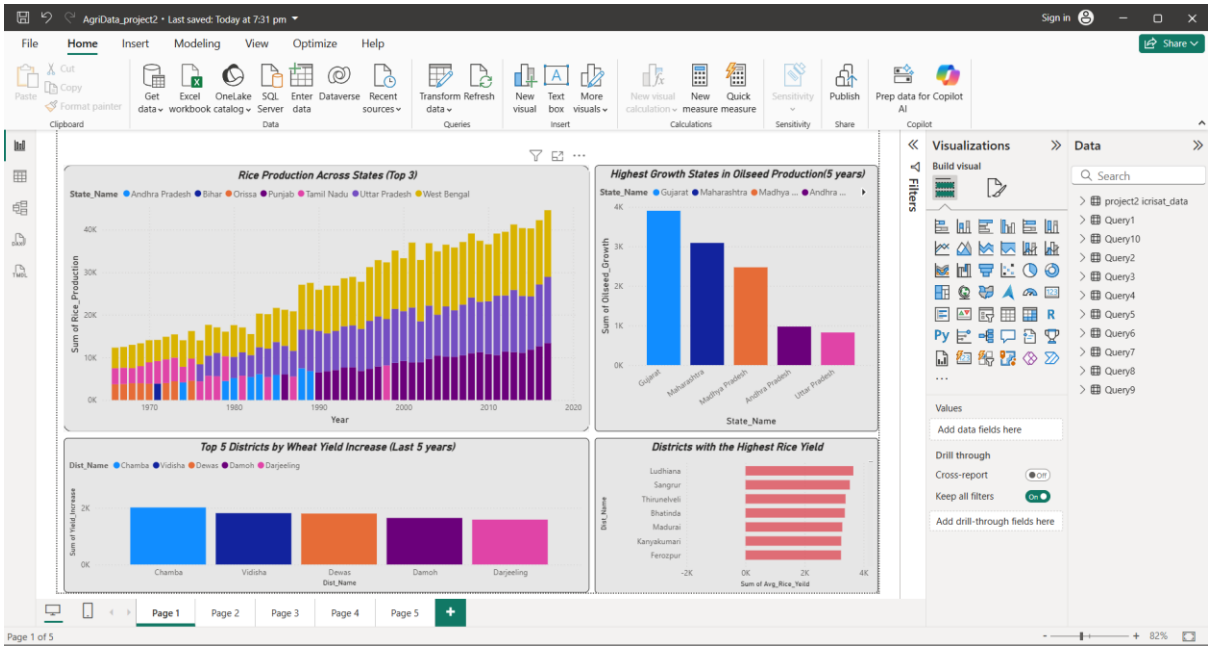
Agri Data Explorer

Page 1



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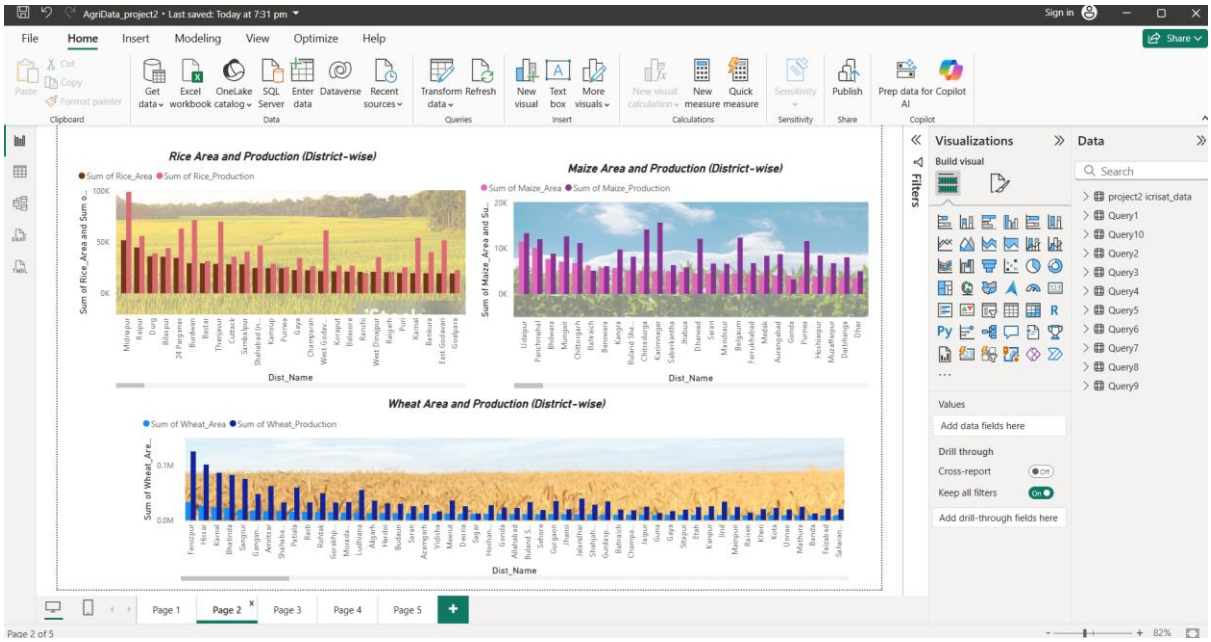

