Project Report Template

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. 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

India is referred to as the second most populous country in the world and feeds a huge part of the population. There is an urgent need to increase the dependency on other sectors of the economy as compared to the agricultural sector.

Food things like Rice, Wheat, Coarse Grains, and Pulses,
Business crops like Oilseeds, Cotton, and Sugarcane,
Establishing crops like Tea and Coffee, and
Plant crops like organic products, vegetables, blossoms, flavors, cashews, and coconut. Moreover, some related exercises like milk and dairy items, poultry items, and fisheries are remembered for the agricultural area. A large portion of the created and industrialized nations got the underlying impulse for industrial advancement from farming.

2 . Problem definition and design thinking

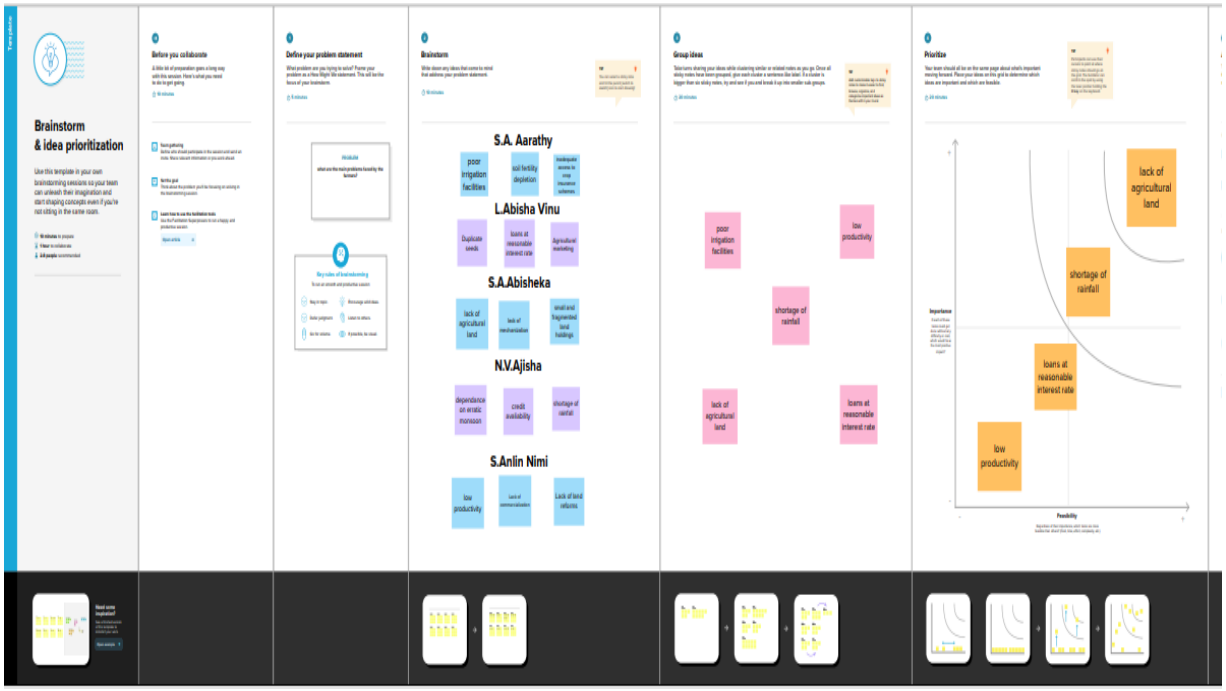
2.1 Empathy Map

An **empathy map** is a collaborative visualization used to articulate what we know about a particular type of user. It externalizes knowledge about users in order to 1) create a shared understanding of user needs, and 2) aid in decision making.

