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

1.INTRODUCTION
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. These visualizations enable intuitive analysis, allowing stakeholders to uncover patterns, identify areas of growth or concern, and make data-driven decisions.

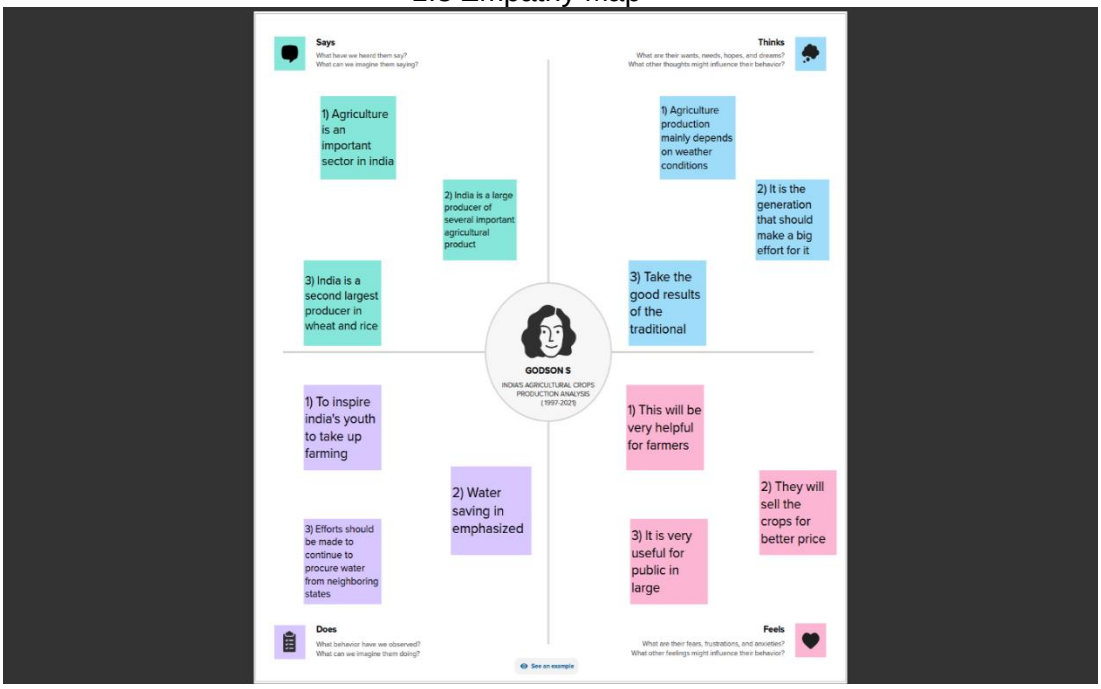
By harnessing the power of Tableau, this report not only presents the data in a visually appealing manner but also provides an interactive experience for readers to explore the intricacies of India's agricultural cultivation. To Extract the Insights from the data and put the data in the form of visualizations,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

