A.A.GOVERNMENT ARTS COLLEGE, MUSIRI

Affiliated to Bharathidasan University, Tiruchirappalli

NAAN MUDHALVAN PROJECT –III BSC MATHEMATICS

TOPIC:

UNVEILING MARKET INSIGHTS: ANALYSING SPENDING BEHAVIOUR AND IDENTIFYING OPPURTUNITIES FOR GROWTH

Submitted by

TEAM ID: NM2023TMID08576

TEAM LEADER: R .YAMUNA (1B7F92F46AFE5B78DC6404C7F401E8F9)

MEMBERS: R. VASUKI (7154C3B1799CEEC9B674746862516A94)

C. SHARMILA (6F7E49DFAC9DCA58C75449B481EED8EB)

R. RAMYA (A5C304D7D53FC92853D455F6A22E1AAB)

Introduction:

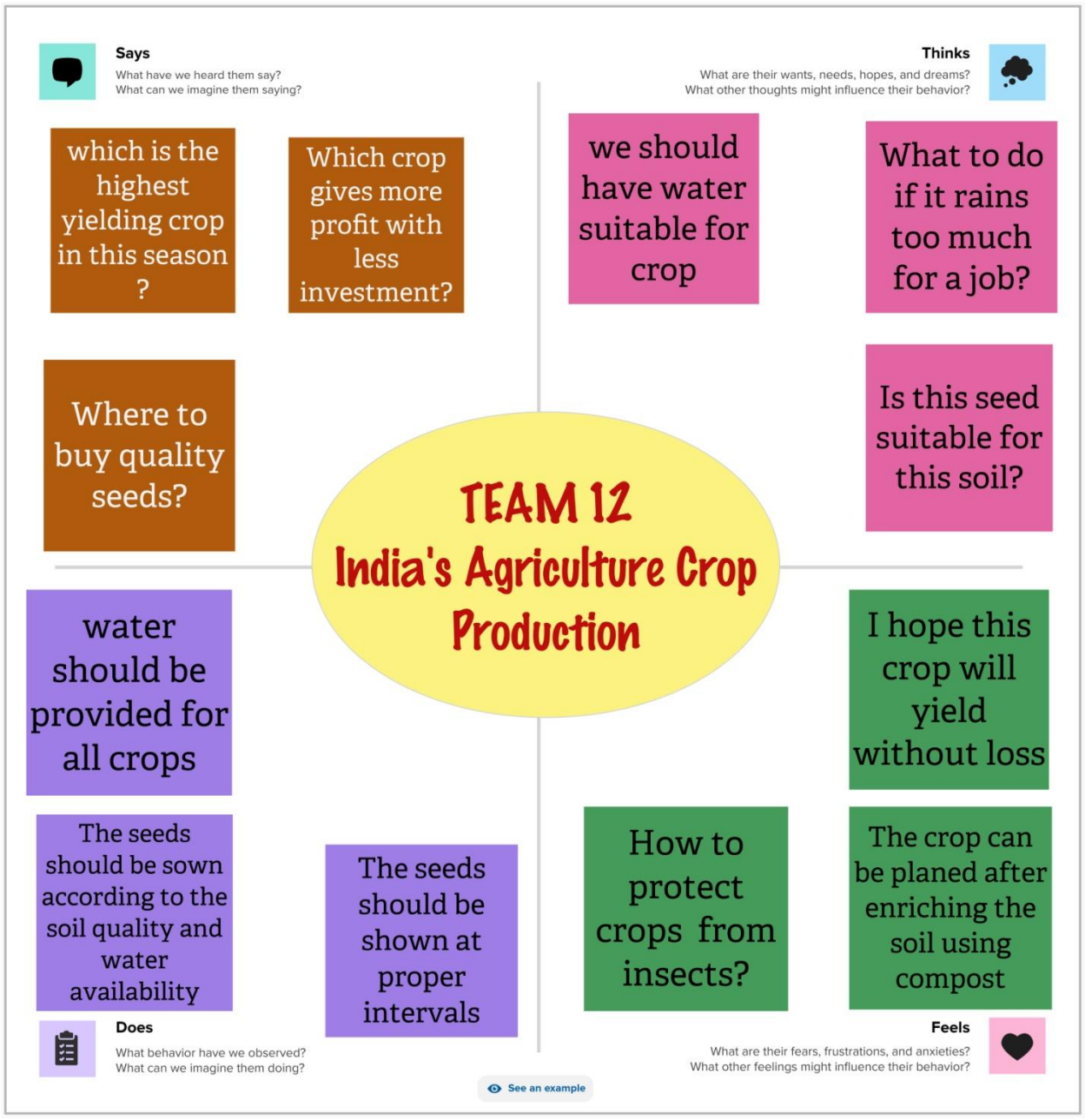
India’s Agricultural Crop Production Analysis

(1997-2021)

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.

Milestone 1: Define Problem / Problem Understanding



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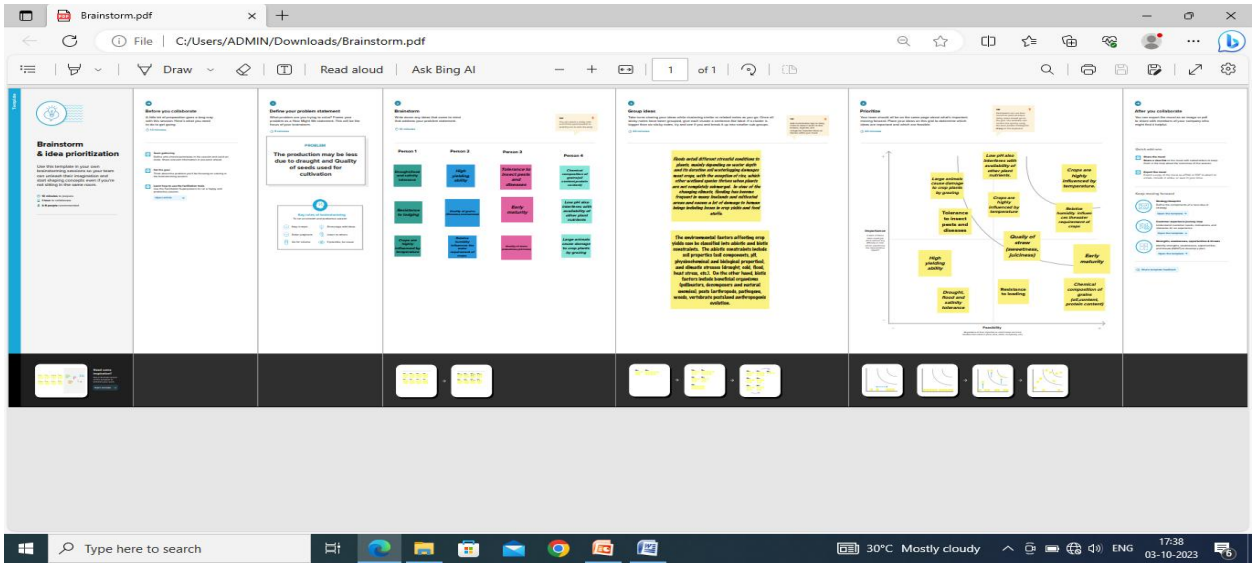
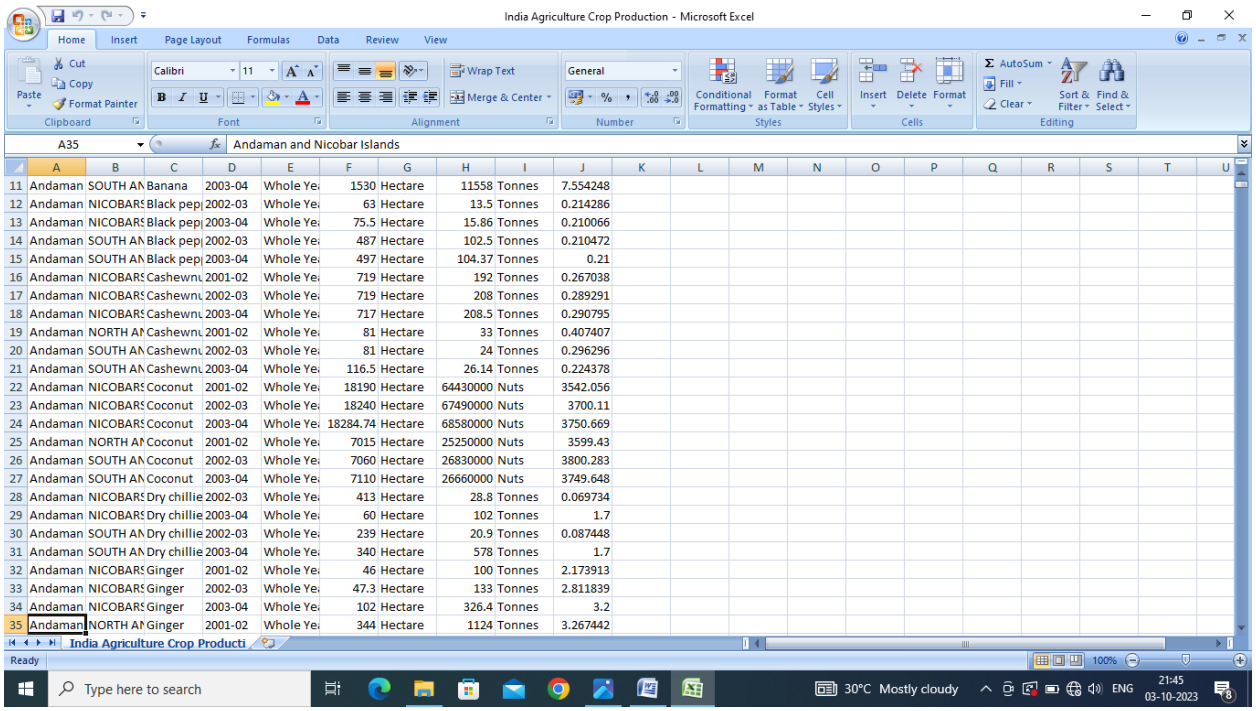