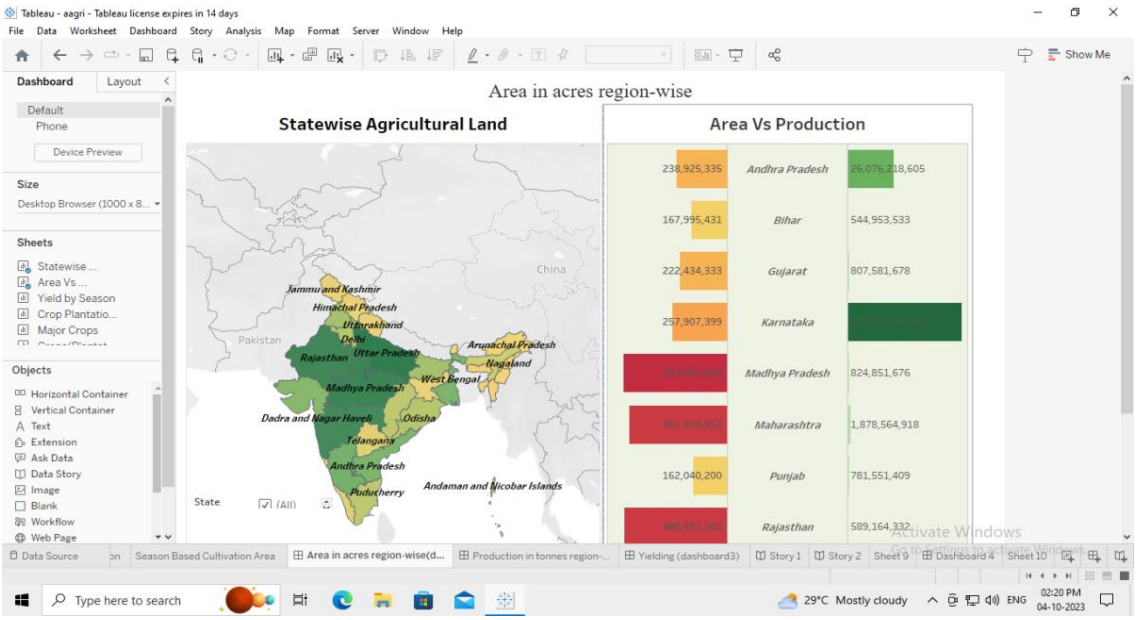
2.2 Ideation and Brainstorming Map

Brainstorming is a group problem-solving method that involves the spontaneous contribution of creative ideas and solutions. This technique requires intensive, freewheeling discussion in which every member of the

group is encouraged to think aloud and suggest as many ideas as possible based on their diverse knowledge.



3 . Result



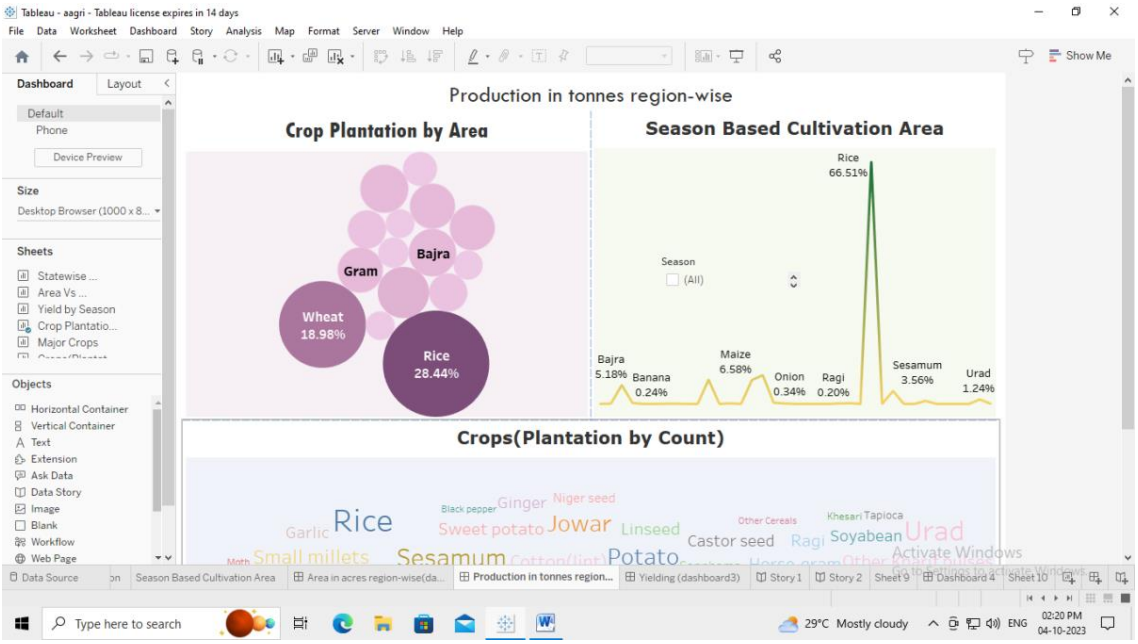


Tableau - aagri - Tableau license expires in 14 days
Production in tonnes region-wise
Crop Plantation by Area
Gram
Bajra
Wheat
18.98%
Rice
28.44%
Season Based Cultivation Area
Rice
66.51%
Season
(All)
Bajra
5.18%
Banana
0.24%
Maize
6.58%
Onion
0.34%
Ragi
0.20%
Sesamum
3.56%
Urad
1.24%
Crops(Plantation by Count)
Rice
Garlic
Black pepper
Ginger
Niger seed
Sweet potato
Jowar
Linseed
Other Cereals
Khesari
Tapioca
Castor seed
Ragi
Soyabean
Urad
Small millets
Sesamum
Potato
Activate Windows
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29°C Mostly cloudy
ENG
02:20 PM
04-10-2023

