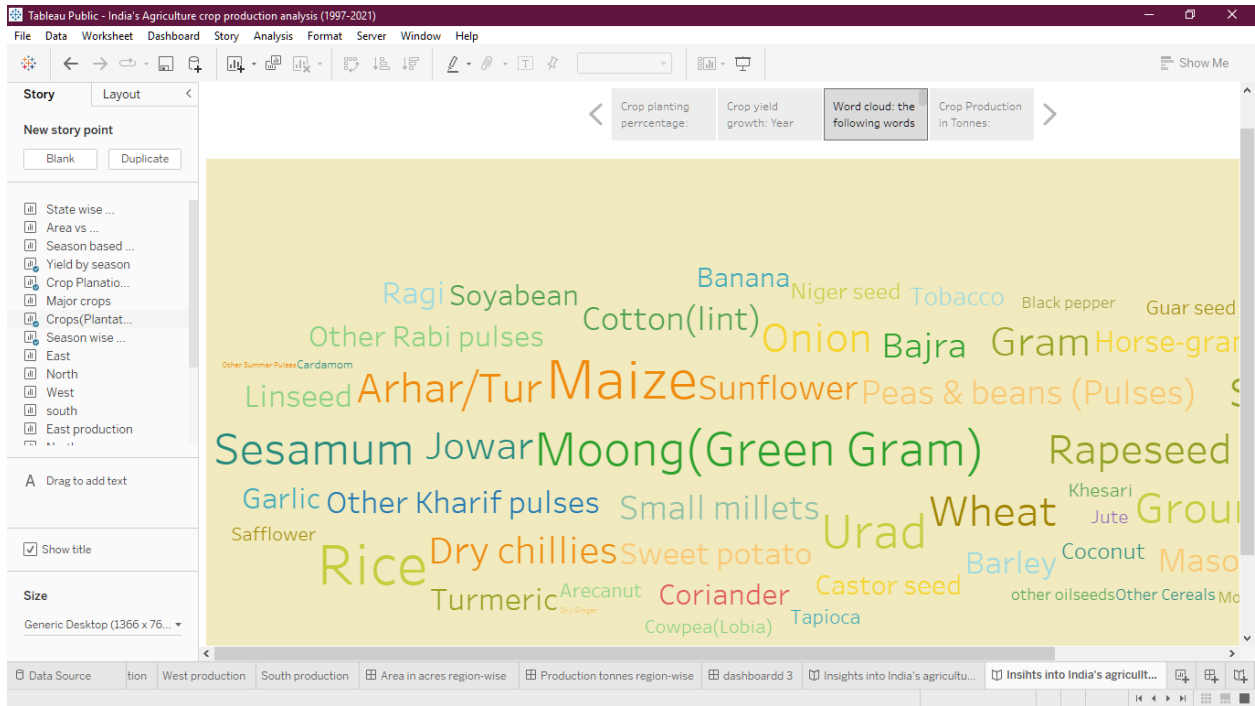
Activity 1.1: Story 1