Milestone 2: Data Collection & Extraction

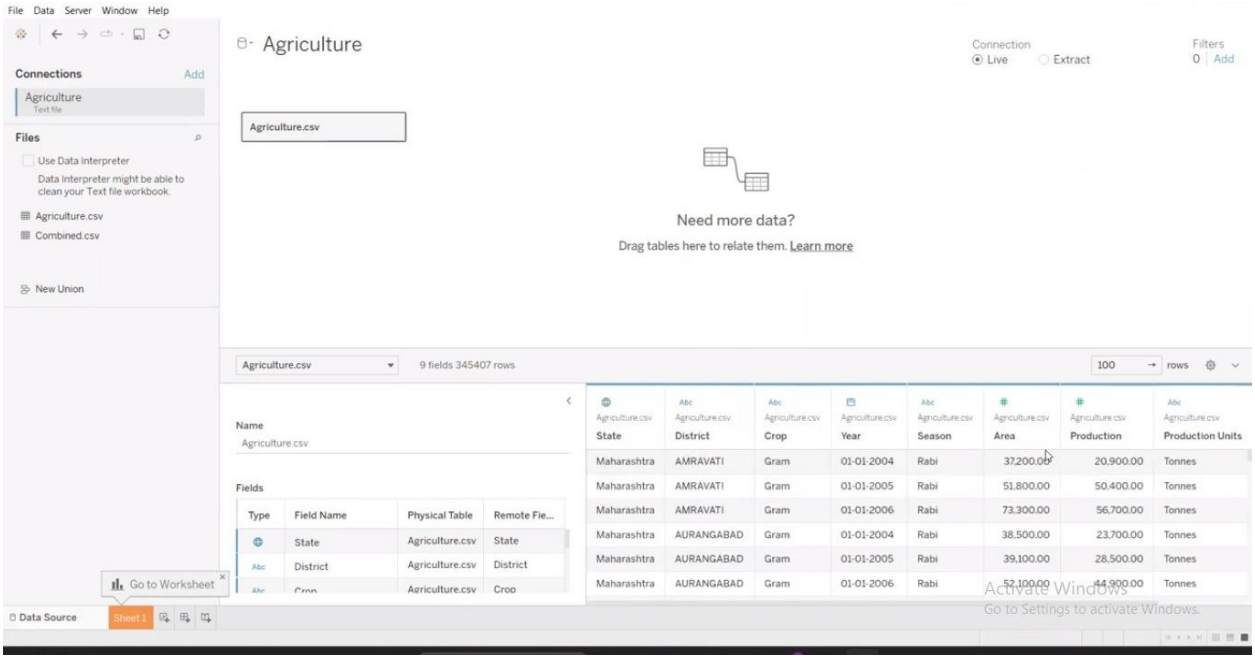
Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes and generate insights from the data.

Activity 1: Downloading the dataset

https://www.kaggle.com/datasets/pyatakov/india-agriculture-crop-production



Activity 3: Connect Dataset with Tableau



Milestone 3: Data Visualization

Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

Activity 1: No of Unique Visualizations

The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyze the performance and efficiency of a project include bar charts, line charts, heat maps, scatter plots, pie charts, Maps, etc. These visualizations can be used to compare performance, track changes over time, and show distribution, and relationships between variables

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Activity 1.1: State Wise Agricultural Land

