NAAN MUDHALVAN

Project Based Experiential Learning

Indian Agricultural crops production

Under the Guidance of

Ms. M. Anusiya, M.Sc., M.Phil.,(Ph.D)

Faculty Mentor, Assistant Professor of Mathematics,

Bon Secours College for Women,

Thanjavur.

BON SECOURS COLLEGE FOR WOMEN

NAAC Accredited with A++ Grade in Cycle II

Affiliated to Bharathidasan University, Tiruchirappalli

UGC Recognized by 2(f) and 12(B) Institutions

Villar Bypass, Thanjavur -613 006.

POLITICAL JUGGERNAUTS: A QUANTITATIVE ANALYSIS OF CANDIDATES IN THE 2019 LOK SABHA ELECTION

Submitted by

Team Leader : Ms. Z.Syeda Ajmal Sultana

Team Members : Ms. M.Priyadharshini(17.7)

Ms. S. Samila Safreen

Ms. V. Motchana

1.Introduction

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.

1.1 Overview

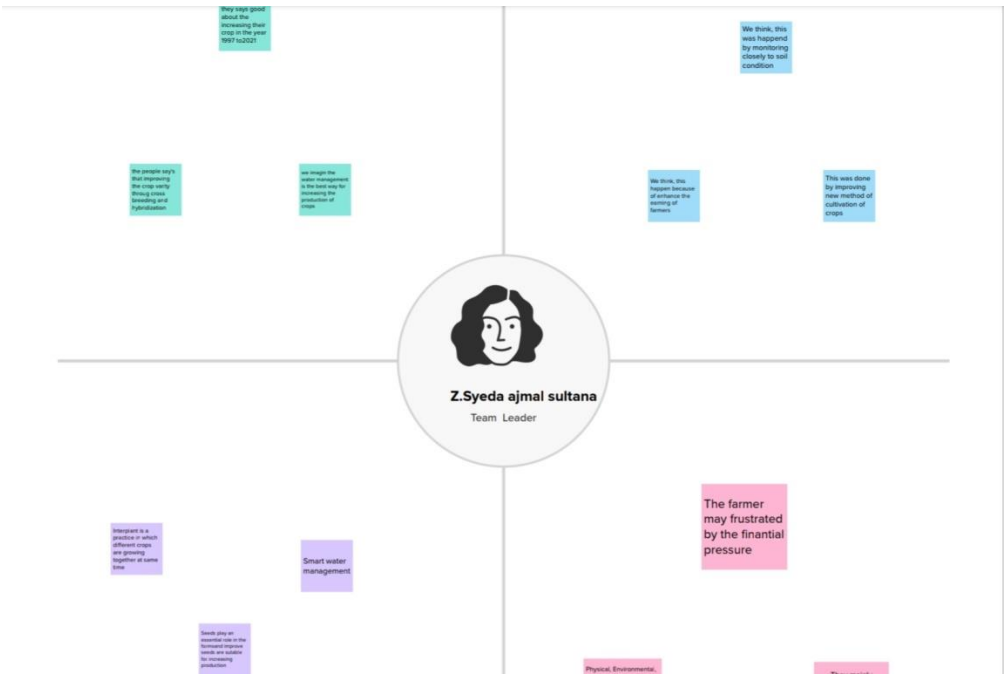
Agriculture is an evolutionary process that consists of a series of activities such as the production of food, fibers, feed, and raising of domesticated animals to fulfill the demand of the population. Agriculture is a key to development in the area of human civilization.

