



Vivekanand Education Society's BUSINESS SCHOOL

SUBMITTED BY

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Experiential Learning for Course: **Sectorial Analysis of Indian District and States.**

Faculty Name: **Dr. Pranjal Muley**

PGDM 2024-2026

Academic year: 24-25

Vivekanand Education Society's Business School

Certificate

This is to certify that project titled **Sectorial Analysis of Indian District and States** is successfully completed by Mr. **Kiran Chavan** during the 1st Year, in partial fulfillment of the PGDM recognized by AICTE for the academic year 2024-2026 through Vivekanand Education Society's Business School.

This project work is original and not submitted earlier for the award of any degree diploma of any other University /Institution.

Faculty Member

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This is to certify that project titled **Sectorial Analysis of Indian District and States** is successfully completed by Mr. **Satyam Bhakare** during the 1st Year, in partial fulfillment of the PGDM recognized by AICTE for the academic year 2024-2026 through Vivekanand Education Society's Business School.

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This is to certify that project titled **Sectorial Analysis of Indian District and States** is successfully completed by Mr. **Smit Jariwala** during the 1st Year, in partial fulfillment of the PGDM recognized by AICTE for the academic year 2024-2026 through Vivekanand Education Society's Business School.

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This is to certify that project titled **Sectorial Analysis of Indian District and States** is successfully completed by Mr. **Ramchandra Rane** during the 1st Year, in partial fulfillment of the PGDM recognized by AICTE for the academic year 2024-2026 through Vivekanand Education Society's Business School.

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Faculty Member

Declaration

I, **Kiran Chavan**, student of PGDM of Vivekanand Education Society's Business School, Chembur, Mumbai, hereby declare that I have completed Summer Internship Project on "**Sectorial Analysis of Indian District and States**" at "**STRATEGIC EXECUTION CONSULTANTS PVT. LTD**", during the academic year 2024-2025.

The information submitted is true and original to the best of my knowledge.

Date:

Place: MUMBAI

(Student Signature)

Declaration

I, **Satyam Bhakare**, student of PGDM of Vivekanand Education Society's Business School, Chembur, Mumbai, hereby declare that I have completed Summer Internship Project on "**Sectorial Analysis of Indian District and States**" at "**STRATEGIC EXECUTION CONSULTANTS PVT. LTD**", during the academic year 2024-2025.

The information submitted is true and original to the best of my knowledge.

Date:

Place: MUMBAI

(Student Signature)

Declaration

I, **Ramchandra Rane**, student of PGDM of Vivekanand Education Society's Business School, Chembur, Mumbai, hereby declare that I have completed Summer Internship Project on "**Sectorial Analysis of Indian District and States**" at "**STRATEGIC EXECUTION CONSULTANTS PVT. LTD**", during the academic year 2024-2025.

The information submitted is true and original to the best of my knowledge.

Date:

Place: MUMBAI

(Student Signature)

Declaration

I, **Smit Jariwala**, student of PGDM of Vivekanand Education Society's Business School, Chembur, Mumbai, hereby declare that I have completed Summer Internship Project on "**Sectorial Analysis of Indian District and States**" at "**STRATEGIC EXECUTION CONSULTANTS PVT. LTD**", during the academic year 2024-2025.

The information submitted is true and original to the best of my knowledge.

Date:

Place: MUMBAI

(Student Signature)

Table of Contents

1. Brief Introduction of the company
2. Brief of the Job/ task assigned
3. Targets Assigned
4. Targets Achieved
5. Results
6. Learnings
7. Limitations
8. Conclusions

1. Brief Introduction of the company

Strategic Execution Consultants Pvt. Ltd. (SEC) is a business consulting firm based in Bangalore, India, founded in 2022. The company offers strategic advisory services in areas such as business transformation, digital innovation, operational efficiency, and corporate finance, helping organizations thrive in competitive markets. SEC caters to a wide range of industries, including financial services, education, and healthcare, supporting clients through tailored strategies that enable efficient business execution and sustainable growth.

Leadership Team and Founders

SEC was co-founded by **Rishabh Bapna**, who serves as the Managing Director. He brings a strong background in management and strategic planning, focusing on aligning business strategies with client objectives. **Manisha Bapna** is also a key member of the board, actively shaping SEC's strategic direction. The leadership team further includes **CA Jeetendra Kumar Thani**, who serves as the Company Secretary and is a specialist in financial management, and **Dr. Ravi Changle**, a director with expertise in artificial intelligence and emerging technologies, ensuring SEC remains at the forefront of tech-driven consulting solutions.

Services Offered:

- **Business Transformation and Strategy:** SEC provides holistic business transformation services, helping companies develop market entry and expansion strategies that drive growth and align with their goals.
- **Digital Transformation:** The firm specializes in guiding companies through digital transformation, offering advanced analytics and data-driven solutions to optimize customer engagement, streamline processes, and enhance operational efficiency.
- **Operational Efficiency:** SEC implements initiatives aimed at process optimization and cost reduction, leveraging automation and resource management techniques to improve overall productivity.
- **Risk Management:** SEC helps organizations in highly regulated industries manage risks related to compliance, operations, and market conditions, providing strategies that safeguard assets and maintain regulatory adherence.
- **Generative AI and Innovation:** The firm integrates generative AI into its client services, allowing businesses to leverage artificial intelligence for innovation across product development, customer service, and process automation.