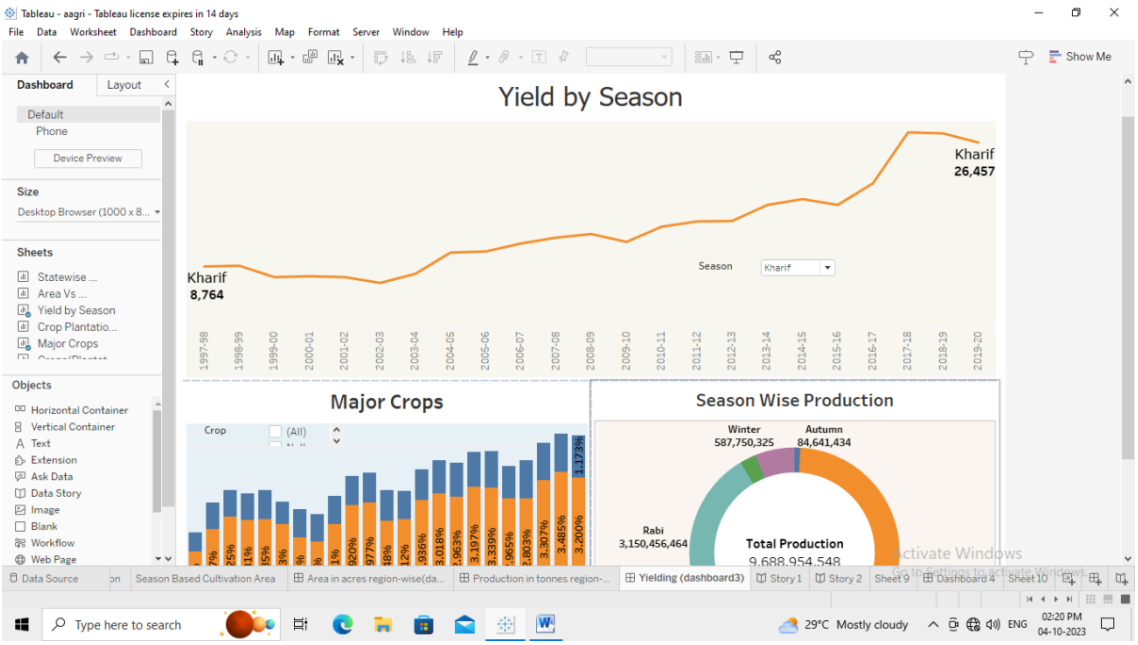
Tableau - aagri - Tableau license expires in 14 days
Yield by Season
Kharif
26,457
Kharif
8,764
Season
Kharif
Major Crops
Crop
(All)
Season Wise Production
Winter
587,750,325
Autumn
84,641,434
Rabi
3,150,456,464
Total Production
9,688,954,548
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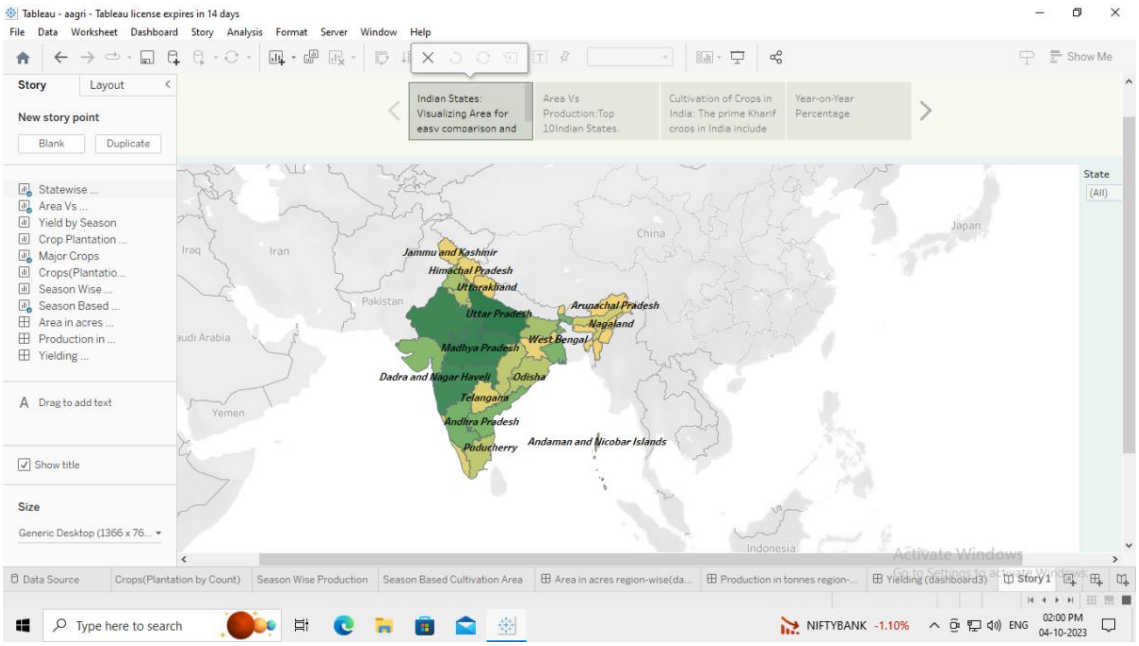
Story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File Data Worksheet Dashboard Story Analysis Format Server Window Help
Story
Layout
New story point
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Statewise ...
Area Vs ...
Yield by Season
Crop Plantation ...
Major Crops
Crops(Plantatio...
Season Wise ...
Season Based ...
Area in acres ...
Production in ...
Yielding ...
Drag to add text
Show title
Size
Generic Desktop (1366 x 76...
Indian States: Visualizing Area for easy comparison and
Area Vs Production:Top 10Indian States.
Cultivation of Crops in India: The prime Kharif crops in India include
Year-on-Year Percentage
Show Me
State
(All)
Jammu and Kashmir