1.1 Purpose

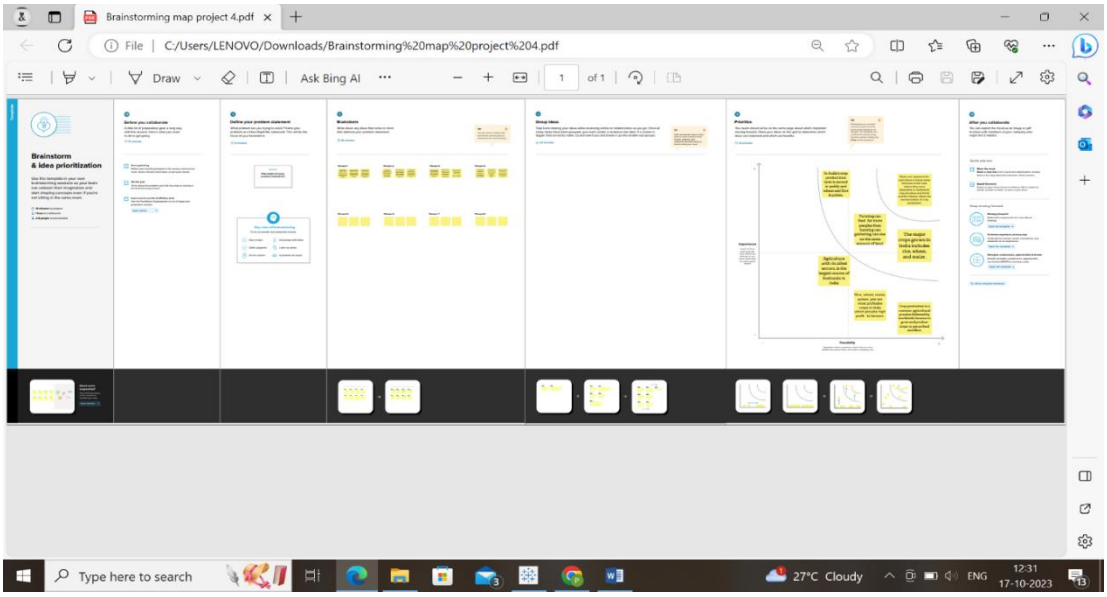
This project highlights the crop production in India for a particular period. The Agricultural Crop production during the year 1997-2021 has been analyzed. Excellent outputs regarding the crop production.

