ARINGAR ANNA GOVERNMENT ARTS COLLEGE

MUSIRI- 621 211

Affiliated to Bharathidasan University, Tiruchirappalli

NAAN MUDHALVAN PROJECT

COURSE: DATA LITERACY WITH TABLEAU

PROJECT TITLE: India's Agriculture Crop Production Analysis(1997-2021)

TEAM NM ID :NM2023TMID25507

SUBMITED BY:

TEAM LEADER	NM ID
C.NISHANTH	**5B57B58607FBE4989414A9DA873D074E**

MEMBERS	NM ID
K.NIVETHA	D4F4646B2DCEF4187D0440C509694E4D

S.PREMA	6F639213CD78C13A56A4386C00D5004A

MENTOR SUPPORT: Dr. C. Sivakumar

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.

Project Flow

- Define Problem / Problem Understanding
  - Specify the business problem
  - Business requirements
  - Literature Survey
  - Social or Business Impact.
- Data Collection & Extraction o Collect the dataset
  - Perform SQL Operations
  - Connect DB with Tableau
- Data Preparation
  - Prepare the Data for Visualization
- Data Visualizations
  - No of Unique Visualizations
- Dashboard
  - Responsive and Design of Dashboard
- Story

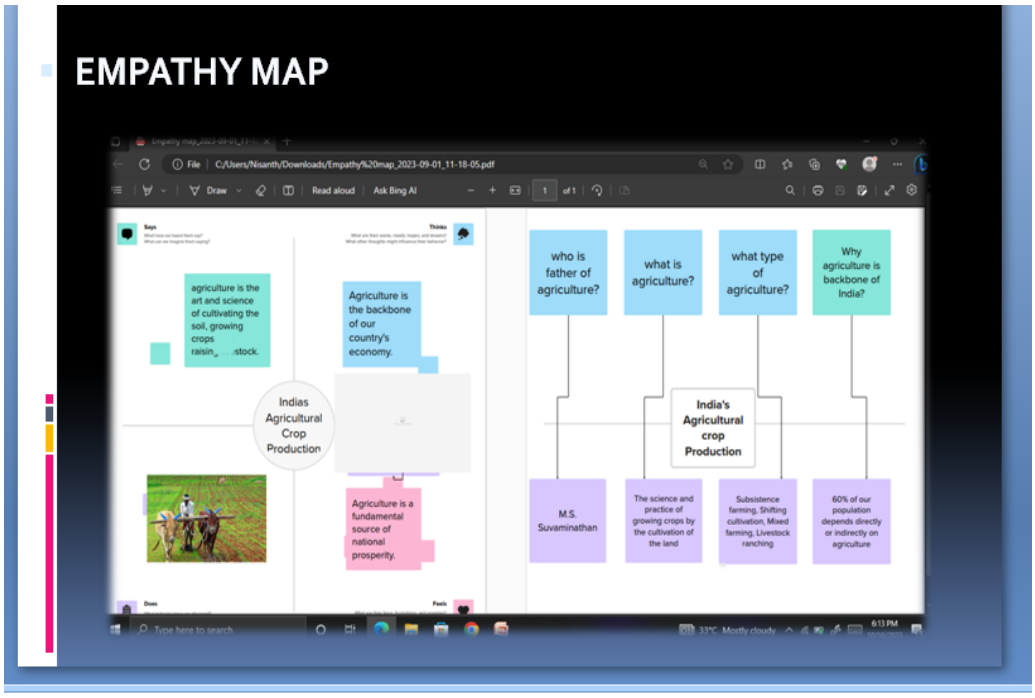
- No of Scenes of Story

- Performance Testing
  - Amount of Data Rendered to DB ‘
  - Utilization of Data Filters
  - No of Calculation Fields
  - No of Visualizations/ Graphs

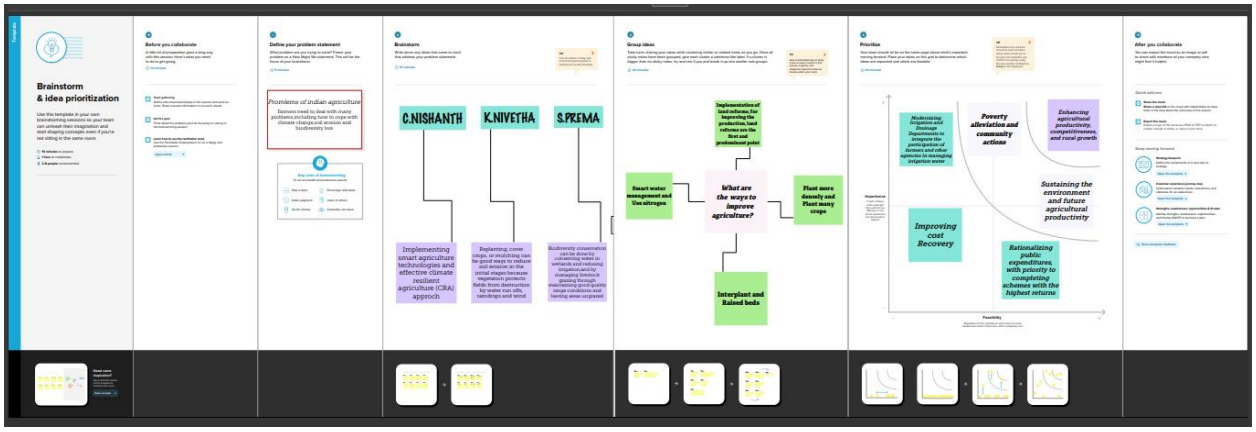
- Publishing
  - Publishing Dashboard and Story to tableau public