Himachal Pradesh
Uttarakhand
Uttar Pradesh
Arunachal Pradesh
Nagaland
West Bengal
Madhya Pradesh
Dadra and Nagar Haveli
Odisha
Telangana
Andhra Pradesh
Puducherry
Andaman and Nicobar Islands
China
Japan
Iran
Iraq
Pakistan
Yemen
Indonesia
Data Source
Crops(Plantation by Count)
Season Wise Production
Season Based Cultivation Area
Area in acres region-wise(da...
Production in tonnes region-...
Yielding (dashboard3)
Story 1
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NIFTYBANK -1.10%
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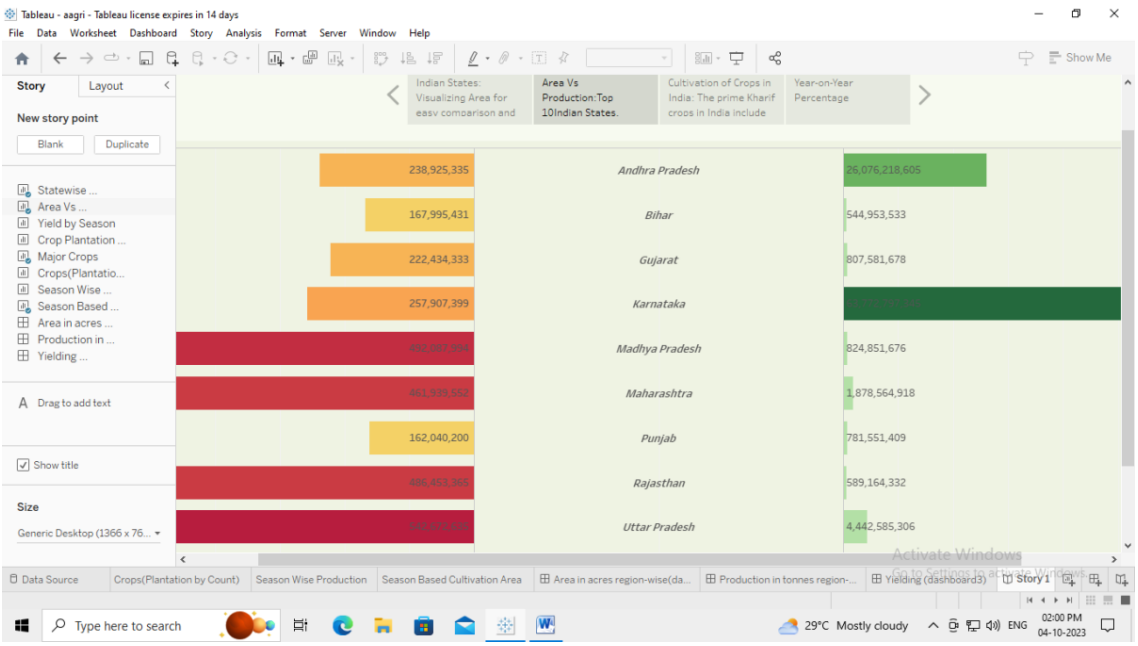
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Cultivation of Crops in India: The prime Kharif crops in India include
Year-on-Year Percentage
Show Me
238,925,335
Andhra Pradesh
26,076,218,605
167,995,431
Bihar
544,953,533
222,434,333
Gujarat
807,581,678
257,907,399
Karnataka
Madhya Pradesh
824,851,676
Maharashtra
1,878,564,918
162,040,200
Punjab
781,551,409
Rajasthan
589,164,332
Uttar Pradesh
4,442,585,306
Data Source
Crops(Plantation by Count)
Season Wise Production