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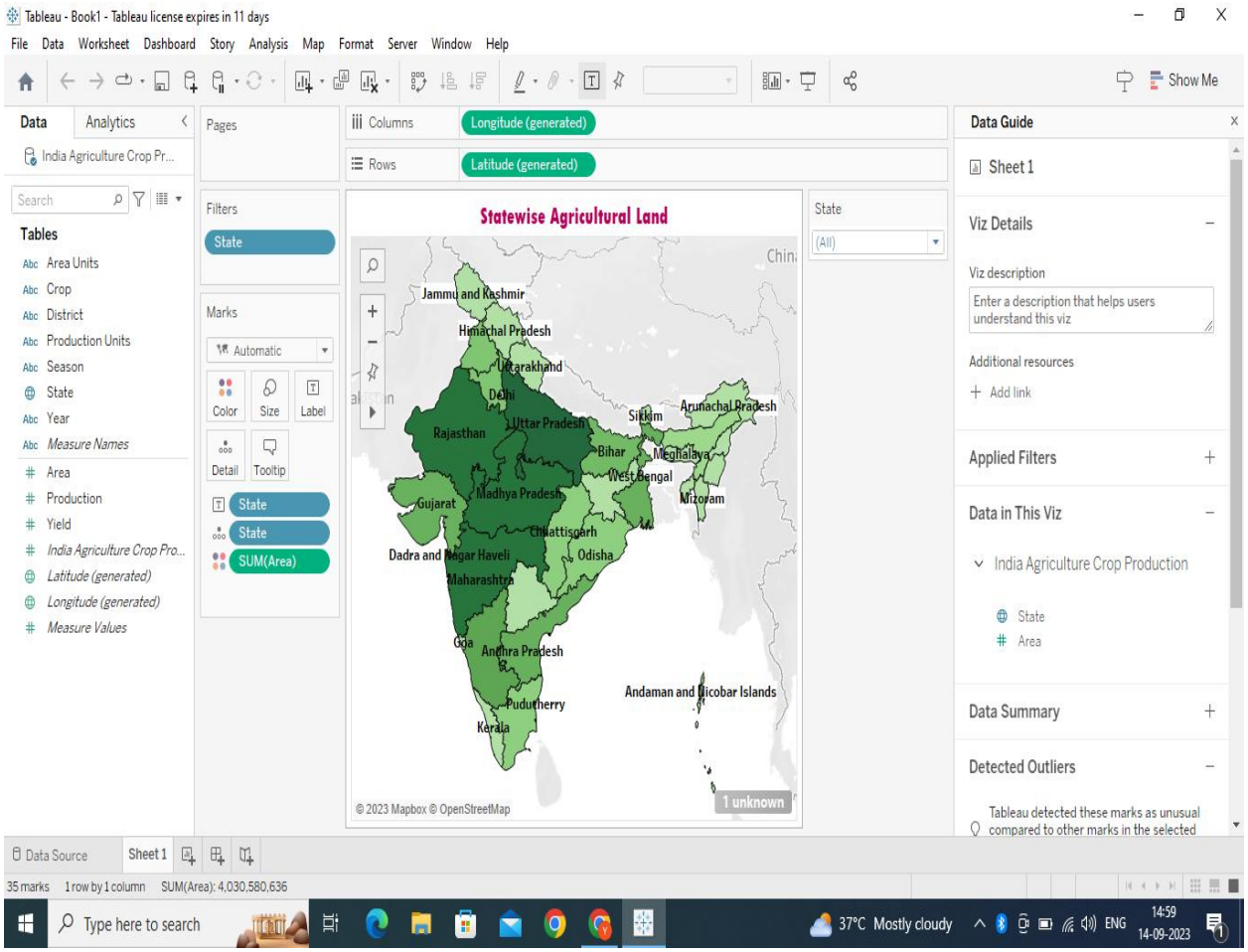
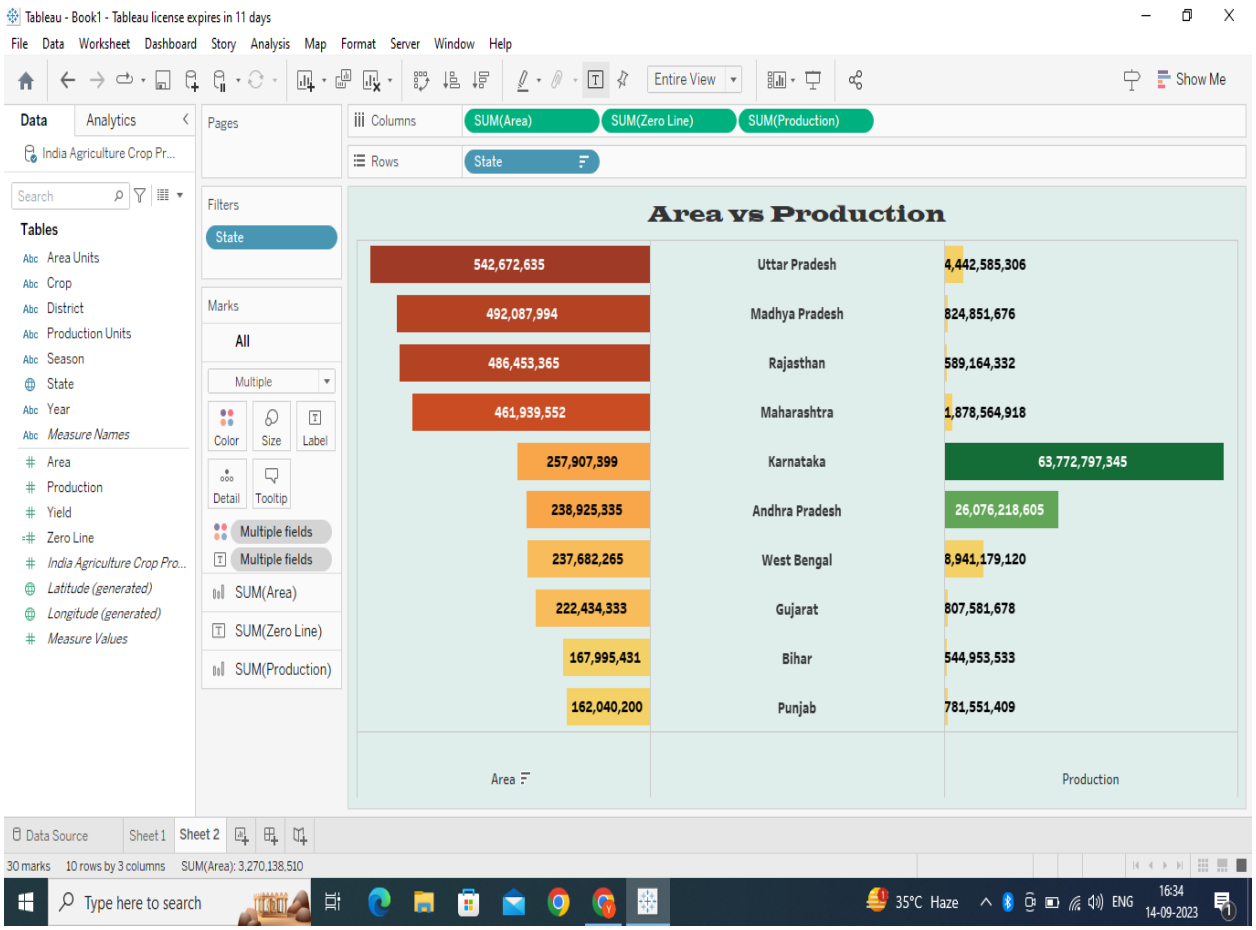


Activity 1.2: Area VS Production

https://drive.google.com/file/d/10KqvbE9GjHlO_MG6pJFu2yVcT8NO4e62/view?usp=sharing



