# ****Petroleum Sector Project Dashboard Summary Report****

#### ****1. Overview****

This dashboard provides a comprehensive view of key projects in the Petroleum sector, focusing on project costs, time and cost overruns, and project distribution. The **total original project cost** is ₹147.41K crore, while the **anticipated cost** has increased to ₹203.83K crore. The **average original cost** of projects is ₹3.23K crore, and the **average anticipated cost** is ₹5.89K crore, highlighting an average increase of 82%.

#### ****2. Key Projects by Cost and Overrun Analysis****

* **Major Projects by Original Cost**:
  + **Rajasthan Refinery Project** (₹43.1K crore original; ₹72.9K crore anticipated)
  + **Capacity Expansion of Panipat Refinery** (₹34.6K crore original; ₹38.2K crore anticipated)
  + **Visakh Refinery Modernization Project** (₹20.9K crore original; ₹26.3K crore anticipated)
* **Top Cost Overrun Projects**:
  + **Kochi-Koottanad-Bangalore-Mangalore Pipeline** tops the cost overrun with a 103% increase.
  + **Rajasthan Refinery Project** and **Numaligarh Refinery Expansion** follow with 69% and 53% overruns, respectively.
  + Lesser overruns (6-16%) are seen in projects like **Koyali Ahmednagar Solapur Pipeline** and **Lube Complex Setup**.

#### ****3. Project Delays (Time Overruns)****

* **Highest Delays**:
  + **Kochi-Koottanad-Bangalore-Mangalore Pipeline** has the longest delay with a **146-month overrun**.
  + **Mumbai High North Redevelopment** and **Kochi Salem LPG Pipeline** are also delayed by **99 and 70 months**, respectively.
  + Projects with minimal delays include **Panipat Refinery Expansion** (16 months) and **Numaligarh Refinery Expansion** (10 months), suggesting effective timeline management for these initiatives.

#### ****4. Sector-Wise Project Contributions****

* **75% of the total project cost** is concentrated in the **Rajasthan Refinery Project**, **Panipat Refinery Expansion**, **Visakh Refinery Modernization**, and **Numaligarh Refinery Expansion**.
* This concentration indicates a strategic investment focus on large-scale refinery projects, which could impact overall sectoral capacity and infrastructure.

#### ****5. Approved and Anticipated Completion Timeline****

* **Most project approvals** occurred during 2015-2019, reflecting strategic sector growth during these years.
* **Anticipated completion years** predominantly range between 2024-2026, with 2025 seeing the highest number of projected completions.

### ****Conclusions****

The Petroleum sector's major projects exhibit substantial cost and time overruns, with the **Kochi-Koottanad-Bangalore-Mangalore Pipeline** and **Rajasthan Refinery Project** accounting for the highest overruns. This analysis highlights the need for effective budget control and risk management practices to mitigate further delays and costs.

### ****Recommendations and Next Steps****

1. **Budget Optimization and Cost Controls**:
   * Implement stricter budget oversight and resource allocation plans to minimize further cost increases in critical projects, particularly in high-overrun areas like pipelines and refineries.
2. **Timely Completion of High-Impact Projects**:
   * Prioritize resources and monitor the top delayed projects, such as the **Kochi-Koottanad-Bangalore-Mangalore Pipeline** and **Mumbai High Redevelopment**, to reduce the cumulative impact of time overruns on sector performance.
3. **Enhanced Project Monitoring Tools**:
   * Deploy advanced tracking tools, such as project management software or enhanced Power BI capabilities, to enable real-time monitoring and facilitate quicker response times to issues as they arise.
4. **Strengthening Risk Management**:
   * Introduce periodic risk assessments for projects with high anticipated costs and delays, focusing on risk-prone areas such as supply chain logistics, regulatory compliance, and budget deviations.

By focusing on these recommendations, there is strong potential to optimize project outcomes, control costs, and enhance the overall performance of the Petroleum sector initiatives.