

1.INTRODUCTION

1.1 Overview

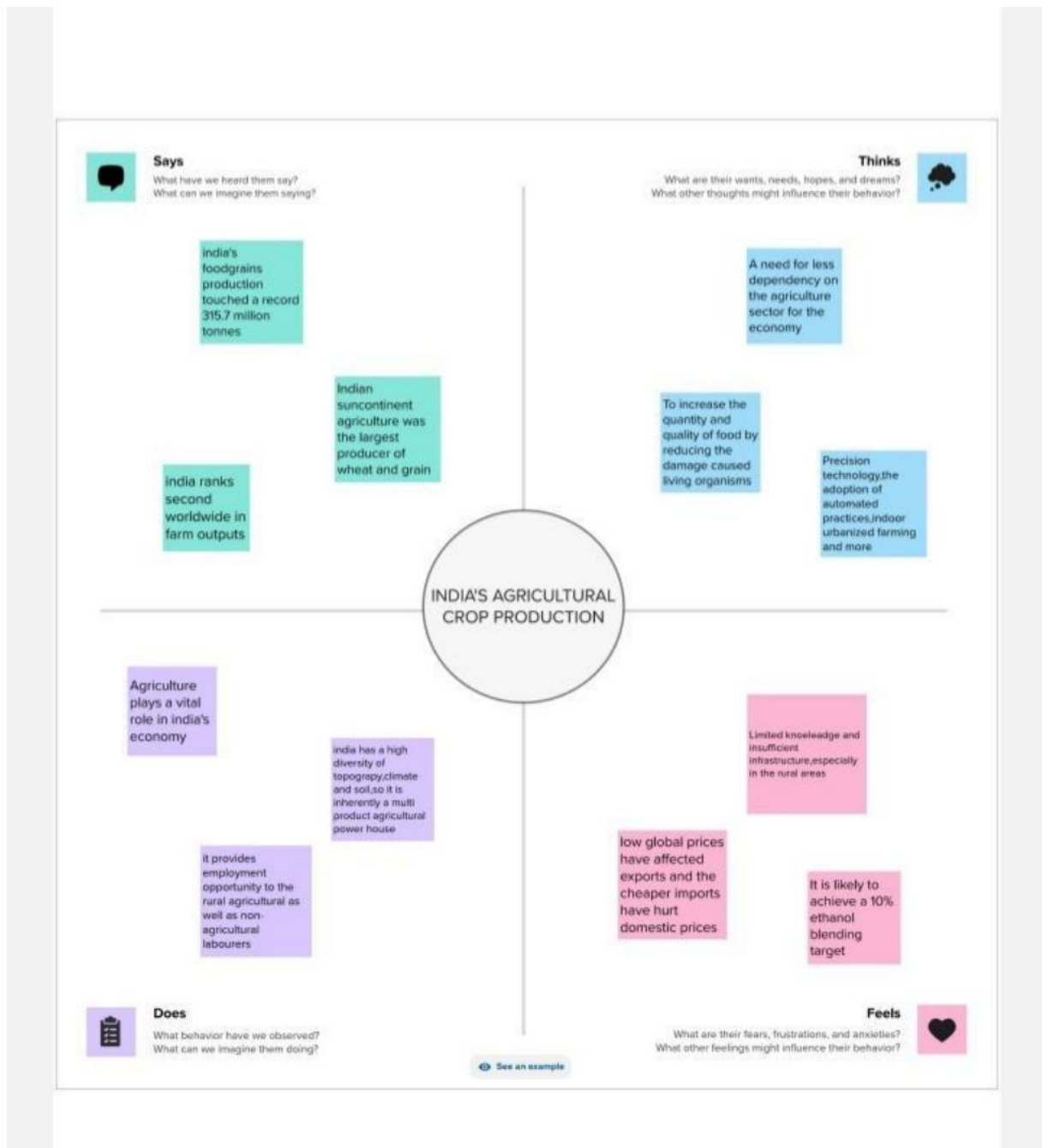
- India is the geographically a vast country so it has various food and non-food crops which are cultivated in three main cropping seasons. Which are
 - Rabi
 - Khalifa
 - Zaid
- Food crops
Rice,Wheat,Millers,Maize and pulses.
- Cash crops
Sugarcane,Oilseeds,Horticulture crops,Tea,Coffee,
Rubber, Cotton and Jute.
- India is the second largest producer Rice, Wheat, Sugarcane fruits and vegetables.