Activity 1.3: Season based cultivation

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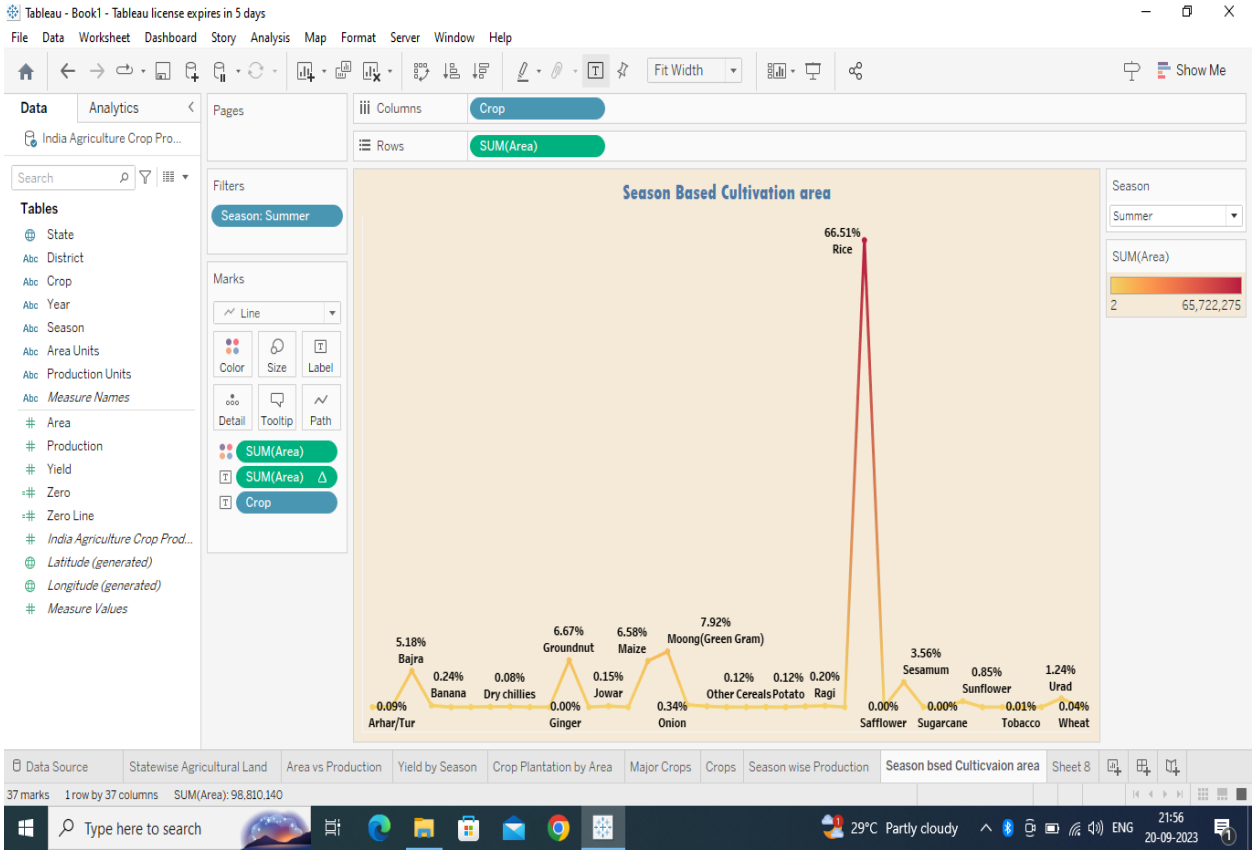

Activity 1.4: Yield by season

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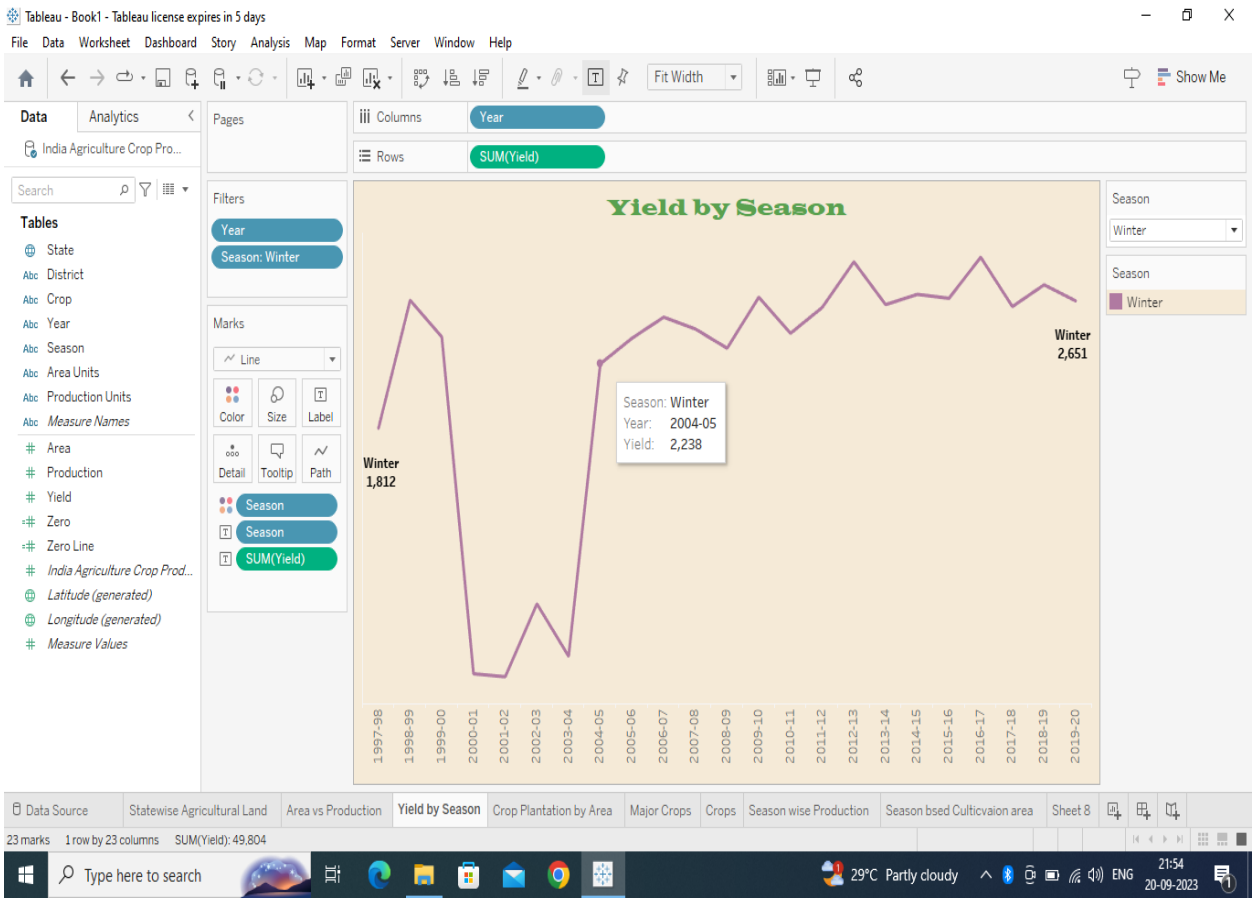

Activity 1.5 : Crop plantation by area

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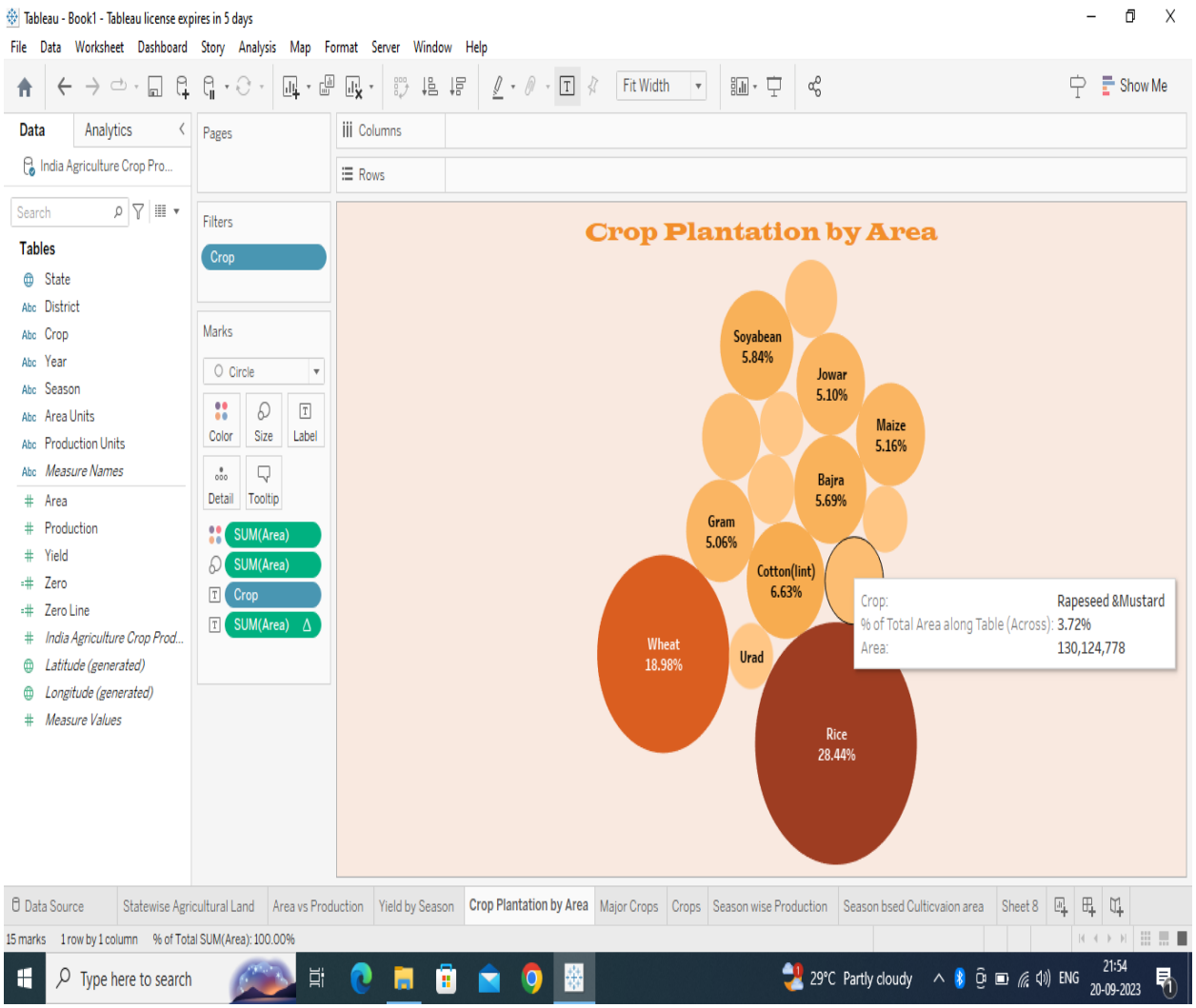

