

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

PROJECT REPORT

NM COURSE – DATA ANALYTICS

III – B.SC MATHEMATICS

SRI KGS ARTS COLEGE,SRIVAIKUNDAM

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

Project Report

1.Introduction

1.1 OVERVIEW

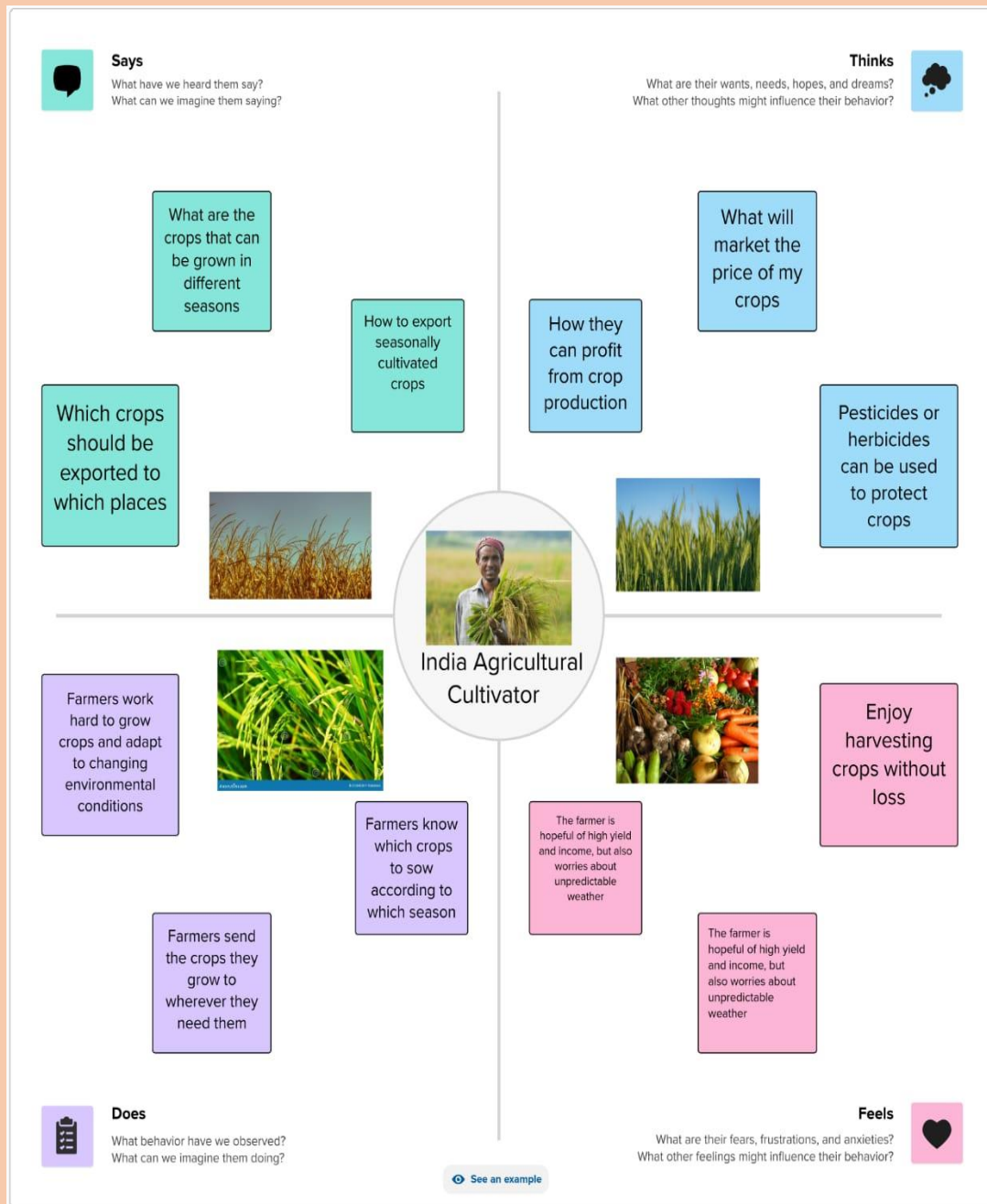
- > This report delves into the captivating realm of India's agricultural cultivation, providing a comprehensive visual exploration of key aspects and trends in the agricultural sector.
- > Through the visual representations, readers can gain valuable insights into crop production, seasonal variations, regional distribution, and overall production trends.

