Indian Agriculture crop production Analysis

INTRODUCTION

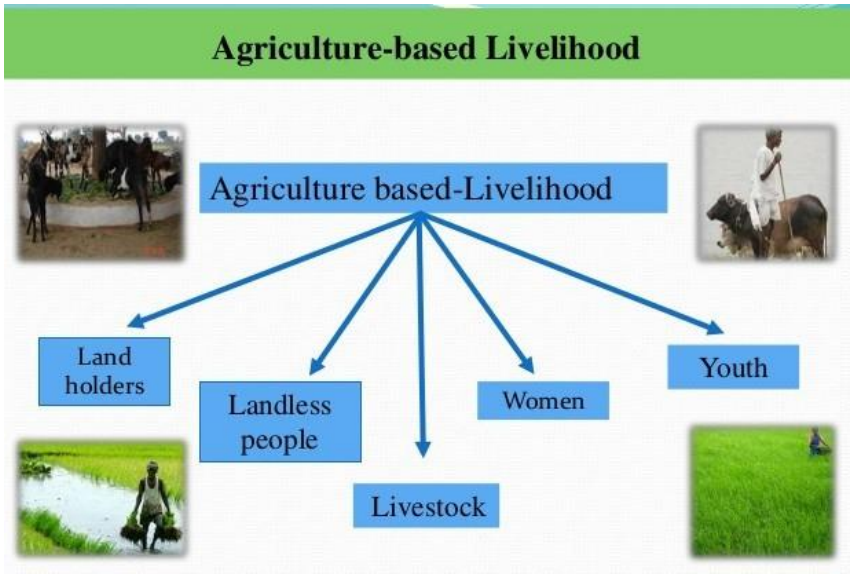
Overview

Agriculture has been the backbone of the Indian economy and it will continue to remain so for a long time. It has to support almost 17 per cent of world population from 2.3 per cent of world geographical area and 4.2 per cent of world's water resources. The economic reforms, initiated in the country during the early 1990s, have put the economy on a higher growth trajectory. Annual growth rate in GDP has accelerated from below 6 percent during the initial years of reforms to more than 8 percent in recent years. This happened mainly due to rapid growth in non-agriculture sector. The workforce engaged in agriculture between 1980-81 and 2006-07 witnessed a very small decline; from 60.5 percent to 52 percent.

The present cropping intensity of 137 per cent has registered an increase of only 26 per cent since 1950-51. The net sown area is 142 Mha. The net irrigated area was 58.87 Mha in 2004-05. Presently, the total net irrigated area covers 45.5 per cent of the net sown area, the remaining 54.5 per cent is rainfed. The degradation of land and surface as well as ground water resources results in fast deterioration of soil health. Losses due to biotic (insect-pests, diseases, weeds) and abiotic (drought, salinity, heat, cold, etc.) stresses account for about one-fourth of the value of agricultural produce. The storage, transportation, processing, value addition and marketing of farm produce need to be improved to enhance household food, nutrition and livelihood security.