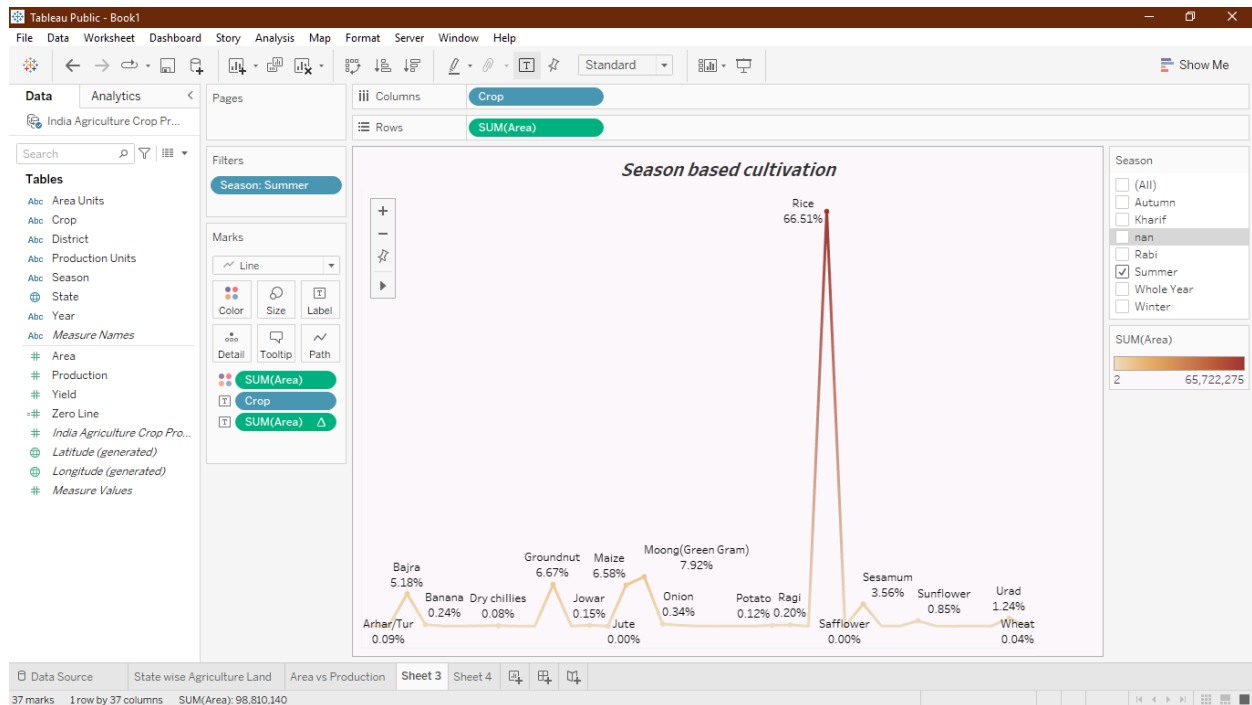
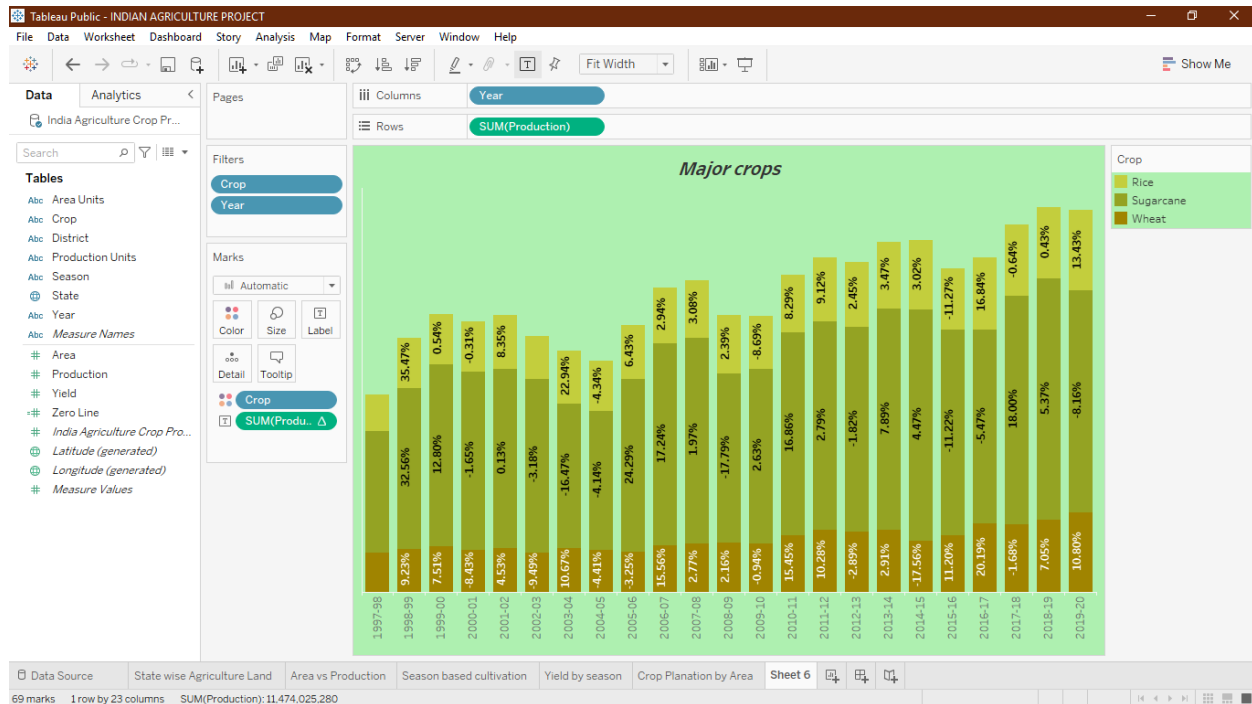
Activity 1.2: Story 2