Activity 1.6: Major Crops Growth Yoy

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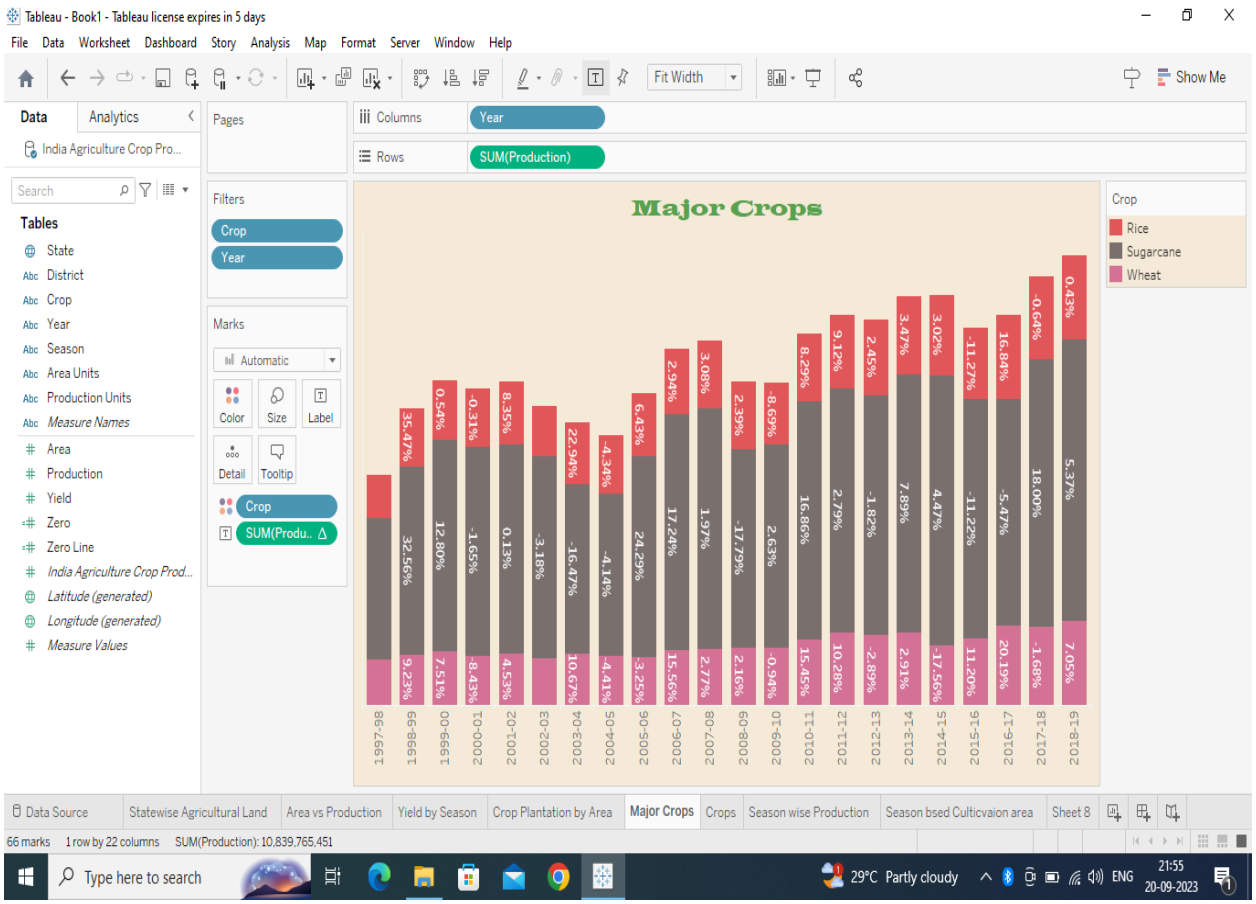

Activity 1.7: Crops

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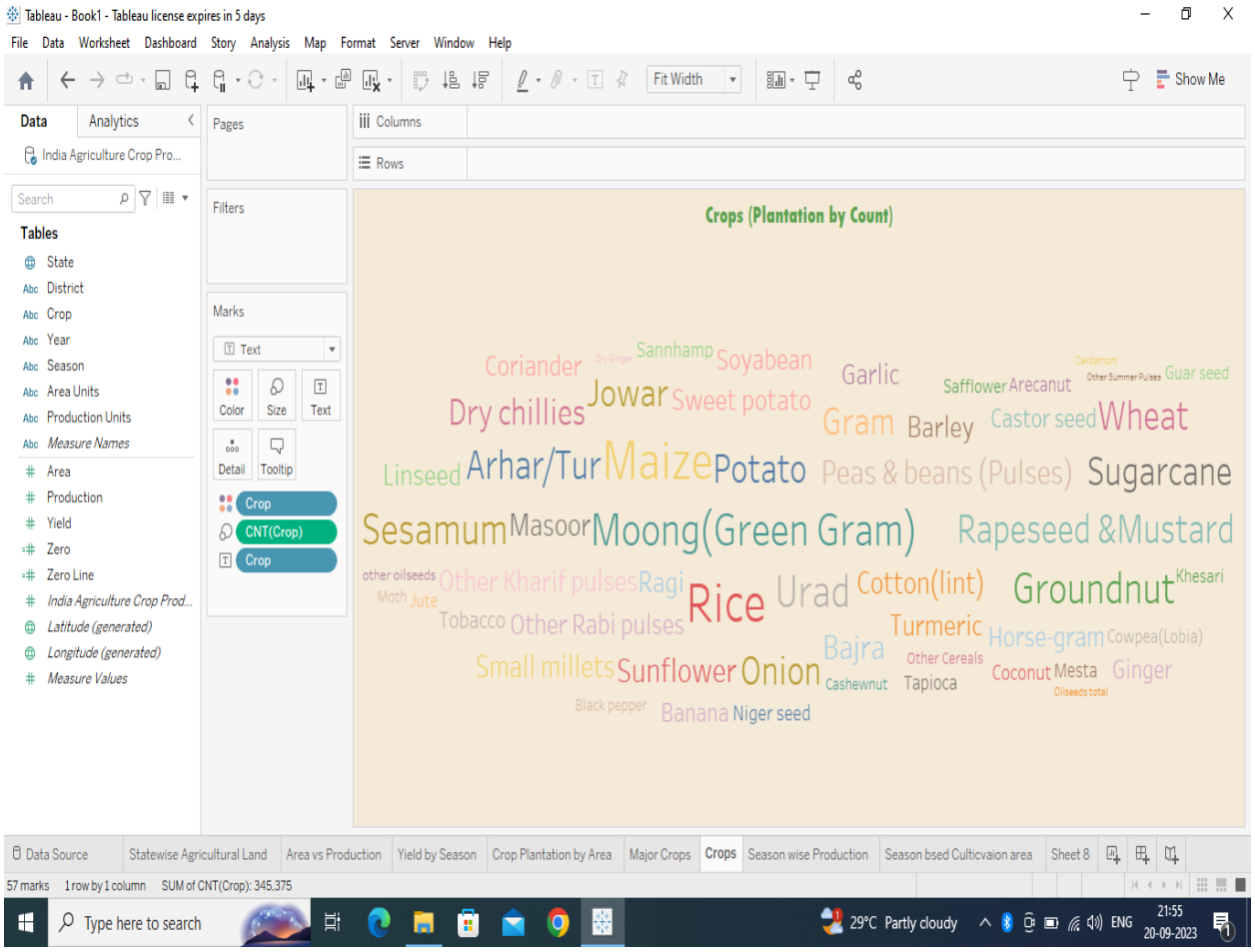