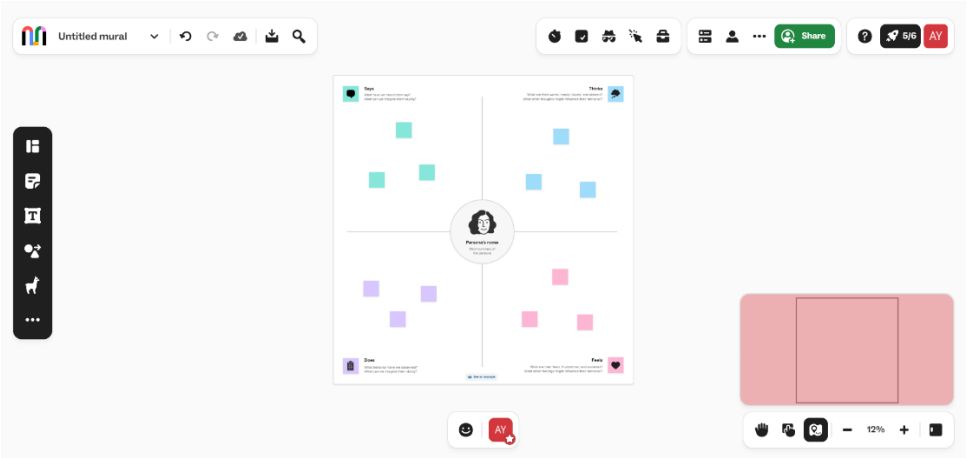
Purpose of Indian Agriculture

Agriculture plays a chiefly role in economy as well as it is considered to be the backbone of economic system for developing countries. For decades, agriculture has been related with the production of vital food crops. The Present era of farming contains dairy, fruit, forestry, poultry beekeeping and arbitrary etc. However, it could be referred to as promotion, processing, marketing, and distribution of crops and **livestock** products. It is also provide the employment chances to huge percentage of the inhabitants. The industrial sector of Pakistan is almost depends on agriculture for raw material. The input of agriculture towards GDP is about 25% which is highest contribution any other sectors. The following are the main points of the importance of agriculture for the Pakistan economy.