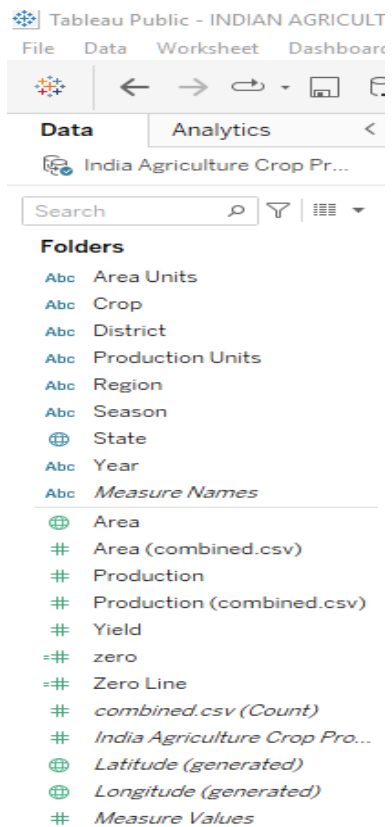
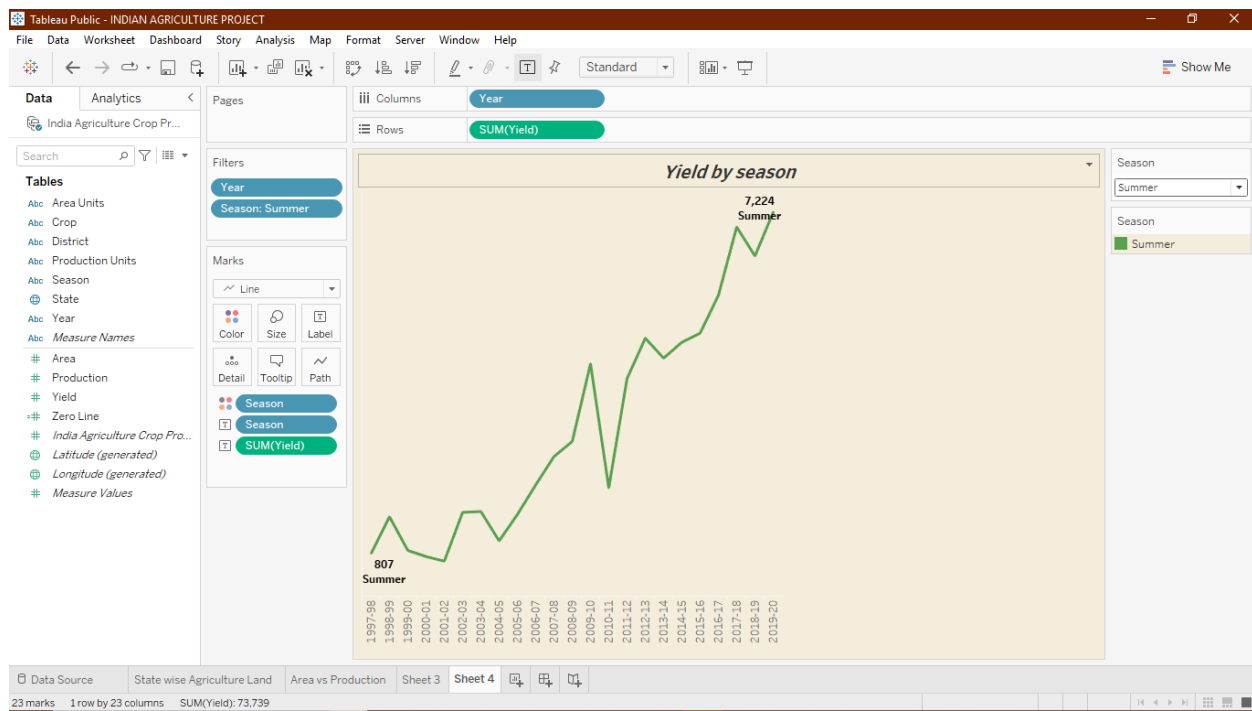




