INDIA'S AGRICULTURAL CROP PRODUCTION ANALYSIS

(1997-2021)

Project documentation

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1.INTRODUCTION

1.1 OVERVIEW

The history of agriculture in India dates back to the Neolithic period. India ranks second worldwide in farm outputs. As per the Indian economic survey 2020 -21, agriculture employed more than 50% of the Indian workforce and contributed 20.2% to the country's GDP.

In 2016, agriculture and allied sectors like animal husbandry, forestry and fisheries accounted for 17.5% of the GDP (gross domestic product) with about 41.49% of the workforce in 2020. India ranks first in the world with highest net cropped area followed by US and China.[6] The economic contribution of agriculture to India's GDP is steadily declining with the country's broad-based economic growth. Still, agriculture is demographically the broadest economic sector and plays a significant role in the overall socio-economic fabric of India.

The total agriculture commodities export was US$3.50 billion in March - June 2020. India exported $38 billion worth of agricultural products in 2013, making it the seventh-largest agricultural exporter worldwide and the sixth largest net exporter. Most of its agriculture exports serve developing and least developed nations. Indian agricultural/horticultural and processed foods are exported to more than 120 countries,

primarily to the Japan, Southeast Asia, SAARC countries, the European Union and the United States.

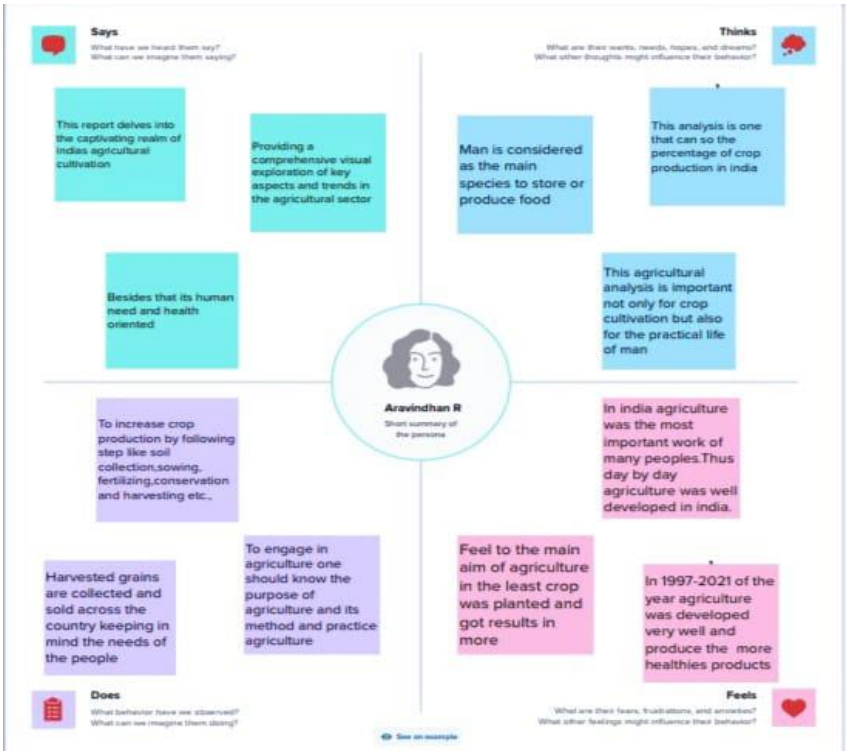
1.2 Purpose

Agriculture impacts society in many ways, including: **supporting livelihoods through food, habitat, and jobs; providing raw materials for food and other products; and building strong economies through trade.**