1.2 PURPOSE

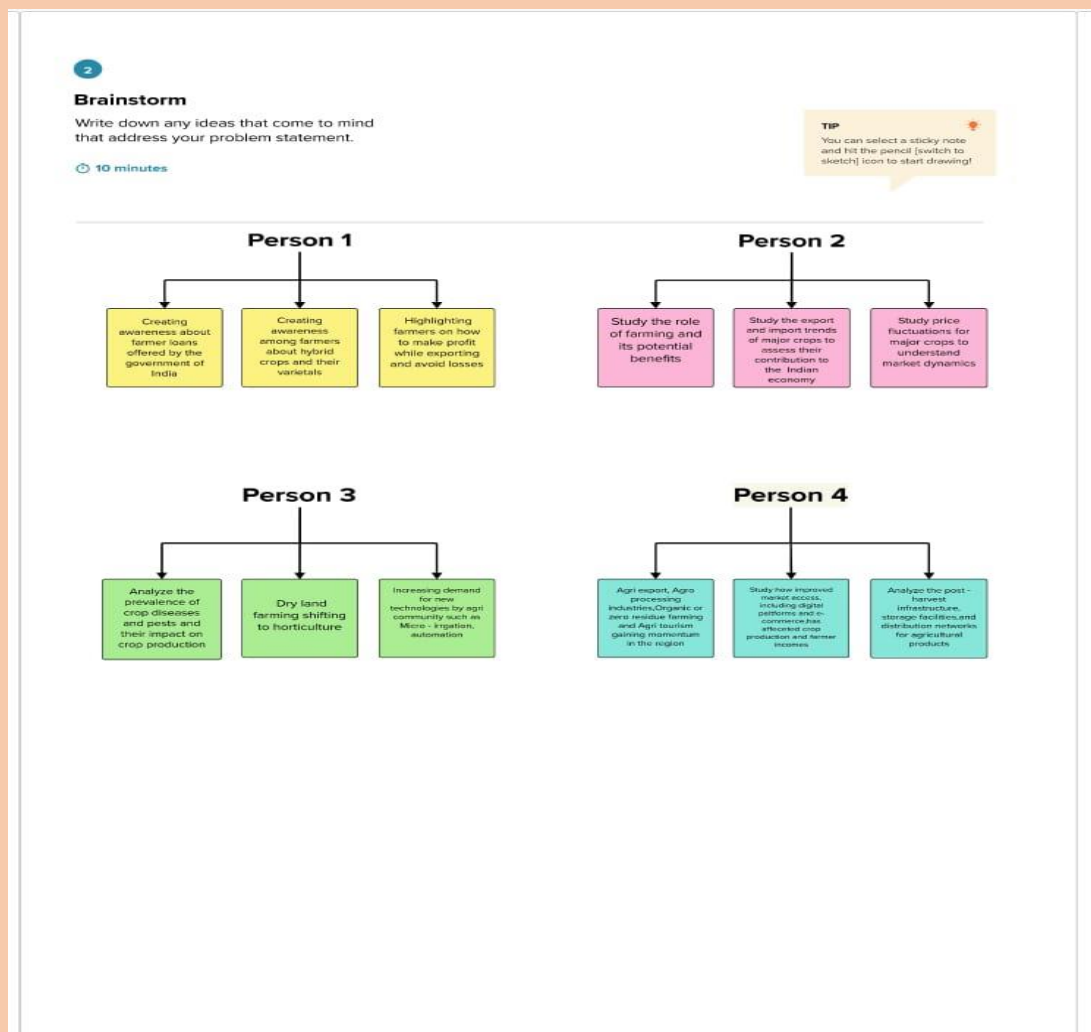
- > These visualizations enable intuitive analysis, allowing stakeholders to uncover patterns, identify areas of growth or concern, and make data-driven decisions.
- > By harnessing the power of Tableau, this report not only presents the data in a visually appealing manner but also provides an interactive experience for readers to explore the intricacies of India's agricultural cultivation.

