PROJECT TITLE: AIR QUALITY ANALYSIS IN TAMIL NADU

PHASE TWO

Step 1: Data Collection

Air quality data from monitoring stations in Tamil Nadu. Data on various air pollutants, including PM2.5, PM10, SO2, NO2, CO, O3, and more.

STEP 2: Data Processing

Clean and pre-process the collected data to remove outliers and errors. Data over time (e.g., hourly, daily) for analysis.

STEP 3: Data Analysis

Calculate Air Quality Indices (AQI) based on pollutant concentrations. Trends, patterns, and anomalies in the data.

STEP 4: Spatial Analysis

Examine the distribution of air quality across different regions within Tamil Nadu. Identify areas with better or worse air quality.

STEP 5: Temporal Analysis

Asses how air quality varies over different times, such as seasons or days of the week. Identify any long-term trends or changes.

STEP 6: Health Impact Assessment

Estimate the potential health impacts of air pollution on the population. Consider the correlation between air quality and health outcomes.

STEP 7: Comparison and Benchmarking

Compare current air quality data with historical data to assess improvements or deterioration. Benchmark against air quality standards and guidelines set by authorities.

STEP 8: Public Awareness

Communicate the results and recommendations to the public and relevant authorities. Encourage awareness and action to mitigate air pollution.