2. Brief of the Job/ task assigned

We have been assigned a project to analyze a dataset titled "District-Wise Sectoral Analysis of Indian States", which captures economic contributions from the Primary, Secondary, and Tertiary sectors across multiple districts and states of India over different years. The data is available in both constant and current prices, allowing for an analysis of both real growth (inflation-adjusted) and nominal growth. Our task included:

1. **Dataset Analysis:** Use SQL to extract insights from the dataset, such as sector-wise contributions, growth rates, trends, and performance comparisons across districts and states.

2. **SQL Queries:** Write and execute SQL queries to explore the following:

- Year-over-year growth and decline in sectoral contributions.
- Comparison of sector shares in different districts.
- Sectoral trends at both state and district levels.

3. **Insights Generation:** Identify key trends such as:

- Sector-wise growth over time: Which sectors are growing the fastest? Are districts shifting from agriculture (Primary sector) to services (Tertiary sector)?
- District comparisons: Which districts are performing better or worse in each sector?
- State-level trends: How do sectors contribute to the state economies, and what patterns are emerging?

4. **Tools:** You will use SQL Workbench, DBeaver, MySQL, or Postgres for querying the dataset. For visualization, tools like Power BI or Tableau can be used to create charts and dashboards that highlight the key trends and findings.

5. **Deliverables:**

- SQL Queries: Create and provide SQL scripts that answer the project's questions.
- Insights: Document the insights from the SQL queries, highlighting trends and sectoral growth.
- Final Report: Summarize all findings, detailing key trends and comparisons across sectors, districts, and states, providing a comprehensive picture of the economic dynamics captured by the dataset.

3. Targets Assigned

1. Data Exploration and Preparation:

- Objective: Understand the structure of the dataset and clean it for analysis.
- Target:
 - Explore the dataset fields to understand what each column represents (district names, sector contributions, years, prices at constant and current terms).
 - Check for missing data, duplicates, or outliers and handle them appropriately (e.g., filling missing values, removing duplicates, or imputing data).
 - Prepare SQL scripts that load and transform the data to ensure it's ready for analysis (e.g., organizing columns, converting data types).
 - Tools: SQL Workbench, DBeaver, MySQL, or Postgres.

2. Sector-Wise Analysis:

- Objective: Analyze the contributions from the Primary, Secondary, and Tertiary sectors for each district and state.
- Target:
 - Write SQL queries that capture the total contribution of each sector for all districts and states over multiple years.
 - Calculate the year-over-year growth of each sector at both constant and current prices.
 - Identify districts with the largest growth or decline in any sector.
 - Tools: SQL for querying; Power BI/Tableau for visualizing sector-wise contributions.

3. District-Level Performance Comparison:

- Objective: Compare economic performance across districts.
- Target:
 - Use SQL queries to compare the share of each sector in the total economy for different districts.
 - Highlight districts where specific sectors dominate or have seen rapid growth.
 - Rank districts based on their economic performance in each sector.
 - Tools: SQL for querying; visual tools (Power BI/Tableau) to create comparative charts.

4. State-Level Trends and Insights:

- Objective: Analyze and report on trends at the state level.
- Target:
 - Aggregate data at the state level using SQL to calculate the total contribution of each sector for each state.
 - Identify which states are more dependent on Primary, Secondary, or Tertiary sectors and how these trends evolve over time.
 - Pinpoint states with the most balanced or unbalanced sectoral growth.
 - Tools: SQL, Power BI/Tableau for visualizing state-level insights.

5. Growth Trend Analysis:

- Objective: Track sector-wise growth over time for districts and states.
- Target:
 - Calculate the percentage change in sectoral contributions over the years using

SQL functions like `LAG` and `PERCENTAGE`.

- Identify which districts and states have shifted from agriculture (Primary) to industrial or service-based economies (Secondary and Tertiary sectors).
- Recognize trends such as urbanization, industrialization, or service-dominance.
- Tools: SQL for performing trend analysis, Power BI/Tableau for time-series visualizations.

6. Insights Generation:

- Objective: Provide actionable insights based on the SQL queries.
- Target:
 - Generate insights such as:
 - Sectoral growth over time for each district and state.
 - Comparison of district's reliance on Primary, Secondary, or Tertiary sectors.
 - Identifying top-performing and underperforming districts in each sector.
 - These insights will form the basis of the final report.
- Tools: SQL for generating insights, Power BI/Tableau for visualizations.

7. Final Report Preparation:

- Objective: Summarize the key findings from the analysis in a comprehensive report.
- Target:
 - Compile the SQL query results and insights into a well-structured report.
 - Highlight key trends, comparisons, and growth patterns across districts and states.
 - Use visualizations to support findings and make the report easier to understand.
- Tools: Power BI/Tableau for visualizations, word processing tools for report writing.

8. Visualization:

- Objective: Create visual dashboard to illustrate trends.
- Target:
 - Use Power BI, Tableau, Looker Studio to build interactive dashboards showcasing sectoral growth, comparisons between districts, and state-level trends.
 - Visualize changes in sectoral contributions over time, and compare district-level performance in various sectors.

4. Targets Achieved

Task – Providing actionable insights for growth of sectors over time by comparing district performance at state and district level.