1.2 Purpose

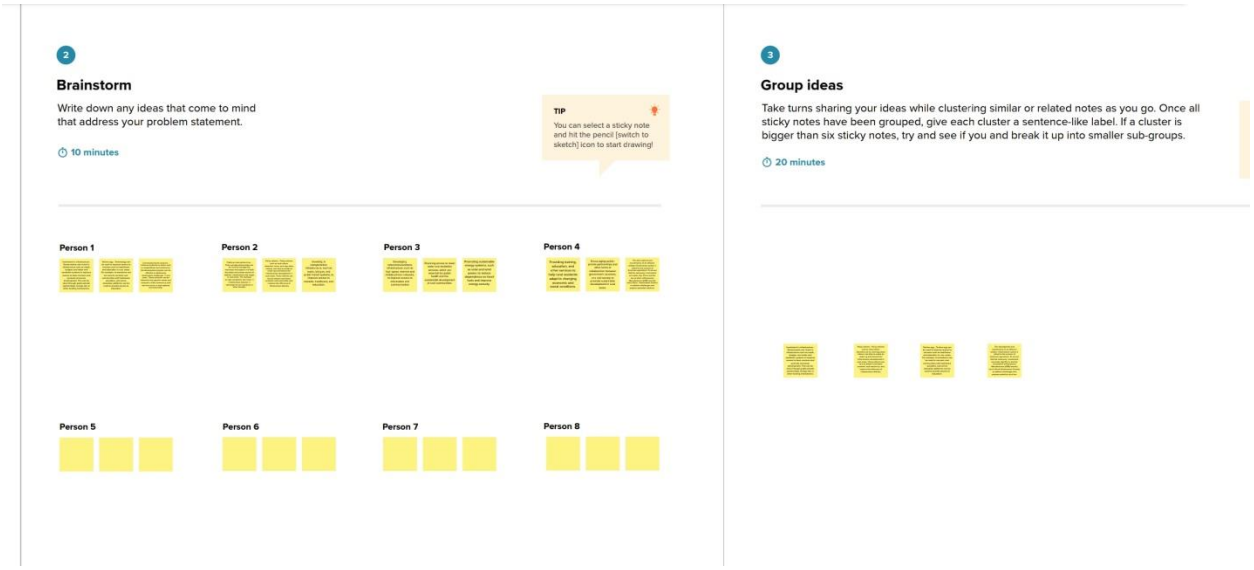
Agriculture is the practice of cultivating natural resources to sustain human life and provide economic gain. It combines the creativity, imagination, and skill involved in planting crops and raising animals with modern production methods and new technologies.