2.Problem Definiton & Design Thinking :-

2.1 Empathy Map :-



2.2 IDEATION & BRAINSTORMING MAP :-



3

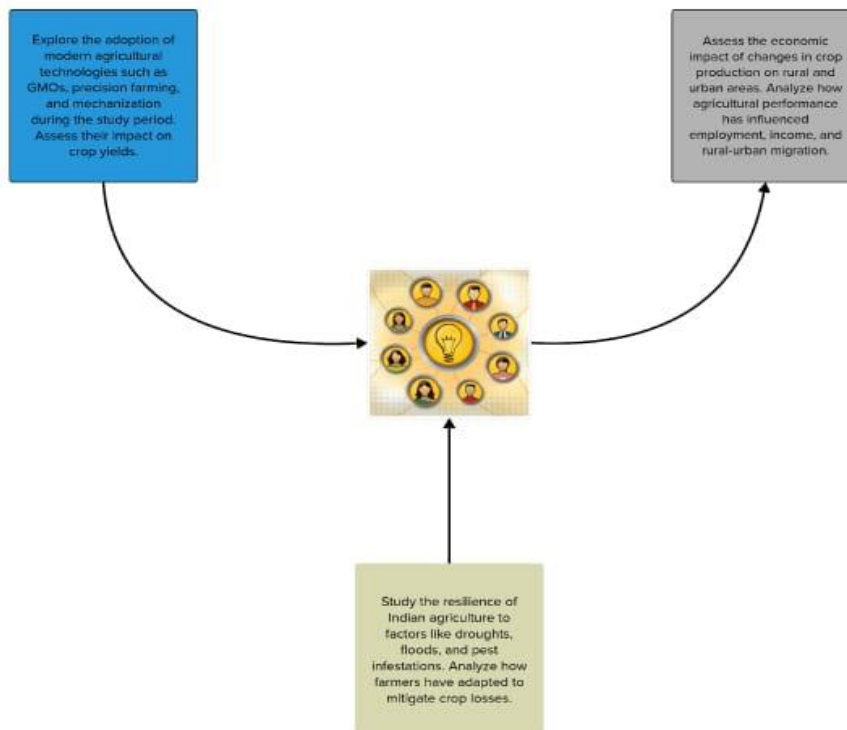
Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.



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Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