Field	Type	Null	Key	Default	Extra
Dist Code	int	YES		NULL	
Year	text	YES		NULL	
State Code	int	YES		NULL	
State Name	text	YES		NULL	
Dist Name	text	YES		NULL	
PRIMARY SECTOR CONSTANT PRICES (in Millions Rs)	int	YES		NULL	
PRIMARY SECTOR CURRENT PRICES (in Million Rs)	int	YES		NULL	
PRIMARY SECTOR CONSTANT SHARES (Percent)	double	YES		NULL	
PRIMARY SECTOR CURRENT SHARES (Percent)	double	YES		NULL	
SECONDARY SECTOR CONSTANT PRICES (Millions in Rs)	int	YES		NULL	
SECONDARY SECTOR CURRENT PRICES (Millions in Rs)	int	YES		NULL	
SECONDARY SECTOR CONSTANT SHARES (Percent)	double	YES		NULL	
SECONDARY SECTOR CURRENT SHARES (Percent)	double	YES		NULL	
TERTIARY SECTOR CONSTANT PRICES (Millions in Rs)	int	YES		NULL	
TERTIARY SECTOR CURRENT PRICES (Millions in Rs)	int	YES		NULL	
TERTIARY SECTOR CONSTANT SHARES (Percent)	double	YES		NULL	
TERTIARY SECTOR CURRENT SHARES (Percent)	double	YES		NULL	
Total Constant Prices (in Millions Rs)	int	YES		NULL	
Total Current Prices (in Millions Rs)	int	YES		NULL	
Per Capita Current Prices (1000 in Rs)	int	YES		NULL	

Queries to be answered:

1. **Basic Query:** Retrieve all data for a specific state, e.g., "Chhattisgarh."

```

1 • SELECT * from sectoral_analysis_indian_states where `State Name`='Chhattisgarh'
2 |

```

Dist Code	Year	State Code	State Name	Dist Name	PRIMARY SECTOR CONSTANT PRICES (in Millions Rs)	PRIMARY SECTOR CURRENT PRICES (in Million Rs)
1	2007 (2004)	14	Chhattisgarh	Durg	14348	18741
1	2008 (2004)	14	Chhattisgarh	Durg	12300	18452
1	2009 (2004)	14	Chhattisgarh	Durg	13876	22189

2. **Filtering:** Show all the districts in a given state that had a total contribution of more than 100,000 million Rs at current prices in a particular year.

```
1 • SELECT `State Name`, `Dist Name`, `Year` from sectoral_analysis_indian_states
2   | where `Total Current Prices (in Millions Rs)`>100000;
3
```

12) select * from sectoral_analysis_indian_states where `State Name`='Maharashtra';

- 2) **Filtering:** Show all the districts in a given state that had a total contribution of more than 100,000 million Rs at current prices in a particular year.

Ans- select `State Name`, `Dist Name`, `Year` from sectoral_analysis_indian_states where `Total Current Prices (in Millions Rs)`>100000;

Result Grid	Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
Dist Name	State Name	Year	Total Current Prices (in Millions Rs)	
Durg	Chhattisgarh	2007 (2004)	116682	
Durg	Chhattisgarh	2008 (2004)	137984	
Durg	Chhattisgarh	2009 (2004)	141821	
Durg	Chhattisgarh	2010 (2004)	173256	
Durg	Chhattisgarh	2011 (2004)	190355	
Durg	Chhattisgarh	2012 (2004)	219071	
Durg	Chhattisgarh	2013 (2004)	246863	
Raipur	Chhattisgarh	2007 (2004)	178584	
Raipur	Chhattisgarh	2008 (2004)	217938	
Raipur	Chhattisgarh	2009 (2004)	225657	
Raipur	Chhattisgarh	2010 (2004)	268431	
Raipur	Chhattisgarh	2011 (2004)	306439	
Raipur	Chhattisgarh	2012 (2004)	364883	

- 3) **Aggregation:** Find the total contribution of the primary sector across all districts for a given year.

Ans- select `Dist Name`, `Year`, sum(`PRIMARY SECTOR CONSTANT PRICES (in Millions Rs)`+`PRIMARY SECTOR CURRENT PRICES (in Million Rs)`) as total_primary_sector_contribution from sectoral_analysis_indian_states group by `Year`, `Dist Name`;

Result Grid				Filter Rows:	Export:	Wrap Cell Content:
	Dist Name	Year	total_contribution			
▶	Durg	2007 (2004)	33089			
	Durg	2008 (2004)	30752			
	Durg	2009 (2004)	36065			
	Durg	2010 (2004)	60770			
	Durg	2011 (2004)	65377			
	Durg	2012 (2004)	76010			
	Durg	2013 (2004)	80969			
	Bastar	2007 (2004)	26798			
	Bastar	2008 (2004)	25374			
	Bastar	2009 (2004)	25486			
	Bastar	2010 (2004)	26072			
	Bastar	2011 (2004)	27973			
	Bastar	2012 (2004)	32911			

4) Join Operation: Write a query to join district data with state codes and names to display state-wise analysis.

Ans- select

s1.`State Code`,

s2.`State Name`,

count(distinct s1.`PRIMARY SECTOR CONSTANT PRICES (in Millions Rs)`) as
Total_Primary_sector_Constant_Prices,

avg(s1.`PRIMARY SECTOR CONSTANT PRICES (in Millions Rs)`) as average_metric

From

sectoral_analysis_indian_states s1

Join

sectoral_analysis_indian_states s2 on s1.`State Code` = s2.`State Code`

group by

s1.`State Code`,

s2.`State Name`;

	State Code	State Name	Total_Primary_sector_Constant_Prices	average_metric
▶	1	Andhra Pradesh	77	38298.5325
	2	Bihar	63	9070.3968
	3	Gujarat	126	19871.0794
	4	Haryana	49	13520.0612
	5	Karnataka	133	16322.5113
	6	Madhya Pradesh	258	10323.2278
	7	Maharashtra	174	20487.7943
	8	Orissa	91	8958.7033
	9	Punjab	77	20434.5584
	10	Rajasthan	182	14319.0495
	11	Tamil Nadu	91	9981.5604
	12	Uttar Pradesh	314	16141.3841
	13	West Bengal	112	28941.7946

Result 1 ×

5) **Growth Calculation:** Calculate the year-on-year growth of the secondary sector for a specific district.

