INDIAN AGRICULTUE CROP PRODUCTION ANALYSIS

(1997-2021)

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1.INTRODUCTION

1.1 Overview:

According to The World Bank, India is a global agricultural powerhouse. It is the world's largest producer of milk, pulses, and spices, and has the world's largest cattle herd (buffaloes), as well as the largest area under wheat, rice and cotton. It is the second largest producer of rice, wheat, cotton, sugarcane, farmed fish, sheep & goat meat, fruit, vegetables and tea. While agriculture's share in India's economy has progressively declined to less than 15% due to the high growth rates of the industrial and services sectors, the sector's importance in India's economic and social fabric goes well beyond this indicator.

1.2 Purpose:

In India, agriculture plays a crucial role in the economy, employing a significant portion of the population. The country is known for its diverse range of crops due to varying climatic conditions across regions. Some of the major crops produced in India include.

1. Rice: India is one of the largest producers of rice in the world. It is a staple food for a majority of the population.

2. Wheat: Wheat is another staple crop and a major source of carbohydrates for Indians.

3. Sugarcane: India is one of the leading producers of sugarcane, which is primarily used for sugar production.

4. Spices: India is often referred to as the "Land of Spices." It produces a wide variety of spices like cardamom, pepper, turmeric, etc.

5. Oilseeds: India produces oilseeds like groundnuts, mustard, and soybeans for oil extraction.

It's important to note that agricultural production can be affected by various factors including weather conditions, government policies, market demand, and technological advancements.
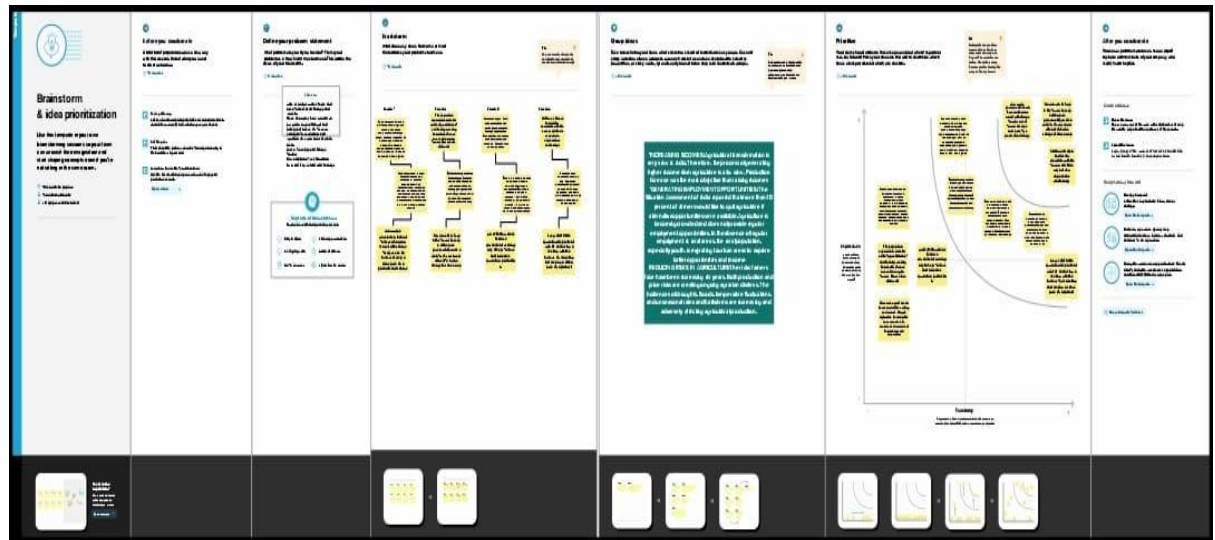
For the most current and specific data, I recommend consulting agricultural reports, government publications, or agricultural research organizations.