Season Based Cultivation Area
Area in acres region-wise(da...
Production in tonnes region-...
Yielding (dashboard3)
Story 1
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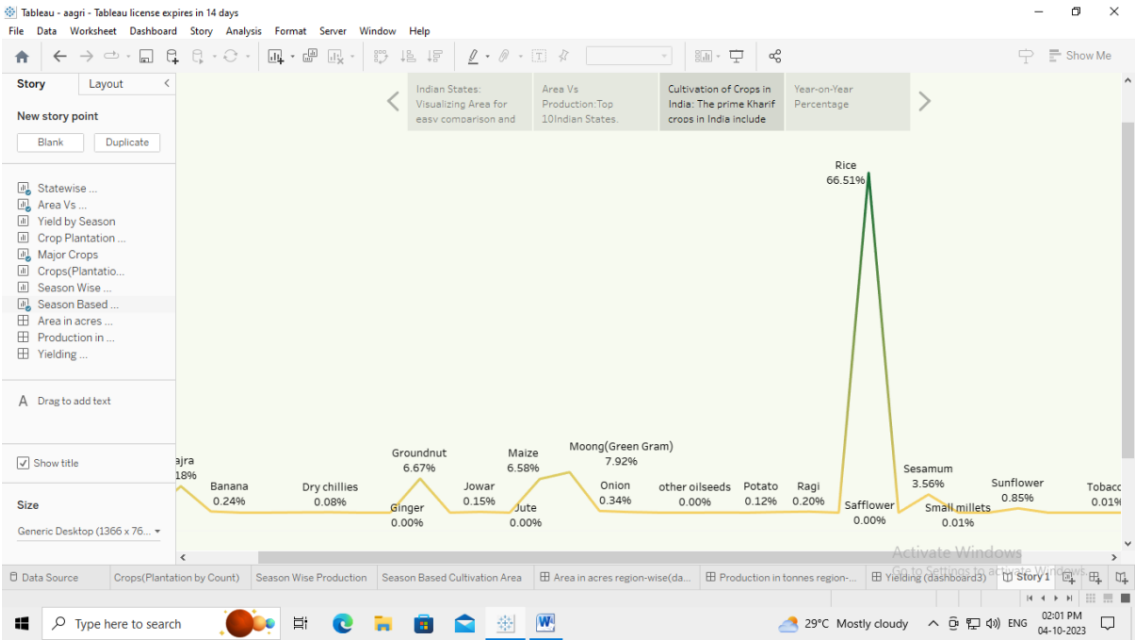
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Cultivation of Crops in India: The prime Kharif crops in India include
Year-on-Year Percentage
Rice 66.51%
ajra 18%
Banana 0.24%
Dry chillies 0.08%
Groundnut 6.67%
Ginger 0.00%
Jowar 0.15%
Maize 6.58%
Jute 0.00%
Moong(Green Gram) 7.92%
Onion 0.34%
other oilseeds 0.00%
Potato 0.12%
Ragi 0.20%
Safflower 0.00%
Sesamum 3.56%
Small millets 0.01%
Sunflower 0.85%
Tobacc 0.01%
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Season Based Cultivation Area
Area in acres region-wise(da...
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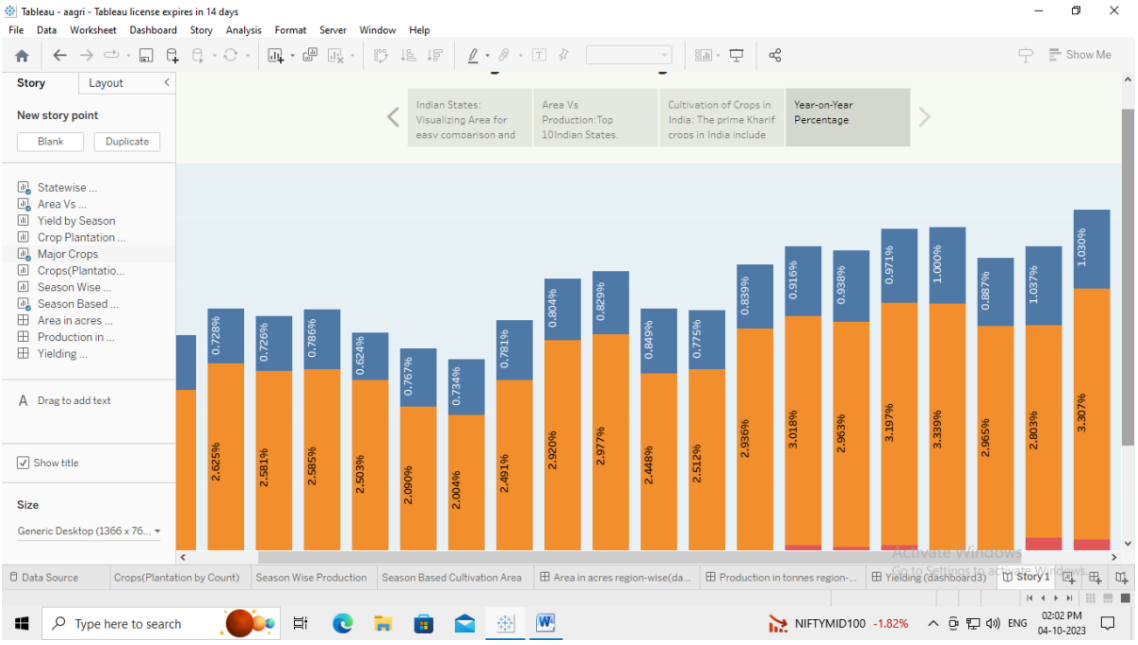
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Area Vs Production:Top 10Indian States.
Cultivation of Crops in India: The prime Kharif crops in India include
Year-on-Year Percentage
2.625%
0.728%
2.581%