Ans - select

current.year as current_year,

current.`SECONDARY SECTOR CURRENT PRICES (Millions in Rs)` as current_value,

previous.`SECONDARY SECTOR CURRENT PRICES (Millions in Rs)` as previous_value,

((current.`SECONDARY SECTOR CURRENT PRICES (Millions in Rs)` -

previous.`SECONDARY SECTOR CURRENT PRICES (Millions in Rs)`)/

previous.`SECONDARY SECTOR CURRENT PRICES (Millions in Rs)`)*100 as

YoY_Growth_Percentage

from

sectoral_analysis_indian_states as current

join

sectoral_analysis_indian_states as previous on current.`State Code`=previous.`State Code`

and previous.year = current.year - 1

where

current.`Dist Name`='Durg'

and current.year between 2007 and 2013

and previous.`Dist Name` = 'Durg';

Result Grid				
	Current_Year	Current_Value	Previous_Value	YoY_Growth_Percentage
▶	2008 (2004)	70733	56724	24.6968
	2009 (2004)	66129	70733	-6.5090
	2010 (2004)	72208	66129	9.1926
	2011 (2004)	76354	72208	5.7417
	2012 (2004)	86859	76354	13.7583
	2013 (2004)	96777	86859	11.4185

6) Trend Analysis: Identify the district with the highest growth rate in the tertiary sector over a five-year period.

Ans- SELECT

 'Dist Name',

 ((MAX('Tertiary Sector Current Prices (Millions in Rs)') - MIN('Tertiary Sector Current Prices (Millions in Rs)')) / MIN('Tertiary Sector Current Prices (Millions in Rs)') * 100) AS
 'Growth_Rate_in_%'

FROM

 dis

WHERE

 Year BETWEEN 2008 AND 2013

GROUP BY

 'Dist Name'

ORDER BY

 'Growth_Rate_in_%' DESC

LIMIT 1;

Result Grid		
	Dist Name	Growth_Rate_in_%
▶	Gurgaon	218.7580

7) Group By: Group data by state to calculate the total contribution of the secondary sector in constant prices for each state.

Ans - SELECT

 `State Name`,

 SUM(`SECONDARY SECTOR CONSTANT PRICES (Millions in Rs)`) AS

Total_Contribution_Constant_Prices

FROM

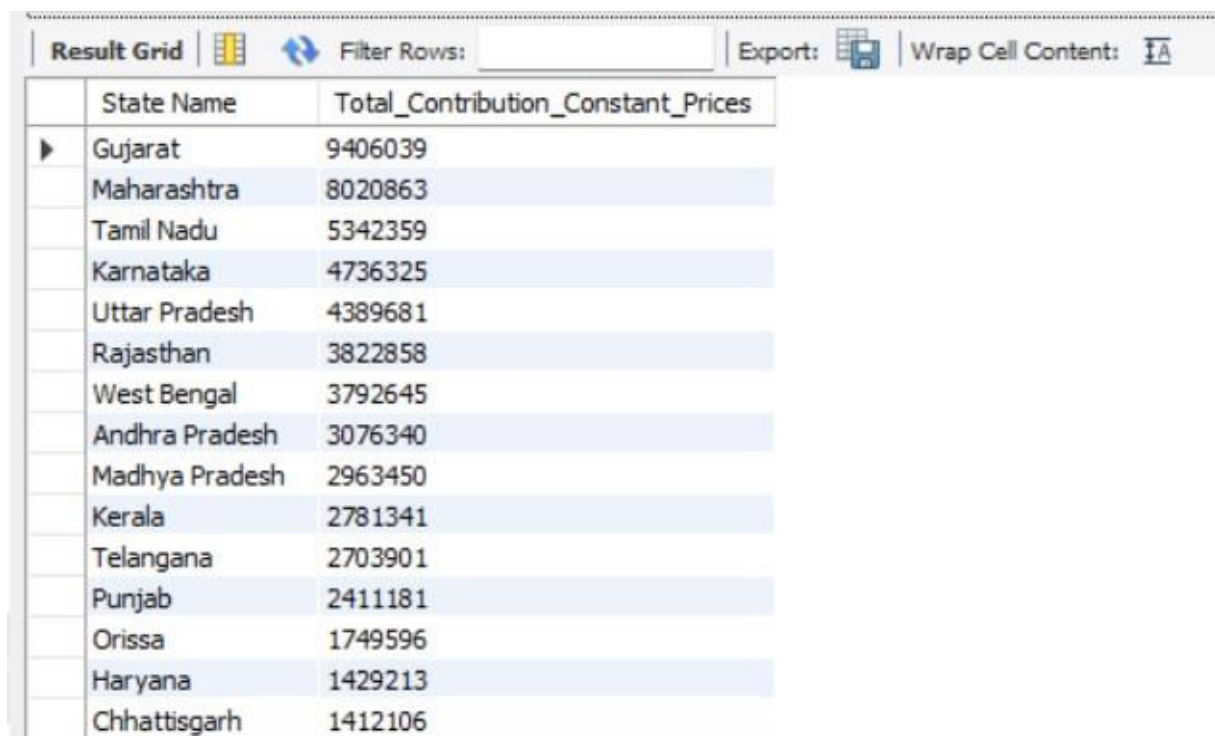
dis

GROUP BY

 `State Name`

ORDER BY

 Total_Contribution_Constant_Prices DESC;



The screenshot shows a database query result grid with the following data:

	State Name	Total_Contribution_Constant_Prices
▶	Gujarat	9406039
	Maharashtra	8020863
	Tamil Nadu	5342359
	Karnataka	4736325
	Uttar Pradesh	4389681
	Rajasthan	3822858
	West Bengal	3792645
	Andhra Pradesh	3076340
	Madhya Pradesh	2963450
	Kerala	2781341
	Telangana	2703901
	Punjab	2411181
	Orissa	1749596
	Haryana	1429213
	Chhattisgarh	1412106

8) Comparison: Compare the per capita current prices between two districts over the same year.

