India's Agriculture crop production

1.INTRODUCTION

1.1 Overview:

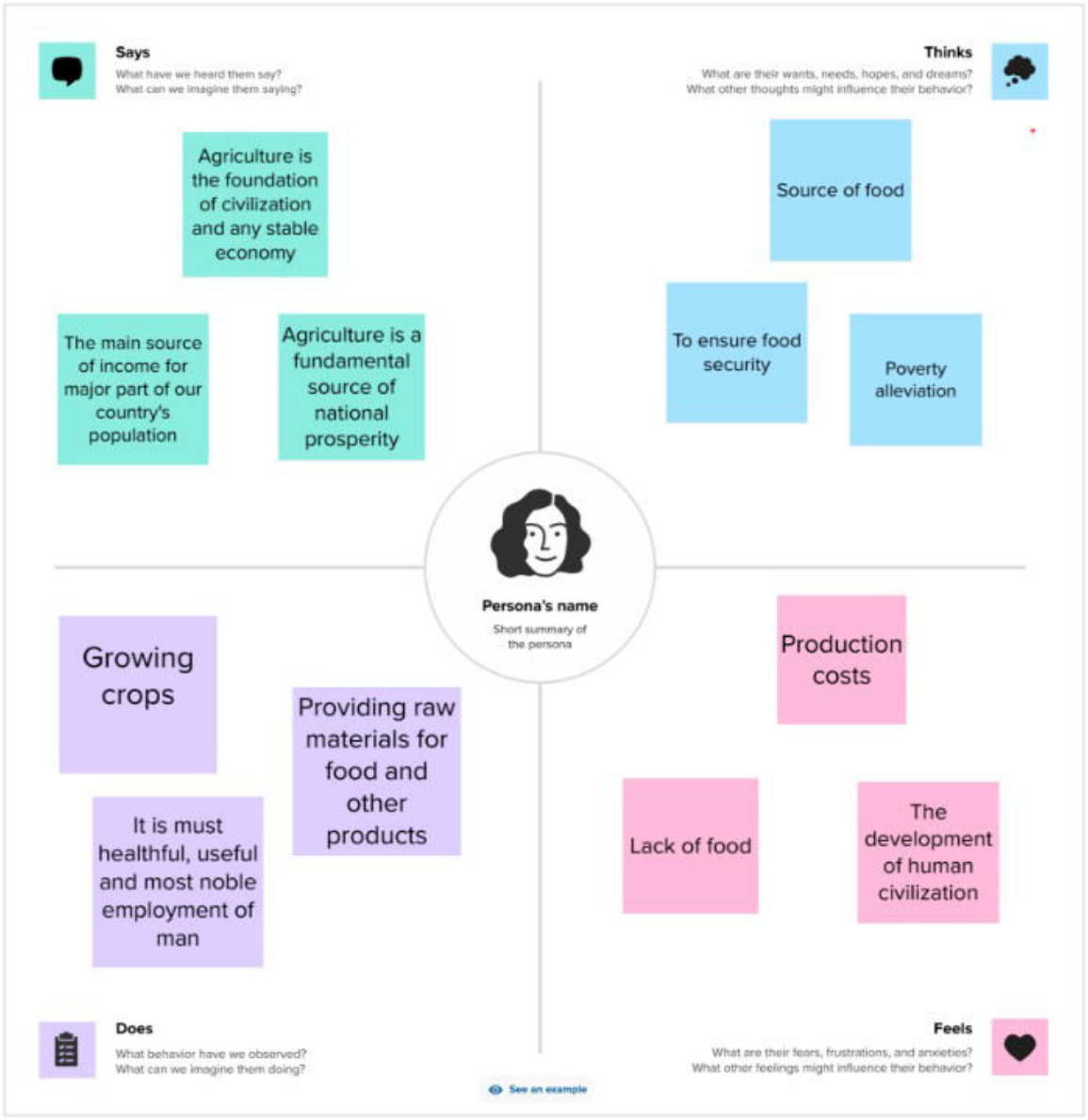
India is the second largest producer of wheat and rice, the world's major food staples. India is currently the world's second largest producer of several dry fruits, agriculture-based textile raw materials, roots and tuber crops, pulses, farmed fish, eggs, coconut, sugarcane and numerous vegetables.