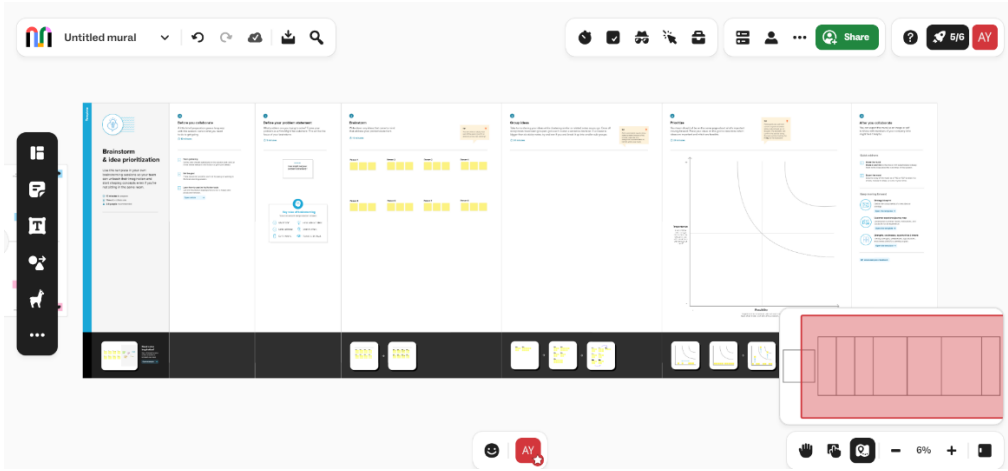


PROBLEM DEFINITION AND DESIGN THINKING

Empathy Map

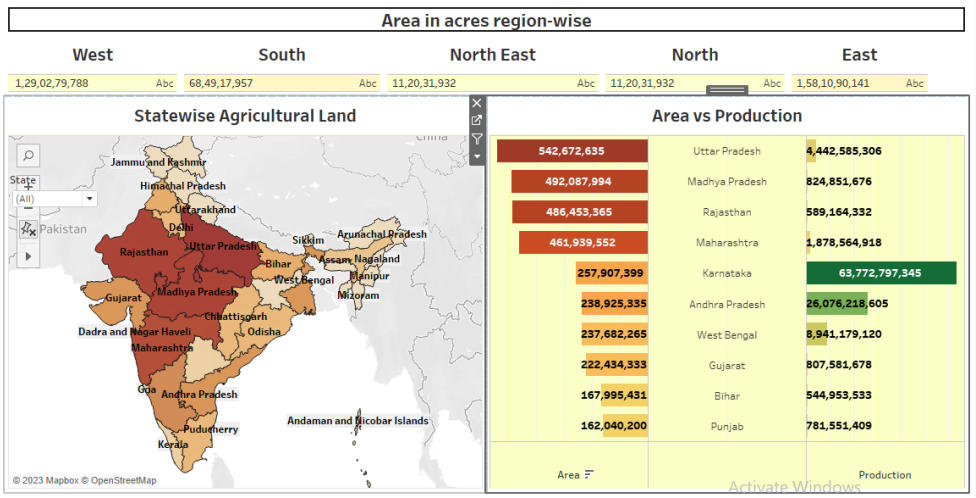


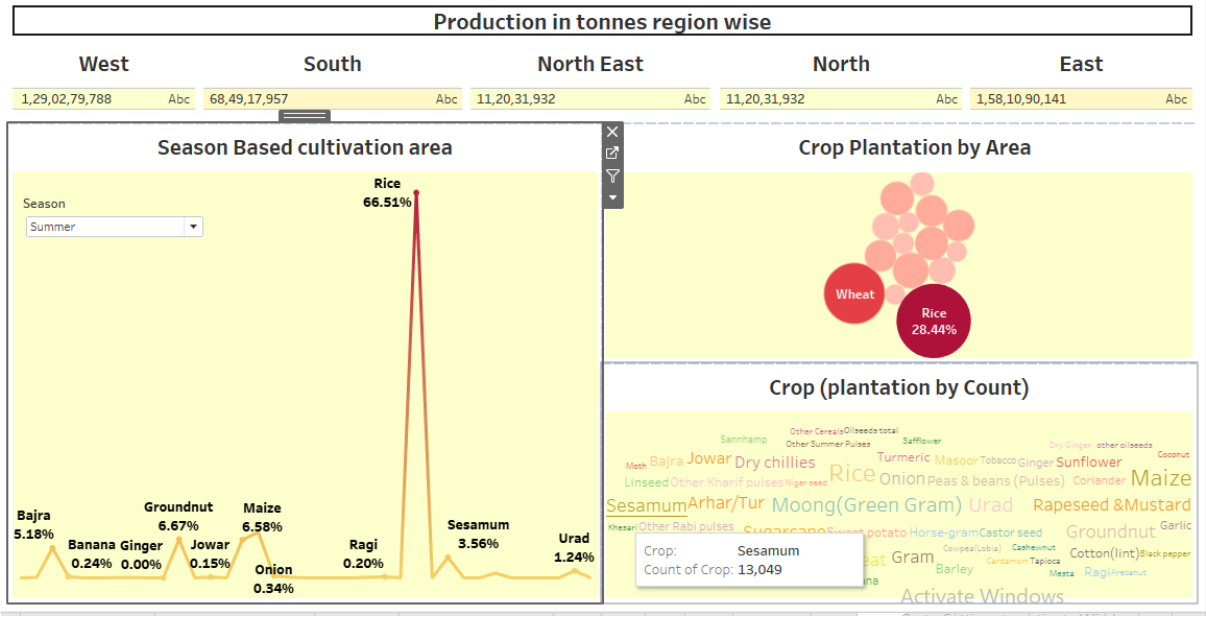
Ideation and Brainstorming Map

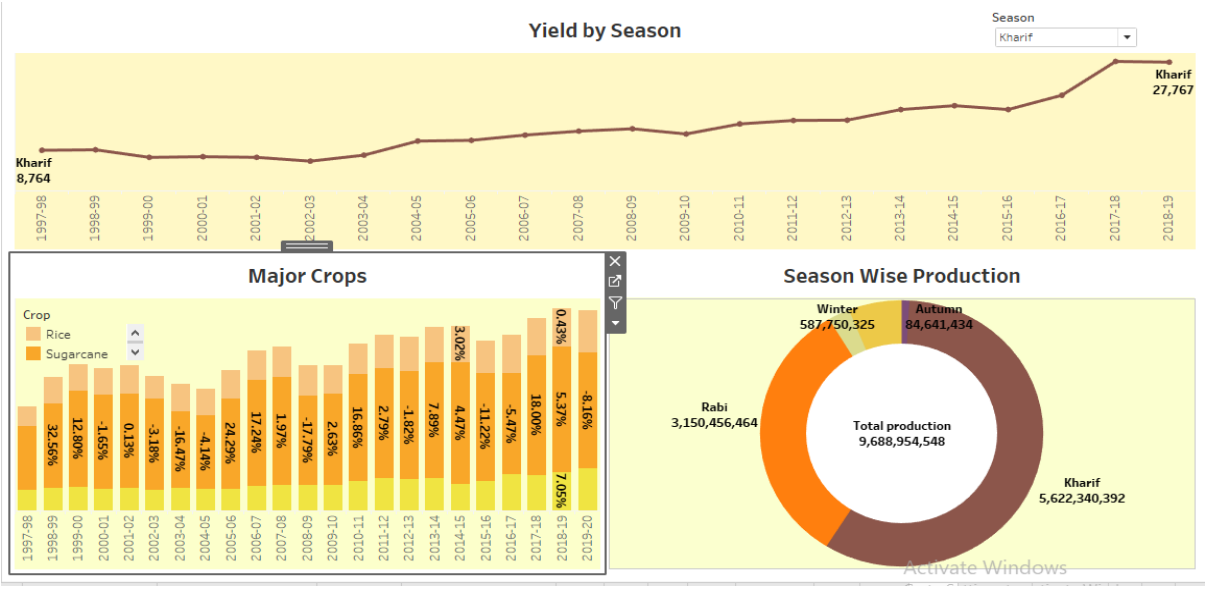


RESULT

Dashboard






Yield by Season
Season
Kharif
Kharif
27,767
Kharif
8,764
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
Major Crops
Crop
Rice
Sugarcane
32.56%
12.80%
-1.65%
0.13%