2.PROBLEM DEFINITION & DESIGN THINKING:

2.2 Empathy Map:
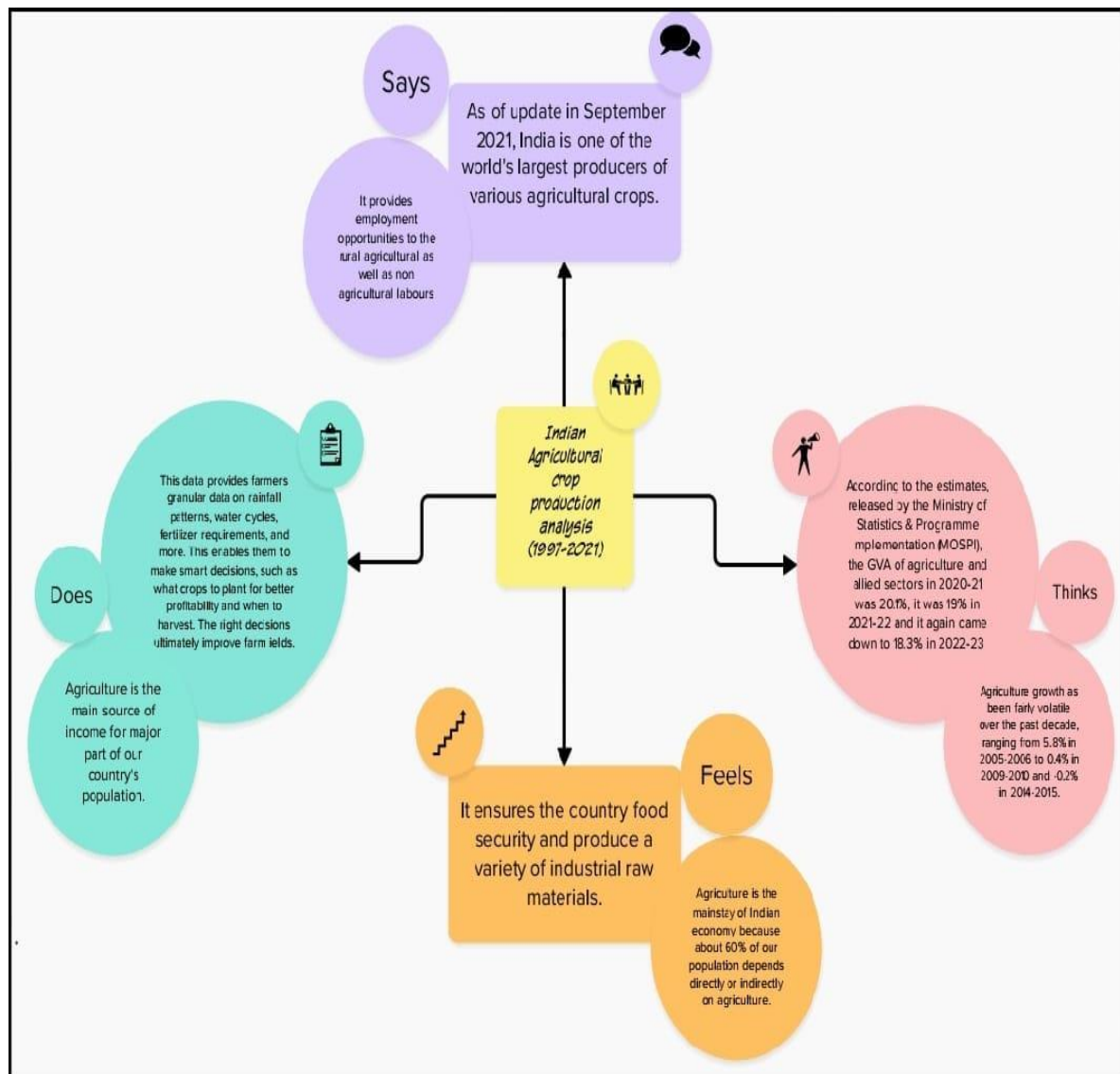
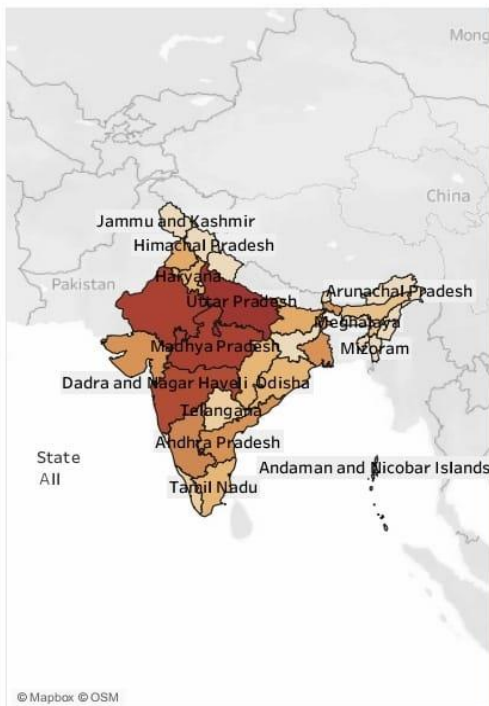## 2.2 Ideation & Brainstorming Map:

3.RESULT

India is the world's second-largest producer of rice, wheat, and other cereals.India is the largest producer of ginger and okra among vegetables and ranks second in the production of potatoes, onions, cauliflowers, brinjal, and cabbages producer in the world.the project shows the state and region wise production of India and it's persentage
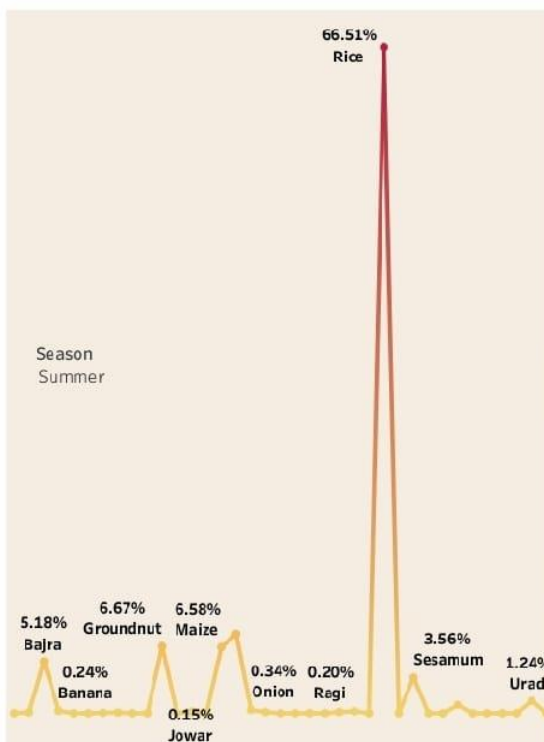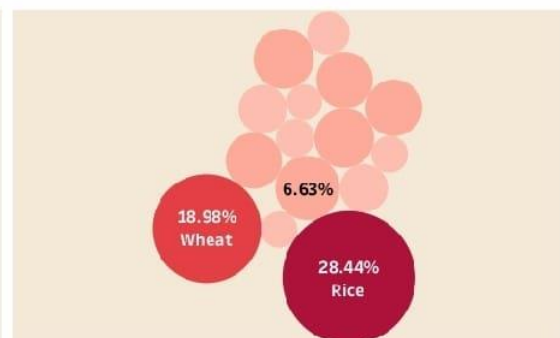
statewise agricultural land

© Mapbox © OSM

State
All

Area Vs Production

Area	State	Production
542,672,635	Uttar Pradesh	4,442,585,306
492,087,994	Madhya Pradesh	824,851,676
486,453,365	Rajasthan	589,164,332
461,939,552	Maharashtra	1,878,564,918
257,907,399	Karnataka	63,772,797,345
238,925,335	Andhra Pradesh	26,076,218,605
237,682,265	West Bengal	8,941,179,120
222,434,333	Gujarat	807,581,678
167,995,431	Bihar	544,953,533
162,040,200	Punjab	781,551,409