1.2 Purpose:

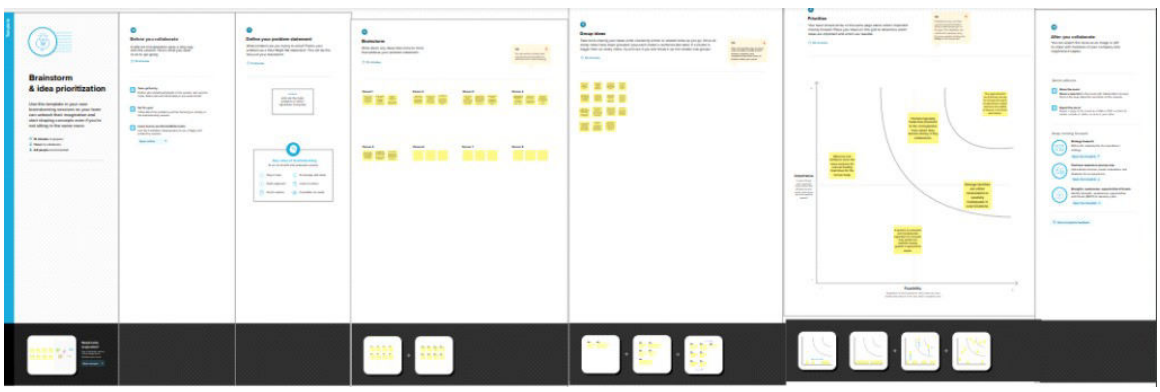
Agriculture is the foundation of the Indian economy. The population of India mostly depends on agriculture for their livelihood and agriculture contributes to 40 percent of the total GDP of the country.

2.PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map:

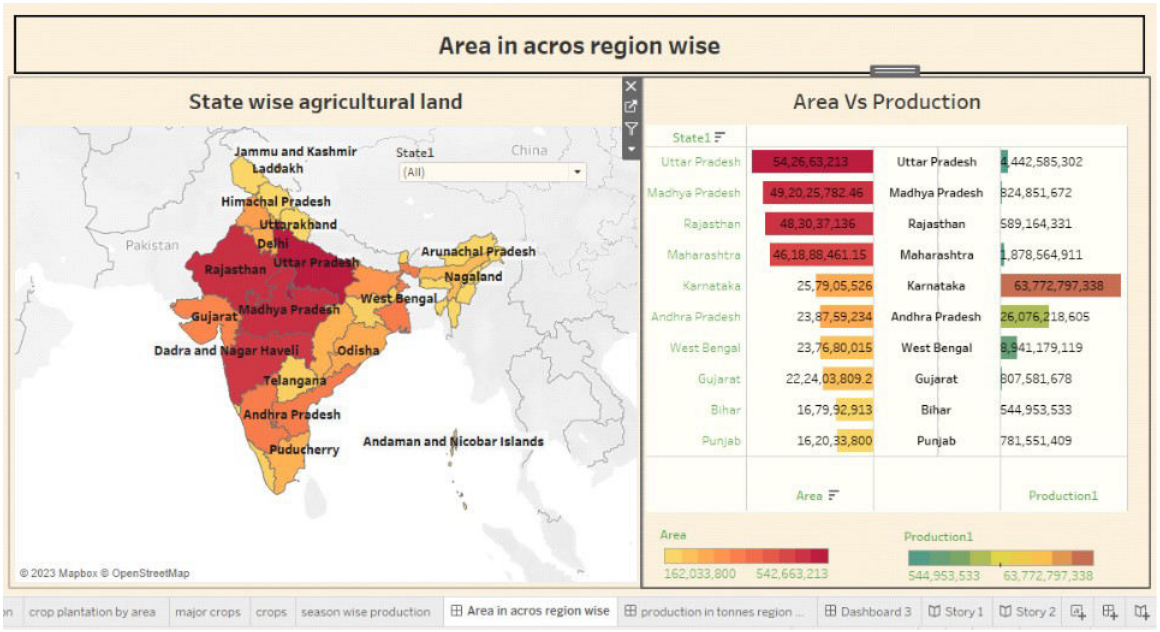


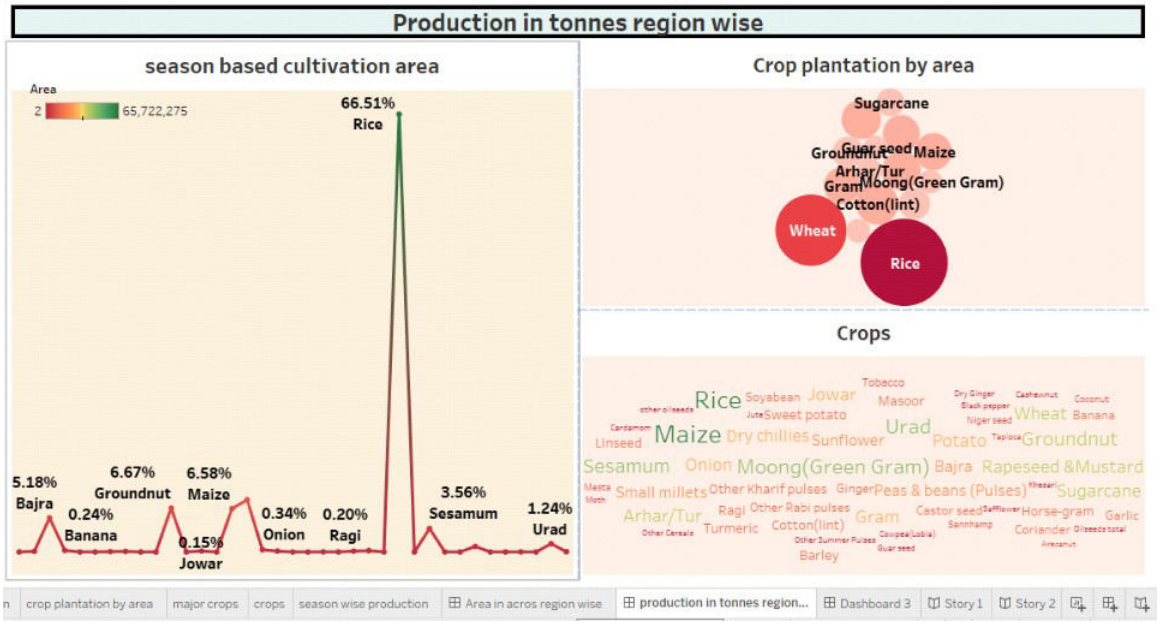
2.2 Brainstorming Map:

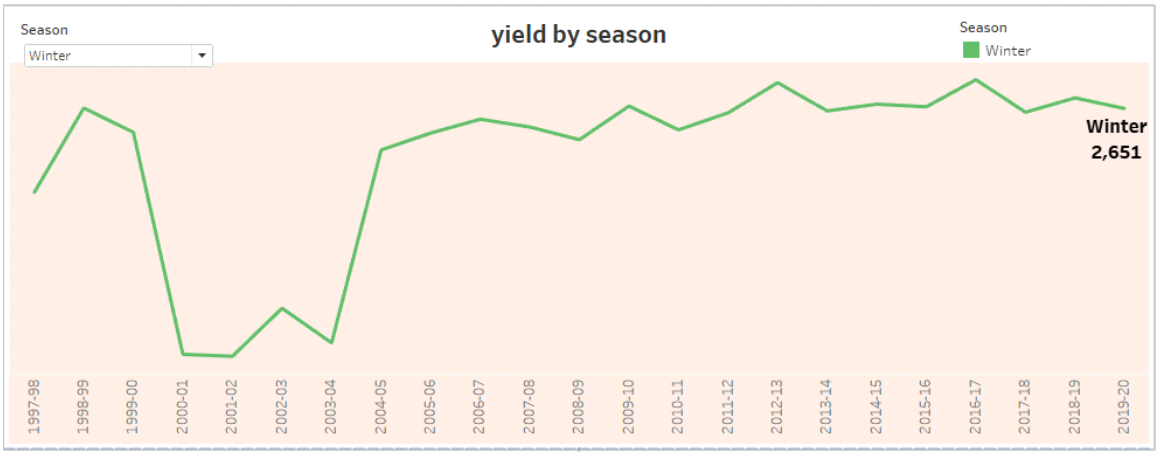


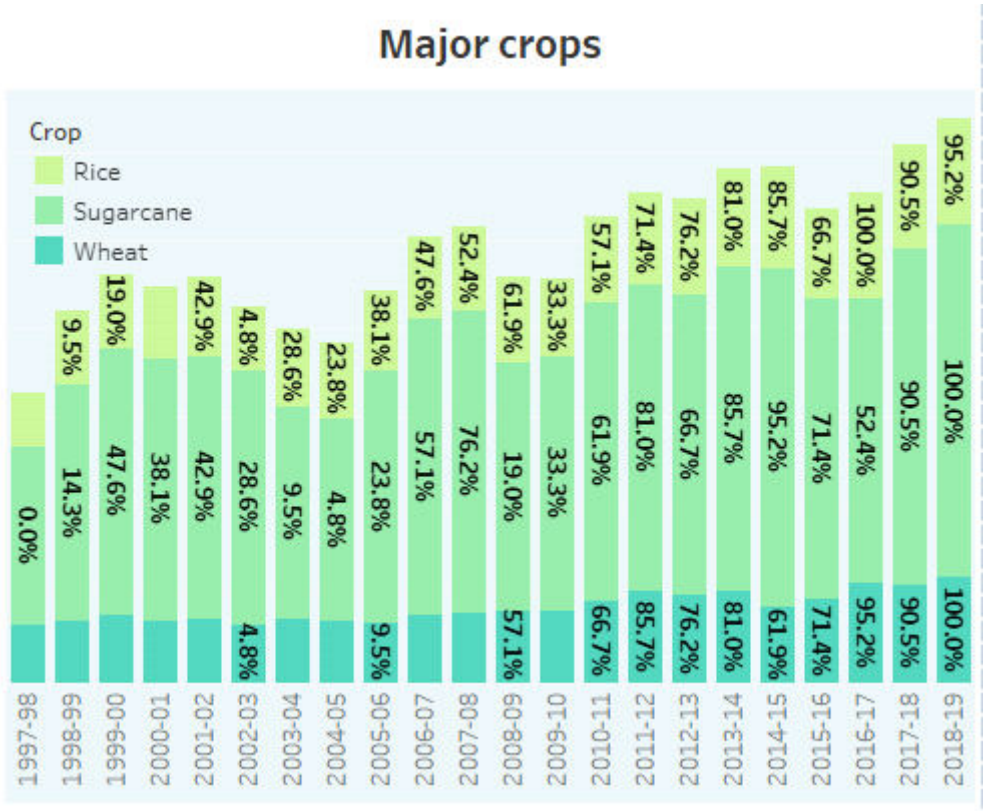
3.RESULT

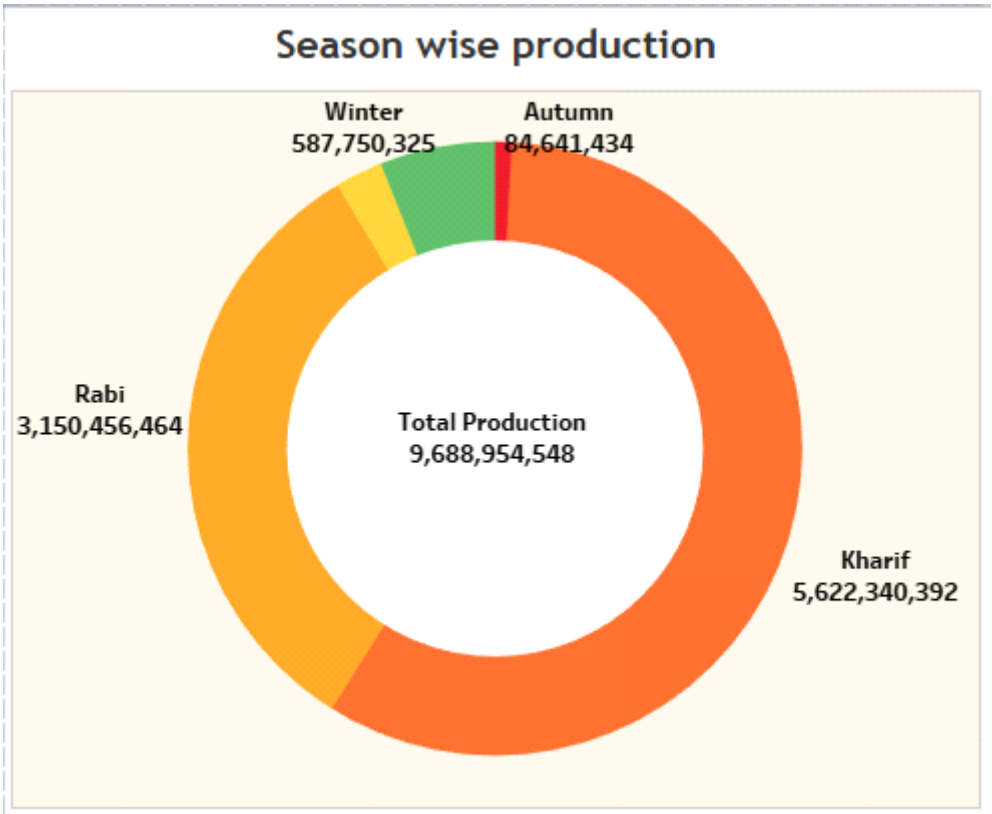
India's total foodgrain production is estimated at a record 3235.54 lakh tonnes for the current agricultural year. Total production of Rice during 2022-23 is estimated at a record 1308.37 lakh tonnes, which is higher by 18.08 lakh tonnes than the previous year.






Season
Winter
yield by season
Season
Winter
Winter
2,651
1997-98
1998-99
1999-00
2000-01
2001-02
2002-03
2003-04
2004-05
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20


Major crops
Crop
Rice
Sugarcane
Wheat
1997-98 0.0%
1998-99 9.5% 14.3%
1999-00 19.0% 47.6%
2000-01 38.1%
2001-02 42.9% 42.9%
2002-03 4.8% 28.6% 4.8%
2003-04 28.6% 9.5%
2004-05 23.8% 4.8%
2005-06 38.1% 23.8% 9.5%
2006-07 47.6% 57.1%
2007-08 52.4% 76.2%
2008-09 61.9% 19.0% 57.1%
2009-10 33.3% 33.3%
2010-11 57.1% 61.9% 66.7%
2011-12 71.4% 81.0% 85.7%
2012-13 76.2% 66.7% 76.2%
2013-14 81.0% 85.7% 81.0%
2014-15 85.7% 95.2% 61.9%
2015-16 66.7% 71.4% 71.4%
2016-17 100.0% 52.4% 95.2%
2017-18 90.5% 90.5% 90.5%
2018-19 95.2% 100.0% 100.0%



4.ADVANTAGES & DISADVANTAGES

ADVANTAGE:

Agricultural innovation can help India cut emissions, improve energy security and boost farmers' incomes. India's agriculture sector plays a critical role in the country's bioethanol sector, as well as supporting moves toward food security, energy security and decarbonization goals.

DISADVANTAGE:

1.Over-dependence on unreliable rain and lack of irrigation facilities had led to a decline in agricultural output.

2.Poverty and illiteracy of the farmers prevent them from making large-scale capital investments and adopting scientific methods of cultivation.

5.APPLICATIONS

Agriculture plays a vital role in the Indian economy. Over 70 per cent of the rural households

depend on agriculture. Agriculture is an important sector of Indian economy as it contributes about 17% to the total GDP and provides employment to over 60% of the population.

6.CONCLUSION

India has made significant advances in agricultural production in recent decades, including the introduction of high-yield seed varieties, increased use of fertilisers and improved water management systems.

7.FUTURE SCOPE

There will be more of vertical and urban farming and there will also be efforts in long term to find new areas for production like barren deserts and seawater. Hydroponic farming, which is a soil-less, water-based farming operation, that may even be done in a tiny space is going to pick up the pace.