Ans - SELECT

 d1.`Dist Name` AS `District 1`,

 d2.`Dist Name` AS `District 2`,

 d1.Year,

```

d1.`Per Capita Current Prices (1000 in Rs)` AS Current_Prices_District1,
d2.`Per Capita Current Prices (1000 in Rs)` AS Current_Prices_District2
FROM
    dis AS d1
JOIN
    dis AS d2
ON
    d1.Year = d2.Year
WHERE
    d1.`Dist Name` = 'Durg'
    AND d2.`Dist Name` = 'Bastar';

```

Result Grid  Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 					
	District 1	District 2	Year	Current_Prices_District1	Current_Prices_District2
▶	Durg	Bastar	2007 (2004)	37	24
	Durg	Bastar	2008 (2004)	43	27
	Durg	Bastar	2009 (2004)	44	28
	Durg	Bastar	2010 (2004)	53	30
	Durg	Bastar	2011 (2004)	57	33
	Durg	Bastar	2012 (2004)	64	38
	Durg	Bastar	2013 (2004)	71	43

9) Ranking: Rank districts within a state based on their total constant prices for a given year.

Ans- SELECT

```

`State Code`,
`State Name`,
`Dist Code`,
`Dist Name`,
`Year`,
`Total Constant Prices (in Millions Rs)`,
RANK() OVER (PARTITION BY `State Code`, Year ORDER BY `Total Constant Prices
(in Millions Rs)` DESC) AS District_Rank

```

FROM sectoral_analysis_indian_states

WHERE Year = 2013

ORDER BY District_Rank;

State Code	State Name	Dist Code	Dist Name	Year	Total Constant Prices (in Millions Rs)	District_Rank
1	Andhra Pradesh	49	Guntur	2007 (2004)	188051	1
1	Andhra Pradesh	45	Visakhapatnam	2008 (2004)	197671	1
1	Andhra Pradesh	49	Guntur	2009 (2004)	204328	1
1	Andhra Pradesh	45	Visakhapatnam	2010 (2004)	226202	1
1	Andhra Pradesh	45	Visakhapatnam	2011 (2004)	237177	1
1	Andhra Pradesh	45	Visakhapatnam	2012 (2004)	245910	1
1	Andhra Pradesh	45	Visakhapatnam	2013 (2004)	258680	1
2	Bihar	907	Patna	2007 (2004)	120508	1
2	Bihar	907	Patna	2008 (2004)	134148	1
2	Bihar	907	Patna	2009 (2004)	143279	1
2	Bihar	907	Patna	2010 (2004)	160389	1
2	Bihar	907	Patna	2011 (2004)	180508	1
2	Bihar	907	Patna	2012 (2004)	207510	1
2	Bihar	907	Patna	2013 (2004)	227255	1

10) Filtering by Sector: Find the districts where the primary sector's share in constant prices is higher than 20% in the latest year.

SELECT `Dist Name`, Year, `PRIMARY SECTOR CONSTANT SHARES (Percent)`

FROM dis

WHERE `PRIMARY SECTOR CONSTANT SHARES (Percent)` > 20 AND Year = 2013

order by `PRIMARY SECTOR CONSTANT SHARES (Percent)`;

Dist Name	Year	PRIMARY SECTOR CONSTANT SHARES (Percent)
Jhansi	2013 (2004)	20.07
Karnal	2013 (2004)	20.13
Kolar	2013 (2004)	20.21
Bhagalpur	2013 (2004)	20.33
Ballia	2013 (2004)	20.37
Yeotmal	2013 (2004)	20.45
Jaunpur	2013 (2004)	20.59
Barmer	2013 (2004)	20.66
Rewa	2013 (2004)	20.72
Maharashtra	2013 (2004)	20.87

11) Sector Performance: For each state, calculate the average share of the tertiary sector (current prices) over the entire time period.