-3.18%
-16.47%
-4.14%
24.29%
17.24%
1.97%
-17.79%
2.63%
16.86%
2.79%
-1.82%
7.89%
4.47%
-11.22%
-5.47%
18.00%
5.37%
7.05%
0.43%
-8.16%
1997-98
1998-99
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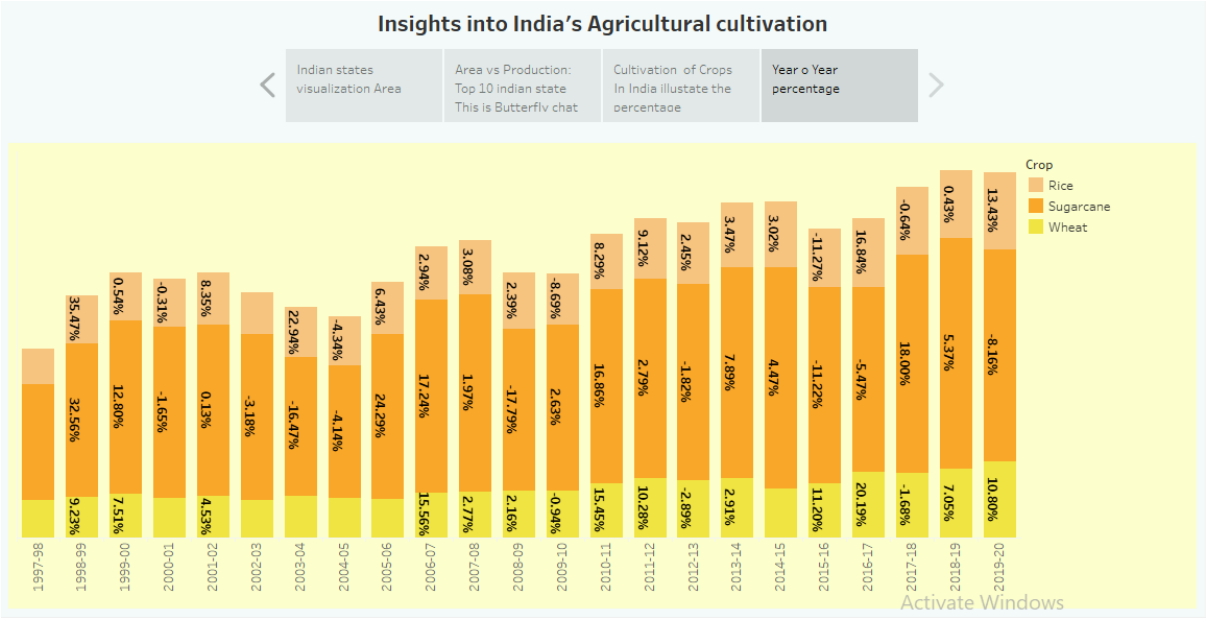
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
Season Wise Production
Winter
587,750,325
Autumn
84,641,434
Rabi
3,150,456,464
Total production
9,688,954,548
Kharif
5,622,340,392
Activate Windows