1.2 Purpose

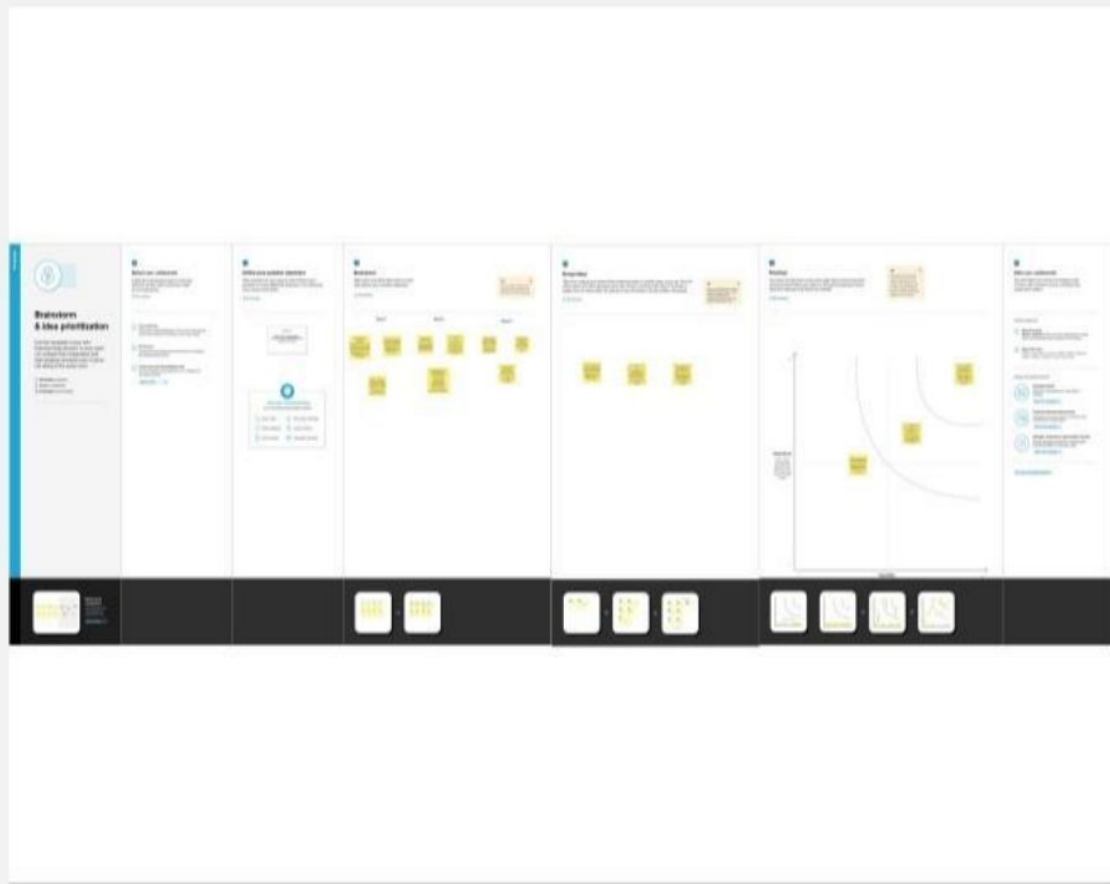
- Agricultural plays a vital role in India economy . It contributes about 17% of total GDP and provides employment to over 60% of the population.
- India adoption old innovative ag-tech and new crop varieties through gene-editing will create a consistent feedstock supply to meet bioethanol targets, leading to energy security , higher farmer incomes and ultimately decolonisation.