2.problem definition and design thinking

2.1.Empathy map



2.2. Ideation and Brainstorming map



3.Dataset

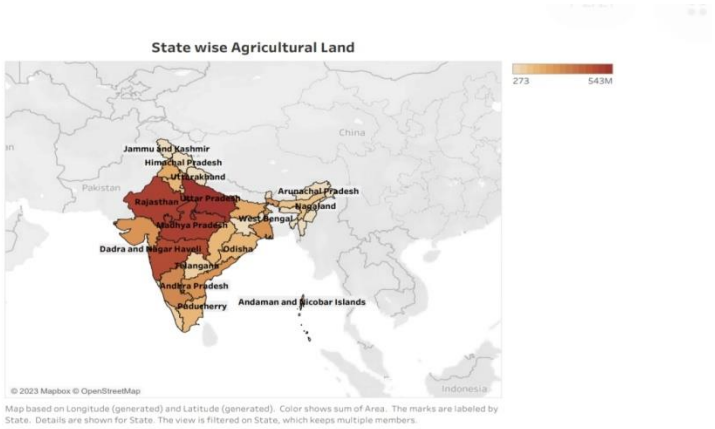
	A	B	C	D	E	F	G	H	I	J	K	L
1	State	District	Crop	Year	Season	Area	Area Units	Productio	Productio	Yield		
2	Andaman	NICOBARS	Arecanut	2001-02	Kharif	1254	Hectare	2061	Tonnes	1.643541		
3	Andaman	NICOBARS	Arecanut	2002-03	Whole Yea	1258	Hectare	2083	Tonnes	1.655803		
4	Andaman	NICOBARS	Arecanut	2003-04	Whole Yea	1261	Hectare	1525	Tonnes	1.209358		
5	Andaman	NORTH AN	Arecanut	2001-02	Kharif	3100	Hectare	5239	Tonnes	1.69		
6	Andaman	SOUTH AN	Arecanut	2002-03	Whole Yea	3105	Hectare	5267	Tonnes	1.696296		
7	Andaman	SOUTH AN	Arecanut	2003-04	Whole Yea	3118	Hectare	5182	Tonnes	1.661963		
8	Andaman	NICOBARS	Banana	2002-03	Whole Yea	213	Hectare	1278	Tonnes	6		
9	Andaman	NICOBARS	Banana	2003-04	Whole Yea	266	Hectare	1763	Tonnes	6.62782		
10	Andaman	SOUTH AN	Banana	2002-03	Whole Yea	1524	Hectare	10882	Tonnes	7.14042		
11	Andaman	SOUTH AN	Banana	2003-04	Whole Yea	1530	Hectare	11558	Tonnes	7.554248		
12	Andaman	NICOBARS	Black pep	2002-03	Whole Yea	63	Hectare	13.5	Tonnes	0.214286		
13	Andaman	NICOBARS	Black pep	2003-04	Whole Yea	75.5	Hectare	15.86	Tonnes	0.210066		
14	Andaman	SOUTH AN	Black pep	2002-03	Whole Yea	487	Hectare	102.5	Tonnes	0.210472		
15	Andaman	SOUTH AN	Black pep	2003-04	Whole Yea	497	Hectare	104.37	Tonnes	0.21		
16	Andaman	NICOBARS	Cashewnu	2001-02	Whole Yea	719	Hectare	192	Tonnes	0.267038		
17	Andaman	NICOBARS	Cashewnu	2002-03	Whole Yea	719	Hectare	208	Tonnes	0.289291		
18	Andaman	NICOBARS	Cashewnu	2003-04	Whole Yea	717	Hectare	208.5	Tonnes	0.290795		
19	Andaman	NORTH AN	Cashewnu	2001-02	Whole Yea	81	Hectare	33	Tonnes	0.407407		
20	Andaman	SOUTH AN	Cashewnu	2002-03	Whole Yea	81	Hectare	24	Tonnes	0.296296		
21	Andaman	SOUTH AN	Cashewnu	2003-04	Whole Yea	116.5	Hectare	26.14	Tonnes	0.224378		
22	Andaman	NICOBARS	Coconut	2001-02	Whole Yea	18190	Hectare	64430000	Nuts	3542.056		
23	Andaman	NICOBARS	Coconut	2002-03	Whole Yea	18240	Hectare	67490000	Nuts	3700.11		
24	Andaman	NICOBARS	Coconut	2003-04	Whole Yea	18284.74	Hectare	68580000	Nuts	3750.669		
25	Andaman	NORTH AN	Coconut	2001-02	Whole Yea	7015	Hectare	25250000	Nuts	3599.43		