Ans - SELECT

`State Code`,

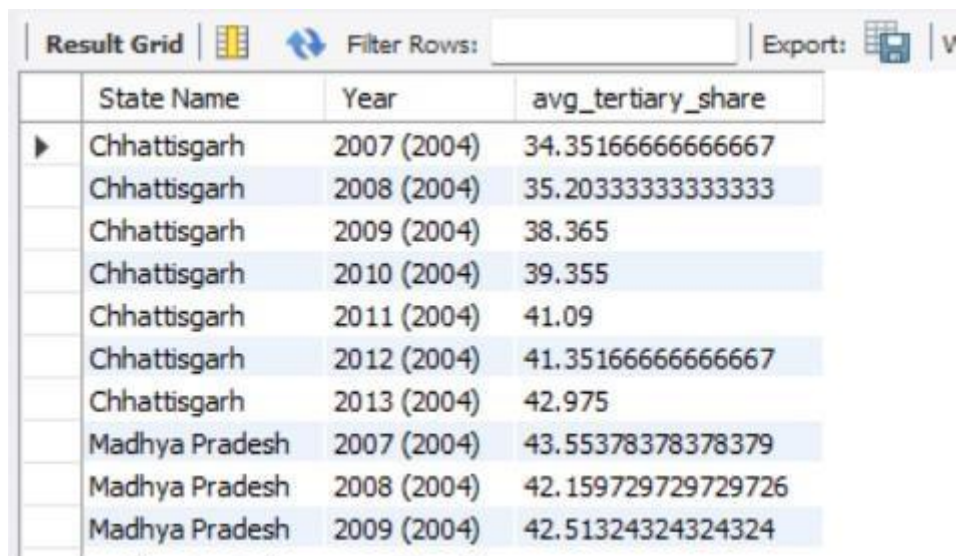
`State Name`,

AVG(`TERTIARY SECTOR CURRENT SHARES (Percent)`) AS
Avg_Tertiary_Sector_Share

FROM sectoral_analysis_indian_states

GROUP BY `State Code`, `State Name`

ORDER BY Avg_Tertiary_Sector_Share DESC;



The screenshot shows a 'Result Grid' with columns: State Name, Year, and avg_tertiary_share. The data is sorted by avg_tertiary_share in descending order. The first two states shown are Chhattisgarh and Madhya Pradesh, each with data for the years 2007, 2008, and 2009 (all labeled as 2004 in the Year column).

State Name	Year	avg_tertiary_share
Chhattisgarh	2007 (2004)	34.35166666666667
Chhattisgarh	2008 (2004)	35.20333333333333
Chhattisgarh	2009 (2004)	38.365
Chhattisgarh	2010 (2004)	39.355
Chhattisgarh	2011 (2004)	41.09
Chhattisgarh	2012 (2004)	41.35166666666667
Chhattisgarh	2013 (2004)	42.975
Madhya Pradesh	2007 (2004)	43.55378378378379
Madhya Pradesh	2008 (2004)	42.159729729729726
Madhya Pradesh	2009 (2004)	42.51324324324324

12) Max-Min Analysis: Identify the district with the highest and lowest total current prices for a given year.

Ans - (SELECT `Dist Name`, `Year`, SUM(`Total Current Prices (in Millions Rs)`) AS
total_price, 'Highest' AS Price_type

FROM sectoral_analysis_indian_states

GROUP BY `Dist Name`, `Year`


ORDER BY total_price DESC

LIMIT 1)

UNION ALL

```
(SELECT `Dist Name`, `Year`, SUM(`Total Current Prices (in Millions Rs)`) AS total_price,
'Lowest' AS Price_type
FROM sectoral_analysis_indian_states
GROUP BY `Dist Name`, `Year`
ORDER BY total_price ASC
LIMIT 1);
```

Result Grid


Filter Rows:

Export:


Wrap Cell Content:

	Dist Name	Year	total_price	Price_type
▶	Bangalore	2013 (2004)	2500219	Highest
	Lahul & Spiti	2007 (2004)	3136	Lowest

13) Percentage Contribution: Calculate the percentage contribution of the secondary sector to the total economy for each district.

Ans- SELECT

`Dist Name`,

`Year`,

(`SECONDARY SECTOR CURRENT PRICES (Millions in Rs)` / `Total Current Prices (in Millions Rs)`) * 100 AS Secondary_Sector_Percentage

FROM

sectoral_analysis_indian_states;

	Dist Name	Year	Secondary_Sector_Percentage
▶	Durg	2007 (2004)	48.6142
	Durg	2008 (2004)	51.2617
	Durg	2009 (2004)	46.6285
	Durg	2010 (2004)	41.6771
	Durg	2011 (2004)	40.1114
	Durg	2012 (2004)	39.6488
	Durg	2013 (2004)	39.2027
	Bastar	2007 (2004)	20.0241
	Bastar	2008 (2004)	23.9281

14) Conditional Filtering: List all districts where the tertiary sector constant share is greater than the secondary sector constant share for a specific year.

Ans -

SELECT

 `Dist Name`,

 `Year`,

 `TERTIARY SECTOR CONSTANT SHARES (Percent)`,

 `SECONDARY SECTOR CONSTANT SHARES (Percent)`

FROM

 dis

WHERE

 `Year` = 2013

 AND `TERTIARY SECTOR CONSTANT SHARES (Percent)` > `SECONDARY SECTOR CONSTANT SHARES (Percent)`;

Result Grid				
		Filter Rows:	Export:	Wrap Cell Content:
	Dist Name	Year	TERTIARY SECTOR CONSTANT SHARES (Percent)	SECONDARY SECTOR CONSTANT SHARES (Percent)
▶	Bastar	2013 (2004)	40.84	22.47
	Raipur	2013 (2004)	50.55	39.83
	Bilaspur	2013 (2004)	52.76	27.29
	Surguja	2013 (2004)	42.37	27.94
	Jabalpur	2013 (2004)	68.81	25.21
	Balaghat	2013 (2004)	50.6	19.73
	Chhindwara	2013 (2004)	45.94	26.78
	Narsinghpur	2013 (2004)	45.41	16.85
	Seoni / Shivani	2013 (2004)	47.58	18.09
	Mandla	2013 (2004)	50.77	15.75

15. Multi-Condition Query: Write a query to display districts where the primary and secondary sector shares are both greater than 30%.