Milestone 1: Define Problem / Problem Understanding

Activity 1: Specify the business problem

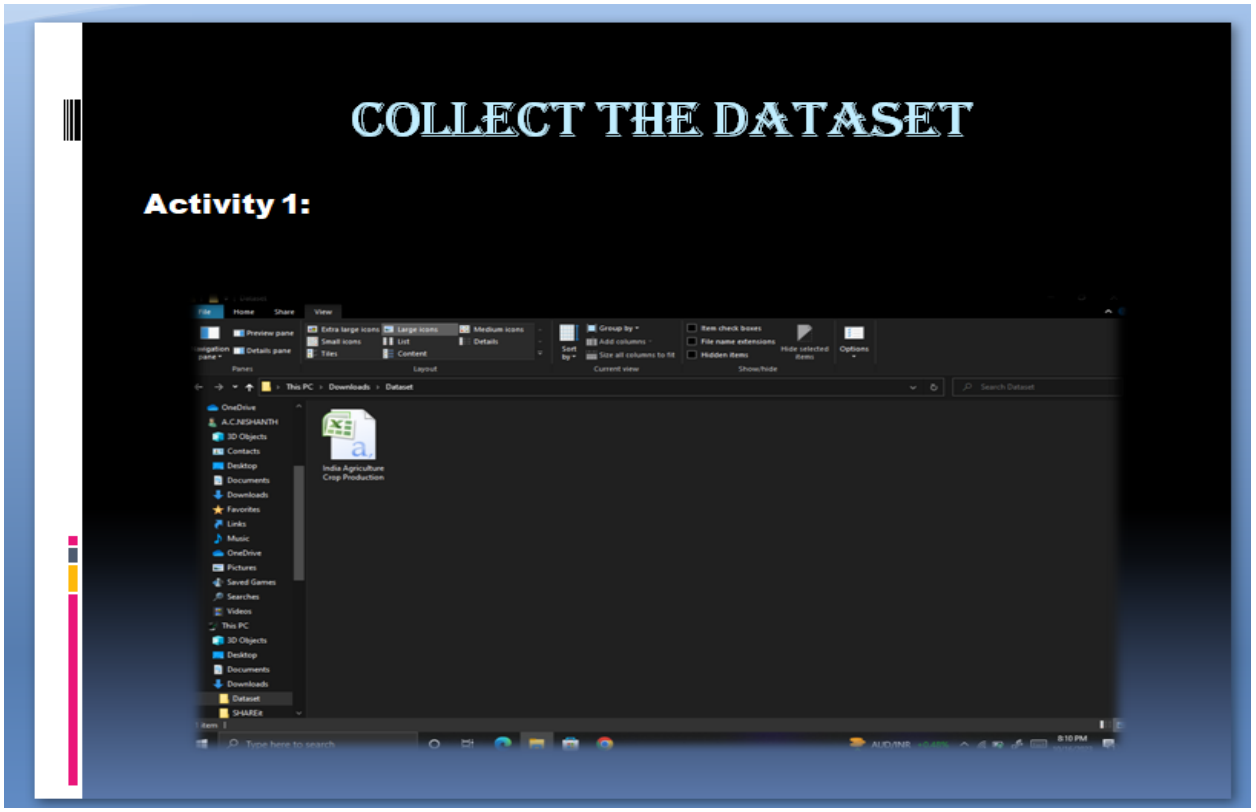


Activity 2: Business requirements

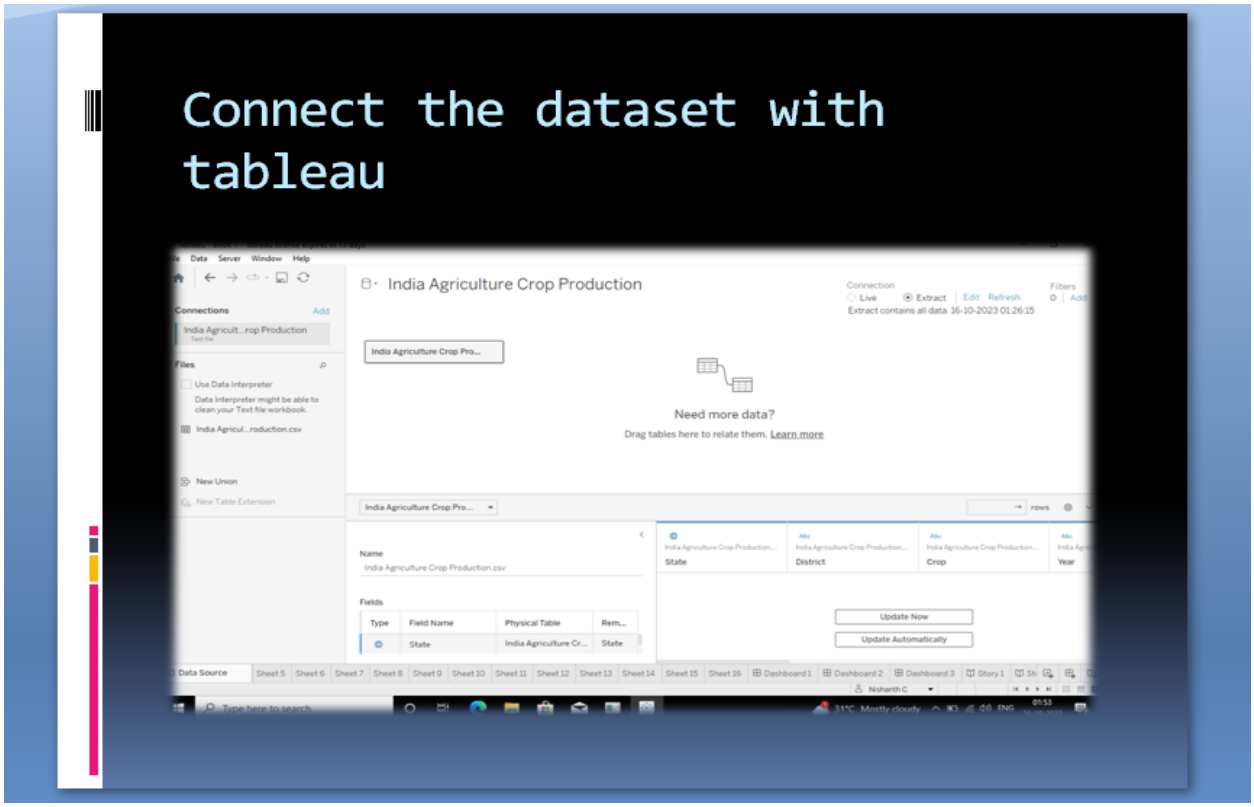


Milestone 2: Data Collection & Extraction

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, evaluate outcomes and generate insights from the data.



