PROJECT REPORT

**NM ID: NM2023TMID14605**

1.INDRODUCTION

1.1 Overview

India is among the top three global producers of many crops, including wheat, rice, pulses cotton, peanuts, fruits and vegetable.

1.2 Purpose

Source of food India is the second-most populous country in the World. And to feed such a huge population, there is always a constant need for a supply of food.
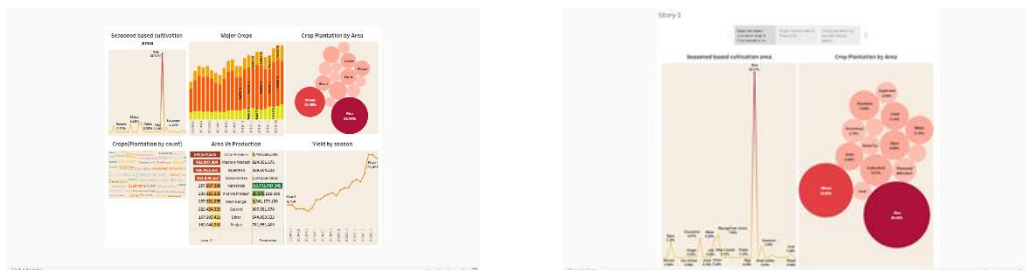
2.PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map
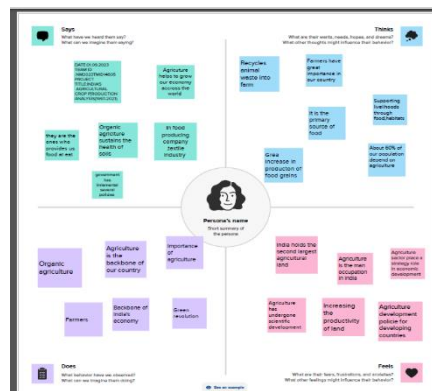
Ideation & Brainstorming Map

3.RESULT

4. ADVANTAGES & DISADVANTAGES

Advantages:

- **Increased Efficiency**
- **Improved crop Quality**
- **Reduced Environmental Impact**

- **Increased Food Production**
- **Economic Benefits**

DISADVANTAGES:

- **Soil Degradation**
- **Biodiversity Loss**
- **Water Pollution**
- **Health Risks**
- **Food Safety Concerns**

5.APPLICATIONS

*Crop data input

*Crop recommendation

*Government polices

*Market Trends

*Data export

6.CONCLUSION

I don't have access to real-time data or the ability to conduct current analysis. However, I can

provide a general conclusion based on historical trends up to my last knowledge update in September 2021.

India has a diverse agricultural landscape, and crop production is influenced by various factors including climate, technology, government policies, and market demand. Historically, India has been a significant producer of crops such as rice, wheat, pulses, cotton, and sugarcane.

Challenges in Indian agriculture include water scarcity, the need for modernization and mechanization, and issues related to land fragmentation. The government has implemented various schemes and initiatives to address these challenges, including the Pradhan Mantri Bhima Yojana (PMFBY) and the National Mission on Sustainable Agriculture (NMSA).

It's important to note that crop production in India can vary significantly from year to year due to factors like monsoons and weather conditions. To get the most

accurate and up-to-date information, it's recommended to refer to the latest reports and data from government agencies and agricultural organizations.

7.FUTURE SCOPE

*Precision Agriculture: The adoption of technology, including IoT devices, drones, and data analytics, can enable precision agriculture. This involves optimizing resource use (water, fertilizers) and increasing crop yields while minimizing environmental impact

* Climate-Resilient Crops: With the changing climate, there's a need to develop and analyze crops that are more resilient to extreme weather conditions. Research into drought-resistant and heat-tolerant crops is essential.