2. Problem Definition & Design Thinking

1.3 Empathy Map



1.2 Ideation & Brainstorming Map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2 RESULT

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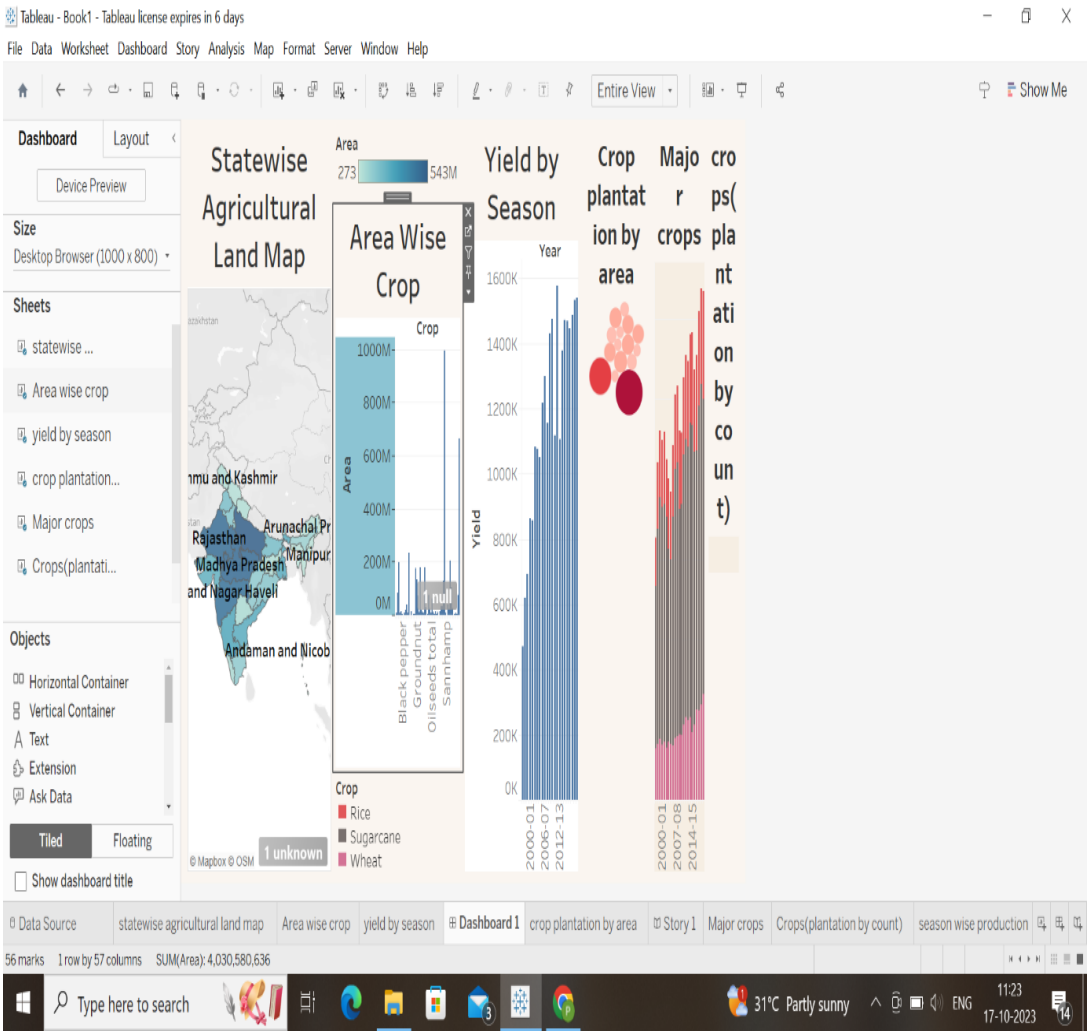
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crop plantation...
Major crops
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Yield by Season
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Crop
Rice
Sugarcane
Wheat
Crop plantation by area
Major crops
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Data Source