Milestone 7: Performance Testing

Activity 1: Utilization of Filters

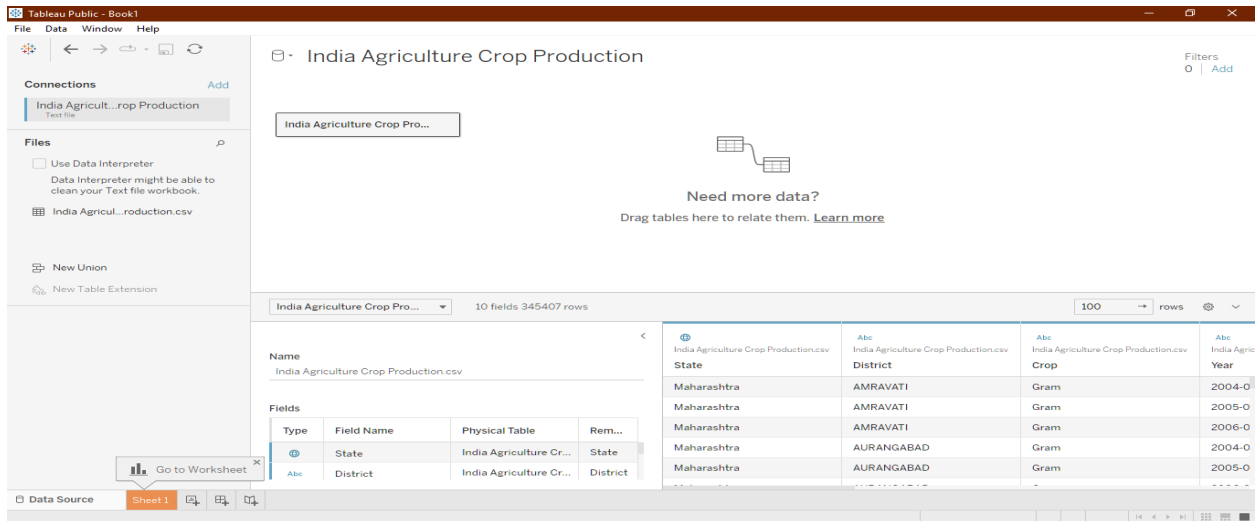




Milestone 8: Publishing

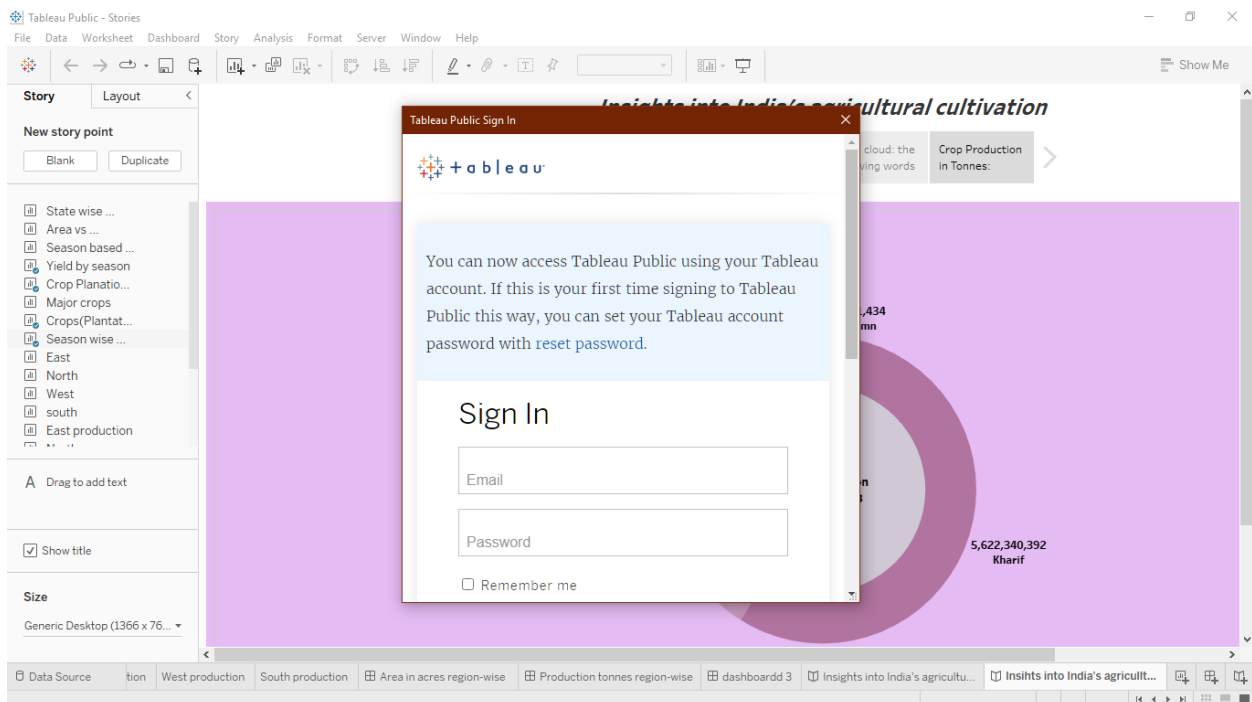
Publishing dashboard and reports to tableau public