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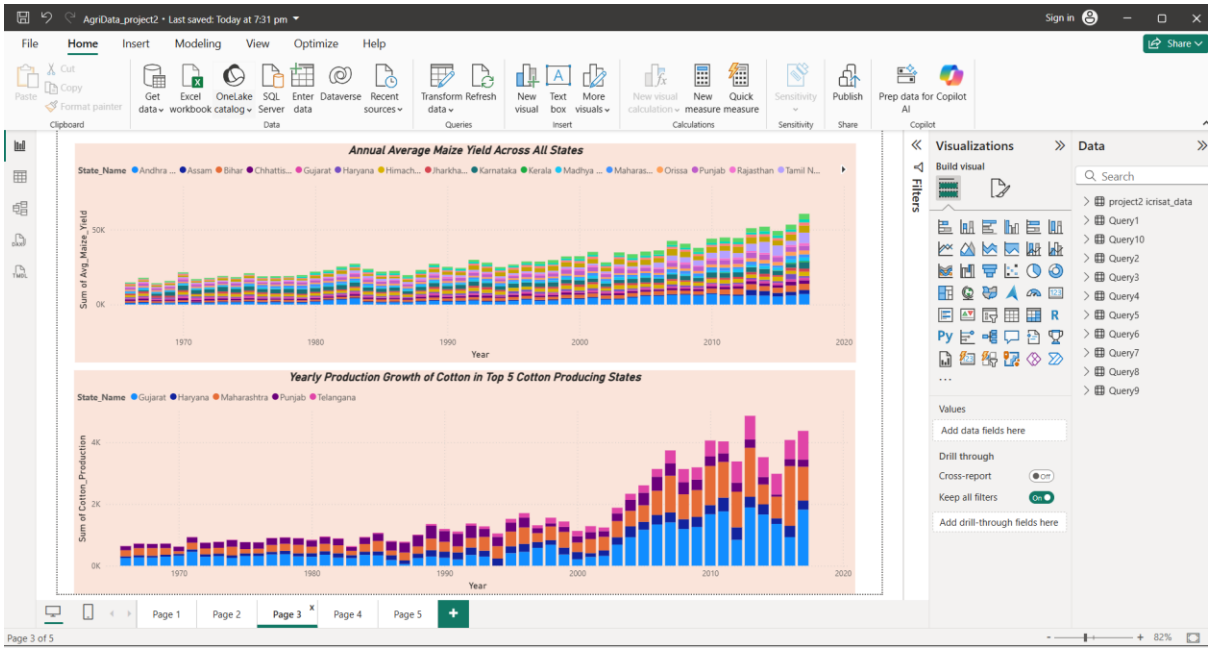
Annual Average Maize Yield Across All States
Yearly Production Growth of Cotton in Top 5 Cotton Producing States
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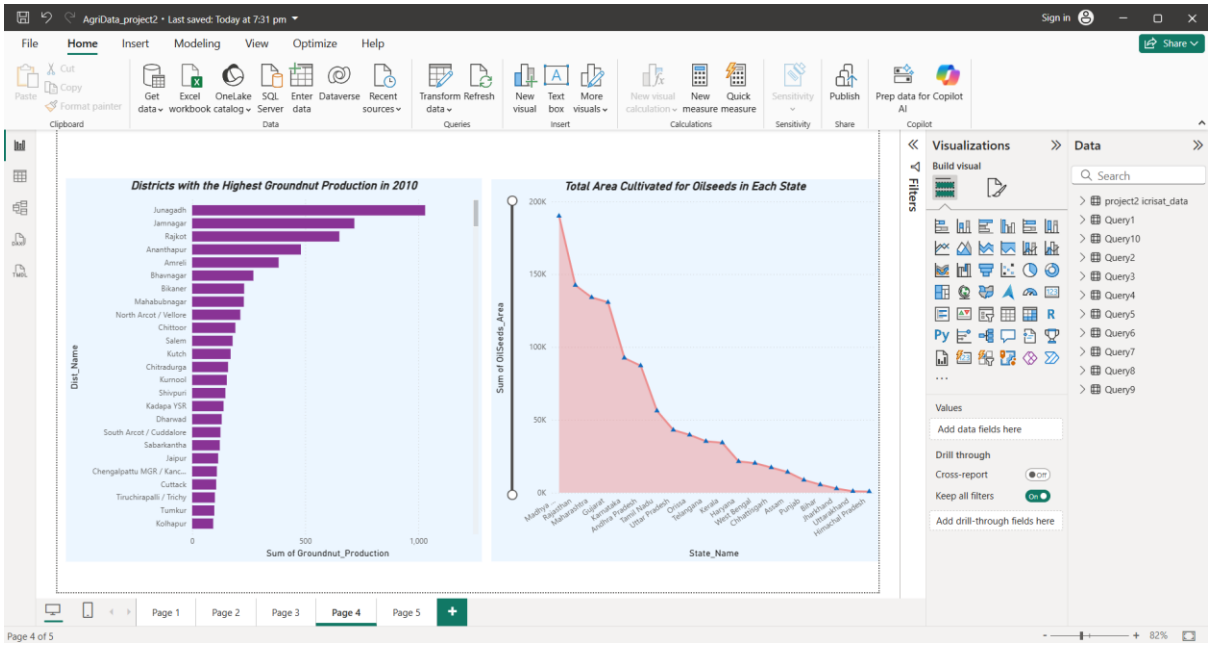
Districts with the Highest Groundnut Production in 2010
Total Area Cultivated for Oilseeds in Each State
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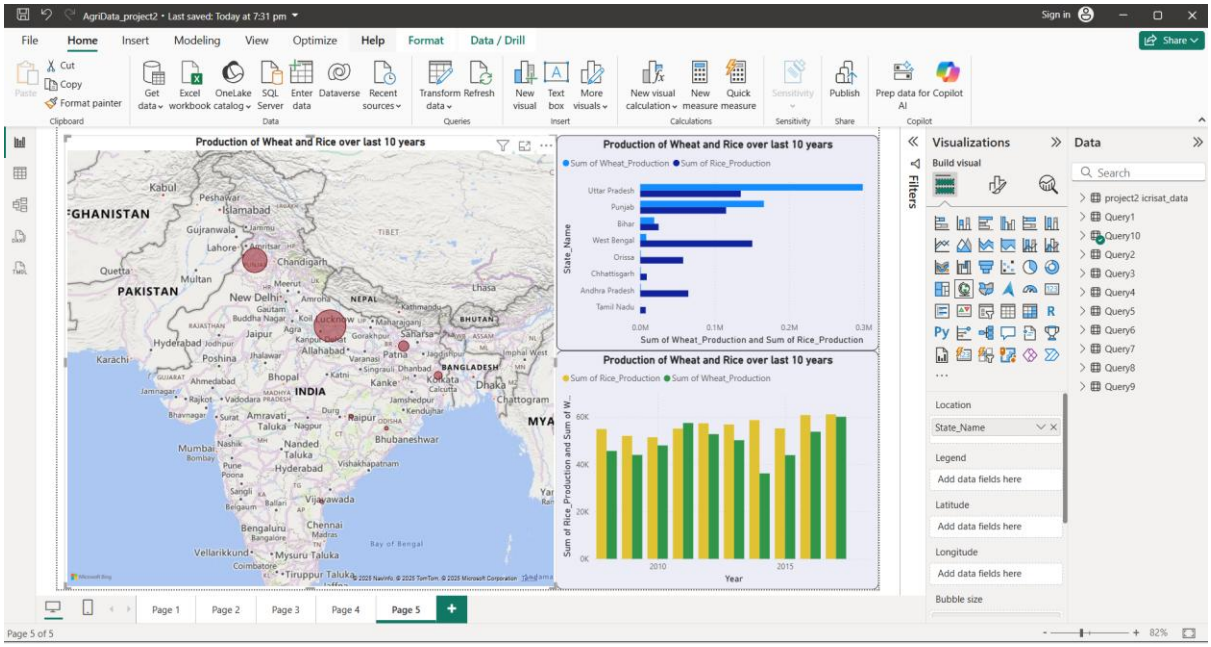
Production of Wheat and Rice over last 10 years
Production of Wheat and Rice over last 10 years
Sum of Wheat_Production
Sum of Rice_Production
Uttar Pradesh
Punjab
Bihar
West Bengal
Orissa
Chhattisgarh
Andhra Pradesh
Tamil Nadu
State_Name
Sum of Wheat_Production and Sum of Rice_Production
Production of Wheat and Rice over last 10 years
Sum of Rice_Production
Sum of Wheat_Production
Year
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Location
State_Name
Legend
Add data fields here
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Add data fields here
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Queries