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Dashboard 1
crop plantation by area
Story 1
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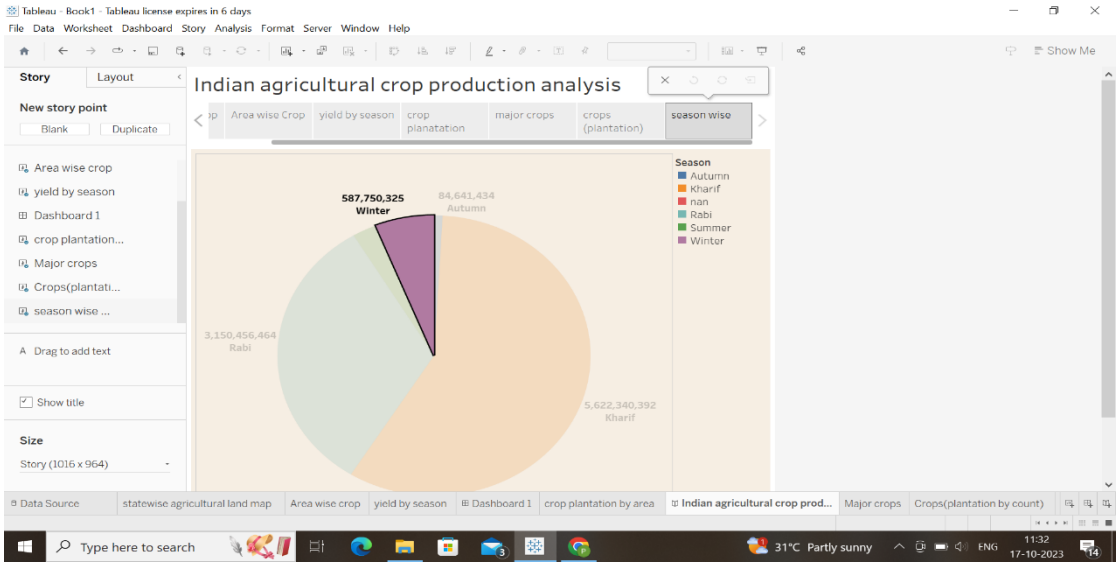
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Area wise Crop
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crop planatation
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Season
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Winter
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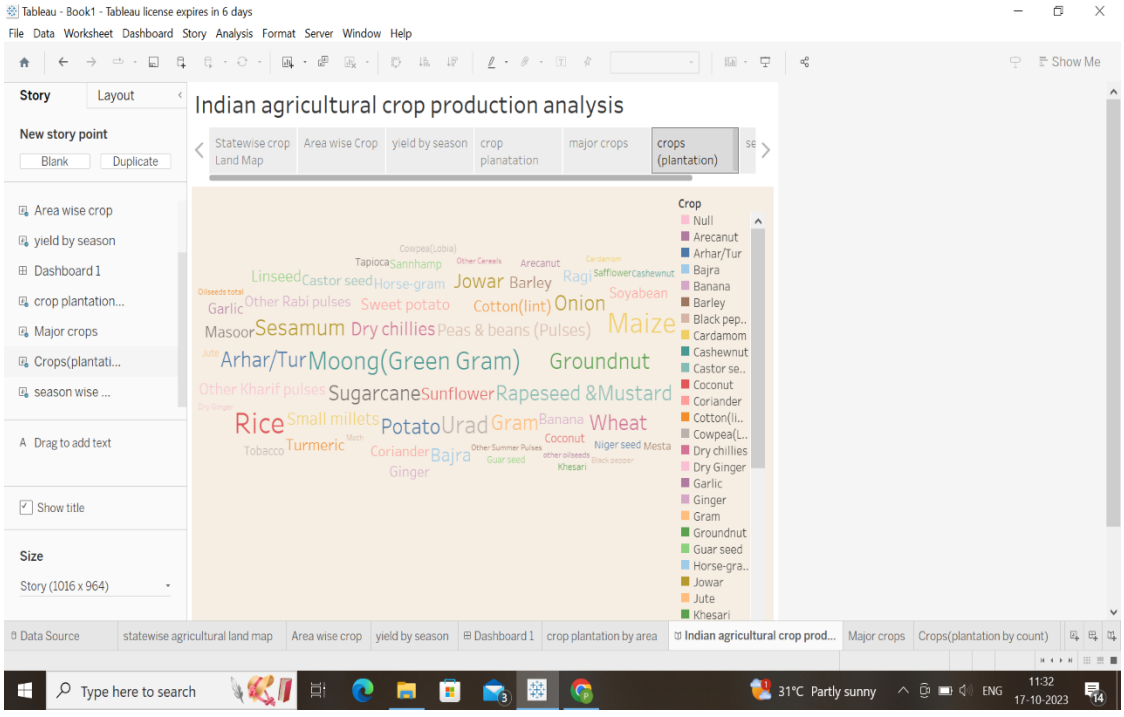