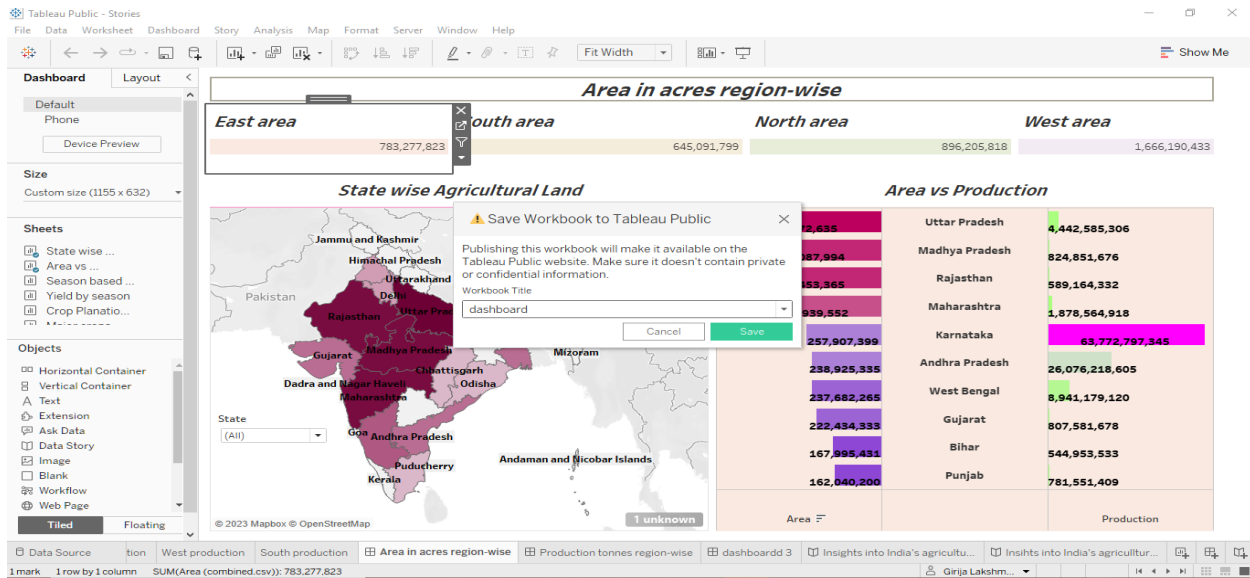
Step 1 Go to data Source and Select Extract so that hyper extension files are created and save it at your desktop.