Ans- SELECT

 `Dist Name`,

 `Year`,

 `PRIMARY SECTOR CURRENT SHARES (Percent)`,

 `SECONDARY SECTOR CURRENT SHARES (Percent)`

FROM

dis

WHERE

`PRIMARY SECTOR CURRENT SHARES (Percent)` > 30

AND `SECONDARY SECTOR CURRENT SHARES (Percent)` > 30;

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Dist Name	Year	PRIMARY SECTOR CURRENT SHARES (Percent)	SECONDARY SECTOR CURRENT SHARES (Percent)
► Surguja	2008 (2004)	31.74	32.95
Dewas	2007 (2004)	34.54	30.48
Dewas	2008 (2004)	34.93	31.97
Bharuch	2010 (2004)	36.06	34.03
Bharuch	2011 (2004)	35.4	32.13
Bharuch	2012 (2004)	30.9	32.76
Bharuch	2013 (2004)	31.16	32.13
Pali	2009 (2004)	31.2	30.08
Udaipur	2011 (2004)	30.82	32.53
Moradabad	2007 (2004)	31.54	31.54

16. Time Series Analysis: Show how the total contribution at current prices has changed over time for a specific district.

Ans- SELECT

`Year`,

SUM(`Total Current Prices (in Millions Rs)`) AS Total_Contribution

FROM

dis

WHERE

`Dist Name` = 'Durg'

GROUP BY

`Year`

ORDER BY

`Year`;

Result Grid		
	Filter Rows:	Ex
	Year	Total_Contribution
▶	2007 (2004)	116682
	2008 (2004)	137984
	2009 (2004)	141821
	2010 (2004)	173256
	2011 (2004)	190355
	2012 (2004)	219071
	2013 (2004)	246863

17. Subquery: Write a subquery to find the state that contributed the most in the tertiary sector at current prices for a given year.

Ans- SELECT

 `State Name`,

 `TERTIARY SECTOR CURRENT PRICES (Millions in Rs)`

FROM

 dis

WHERE

 `Year` = 2013

AND `TERTIARY SECTOR CURRENT PRICES (Millions in Rs)` = (

 SELECT

 MAX(`TERTIARY SECTOR CURRENT PRICES (Millions in Rs)`)

FROM

 dis

WHERE

 `Year` = 2013);

Result Grid		
	Filter Rows:	Export: Wrap Cell Content: IA
	State Name	TERTIARY SECTOR CURRENT PRICES (Millions in Rs)
▶	Karnataka	1819784

18) Distinct Query: Find all the unique states present in the dataset.

Ans - SELECT DISTINCT

`State Name`

FROM sectoral_analysis_indian_states

order by

`State Name`;

	State Name
►	Andhra Pradesh
	Assam
	Bihar
	Chhattisgarh
	Gujarat
	Haryana
	Himachal Pradesh
	Jharkhand
	Karnataka
	Kerala
	Madhya Pradesh
	Maharashtra
	Orissa
	Punjab
	Rajasthan

19) Join and Aggregate: Join state and district data and calculate the total economic contribution for a particular state across all its districts for a given year.

Ans - SELECT

s.`Year`,

s.`Dist Code`,

s.`Dist Name`,

s.`State Name`,

s.`Total Current Prices (in Millions Rs)`

FROM

dis s

JOIN

dis d ON s.`State Code` = d.`State Code`

WHERE

s.`Year` = 2013

Group By

s.`State Name`,

s.`Year`,

s.`Dist Code`,

s.`Dist Name`,

s.`Total Current Prices (in Millions Rs)`;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Year	Dist Code	Dist Name	State Name	Total Current Prices (in Millions Rs)
▶	2013 (2004)	6	Surguja	Chhattisgarh	86404
	2013 (2004)	5	Raigarh	Chhattisgarh	108738
	2013 (2004)	4	Bilaspur	Chhattisgarh	188695
	2013 (2004)	3	Raipur	Chhattisgarh	423297
	2013 (2004)	2	Bastar	Chhattisgarh	62179
	2013 (2004)	1	Durg	Chhattisgarh	246863
	2013 (2004)	43	Hoshangabad	Madhya Pradesh	83938
	2013 (2004)	42	Shajapur	Madhya Pradesh	104359
	2013 (2004)	41	Rajgarh	Madhya Pradesh	93077
	2013 (2004)	40	Betul	Madhya Pradesh	92574
	2013 (2004)	39	Vidisha	Madhya Pradesh	62061
	2013 (2004)	38	Raisen	Madhya Pradesh	60136
	2013 (2004)	37	Sehore	Madhya Pradesh	75520
	2013 (2004)	36	Khandwa / E...	Madhya Pradesh	59804

20) Window Functions: Use a window function to calculate the cumulative total of the primary sector at constant prices for a district over the years.

Ans - SELECT

`Dist Name`,

`Year`,

`PRIMARY SECTOR CONSTANT PRICES (in Millions Rs)`,

SUM(`PRIMARY SECTOR CONSTANT PRICES (in Millions Rs)`) OVER
(PARTITION BY `Dist Name` ORDER BY `Year`) AS Cumulative_Total