Seasoned Based Cultivation area

Season
Summer

66.51%
Rice

6.67%
Groundnut

6.58%
Maize

5.18%
Bajra

3.56%
Sesamum

1.24%
Urad

0.24%
Banana

0.34%
Onion

0.20%
Regi

0.15%
Jowar

Crops Plantation by area

6.63%

18.98%
Wheat

28.44%
Rice

Crops (plantation by count)

Oilseeds total Coconut   Mesta Tapioca
Black pepper Turmeric Onion   Linseed   Ginger   Cashewnut
Other Rabi pulses   Horse-gram Cowpea(Lobia) Niger seed
Gram Arhar/Tur Rice Urad   Sunflower Wheat
Khesari Other Kharif pulses Barley Rapeseed &Mustard
Maize Moth Moong(Green Gram) Groundnut
Bajra Sesamum Jute Jowar Peas & beans (Pulses) Sugarcane
Masoor Dry chillies Cotton(lint) Potato Soyabean Safflower
Guar seed Small millets Sweet potato Other Summer Pulses other oilseeds Ragi
Dry Ginger Coriander Castor seed Sannhamp Garlic Arecanut
Other Cereals   Banana Tobacco Cardamom

4.ADVANTAGES & DISADVANTAGES

ADVANTAGE:

- Reduces the Stress of Weeds
- Limits the Concentration of Pests and Diseases
- Reduces Soil Erosion
- Increases Soil Nutrients
- Improves the Soil Structure
- Reduces Pollution
- Diversification and Reduced Cost of Production
- The Nutrient Uptake Regulation

DISADVANTAGE:

- Soil topography is prohibited from taking and growing more than one crop in a particular area.
- Crop rotation is not always advisable.
- Changing weather conditions and other accidents interfere with crop rotation.
- The type of soil may generally be suitable only for certain crops.
- Improper Implementation causes more harm than good .
- Necessitates more skills and knowledge of the subject.

5.APPLICATIONS

1. Food Security
2. Sustainable Agriculture Practices
3. Climate Change Adaptation
4. Export and Import Planning
5. Crop Diversification
6. Technology Adoption
7. Income Generation
8. Environmental Impact Assessment
9. Insurance and Financial Planning
10. Government Subsidy Programs
11. Policy Formulation
12. Resource Allocation
13. Market Planning

6.CONCLUSION

The agricultural sector is of vital importance for the region. It is undergoing a process of transition to a market economy, with substantial changes in the social, legal, structural, productive and supply set-ups, as is the case with all other sectors of the economy. These changes have been accompanied by a decline in agricultural production for most countries, and have affected also the national seed supply sectors of the region. The region has had to face problems of food insecurity and some countries have needed food aid for IDPS and refugees

7.FUTURE SCOPE

The future of Indian agriculture holds several potential areas for growth and improvement:

1. Precision Agriculture: Utilizing technology like GPS, drones, and IoT for precise management of resources like water, fertilizers, and pesticides.

2. Climate-Smart Agriculture: Implementing practices that are resilient to climate change, such as drought-resistant crops and efficient water management techniques.

3. Organic Farming: With an increasing global demand for organic produce, there is room for expansion in this sector.

4. Value-Added Products: Processing and packaging of agricultural products can add value and increase income for farmers.

5. Horticulture and Floriculture: There's a growing market for fruits, vegetables, and flowers both domestically and for export.

6. Genetically Modified Crops: Although controversial, GM crops can offer solutions for pest resistance, improved yield, and drought tolerance.

7. Digital Agriculture Platforms: Utilizing technology for farm management, market access, and weather forecasting can enhance productivity.

8. Government Initiatives: Continued support and policies that promote sustainable agriculture, subsidies, and research and development.

9. Export Opportunities: Meeting global standards and exploring international markets for Indian agricultural products.

10. Education and Skill Development: Focusing on training farmers in modern techniques and practices for better productivity.

Remember, the success of these initiatives will depend on various factors including policy implementation, technological adoption, and adaptability to changing environmental conditions.