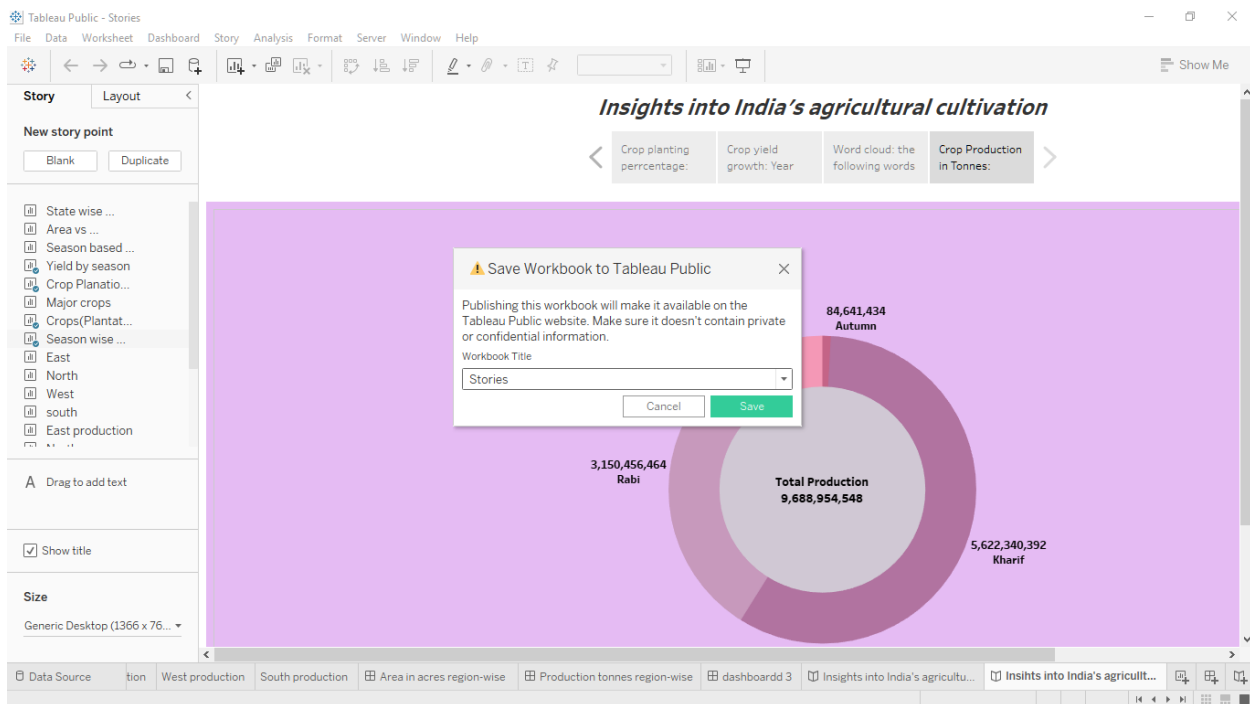
Step 2: Go to Dashboard/story, click on share button on the top ribbon

Give the server address of your tableau public account and click on connect.