Activity 1.8: Season Wise production

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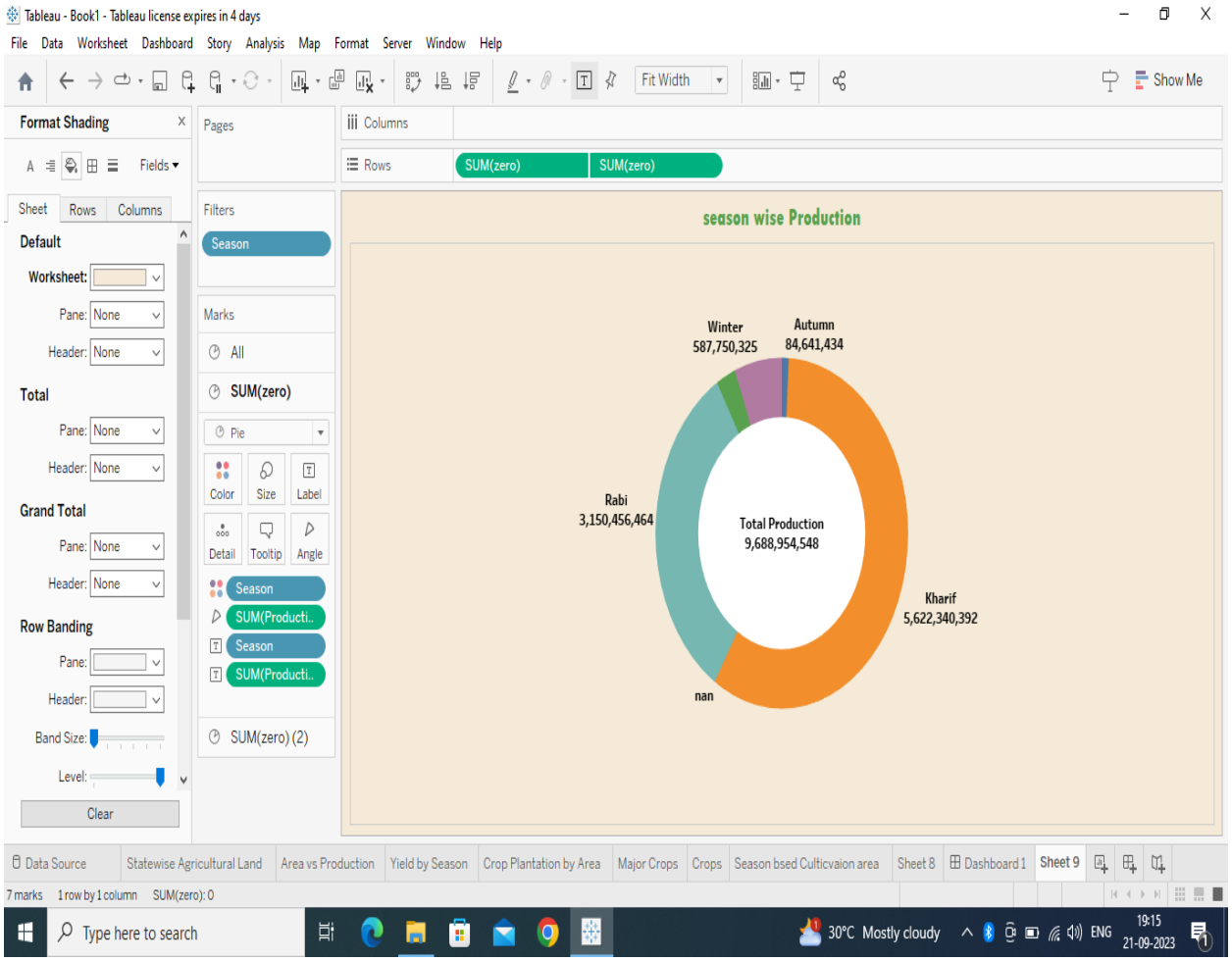


Milestone 5: Dashboard

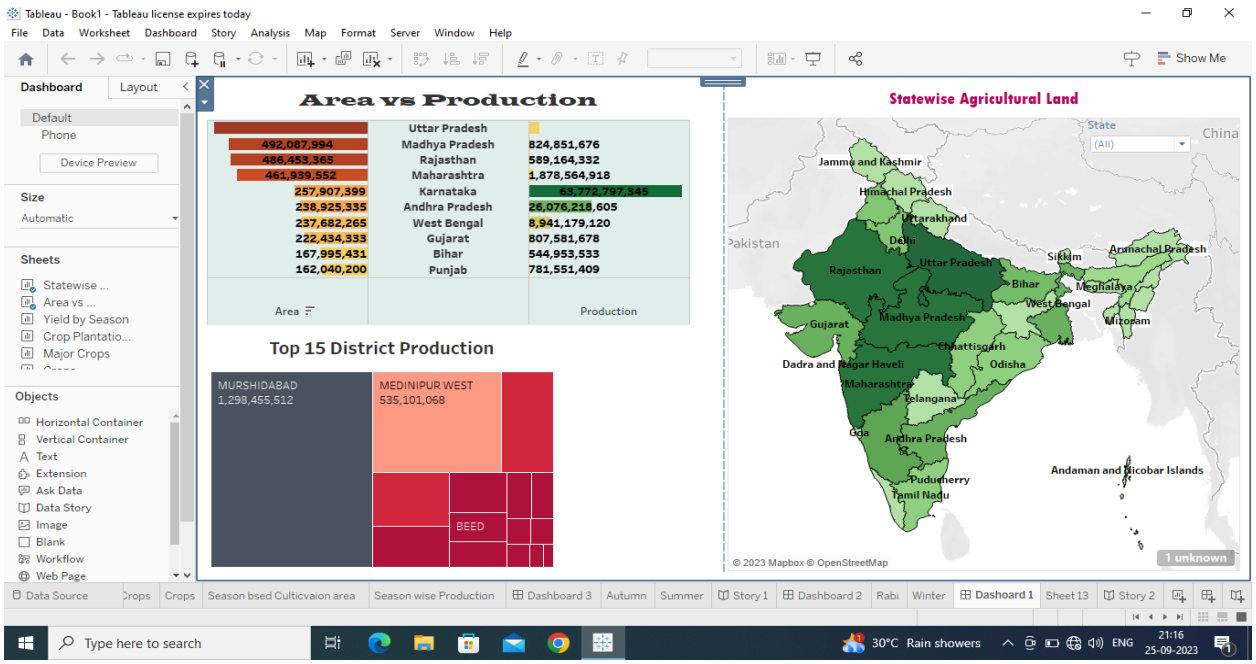
A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data, and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables.