0.726%
2.585%
0.786%
2.503%
0.624%
2.090%
0.767%
2.004%
0.734%
2.491%
0.781%
2.920%
0.804%
2.977%
0.829%
2.448%
0.849%
2.512%
0.775%
2.936%
0.839%
3.018%
0.916%
2.963%
0.938%
3.197%
0.971%
3.339%
1.000%
2.965%
0.887%
2.803%
1.037%
3.307%
1.030%
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Crops(Plantation by Count)
Season Wise Production
Season Based Cultivation Area
Area in acres region-wise(da...
Production in tonnes region-...
Yielding (dashboard3)
Story 1
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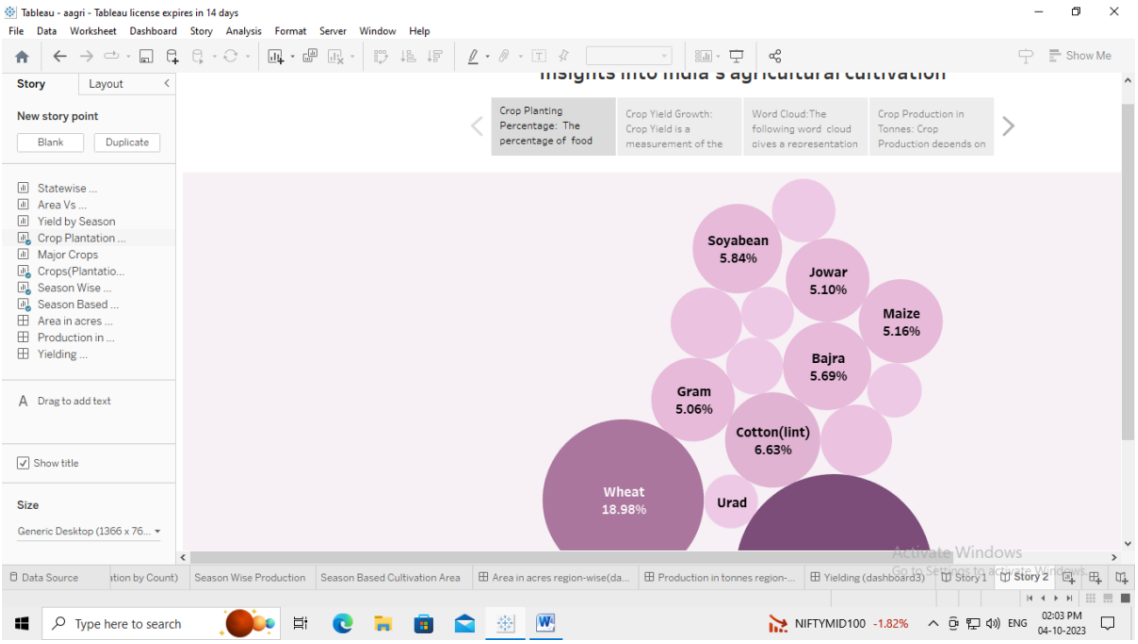
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Season Based ...
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Yielding ...
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Size
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Crop Planting Percentage: The percentage of food
Crop Yield Growth: Crop Yield is a measurement of the
Word Cloud:The following word cloud gives a representation
Crop Production in Tonnes: Crop Production depends on
Soyabean 5.84%
Jowar 5.10%