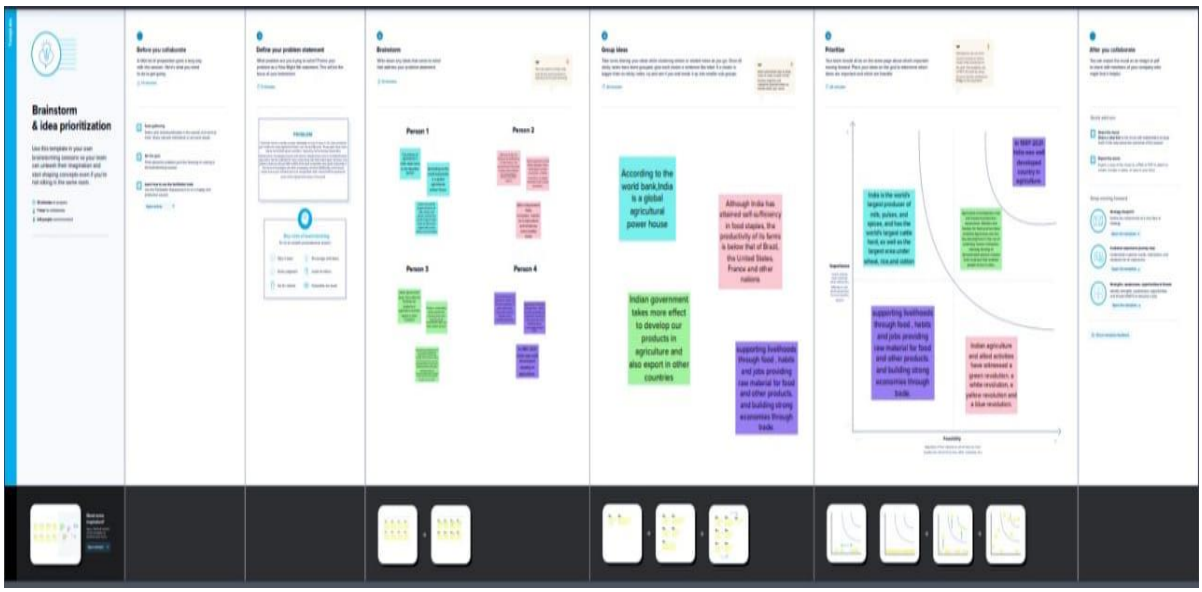
Agriculture is the foundation of the Indian economy. The population of India mostly depends on agriculture for their livelihood and agriculture contributes to 40 percent of the total GDP of the country. While agriculture is one of the most important sectors, it has taken a comparative backseat and the service sector is leading the way.