1. Year-wise Trend of Rice Production Across States (Top 3)

```
WITH temp_table as (

SELECT Year, State_Name, sum(`RICE_PRODUCTION_(1000_tons)`) as Rice_Production, ROW_NUMBER() over(PARTITION by year order by sum(`RICE_PRODUCTION_(1000_tons)`) desc) as row_num

from icrisat_data group by  Year, State_Name)

SELECT Year, State_Name, Rice_Production from temp_table WHERE row_num <= 3;
```

2.Top 5 Districts by Wheat Yield Increase Over the Last 5 Years

```
WITH recent_years AS (

SELECT DISTINCT Year FROM icrisat_data ORDER BY Year DESC LIMIT 5),

yearly_yield AS (

SELECT Year, Dist_Name, SUM(`WHEAT_YIELD_(Kg_per_ha)`) AS Wheat_Yield FROM icrisat_data WHERE Year IN (SELECT Year FROM recent_years) GROUP BY Year, Dist_Name),

new_table AS (

SELECT Dist_Name,

MAX(CASE WHEN Year=(SELECT MIN(Year) FROM recent_years) THEN Wheat_Yield END) AS Start_Yield,

MAX(CASE WHEN Year=(SELECT MAX(Year) FROM recent_years) THEN Wheat_Yield END) AS End_Yield

FROM yearly_yield WHERE Wheat_Yield<> 0 GROUP BY Dist_Name)

SELECT Dist_Name, Start_Yield, End_Yield, (End_Yield - Start_Yield) AS Yield_Increase FROM new_table ORDER BY Yield_Increase DESC LIMIT 5;
```