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Rice
Maize
Moong(Green Gram)
Groundnut
Sugarcane
Sunflower
Rapeseed &Mustard
Wheat
Potato
Urad
Gram
Banana
Coconut
Turmeric
Coriander
Bajra
Ginger
Sesamum
Dry chillies
Peas & beans (Pulses)
Onion
Cotton(lint)
Soyabean
Sweet potato
Other Rabi pulses
Garlic
Masoor
Arhar/Tur
Jowar
Barley
Ragi
Linseed
Castor seed
Horse-gram
Tapioca
Sannhamp
Arecanut
Safflower
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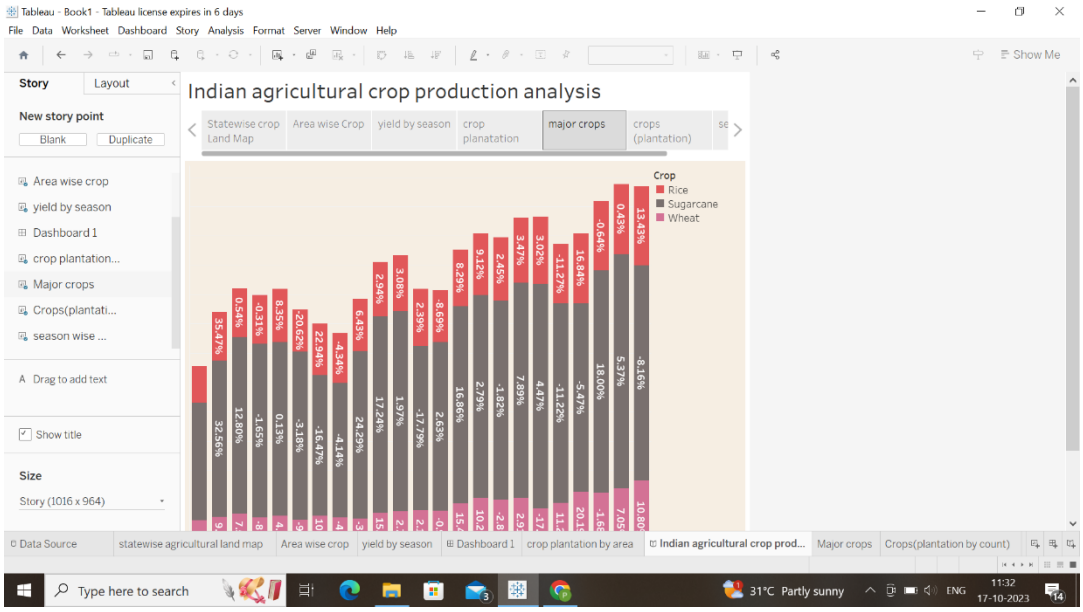