Insights into India's Agricultural cultivation
Indian states visualization Area
Area vs Production: Top 10 indian state This is Butterfly chat
Cultivation of Crops In India illustate the percentage
Year o Year percentage
Crop
Rice
Sugarcane
Wheat
35.47%
32.56%
9.23%
0.54%
12.80%
7.51%
-0.31%
-1.65%
8.35%
0.13%
4.53%
-3.18%
22.94%
-16.47%
-4.34%
-4.14%
6.43%
24.29%
2.94%
17.24%
15.56%
3.08%
1.97%
2.77%
2.39%
-17.79%
2.16%
-8.69%
2.63%
-0.94%
8.29%
16.86%
15.45%
9.12%
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10.28%
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-1.82%
-2.89%
3.47%
7.89%
2.91%
3.02%
4.47%
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-11.22%
11.20%
16.84%
-5.47%
20.19%
-0.64%
18.00%
-1.68%
0.43%
5.37%
7.05%
13.43%
-8.16%
10.80%
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2019-20
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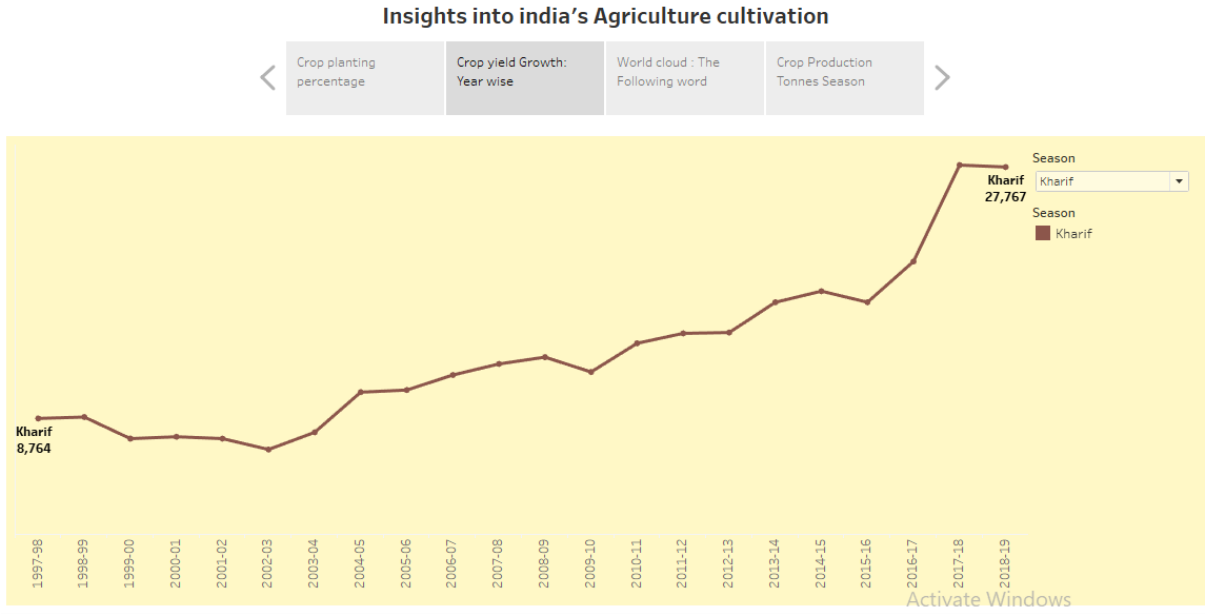
Story:


Insights into india's Agriculture cultivation
Crop planting percentage
Crop yield Growth: Year wise
World cloud : The Following word
Crop Production Tonnes Season
Season
Kharif
Kharif
27,767
Season
Kharif
Kharif
8,764
1997-98
1998-99
1999-00
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Activate Windows

ADVANTAGES AND DISADVANTAGES

Advantages

1. NATURAL ENVIRONMENT

Organic farming usually goes down in a natural environment. Unnecessary enclosures are not used for the crops or plants. This way the productivity is increased and is way better compared to closed spaces. An open and natural area for growing the crops would give them wild and instinctive growing nature. This is ideal for the crops and is one of the factors that leads to the plants being organic.

2. NO CHEMICALS

Unlike other forms of farming, organic farming does not involve any artificial sources like chemicals to drive away pests or to speed up the process of farming. These chemicals are often used in commercial and industrial farming methods. However, organic farming stays true to its title. Its method is true to its natural core and does not use anything that may be of harm to its consumers. Any type of chemical is not entertained in the organic farming industry.