2.PROBLEMDEFINATION & DESIGN THINKING

2.1 Empathy map



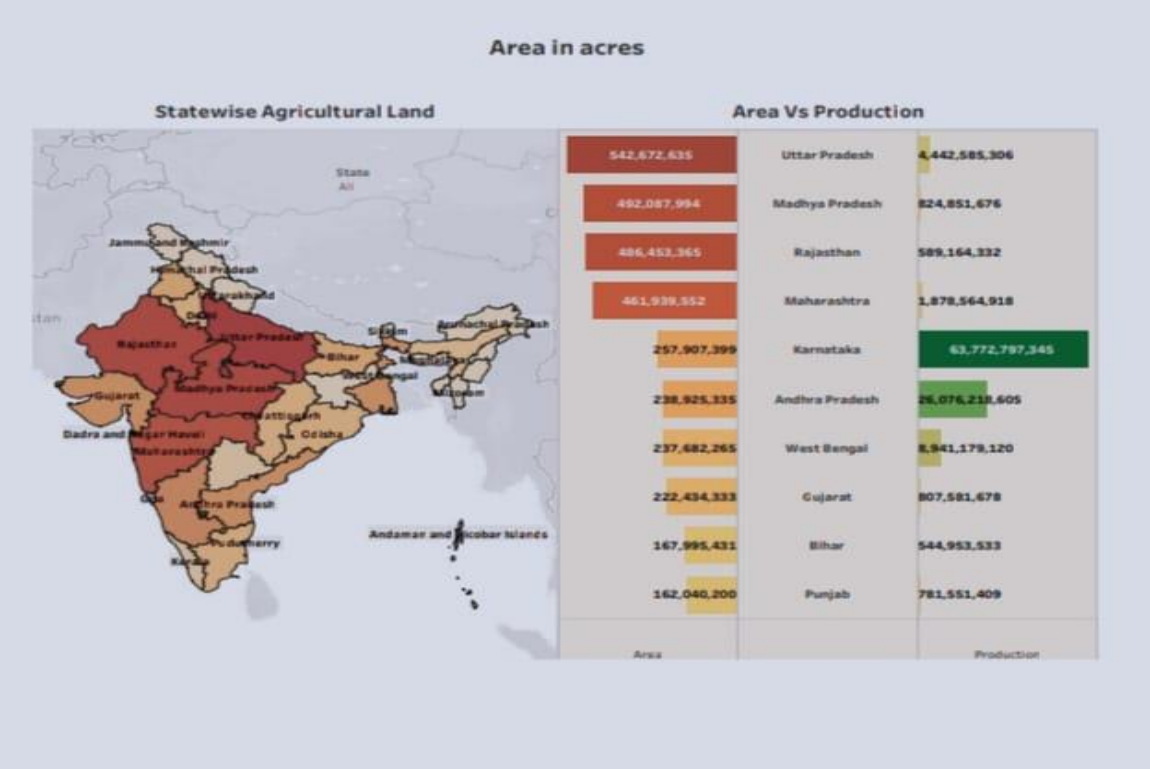
2.2 Ideation & brainstorming map



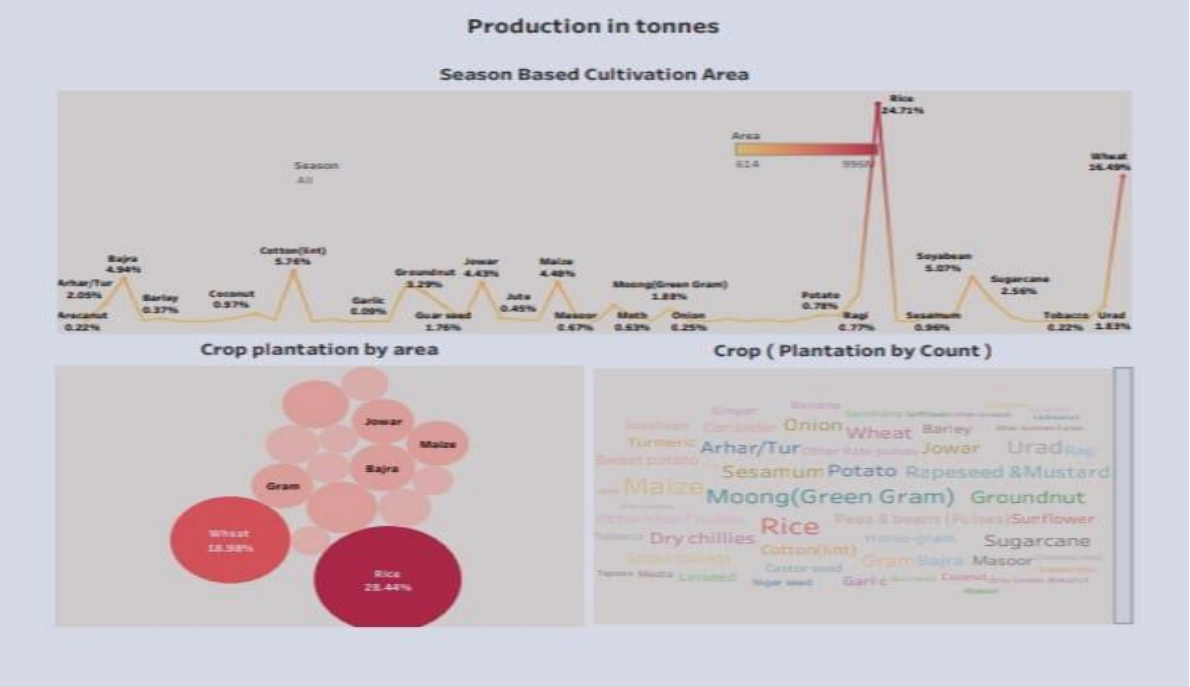
3. RESULT

3.1 Dashboard

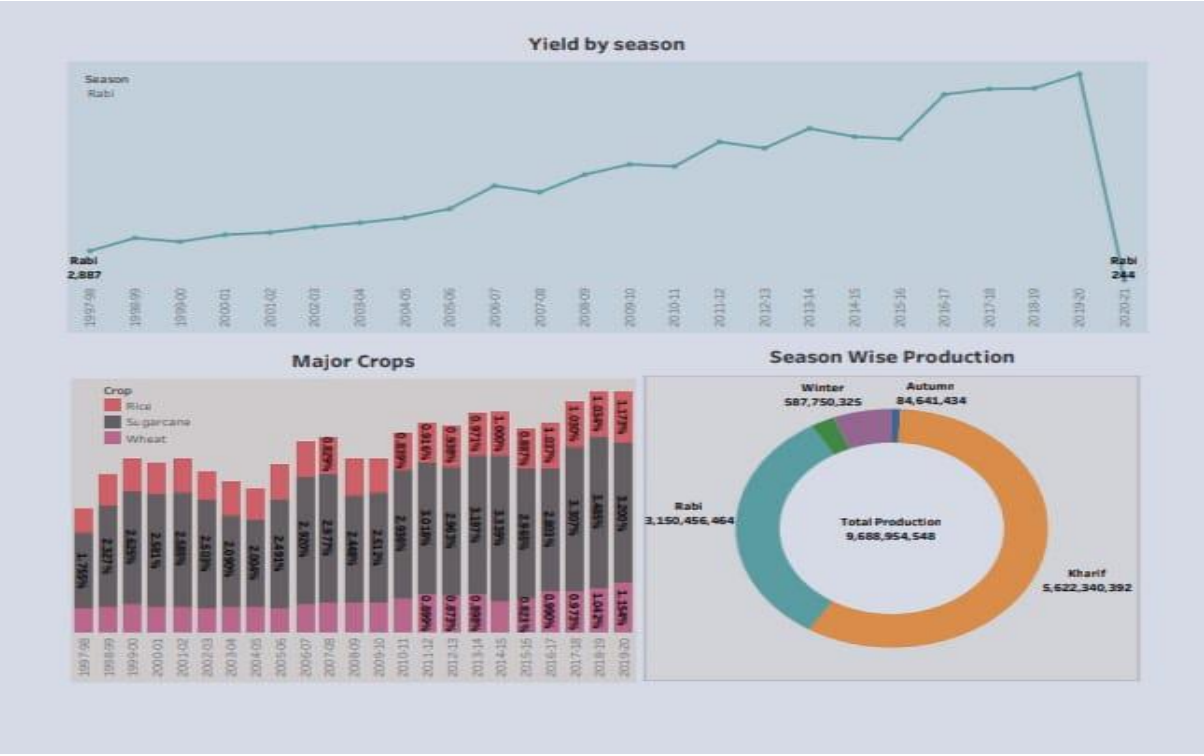
3.1.1 Area in acres



3.1.2 Production in tonnes

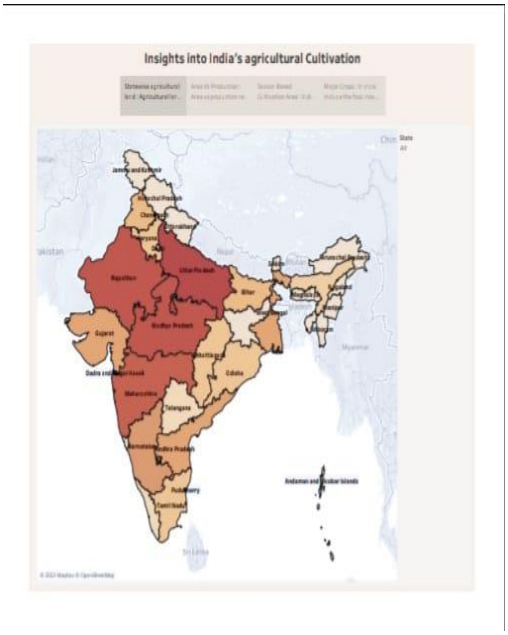


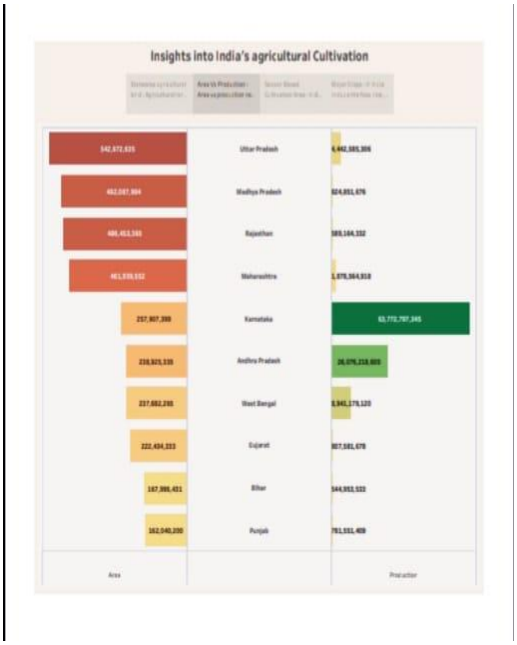
3.1.3 season wise



3.2 Story

3.2.1


Insights into India's agricultural Cultivation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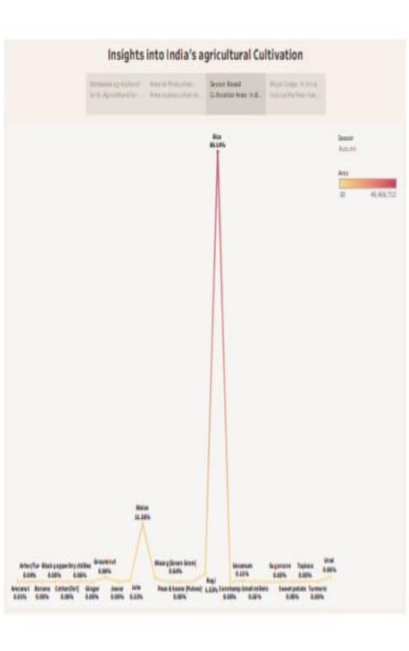
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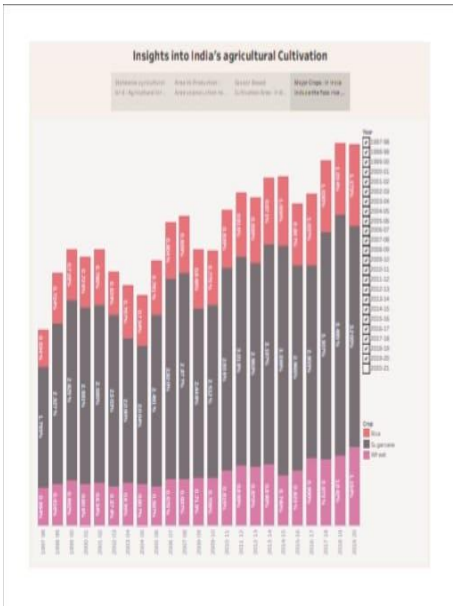
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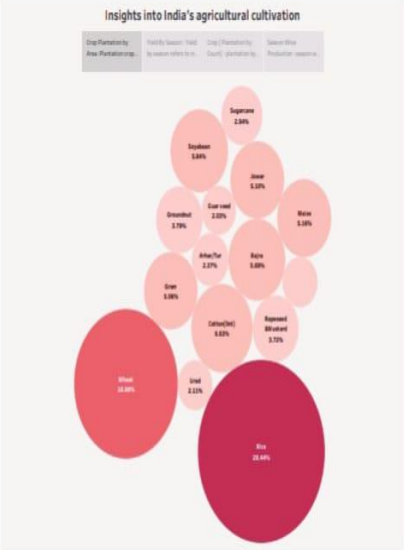
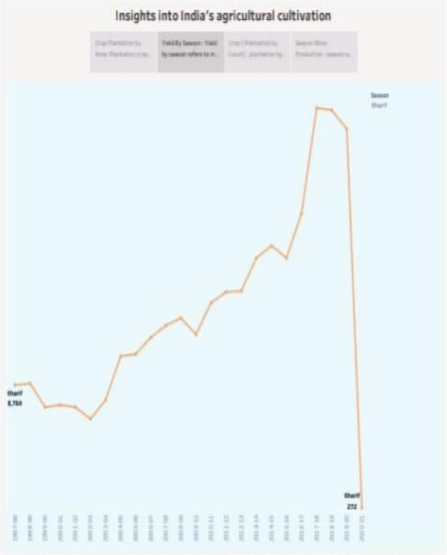
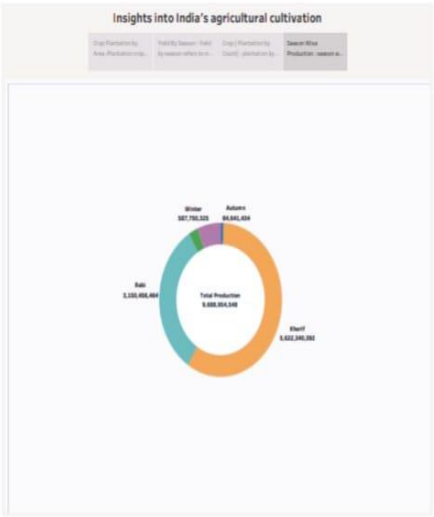
3.2.2







4.ADVANTAGES & DISADVANTAGES

4.1 Advantges

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.**
5. **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:

6. **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.**
7. **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.**
8. **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.**
9. **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.**
10. **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 effects.**

5.APPLICATIONS

- **Precision soil sampling, data collection, and data analysis, enable localized variation of chemical applications and planting density to suit specific areas of the field.**
- **Accurate field navigation minimizes redundant applications and skipped areas, and enables maximum ground coverage in the shortest possible time.**
- **Ability to work through low visibility field conditions such as rain, dust, fog and darkness increases productivity.**
- **Accurately monitored yield data enables future site-specific field preparation.**
- **Elimination of the need for human "flaggers" increases spray efficiency and minimizes over-spray.**

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.But ,

In (1997-2021) india was well devoloped country in 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.

Indian agriculture can help the nation tackle three of its biggest challenges — feeding a huge and expanding population, ensuring sufficient energy supplies and curbing emissions. Still, meeting these goals will require a coordinated effort with alignment across policy, investment and agricultural research

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