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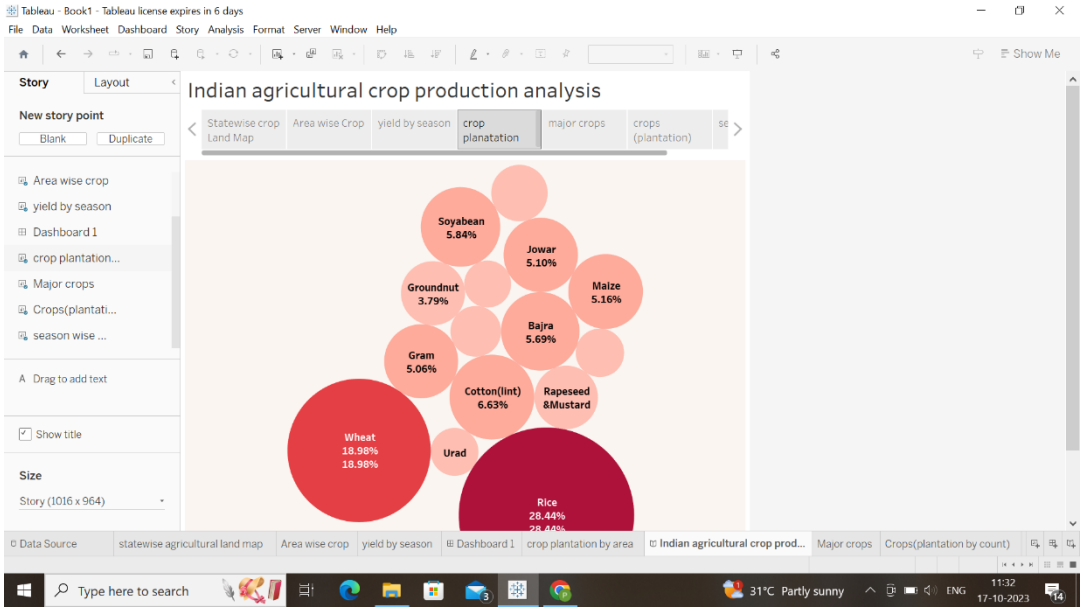
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crops (plantation)
Soyabean 5.84%
Jowar 5.10%
Groundnut 3.79%
Maize 5.16%
Bajra 5.69%
Gram 5.06%
Cotton(lint) 6.63%
Rapeseed &Mustard
Wheat 18.98%
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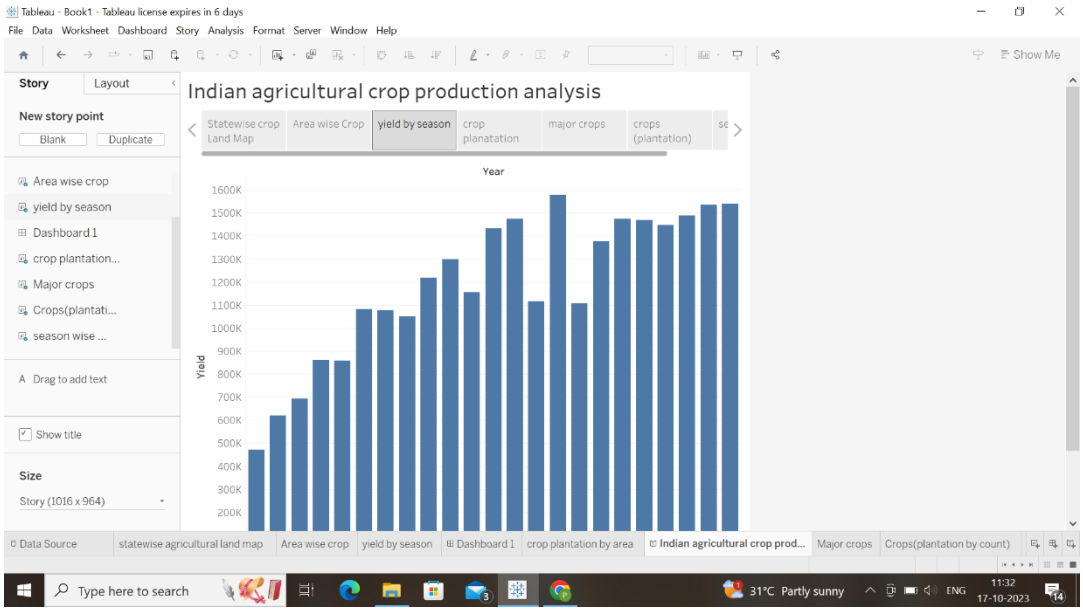
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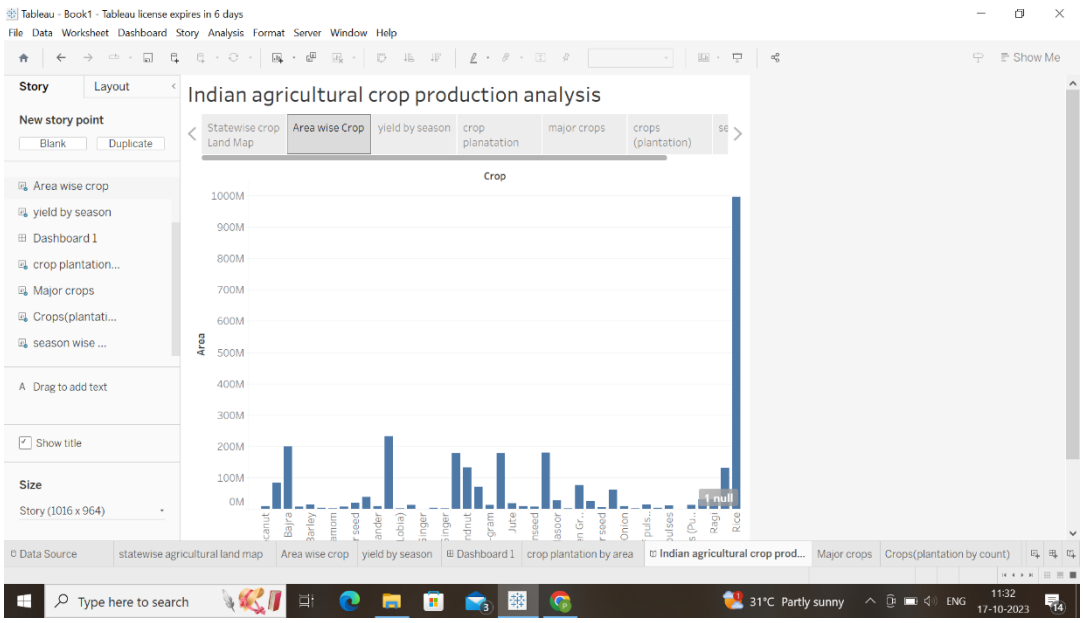
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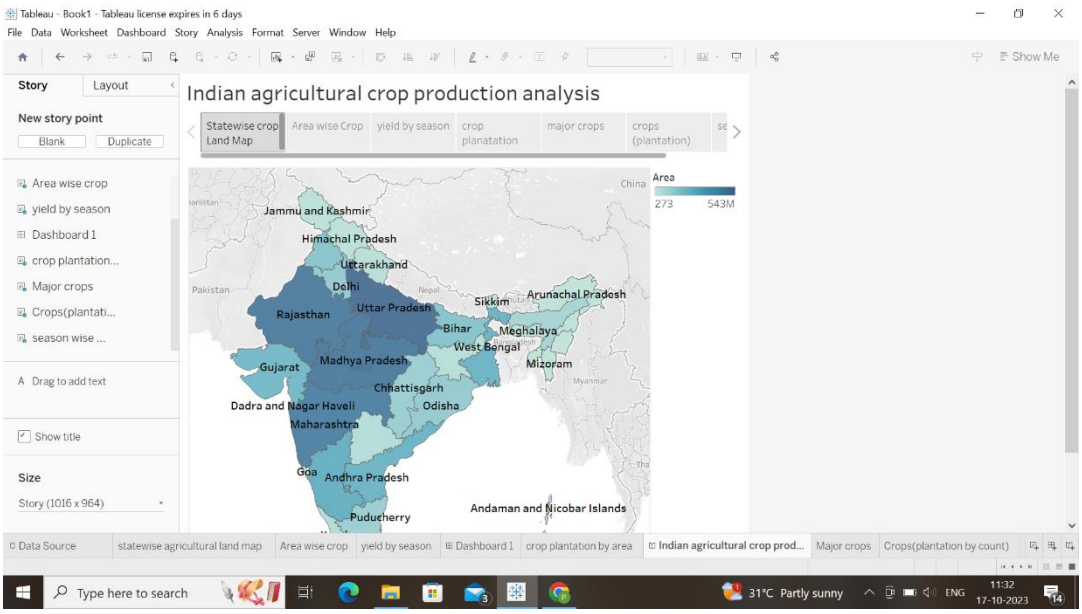