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

https://drive.google.com/file/d/1OXIjbH8EZnBUWFCfX4l9k8j1L8KQmmri/view?usp=sharing



Activity 1.2: Dashboard 2

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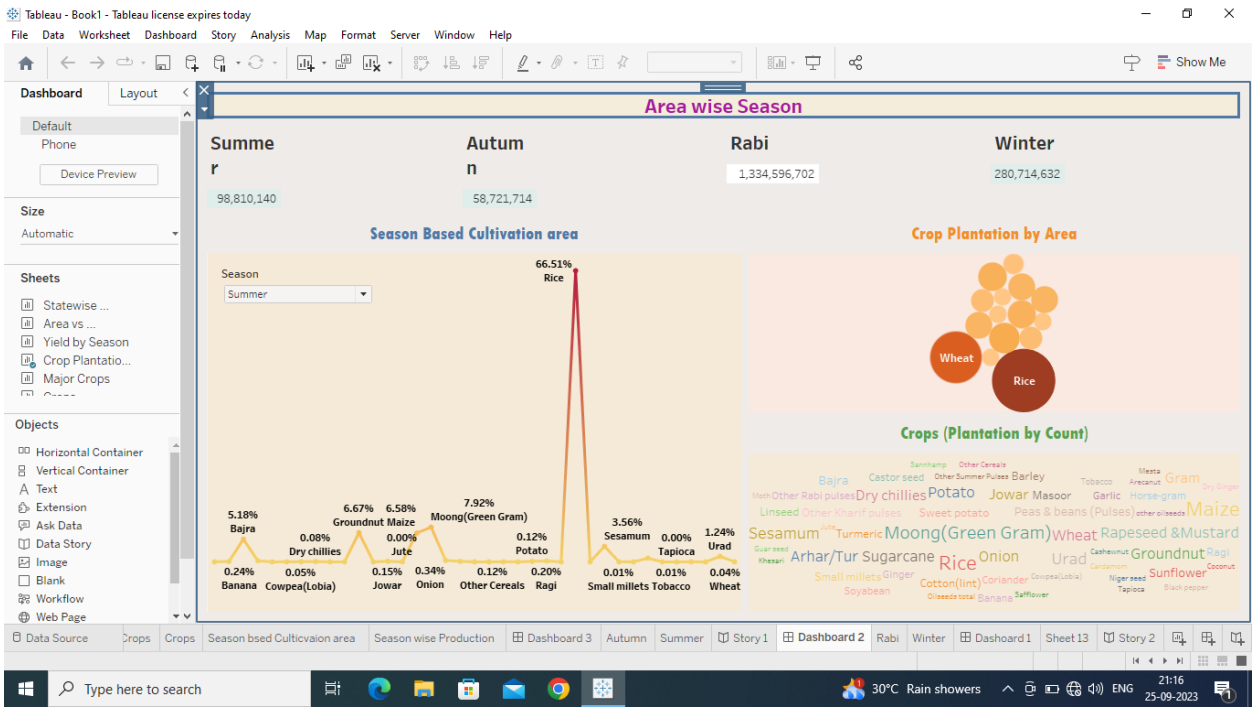

Activity 1.3: Dashboard 3

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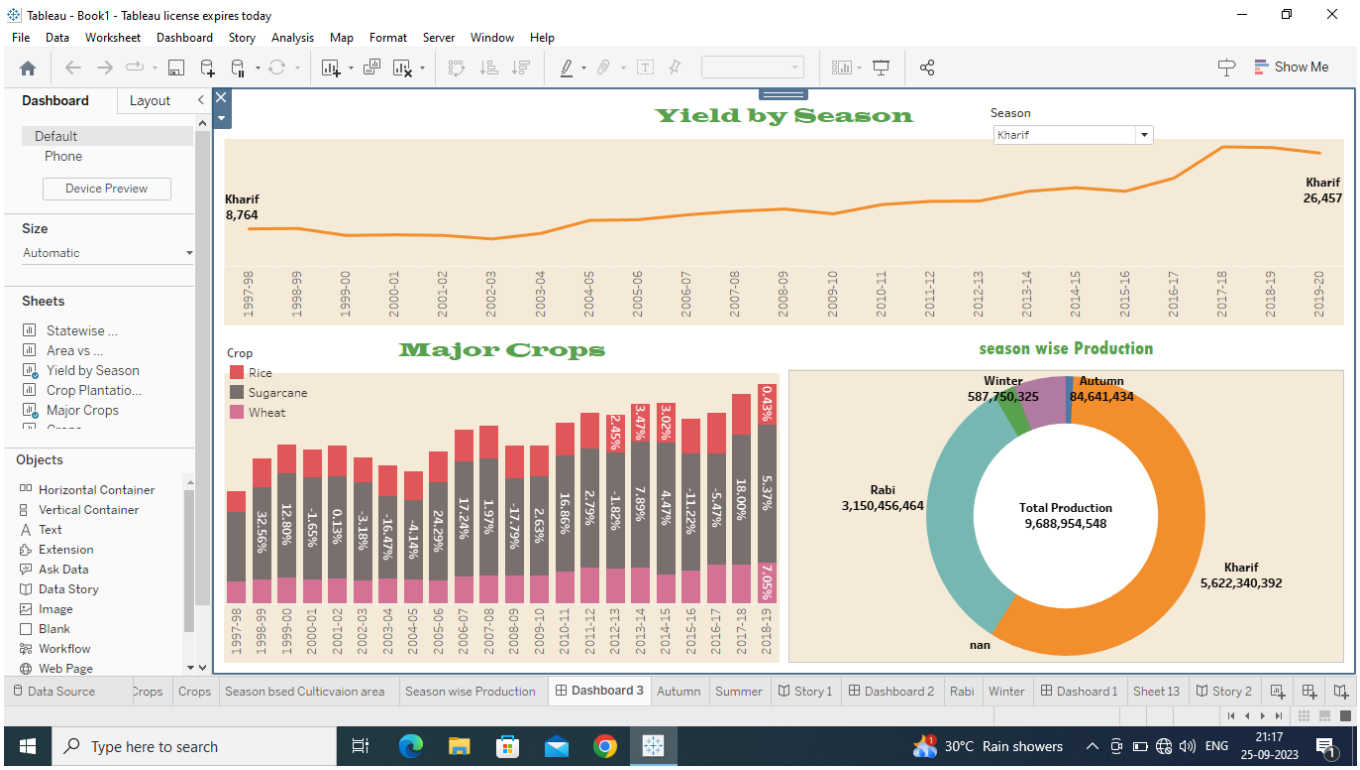

Milestone 6: Story

A data story is a way of presenting data and analysis in a narrative format, with the goal of making the information more engaging and easier to understand. A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and systematic way, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos.