⌚ 20 minutes

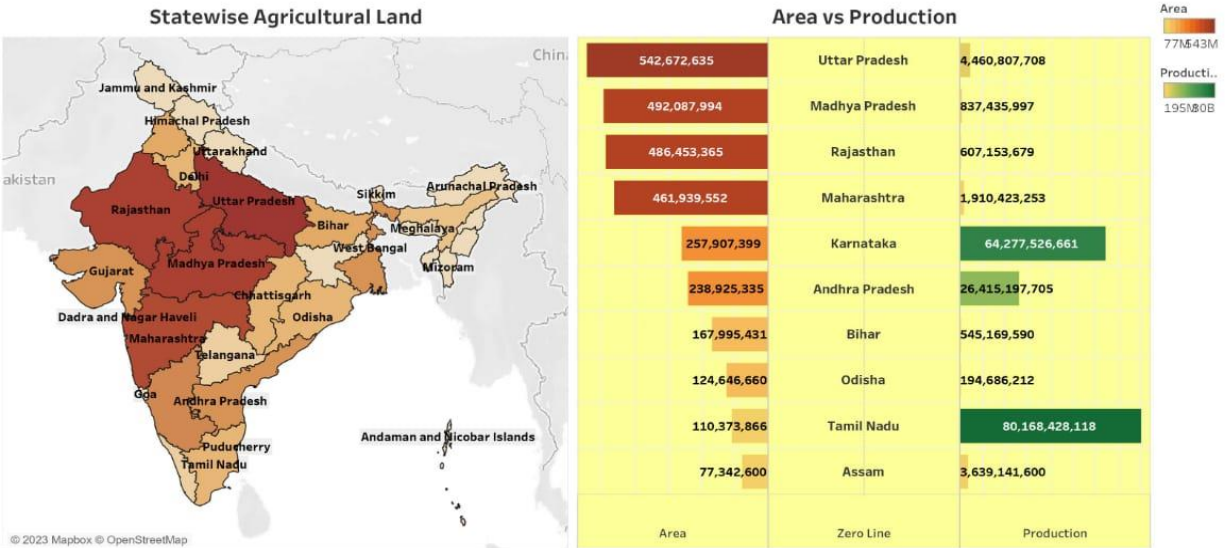
TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H** key on the keyboard.