FROM

dis

WHERE

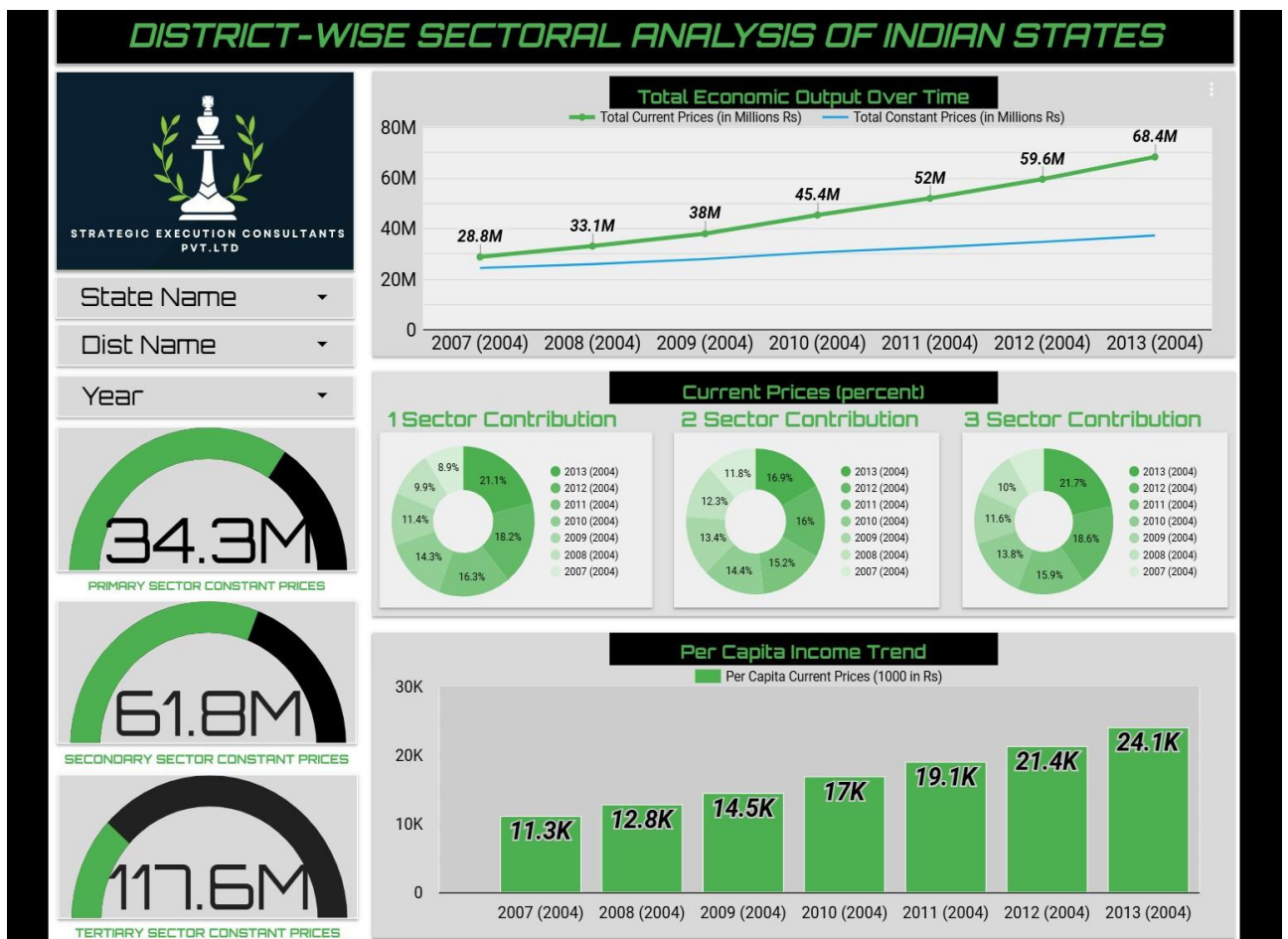
`Dist Name` = 'Durg'

ORDER BY

`Year`;

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Dist Name	Year	PRIMARY SECTOR CONSTANT PRICES (in Millions Rs)	Cumulative_Total
Durg	2007 (2004)	14348	14348
Durg	2008 (2004)	12300	26648
Durg	2009 (2004)	13876	40524
Durg	2010 (2004)	22327	62851
Durg	2011 (2004)	22907	85758
Durg	2012 (2004)	25174	110932
Durg	2013 (2004)	25905	136837

5. Dashboard



6. Learnings

Economic Sector Distribution

- **Primary Sector:** The dataset provides insights into the primary sector's contribution to the economy, with constant prices ranging from 296 to 329 million Rs and current prices from 428 to 499 million Rs.
- **Secondary Sector:** This sector shows higher values in both constant and current prices, indicating its significant role in the economy.
- **Tertiary Sector:** The tertiary sector appears to be the largest contributor, with constant prices ranging from 1471 to 2142 million Rs and current prices from 1706 to 2952 million Rs.

Growth Trends

- **Constant vs. Current Prices:** The dataset allows for the analysis of growth trends by comparing constant and current prices. The tertiary sector shows a significant increase in both constant and current prices, indicating robust growth over the years.
- **Sectoral Shares:** The shares of each sector in the economy provide insights into structural changes. The tertiary sector consistently holds the largest share, suggesting a shift towards a service-oriented economy.

Per Capita Income Trends

- The dataset includes per capita income data, expressed in thousands of Rs. This metric is crucial for understanding the economic well-being of individuals in different districts and states. The sample data shows an increase from 37 to 43 thousand Rs, indicating a positive trend in per capita income.

State and District Analysis

- The dataset covers multiple states and districts, allowing for a detailed analysis of regional economic performance. For instance, the sample data from Chhattisgarh's Durg district shows significant contributions from the secondary and tertiary sectors

7. Limitations

- The dataset covers only a limited range of years (2007 to 2013), which may not be sufficient for long-term trend analysis.
- The Year column is a Text type with a specific format that might require preprocessing for time series analysis.
- The dataset provides data for primary, secondary, and tertiary sectors, but lacks detailed sub-sector information, which could be important for more granular economic analysis.

8. Conclusion

The dataset provides a comprehensive view of the economic landscape across Indian states and districts, highlighting the importance of the tertiary sector and the growth in per capita income. It serves as a valuable resource for analyzing economic trends and sectoral contributions over the specified years.