Activity 1: Number of scenes in a story

The number of scenes in a storyboard for this project will depend on the complexity of the analysis and the specific insights that are trying to be conveyed. 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

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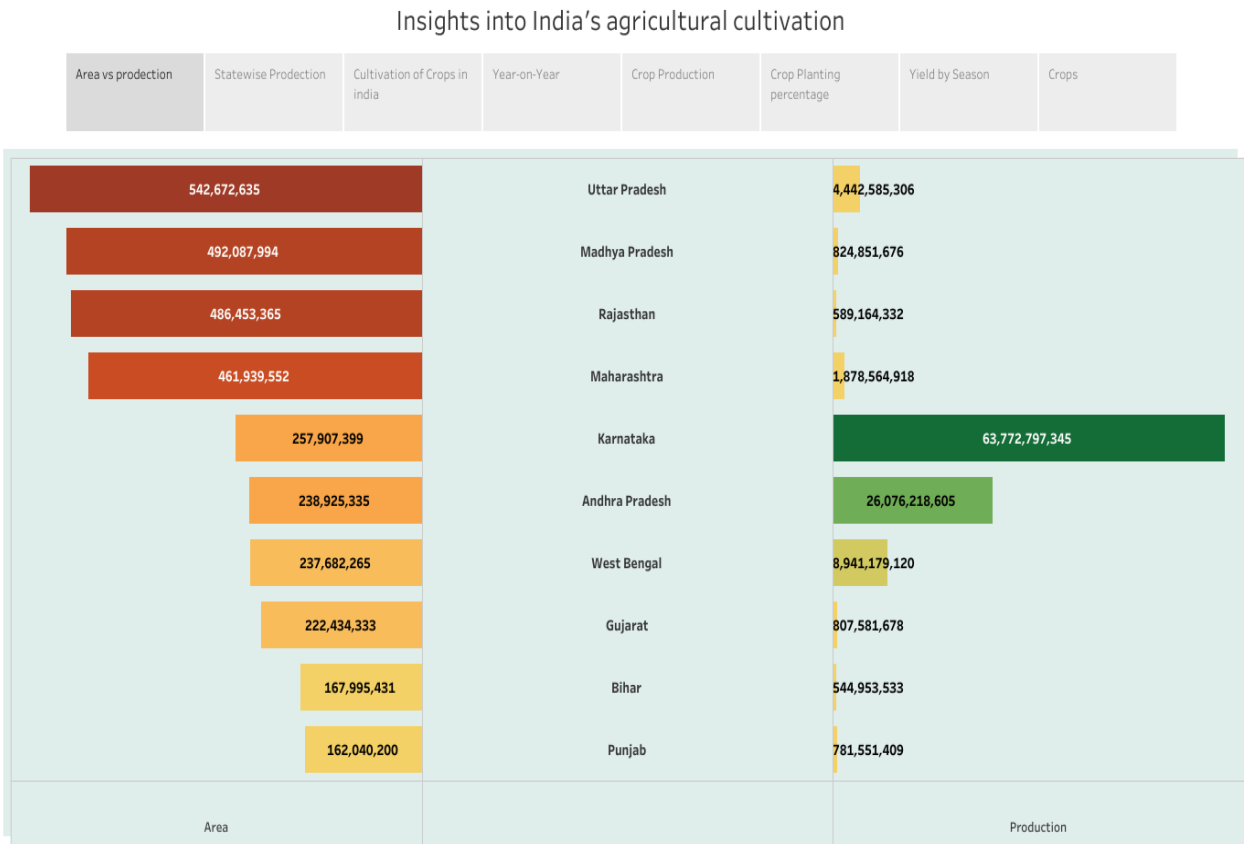
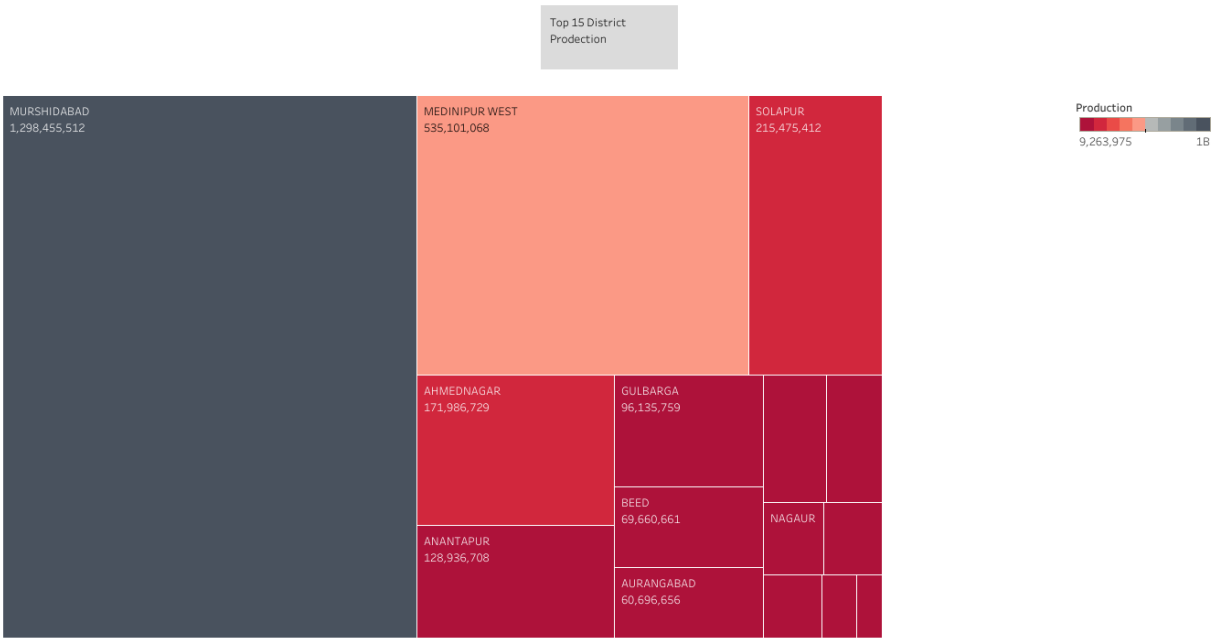


Story 2



Milestone 8: Publishing

Publishing Tableau Desktop to Tableau Public is a process that allows to share your Tableau visualizations publicly on the internet. Tableau Public is a free cloud-based platform provided by Tableau Software specifically designed for sharing interactive data visualizations with the world. When you publish to Tableau Public, your visualizations become accessible to anyone on the web, and you can embed them in websites, blogs, and social media.

Dashboard 1

https://public.tableau.com/views/Dashboard1_16955572331600/Dashoard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Dashboard 2

https://public.tableau.com/views/Dashboard2_16955576202960/Dashboard2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Dashboard 3

https://public.tableau.com/views/Dashboard3_16955578286540/Dashboard3?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Story 1

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Story 2

https://public.tableau.com/views/Story2_16955589889710/Story2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Conclusion

The Indian economy is an agro-economy and depends highly on the agricultural sector. Despite just supporting the Indian Economy, the agricultural sector also supports the industrial sector and international trade in imports and exports. Although the contribution of the Agricultural Sector to the Indian Economy is reducing, it is the sector with the most number of people working in it around the country.

Reference

https://www.google.com/search?q=india%27s+agricultural+ctop+production+conclusion+in+english&rlz=1C1VDKB_enIN1052IN1052&oq=india%27s+agricultural+ctop+production+conclusion+&gs_lcrp=EgZjaHJvbWUqCQgCECEYChigATIGCAAQRRg5MgkIARAhGAoYoAEyCQgCECEYChigATIJCAMQIRgKGKAB0gEKMzkwMDNqMGoxNagCALACAA&sourceid=chrome&ie=UTF-8