Connect Dataset with Tableau



Milestone 3: Data Preparation

Activity 1: Prepare the Data for Visualization

Preparing the data for visualization involves cleaning the data to remove irrelevant or missing data, transforming the data into a format that can be easily visualized, exploring the data to identify patterns and trends, filtering the data to focus on specific subsets of data, preparing the data for visualization software, and ensuring the data is accurate and complete.

Milestone 4: Data Visualization

Data visualization is the process of creating graphical representations of data 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.

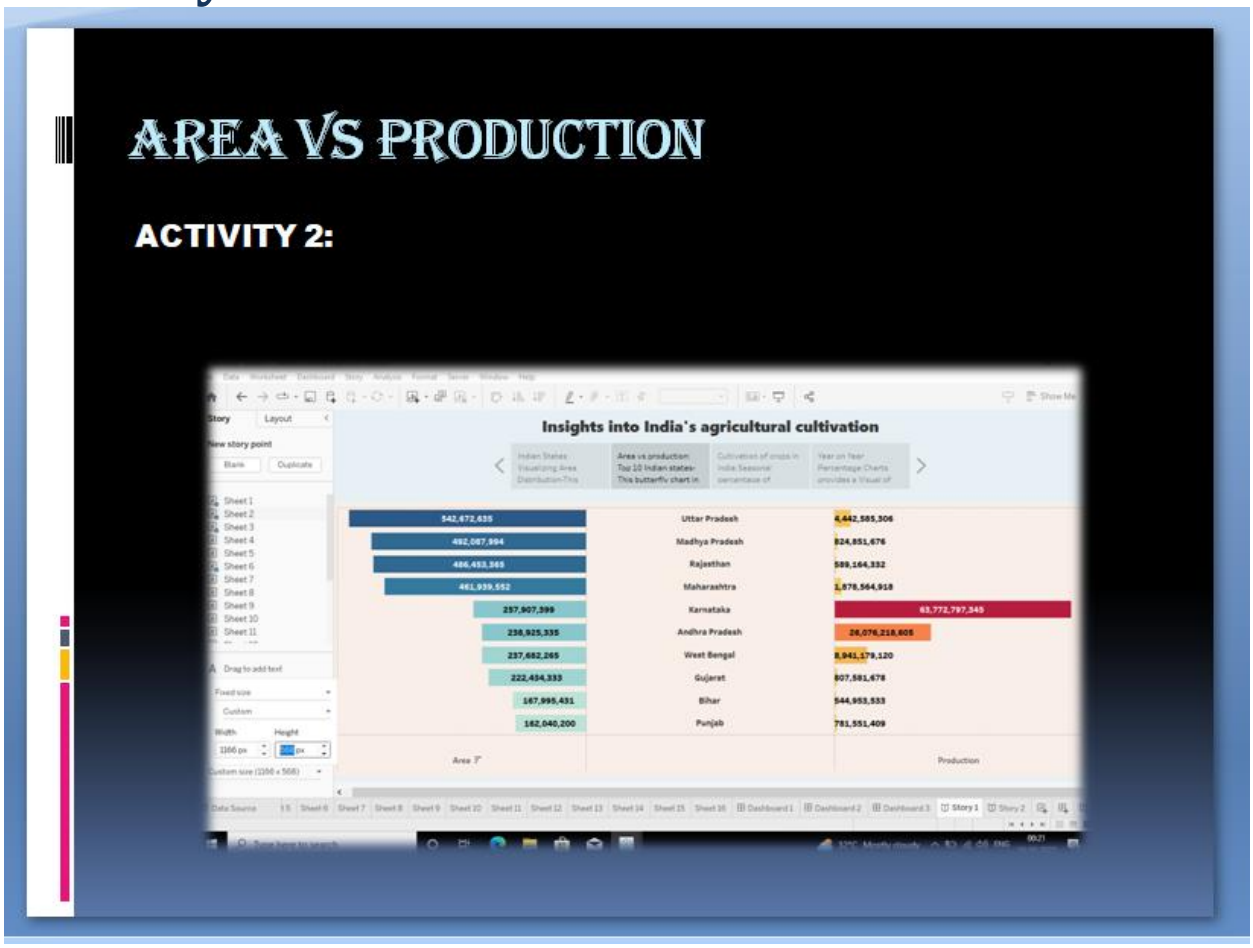
Activity 1: No of Unique Visualizations

The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyse the

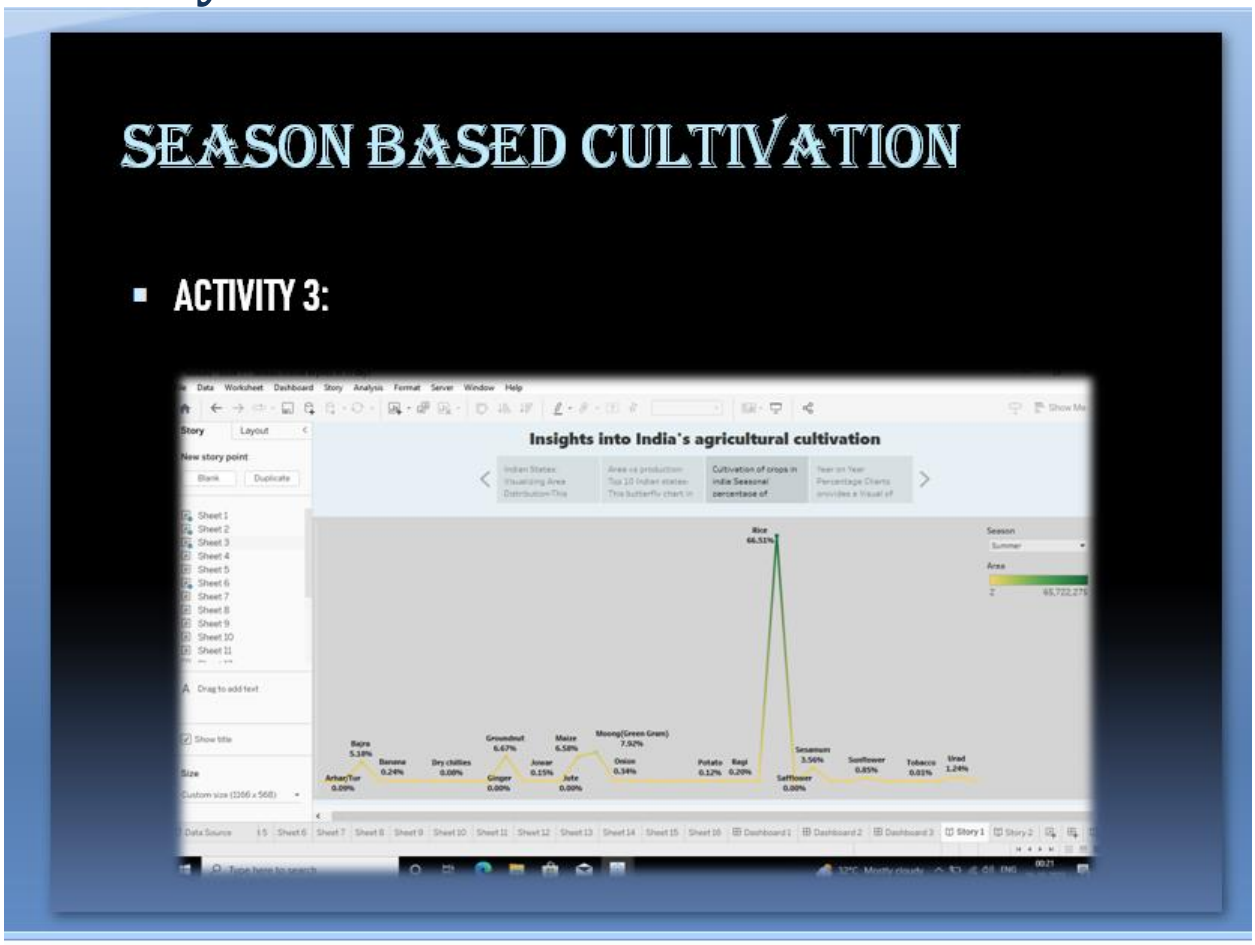
performance and efficiency of banks include bar charts, line charts, heat maps, scatter plots, pie charts, Maps etc.