Maize 5.16%
Bajra 5.69%
Gram 5.06%
Cotton(lint) 6.63%
Wheat 18.98%
Urad
Data Source
Season Wise Production
Season Based Cultivation Area
Area in acres region-wise(da...
Production in tonnes region-...
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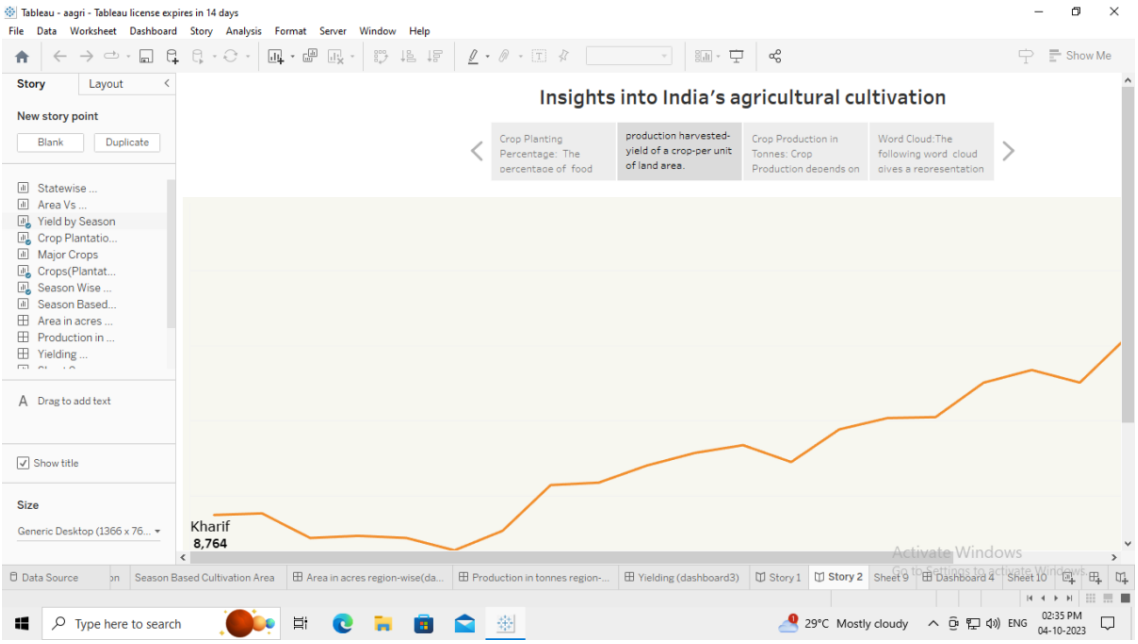
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Season Based...
Area in acres ...
Production in ...
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Size
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Insights into India's agricultural cultivation
Crop Planting Percentage: The percentage of food
production harvested-yield of a crop-per unit of land area.
Crop Production in Tonnes: Crop Production depends on
Word Cloud:The following word cloud gives a representation
Kharif
8,764
Data Source
Season Based Cultivation Area
Area in acres region-wise(da...
Production in tonnes region-...
Yielding (dashboard3)
Story 1
Story 2
Sheet 9
Dashboard 4
Sheet 10
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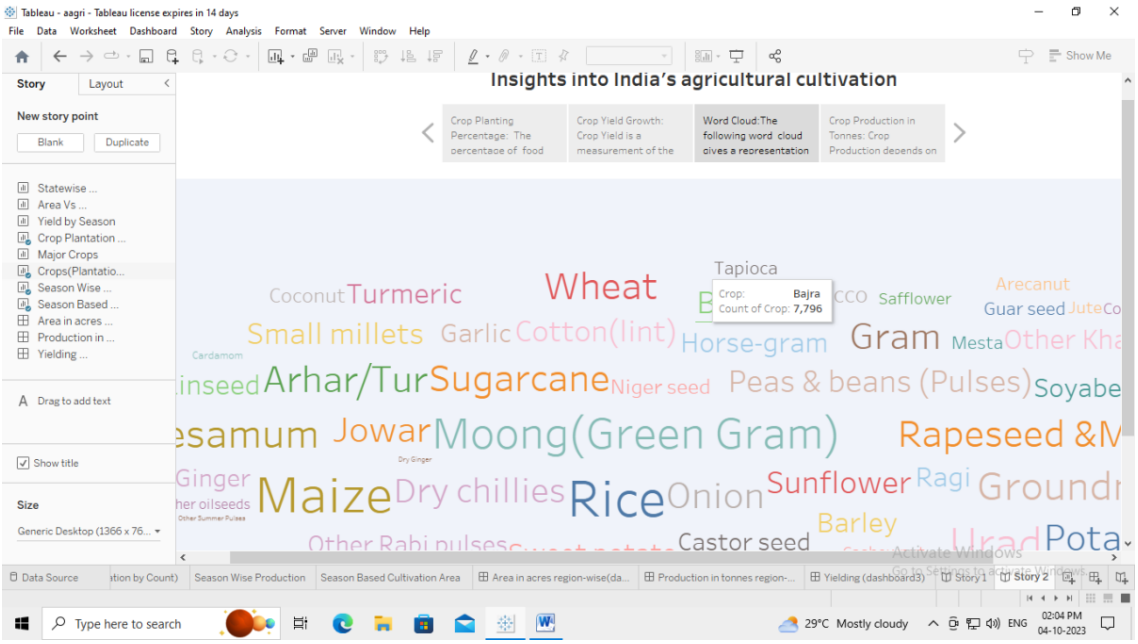