Advantages of Modern Agriculture;

1. 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.

2. 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.

3- Reduced Environmental Impact - Modern agriculture techniques are designed to be more sustainable with a focus on reducing waste conserving resources and minimizing the use of harmful chemicals

4. Increased Food Production - Modern agriculture has enabled farmers to produce larger quantities of food helping to address food shortages and hunger in many parts of the world.

Disadvantages of Modern Agriculture;

1. Soil Degradation - The intensive use of modern farming practices such as heavy chemical use of fertilizers and pesticides can lead to soil degradation over time reducing soil fertility and leading to erosion

2- Biodiversity Loss - Modern agriculture can have 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.

3- 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-

4. 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-

5. APPLICATIONS

1. Agriculture means the cultivation of crops for food and fodder.

2. Agriculture plays a significant role in the Indian economy as the main source of food.

3. Dairy, poultry, fisheries etc. come under animal husbandry, a sub-sector of agriculture.

4. Scientific research and improved

farming techniques helped India to achieve the Green revolution and attain a self-reliant status in terms of food production.

5. India is the second-largest producer of wheat and paddy in the world.

6. CONCLUSION

In conclusion, Agriculture has given so much to society. But it has its own pros and cons that we can't overlook. Furthermore, the government is doing his every bit to help in the growth and development of agriculture; still, it needs to do something for the negative impacts of agriculture.

7. FUTURE SCOPE

Yes, agriculture is good for

the future as it is expected to use advanced technologies and innovations to produce more food with limited land and resources, increase efficiency on farms, and become more profitable, efficient, safe, and environment friendly.