India Agriculture Crop Producti

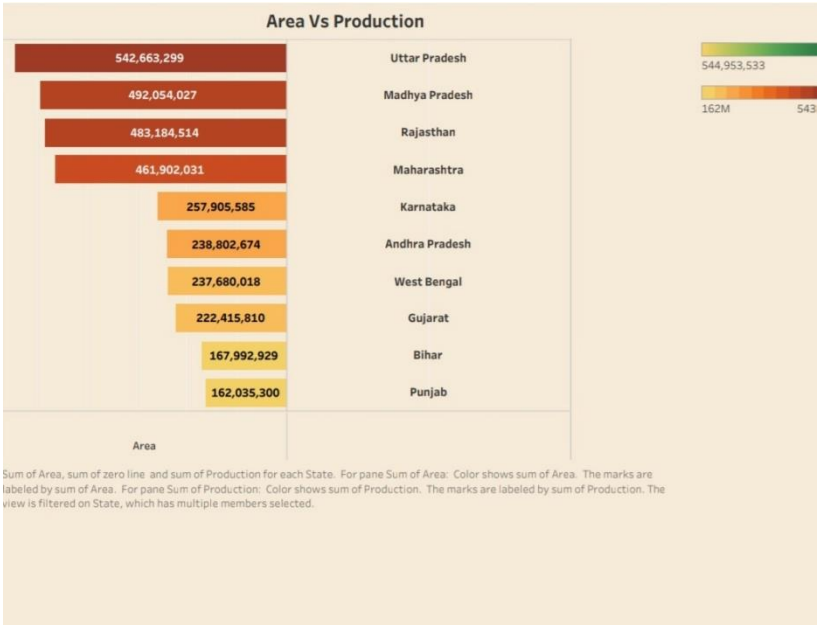
Ready

4.Visualizations

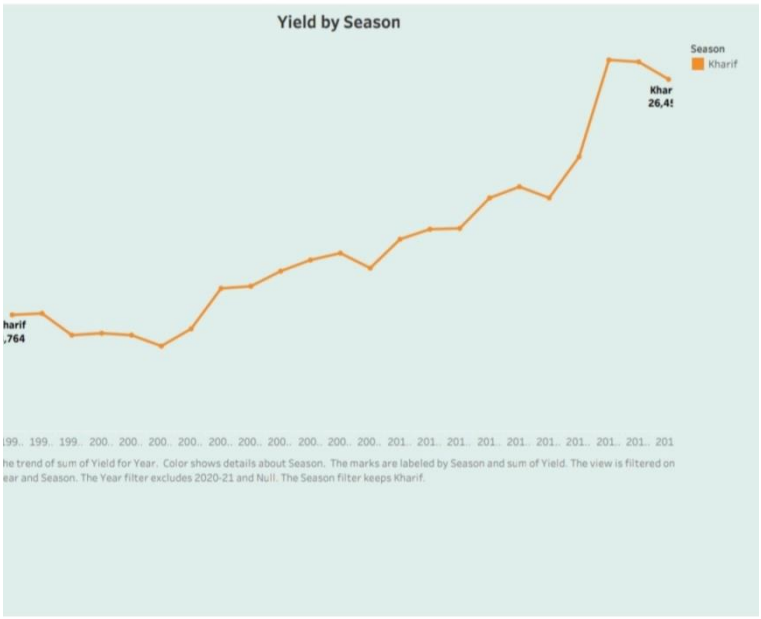
4.1. State wise Agricultural land:



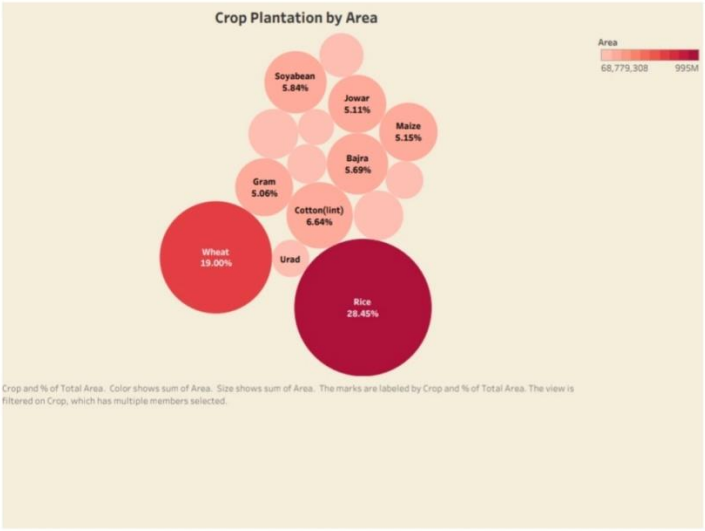
4.2. Area Vs Production:



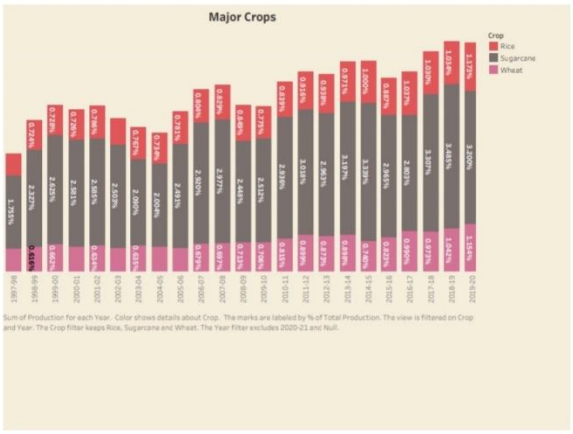
4.3.Yield by Season:



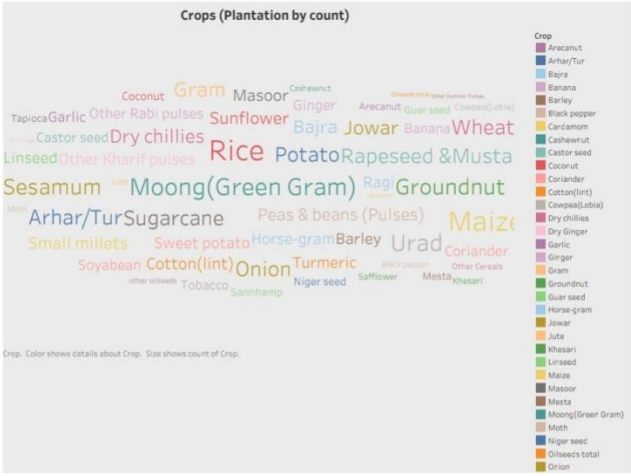
4.4. Crop Production by Area:



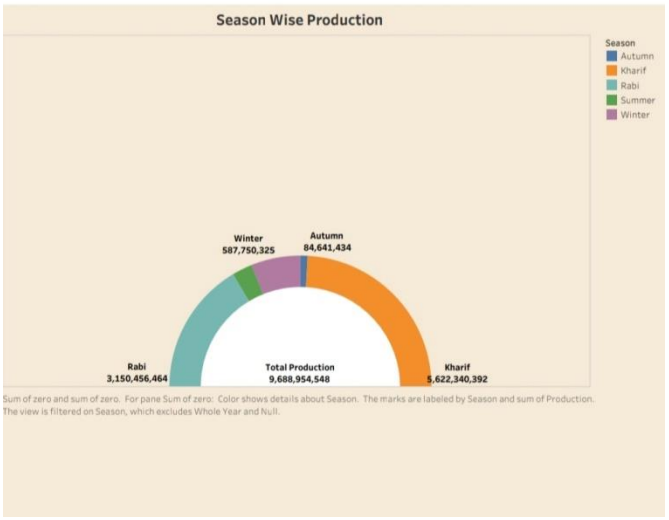
4.5. Major Crops:



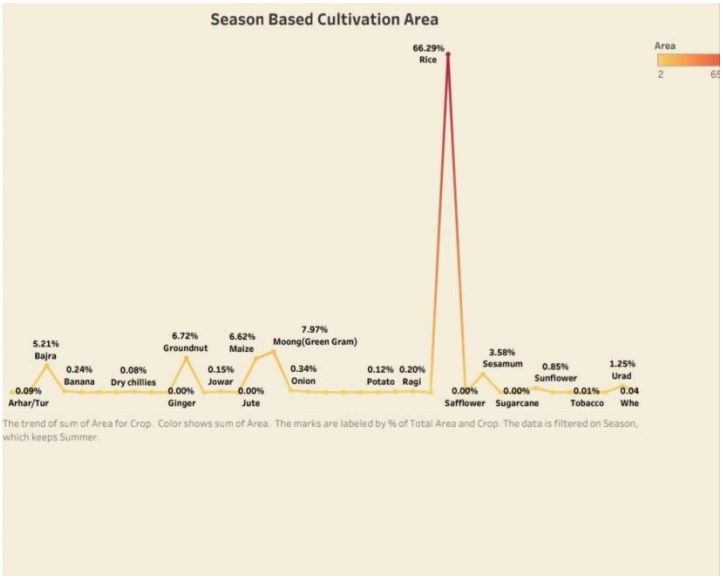
4.6.Crop (plantation by count) :



4.7.Season Wise Production:

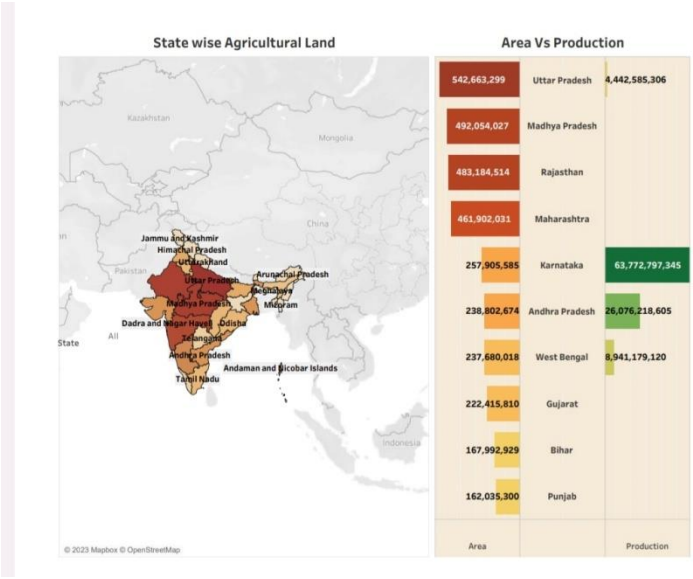


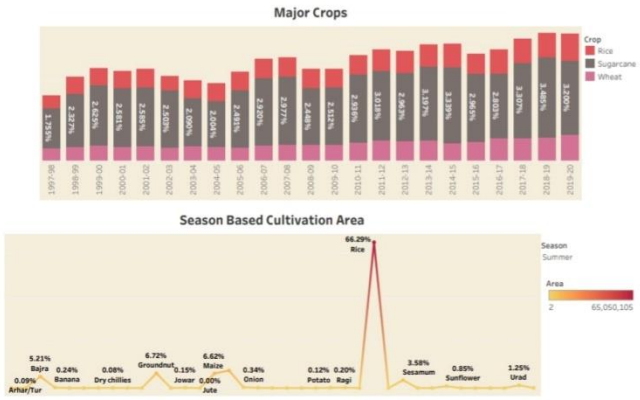
4.8.Season Based Cultivation Area:

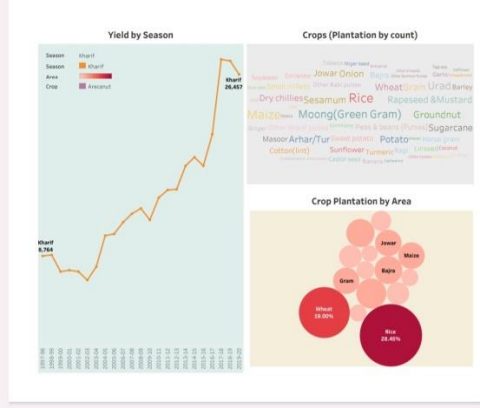


5.Result:

5.1 Dashboard:

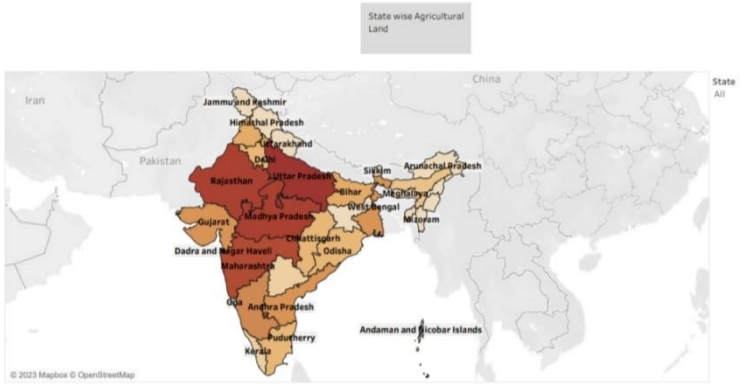




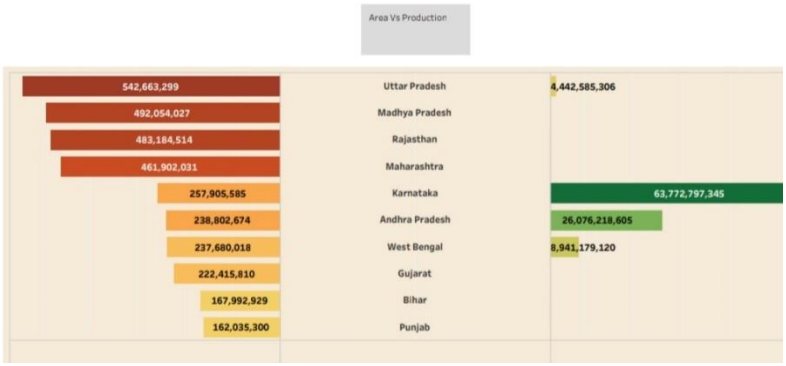


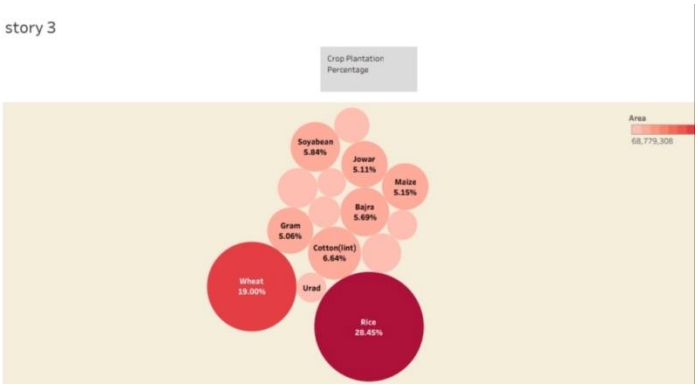
5.2.Story:

Story 1



Story 2





6. Publication in Tableau public:

7.Publication of story:

8. Advantage and Disadvantage

8.1 Advantage

Agriculture supplies raw materials to various agro-based industries like sugar, jute, cotton textile and vanaspati industries. Food processing industries are similarly dependent on agriculture. Therefore the development of these industries entirely is dependent on agriculture.

There is over all increase in yield of crops mainly due to maintaining physical- chemical properties of soil. Soil fertility is restored by fixing atmospheric nitrogen, encouraging microbial activity (more organic matter) and protecting soil from erosion, salinity and acidity.

It helps in controlling insects, pests and soil borne diseases. It also controls weeds. E.g. repeated wheat culture (growing) increases wild oats and phallaris infestation. Similarly growing berseem continuously encourages chicory (kasani) infestation, but an alternate cropping of berseem and wheat helps in controlling kasani as well as oats and phallaris.

Prevent or limit periods of peak requirements of irrigation water. Crops requiring high irrigation if followed by light irrigation, this will not affect or deteriorate the soil physical condition.

It facilitates even distribution of labour. Following crop make proper utilization of all resources and inputs. Family and farm labour, power, equipment and machines are well employed thought the year.

Farmers get a better price for his produce due to higher demand in local market. So there is regular flow of income over year.

8.2 Disadvantage

In crop rotation, investing in a season involves a lot of money to buy different seedlings of the different types of crops to be planted.

Improper implementation of this technique causes much more harm than good. If one lacks the technical know-how, there is no need to experiment with it. Otherwise, it can result in nutrient buildup that will take longer to correct.

Crop rotation means a variety of crops; therefore, it requires a deeper set of skills and knowledge regarding each type of crop harvested. It also necessitates working with different types of machinery, and operating them also requires knowledge. Hence, farmers must invest more time and resources in learning and mastering this agricultural practice.

9. Application

Precision farming, animal monitoring, and greenhouse monitoring are a few agricultural businesses utilizing the Internet of Things. Every element of traditional farming operation may be substantially improved by combining cutting-edge sensors and Internet of Things technology.

This category includes fertilizers, herbicides, pesticides, rodenticides, fumigants, and other inputs/applications for improved agricultural performance.

The most common soil application method used mainly for open field crops is fertilizer broadcast. It is a method by which the fertilizers are applied on the surface across an entire field. Often high capacity spreaders are used to spin dry fertilizer on the soil surface.

10. Conclusion

Indian economy is predominantly dependent on the agricultural sector and the agricultural sector supports the industrial as well as international trade in both imports and exports. Even though the contribution of agriculture is reducing gradually, it is still the most important sector on which most of the working population depends on.

11. Future Scope

There is a tremendous scope for agriculture because food & food products are indispensable for the survival of humanity.

It's a recession proof industry because when every industry is downsizing the demand for food crops is on a rise underlining the need for agricultural productivity.

The recent bout of drought in East Africa has propelled the demand for food grains.

The Ongoing Ukraine war has highlighted that consistent food grain production is vital for survival. In fact, with growing climatic challenges, we require Agriculture scientists who can develop pest resistant varieties that give a bumper harvest.