3. States with the Highest Growth in Oilseed Production (5-Year Growth Rate)

```
WITH recent_years AS (

SELECT DISTINCT Year FROM icrisat_data ORDER BY Year DESC LIMIT 5),

temp_table as (

select year, State_Name, sum(`OILSEEDS_PRODUCTION_(1000_tons)`) as Oilseed_Production
```

from icrisat_data where Year IN (SELECT Year FROM recent_years) group by State_Name, Year ORDER by Oilseed_Production desc),

final_table AS(

SELECT State_Name, max(Oilseed_Production) Max_Prod, min(Oilseed_Production) Min_Prod, max(Oilseed_Production)-min(Oilseed_Production) increase_oilseeds

from temp_table WHERE Oilseed_Production <> 0 GROUP by State_Name ORDER by increase_oilseeds desc LIMIT 5)

SELECT State_Name, increase_oilseeds as Oilseed_Growth from final_table;

4.District-wise Correlation Between Area and Production for Major Crops (Rice, Wheat, and Maize)

SELECT Dist_Name, sum(`RICE_AREA_(1000_ha)`) Rice_Area,
sum(`WHEAT_AREA_(1000_ha)`) Wheat_Area, sum(`MAIZE_AREA_(1000_ha)`) Maize_Area,

sum(`RICE_PRODUCTION_(1000_tons)`) Rice_Production,
sum(`WHEAT_PRODUCTION_(1000_tons)`) Wheat_Production,
sum(`MAIZE_PRODUCTION_(1000_tons)`) Maize_Production

from icrisat_data group by Dist_Name order by Dist_Name;

5.Yearly Production Growth of Cotton in Top 5 Cotton Producing States

with state_table as(

select State_Name, sum(`COTTON_PRODUCTION_(1000_tons)`) Cotton_Production from icrisat_data GROUP by State_Name ORDER BY Cotton_Production DESC LIMIT 5)

SELECT Year, State_Name, sum(`COTTON_PRODUCTION_(1000_tons)`) Cotton_Production from icrisat_data WHERE State_Name IN(SELECT State_Name from state_table) group BY Year, State_Name order by Year;

6.Districts with the Highest Groundnut Production in 2010

SELECT Year, Dist_Name, sum(`GROUNDNUT_PRODUCTION_(1000_tons)`) Groundnut_Production from icrisat_data WHERE Year=2010 GROUP by Dist_Name, Year ORDER BY Groundnut_Production DESC;

7.Annual Average Maize Yield Across All States

select Year, State_Name, avg(`MAIZE_YIELD_(Kg_per_ha)`) Avg_Maize_Yield from icrisat_data GROUP by State_Name, Year ORDER by Year desc, Avg_Maize_Yield DESC;

8.Total Area Cultivated for Oilseeds in Each State

```
SELECT State_Name, sum(`OILSEEDS_AREA_(1000_ha)`) as OilSeeds_Area from icrisat_data GROUP BY State_Name ORDER BY OilSeeds_Area;
```

9.Districts with the Highest Rice Yield

```
select Dist_Name, ROUND(AVG(`RICE_YIELD_(Kg_per_ha)`),2) Avg_Rice_Yeild from icrisat_data group by Dist_Name ORDER by Avg_Rice_Yeild desc;
```

10. Compare the Production of Wheat and Rice for the Top 5 States Over 10 Years

```
with year_table as(
SELECT DISTINCT Year from icrisat_data order by Year DESC LIMIT 10),
temp_table1 as(
SELECT Year, State_Name, sum(`RICE_PRODUCTION_(1000_tons)`) Rice_Production, sum(`WHEAT_PRODUCTION_(1000_tons)`) Wheat_Production,
row_number() over(PARTITION BY Year ORDER by sum(`RICE_PRODUCTION_(1000_tons)`) DESC, sum(`WHEAT_PRODUCTION_(1000_tons)`) DESC) row_num
from icrisat_data WHERE Year IN(SELECT Year FROM year_table) group by Year, State_Name)
SELECT Year, State_Name, Rice_Production, Wheat_Production FROM temp_table1 WHERE row_num<=5 ORDER BY Year DESC;
```