3. EYE ON YOU

Unlike any other procedure, organic farming has a very strict supervision schedule. The reason for this extreme regulation is because of the importance to keep the label organic. It is very difficult to do so as most brands use artificial aspects in their farming. There are various **methods of organic farming** and its standards must be maintained in order to remain organic. This ensures that customers buying the end product receive what they're truly looking for.

4. ENVIRONMENTALLY FRIENDLY

Among the **advantages of organic farming**, this one stands out the most. Today, almost the entire sector of industrial farming consists of chemicals that ruin the environment. However, when you have something like organic farming to replace it, a huge benefit is received. Organic farming does not use any form of chemical nor does any form of pollution happen because of it. This makes it way better than regular farming. The whole world suffers because of the ignorant methods of regular farming including animals. Organic farming is definitely the way to go.

5. HEALTHIER AND TASTIER

Since non-organic farming produces results that are way too suspicious when eaten, it is obvious that it isn't good for health either. **Organic farming in kerala** for example are known to keep the crops growing properly. They are given time and care unlike non-organic sectors that pump the results with chemicals in order for it to grow faster. These type of sectors are only commercial-minded and are least bothered about the satisfaction and health of the consumer. Since the fruits and vegetables grown organically are given longer time to flourish, they automatically are way better in terms of nutrition and taste.

Disadvantages

If you're looking to know **how to start organic farming**, these pointers should be kept in mind. Now that we've seen the positive side to organic farming, let us move on to the negative. Although it does have a lot of useful aspects, some things could go wrong. The following are the **disadvantages of organic farming**.

1. EXPENSIVE PRODUCTS

One of the major problems of organic farming methods is that sometimes it can get a bit costly. Some products related to organic farming are too expensive, leading to some common people to not be able to afford it. In a country like India where most of its livelihood are farmers, organic farming brings a huge problem to it. However, **organic farming in Tamil Nadu** have had some success stories.

2. MORE LABOR

Organic farming is a sector that requires a lot of patience. This is because pests and others obstacles must be tackled manually. Unlike in non-organic farming, the use of pesticides and other chemicals are not permitted. This makes the work of the farmer harder as constant attention and care is needed. Due to the constant attention, a lot of time is consumed. Organic farming has to be executed well which needs a lot of time and not to forget weed-prevention.

3. HIGH MRP

It is almost obvious that due to the extreme care taken to go along with organic farming, the results would be kept at a high price. Once sold to the market, most of the place is devoted to the sale of these organic fruits and vegetables. Most people do that approve of organic products because of this. The items sold in the market are half the price of non-organic products. So, we can say that organic items are expensive and not every consumer is willing to pay the price for it.

4. CROSS BREEDING PROBLEM

The seeds of GMO plants once planted, create GMO crops. These crops then produce seeds and the pattern continues. This makes it very difficult to tell from the organic and GMO crops. This has become a huge problem in the organic farming sector. This could ruin the future of organic planting as a whole.

5. LABOR CHARGES

Labor charges refer to the amount payable to someone who has been involved in the building ot working of something. Like we said earlier, in organic farming ventures, the amount of labor is high and it takes a lot of time and patience to the get work done. If one is not able to do it by oneself, a lot of labor would be hired which increases the payment that those laborers deserve.

APPLICATION

- Increasing incomes.
- Generating employment opportunities.
- Reducing risk in agriculture.
- Developing agri-infrastructure.
- Improving quality of rural life.

FUTURE SCOPE.

The future of agriculture in India is full of potential and opportunities. As the country with one of the largest agrarian populations in the world, the agricultural sector plays a crucial role in India's economy.

1. Precision Agriculture

2. Smart Farming and IoT

3. Vertical Farming and Controlled Environment Agriculture

4. Genetic Engineering and Biotechnology

5. Organic Farming and Sustainable Practices

6. Value Addition and Food Processing

7. Dairy and Livestock Farming

8. Agri-Tech Startups

9. Agroforestry and Horticulture

10. Hydroponics and Aquaponics

CONCLUSION

India's agricultural sector is still very important to the Indian economy, although its share of the economy has decreased over the past 50 years. 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. Reforms to land distribution, water management and food distribution systems will further enhance productivity and help India meet its growing demand for food.