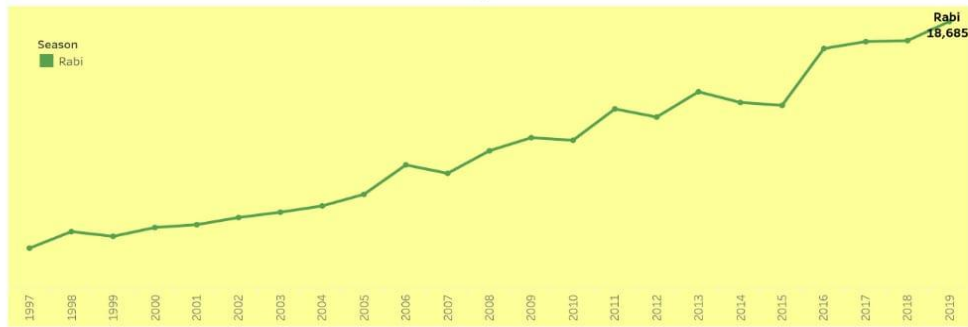


1.RESULT :-

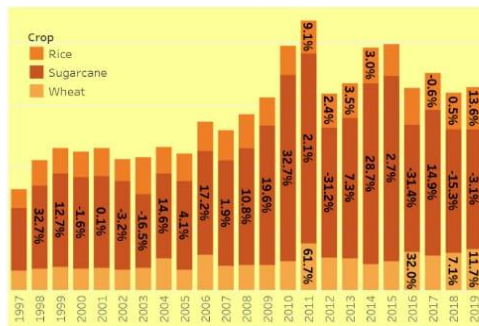
DASHBOARD



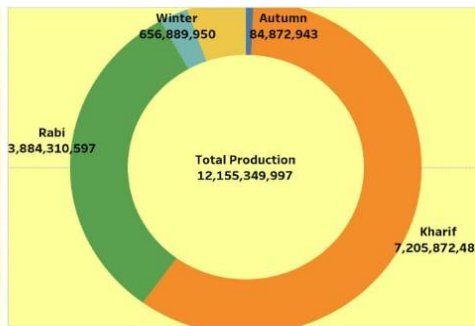
Yield by Season



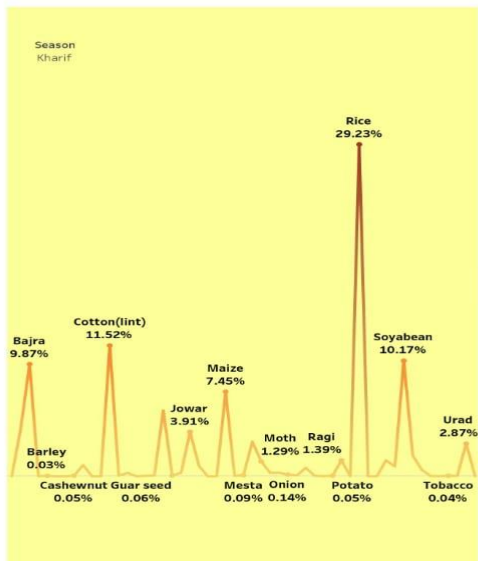
Major Crops



Season Wise Production



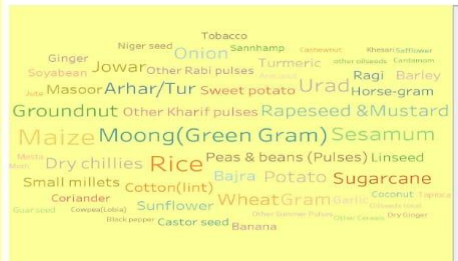
Season Based Cultivation Area



Crop Plantation by Area

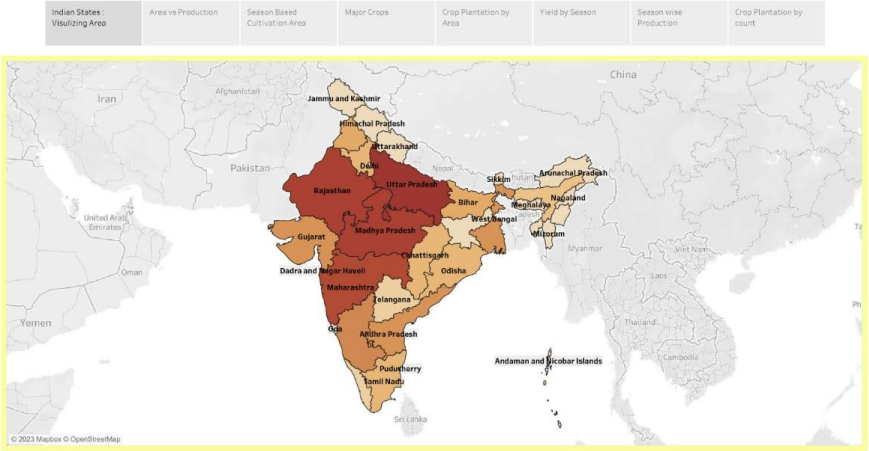


Crop Plantation by Count



STORY

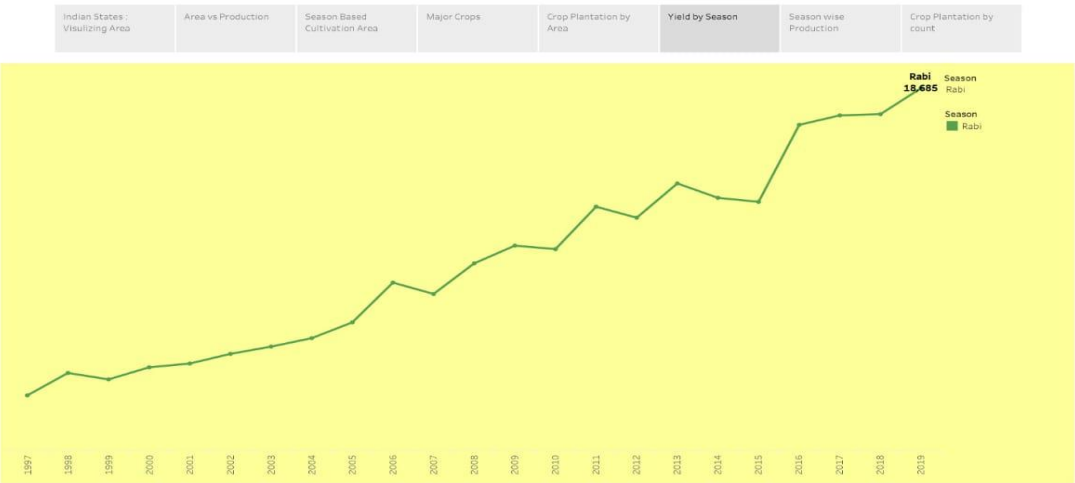
Story 1



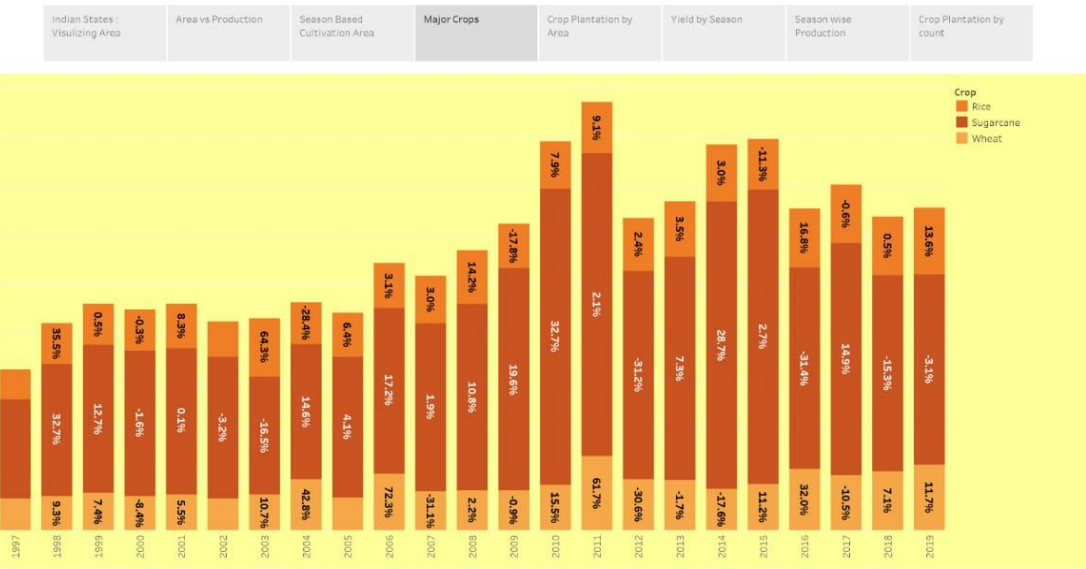
Story 1



Story 1



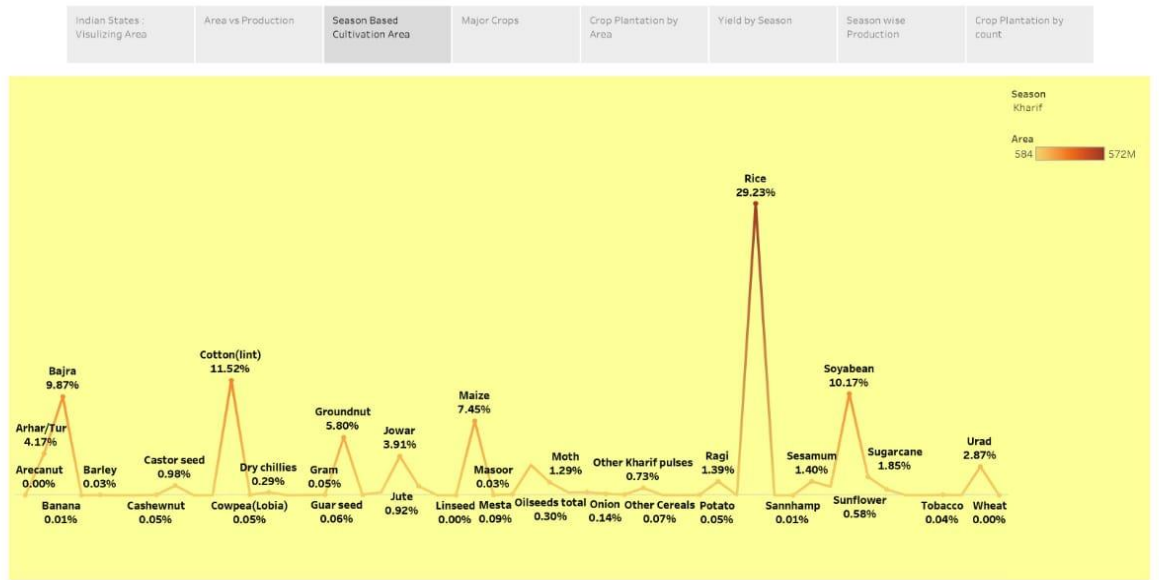
Story 1



Story 1

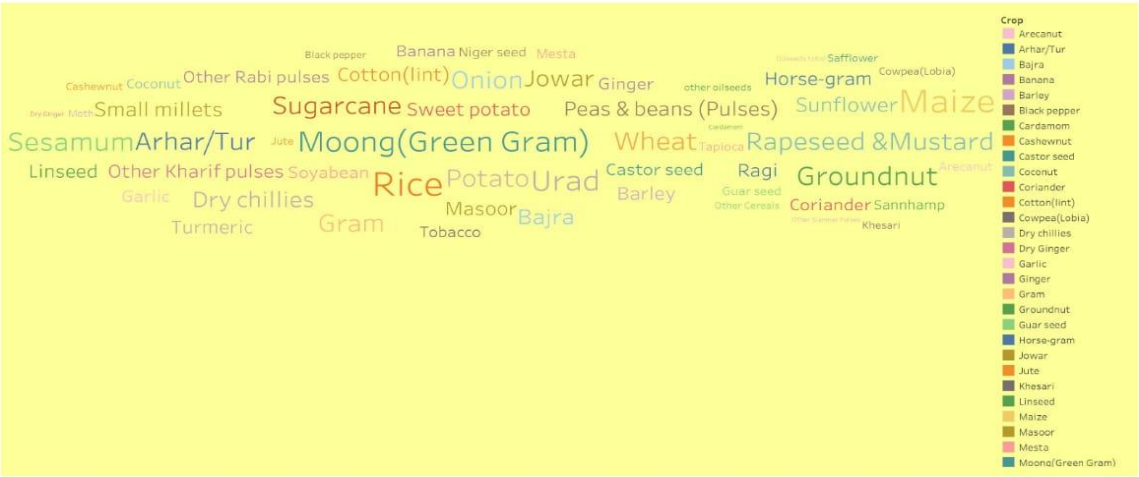


Story 1



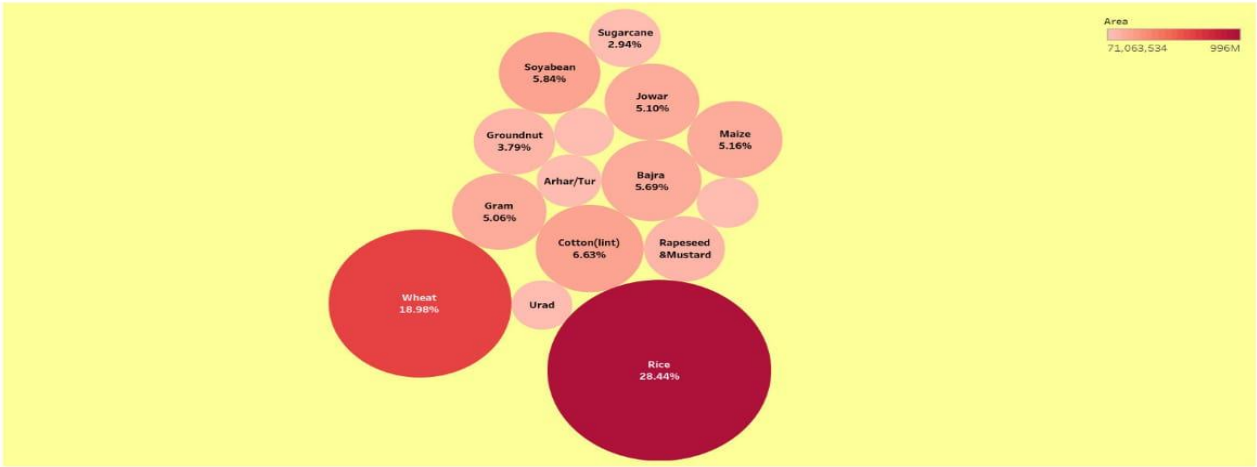
Story 1

Indian States : Visualizing Area	Area vs Production	Season Based Cultivation Area	Major Crops	Crop Plantation by Area	Yield by Season	Season wise Production	Crop Plantation by count
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Story 1

Indian States : Visualizing Area	Area vs Production	Season Based Cultivation Area	Major Crops	Crop Plantation by Area	Yield by Season	Season wise Production	Crop Plantation by count