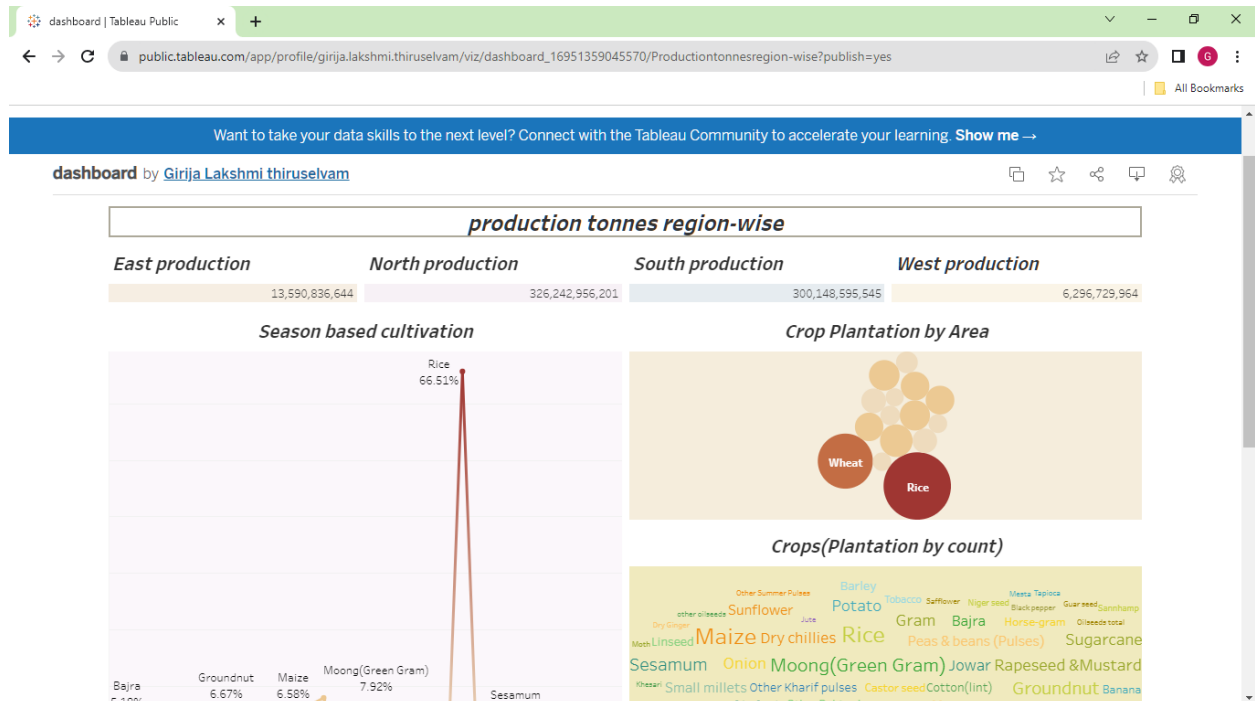
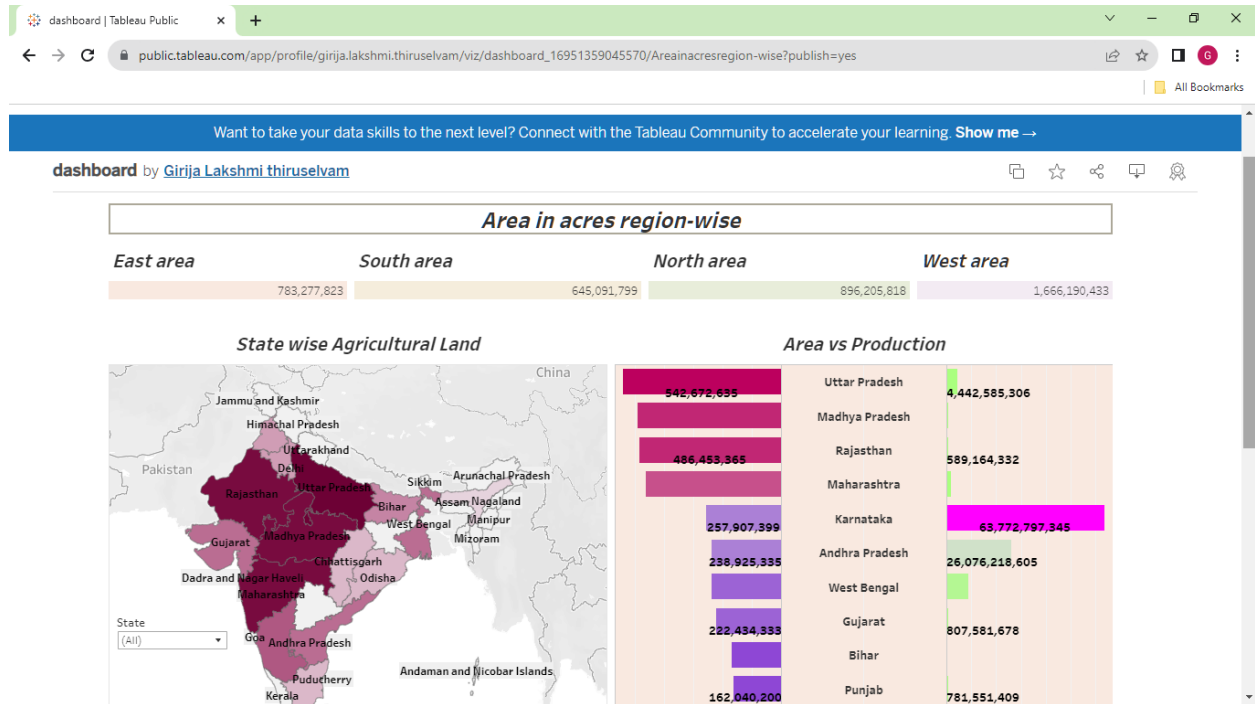