Activity 1.1 : State wise Agricultural Land Activity

Activity 1.2 : Area vs Production

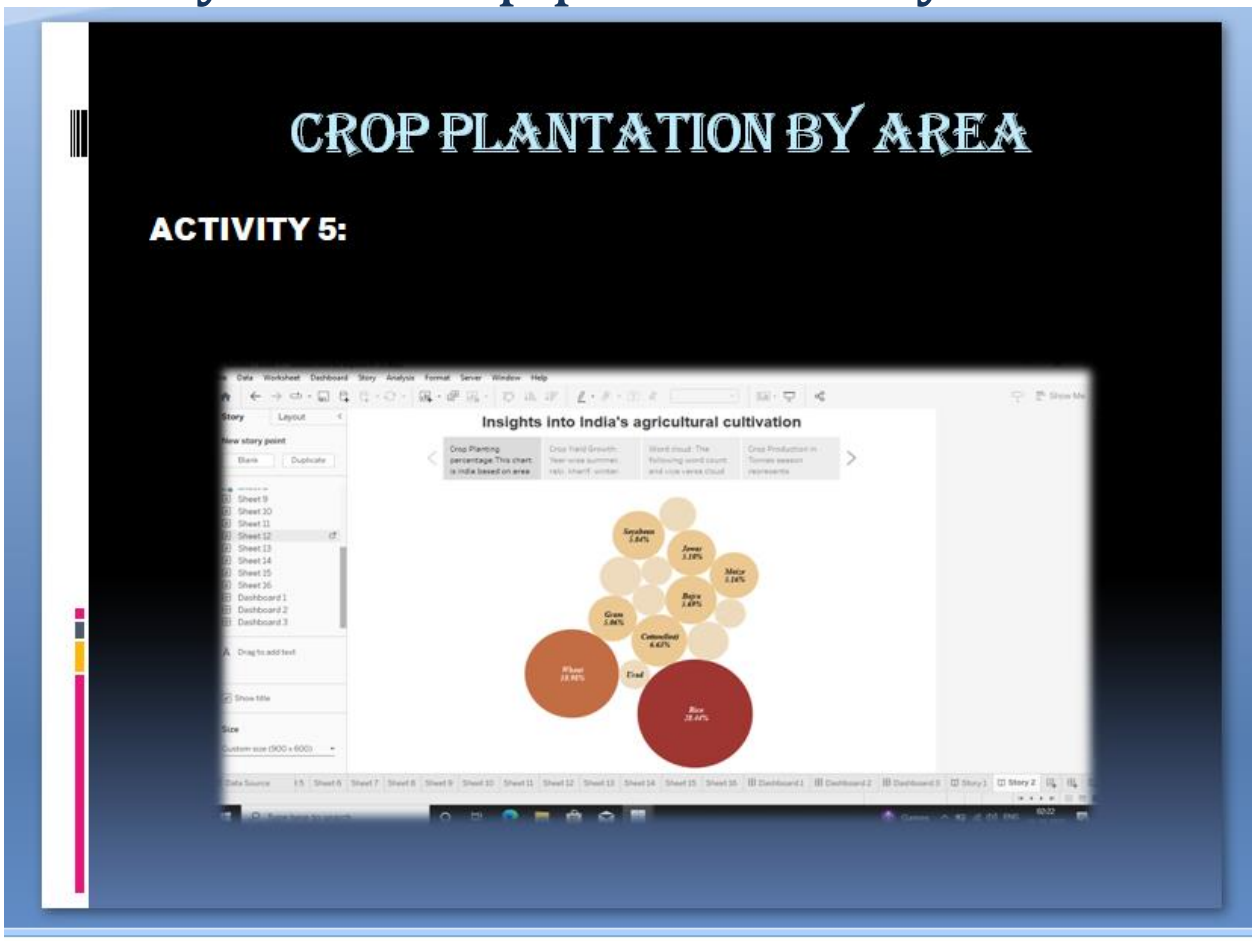


Activity 1.3 : Season based cultivation

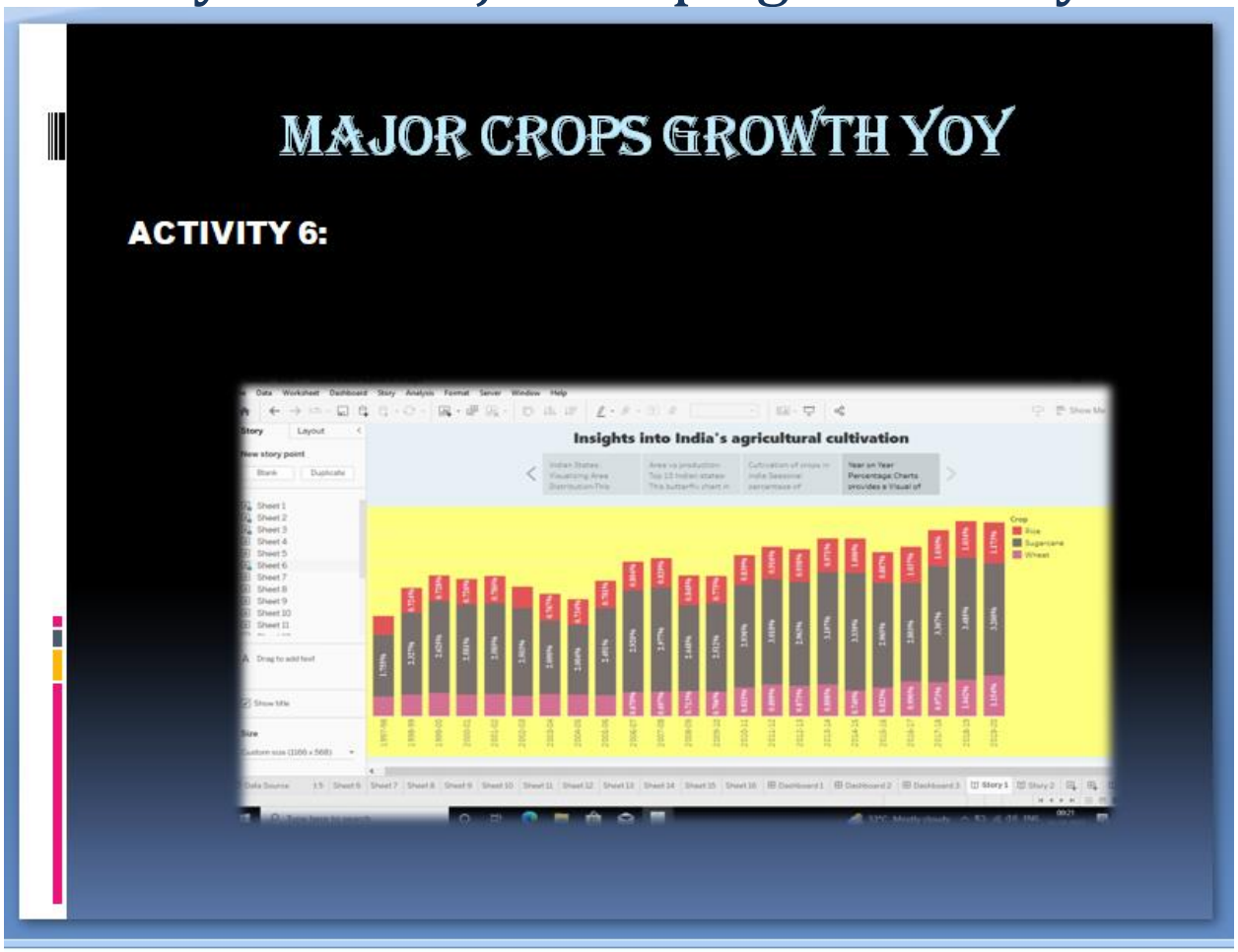