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4. Advantage and Disadvantage

ADVANTAGE :-

- > Rice: India is one of the world's largest producers of rice, with various varieties cultivated across the country.
- > Wheat: Wheat is another staple crop, primarily grown in the northern states of India.
- > Sugarcane: India is one of the top sugarcane producers globally, used for sugar and ethanol production.

DISADVANTAGE :-

- > Cost: Tableau can be expensive, especially for large-scale enterprise deployments, which might be a barrier for some organizations.
- > Learning Curve: Tableau has a steeper learning curve, and users may need training to use it effectively.

> Data Preparation: Proper data preprocessing is essential, and Tableau may require well-structured data, which can be time-consuming.

5.Applications :-

> Rice: India is one of the world's largest producers of rice, with various varieties cultivated across the country.

> Wheat: Wheat is another staple crop, primarily grown in the northern states of India.

> Sugarcane: India is one of the top sugarcane producers globally, used for sugar and ethanol production.

> Cotton: Cotton is a significant cash crop in India, supporting the textile industry.

> Maize: Maize is grown for various purposes, including human consumption and animal feed.

> Pulses: Various pulses like lentils, chickpeas, and mung beans are grown, serving as essential sources of protein.

> Oilseeds: Soybeans, groundnuts, and sunflower seeds are cultivated for oil extraction.

6.CONCLUSION :-

>Through this approach, stakeholders can easily identify patterns and areas of growth or concern, facilitating data-driven decision-making in the agricultural industry. This report not only presents data in a visually appealing manner but also ensures that readers can actively engage with the data to uncover deeper insights. In conclusion, the use of Tableau has greatly enhanced our understanding of India's agricultural cultivation, making it a powerful tool for informed decision-making and strategic planning in this vital sector.

7.FUTURE SCOPES :-

>The insights gained from this analysis can help stakeholders make data-driven decisions. As for the "Future scope," this section typically outlines potential areas for further research or development. In the context of this report, it might discuss future trends in agricultural production, emerging technologies, policy implications, or areas where more data and analysis are needed to enhance decision-making in the agricultural sector.

8.Appendix :-

SOURCE CODE

DASHBOARD 1:

https://public.tableau.com/views/Dashboard-1_16966525953280/Dashboard1?:language=en-US&:display_count=n&:origin=viz_share_link

DASHBOARD 2:

https://public.tableau.com/views/Dashboard-2_16966527464580/Dashboard2?:language=en-US&:display_count=n&:origin=viz_share_link

DASHBOARD 3:

https://public.tableau.com/views/Dashboard-3_16966528519110/Dashboard3?:language=en-US&:display_count=n&:origin=viz_share_link

STORY

https://public.tableau.com/views/Story_16966529732640/Story1?:language=en-US&:display_count=n&:origin=viz_share_link

◆◆ THANK YOU ◆◆