2.PROBLEM DEFINITION & DESIGN THINKING

2.1 EMPATHY MAP:



2.2 IDEATION & BRAINSTORMING MAP:



3. RESULT

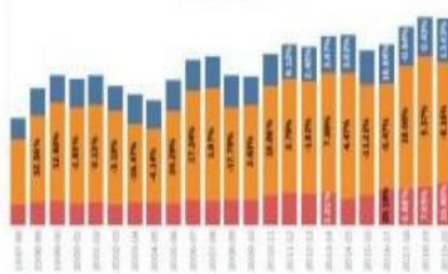
STATEWISE AGRICULTURAL LAND



AREA VS PRODUCTION

State	Area	Production
Uttar Pradesh	542,672,835	4,442,585,306
Madhya Pradesh	482,087,994	824,851,676
Rajasthan	486,455,365	589,164,332
Maharashtra	461,939,052	1,878,564,918
Karnataka	257,907,399	63,772,797,346
Andhra Pradesh	238,925,335	26,076,218,605
West Bengal	237,682,265	8,941,179,120
Gujarat	222,434,333	807,581,678
Bihar	167,995,431	544,953,533
Punjab	162,040,200	781,551,409
Area		Production

MAJOR CROPS



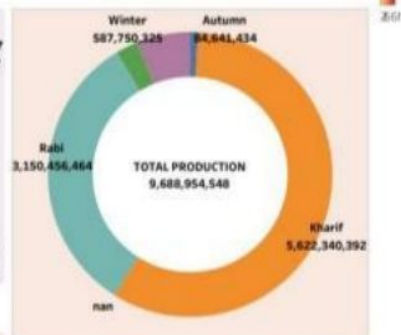
CROPS(PLANTATION BY COUNT)



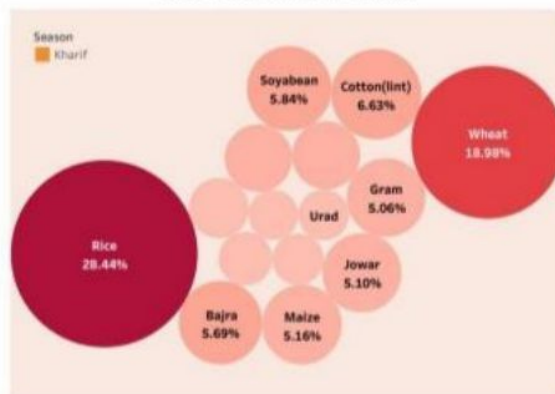
YIELD BY SEASON



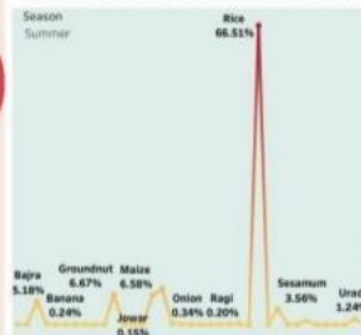
SEASON WISE PRODUCTION



CROP PLANTATION BY AREA



SEASON BASED CULTIVATION AREA



4.ADVANTAGE AND DISADVANTAGE

ADVANTAGES:

- It provides employment opportunity to the rural Agricultural as well as non-agricultural labors .
- It is the source of food and fodder.
- It also plays an important role in international business in import and export activities.

DISADVANTAGES:

- Erosion of soil by heavy rain , floods , insufficient vegetation cover etc.. and also reduces farm productivity.
- Inadequate irrigation facilities and poor management of water resources have led to a great decline in agricultural productivity .

5.APPLICATIONS

THE AREAS WHERE SOLUTION CAN BE APPLIED:

Some types of areas that are generally well-suited for farming include:

- **PLAINS:** Flat or gently rolling areas with fertile soil and favorable climate conditions for crop cultivation.
- **RIVER VALLEYS:** Areas adjacent to rivers that benefit from fertile alluvial soil and access to water for irrigation.

6.CONCLUSION

- India agricultural is still very important in indian economy , although it's shares of the economy has decreased over the past 60 years.

7.FUTHER SCOPE

- According to union government estimates , India's food production was 291.95 MT in 2019-2020 .For 2020-2021 , the government had set the target up to 298.3 MT , which was two percent from the previous years output.
- Food production must be doubled by 2050 to match the country's population and income growth.

8.APPENDIX

A. SOURCE CODE

https://public.tableau.com/views/Book2_16971761550590/Story1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link