Activity 1.4 : Yield by season

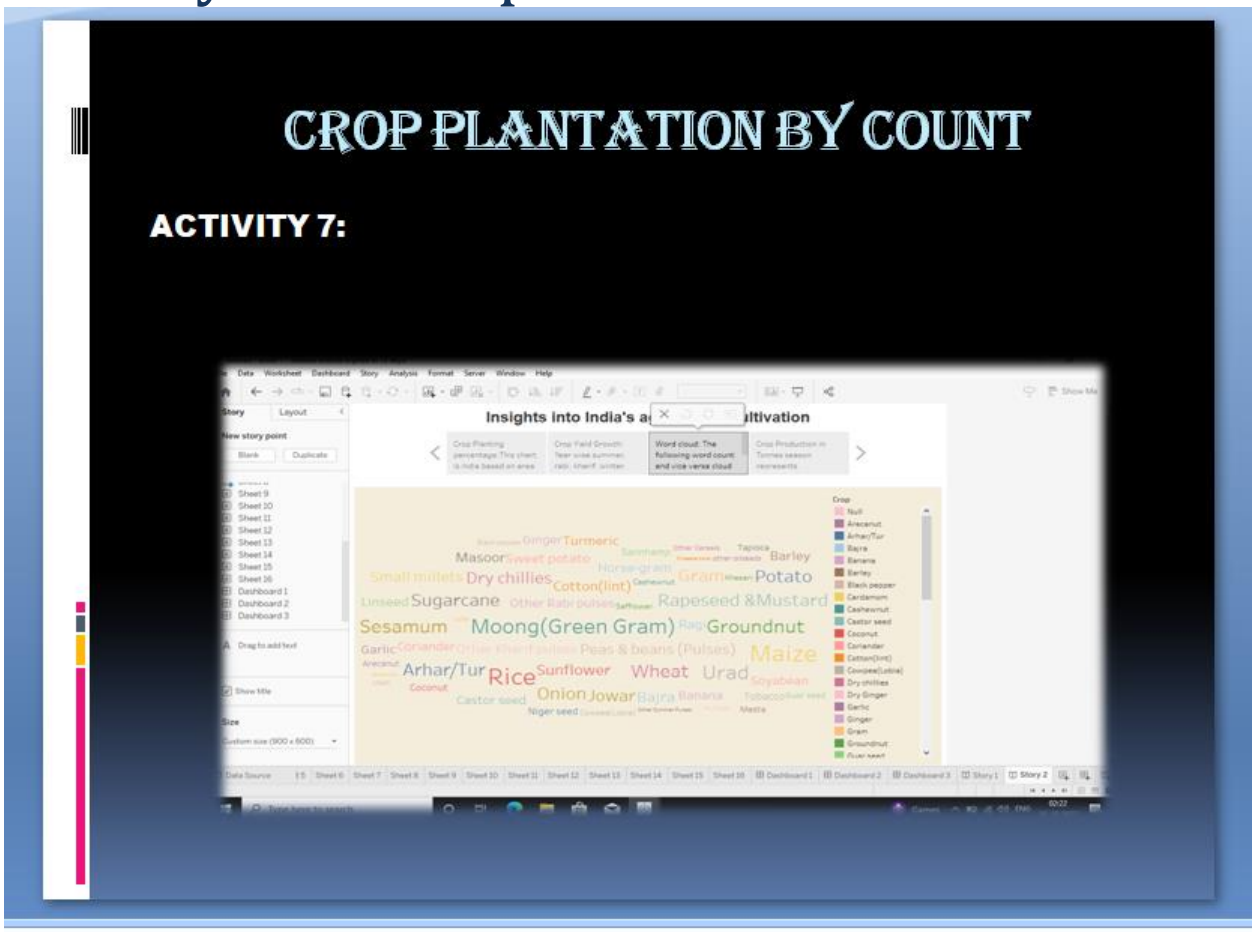
Activity 1.5 : Crop plantation by area



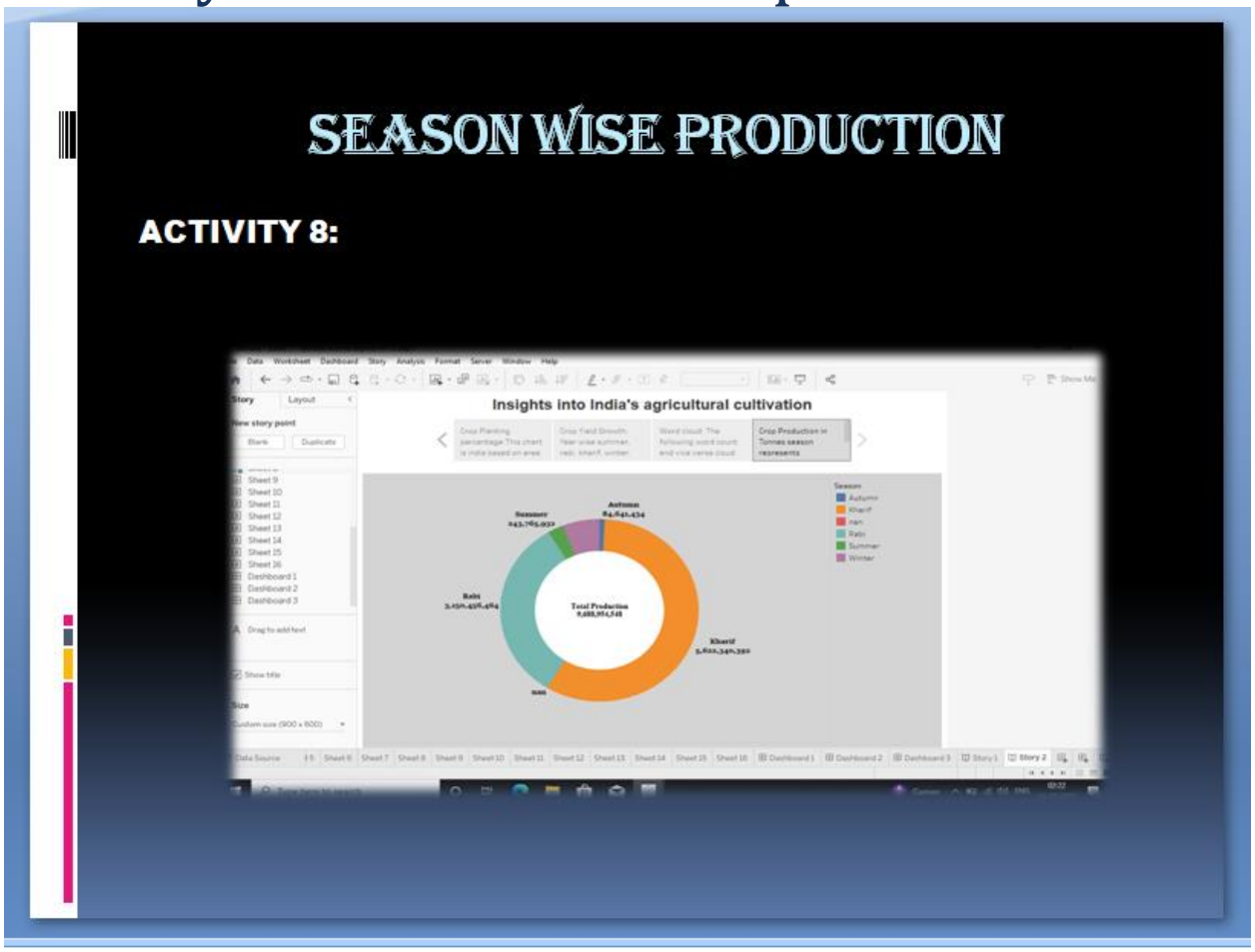
Activity 1.6 : Major crops growth Yoy



Activity 1.7 : Crops



Activity 1.8 : Season wise production



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 1.1 : Dashboard 1

https://public.tableau.com/app/profile/nishanth.c8092/viz/book1_16957960865260/Dashboard1?publish=yes#WelcomeQuestionnaire