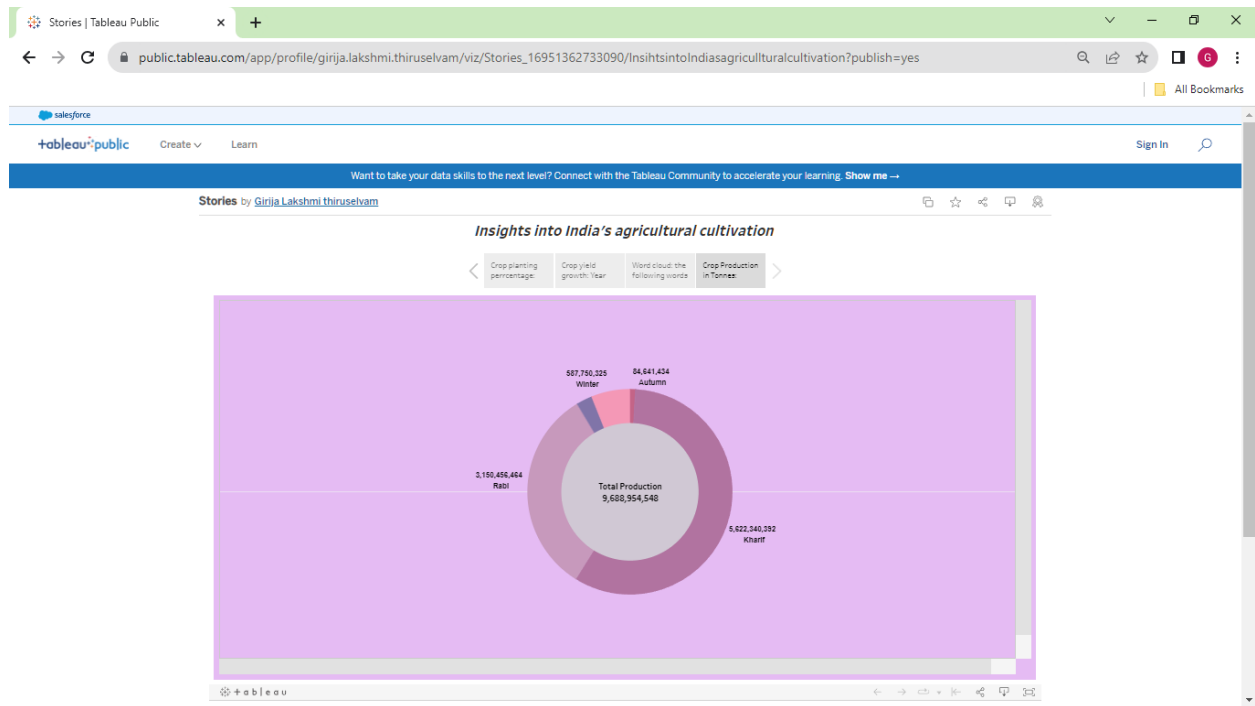


Publishing story and reports to tableau public



Activity 1: Publishing dashboard and reports to tableau public





ADVANTAGES & DISADVANTAGES

Advantages:

- **Increased Efficiency** modern farming methods are more efficient than traditional methods, with advanced machinery and equipment, allowing farmers to produce larger quantities of crops in less time and with less labor.
- **Improved Crop Quality** the use of advanced techniques such as precision farming and genetic engineering has led to the development of higher quality crops that are more resistant to pests and disease.
- **Reduced Environmental Impact** agriculture techniques are designed to be more sustainable, with a focus on reducing waste, conserving resources, and minimizing the use of harmful chemicals.
- **Increased Food Production** agriculture has enabled farmers to produce larger quantities of food, helping to address food shortages and hunger in many parts of the world.

- **Economic Benefits** modern agriculture has had a positive impact on the economy, by creating jobs and generating revenue for farmers, agribusinesses, and related industries.

DISADVANTAGES

- **Soil Degradation** the intensive use of modern farming practices, such as heavy use of chemical fertilizers and pesticides, can lead to soil degradation over time, reducing soil fertility and leading to erosion.
- **Biodiversity Loss** modern agriculture can have a negative impact on biodiversity, with the use of monoculture and genetically modified crops leading to a loss of natural diversity in plant and animal species.
- **Water Pollution** the excessive use of chemical fertilizers and pesticides in modern agriculture can lead to runoff and contamination of nearby water sources, potentially harming aquatic ecosystems and human health.
- **Health Risks** the use of chemicals in modern agriculture can pose health risks to farmers and farm workers who are exposed to these chemicals on a regular basis.
- **Food Safety Concerns** the use of genetically modified crops and hormones in modern agriculture has raised concerns about the safety of the food supply, with some studies suggesting potential long-term health effect.

CONCLUSION

In this project, we analysis crop production India states year on year. We improve our crop production, we use organic fertilizers and improve soil managements, irrigation system. We use

the hybrid seeds to crop. We investing in agricultural technology. Government provides to farmer to new policy schemes.

FUTURE SCOPE

- Future agriculture will use sophisticated technologies such as robots, temperature and moisture sensors, aerial images, and GPS technology.
- These advanced devices and precision agriculture and robotic systems will allow farms to be more profitable, efficient, safe, and environmentally friendly.