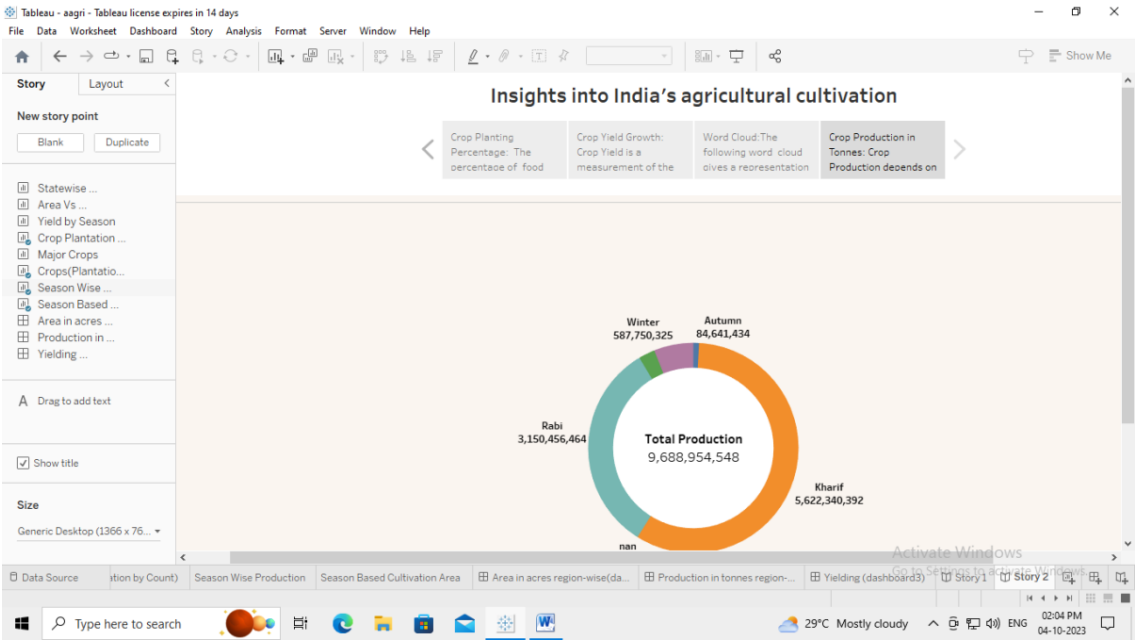

4 . ADVANTAGES AND DISADVANTAGES

4.1 Advantages of agricultural crop production

Crop production is the process of growing crops for human consumption or for use as animal feed, biofuels, or raw materials for other products. Crop production is an important part of the global

economy, as it provides a source of food, fuel, and raw materials for many industries. Inclusion of crops of different feeding zones (root system) and nutrient requirement could maintain the better balance of nutrient in soil. Growing crops of different root depths avoids continuous depletion of nutrients form same depth. E.g. deep rooted crops take nutrients from deeper zone and during that period upper zone get enriched. Similarly, surface feeding roots take nutrients from upper zone when lower zone get enriched. So growing same crop without rotation results in loss of soil productivity utilized the nutrients from entire soil mass and cost of cultivation is reduced. Some crop plants are found to produce phytoalexins when they get infected by diseases. Repeated cultivation of such crops results in harmful effects over crop plants and lower crop yield is obtained. E.g. crop- phytolalexins produced by diseased plants.Groundnut -Resvertrol, Soybean-Glyceollins

The family needs of feed, food, fuel, fiber, spices, sugar etc. are fulfilled and also fulfill needs of livestock.

Advantages of raising short duration crops (catch crop/ vegetables) when long season crops cannot be raised due to some reasons.
Factors to be considered while planning a crop rotation: growing different crop is very beneficial, but sometimes the desired crops cannot be grown because of certain governing factors (soil and climate), irrigation, availability bullock and other powers, market facilities and type of farming.

4.2 Disadvantages of agricultural crop production

Production risk derives from the uncertain natural growth processes of crops and livestock. Weather, disease, pests, and other factors affect both the quantity and quality of commodities produced.

Price or market risk refers to uncertainty about the prices producers will receive for commodities or the prices they must pay for inputs. The nature of price risk varies significantly from commodity to commodity.

Financial risk results when the farm business borrows money and creates an obligation to repay debt. Rising interest rates, the prospect of loans being called by lenders, and restricted credit availability are also aspects of financial risk.

Institutional risk results from uncertainties surrounding Government actions. Tax laws, regulations for chemical use, rules for animal waste disposal, and the level of price or income support payments are examples of government decisions that can have a major impact on the farm business.

Human or personal risk refers to fact.

5. APPLICATIONS

It provides employment opportunity to the rural agricultural as well as non-agricultural labourers. It is the source of food and fodder. It also plays an important role in international business in import and export activities. Cash crop farming in India provides benefits such as improved income for farmers, job possibilities, economic stability, and generating revenue for the government.

6. 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.

7. FUTURE SCOPE

Demand for fruits and vegetables, dairy products, fish, and meat is going to increase in future agriculture. Research, improvement in technology, safe cultivation of high-value vegetables and other vegetables will be more. There will be high demand for processed and affordable quality products.