Activity 1.2 : Dashboard 2

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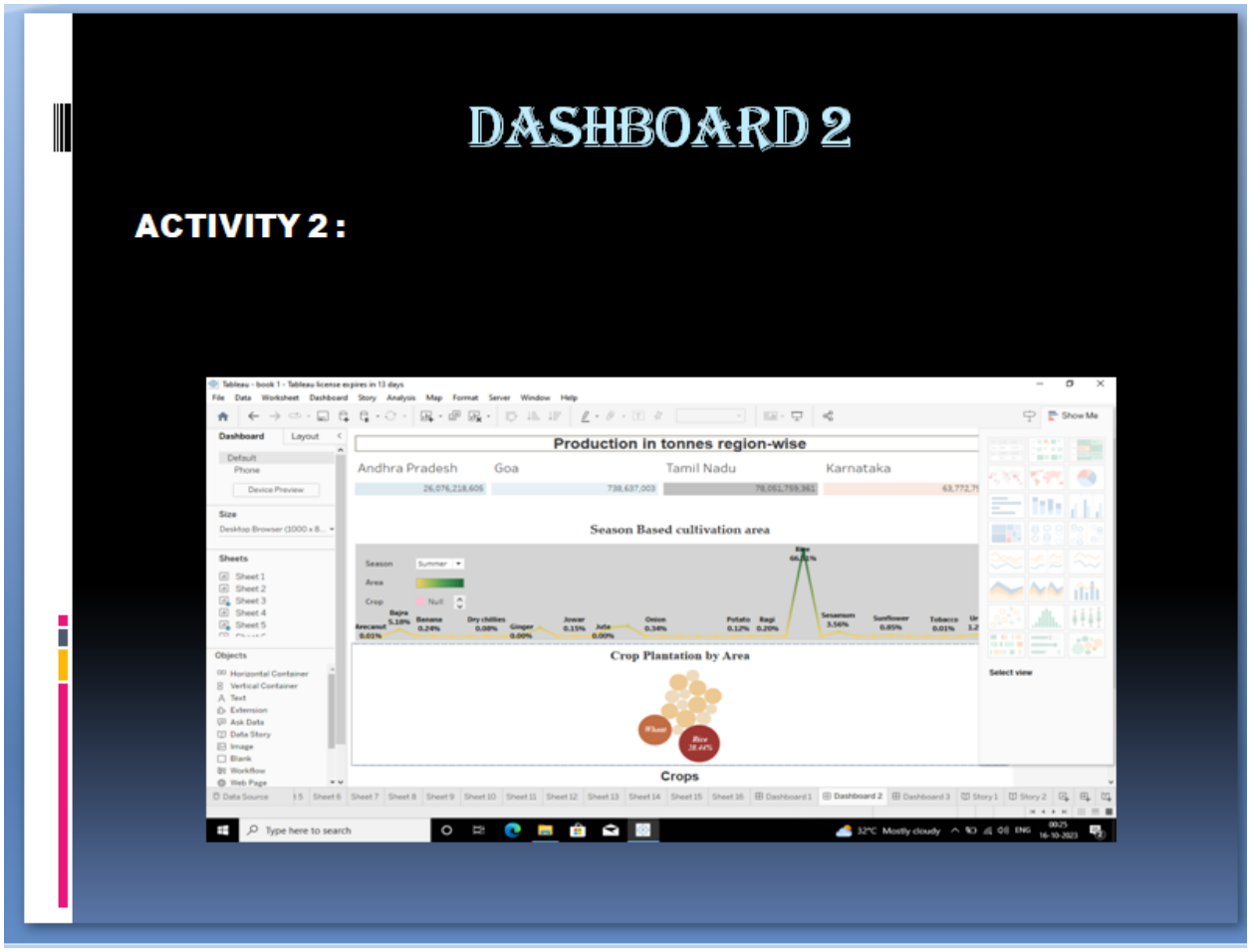

Activity 1.3 : Dashboard 3

https://public.tableau.com/app/profile/nishanth.c8092/viz/book1_16957960865260/Dashboard3?publish=yes#WelcomeQuestionnaire

Milestone 6: Story

A data story is a way of presenting data and analysis in a narrative format, intending to make 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 logically and systematically, 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 1.1 : Story 1

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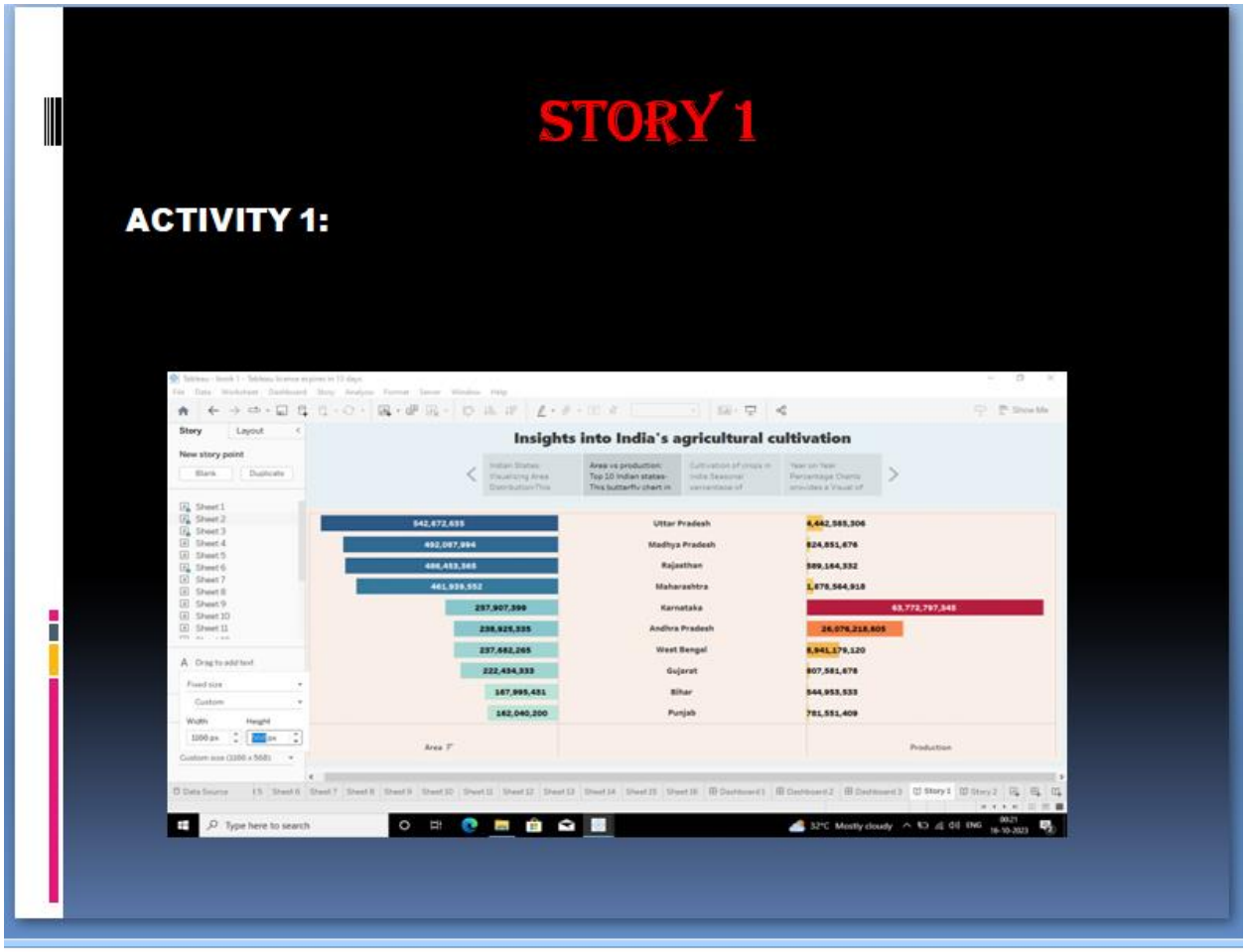
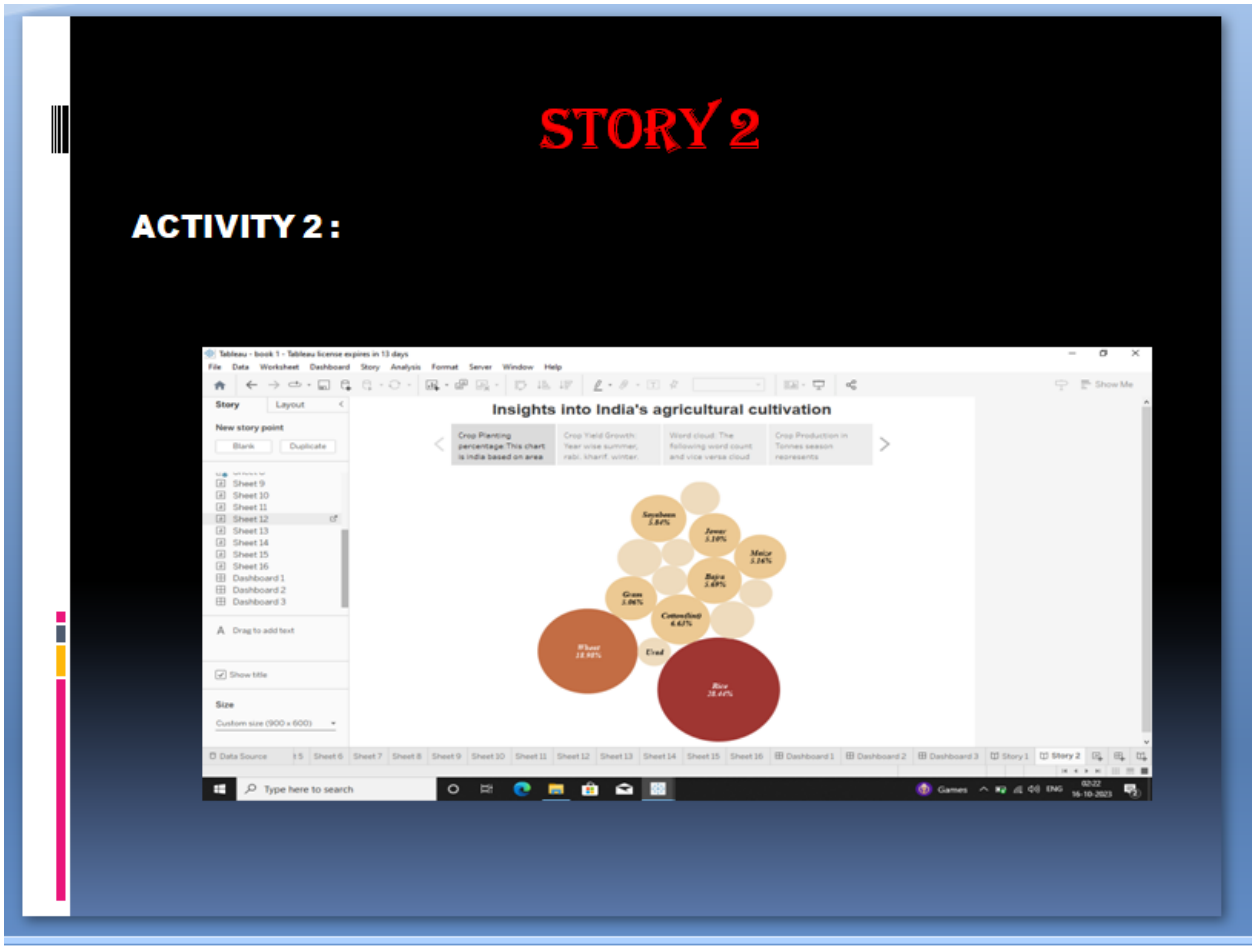


Activity 1.1 : Story 2

https://public.tableau.com/app/profile/nishanth.c8092/viz/book1_16957960865260/Story2?publish=yes#WelcomeQuestionnaire



Milestone : Publishing

Dashboard 1:

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Dashboard 2:

https://public.tableau.com/app/profile/nishanth.c8092/viz/book1_16957960865260/Dashboard2?publish=yes#WelcomeQuestionnaire

Dashboard 3:

https://public.tableau.com/app/profile/nishanth.c8092/viz/book1_16957960865260/Dashboard3?publish=yes#WelcomeQuestionnaire

Story 1:

https://public.tableau.com/app/profile/nishanth.c8092/viz/book1_16957960865260/Story1?publish=yes

Story 2:

https://public.tableau.com/app/profile/nishanth.c8092/viz/book1_16957960865260/Story2?publish=yes#WelcomeQuestionnaire

Reference Video:

https://drive.google.com/file/d/1L73uHxuFGcUvohWshQU5-B-obkRk5oOE/view?usp=drivesdk

CONCLUSION:

i. **COURSE HELPFUL**

- **Allows for Data driven decisions**
- **Better Customer knowledge**
- **Competitive edge**
- **Increased Employability**
- **Develop Goals and Objectives**

ii. **MENTRING SUPPORT**

- **Keep an Active Line of Communication**
- **Maintain a Schedule**
- **Share Your Personal Goals**
- **Maintain Mutual Respect**
- **Make Time for Constructive Feedback**

iii. **SMART INTERNZ PLATFORM**

- **It helps students acquire technical and professional competencies while working on real-world challenges and creating innovative solutions.**

- **The program encourages students to think critically and creatively, and it is designed to provide industry-level training at the college level.**

THANKING NAAN MUDHALVAN & TAMILNADU GOVERNMENT