

# **Phase 1:**

## **Problem Definition and Thinking.**

### **Project:**

Assessment of Marginal Workers in TamilNadu.

### **Problem Definition:**

The project involves analyzing the demographic characteristics of marginal workers in Tamil Nadu based on their age, industrial category, and sex. The objective is to perform a socioeconomic analysis and create visualizations to represent the distribution of marginal workers across different categories. This project includes defining objectives, designing the analysis approach, selecting appropriate visualization types, and performing the analysis using Python and data visualization libraries.

### **Design Thinking:**

### **Analysis Approach:**

### **Step 1: Data Acquisition:**

- Obtain the dataset containing information on marginal workers in Tamil Nadu, including age, industrial category, and sex, from the provided dataset link.

## **Step 2: Data Preprocessing:**

- Perform data cleaning to address any inconsistencies, errors, or missing values in the dataset.
- Ensure that the dataset is in a structured and usable format for analysis.

## **Step 3: Exploratory Data Analysis (EDA):**

- Conduct EDA to gain a comprehensive understanding of the dataset.
- Analyze demographic distributions, including age groups, industrial categories, and gender.
- Identify key trends, outliers, and correlations within the data.

## **Step 4: Data Visualization:**

- We will be selecting appropriate data visualization techniques, such as bar charts, pie charts, and heatmaps, to effectively represent demographic distributions.
- Create visualizations that clearly communicate the distribution and socioeconomic status of marginal workers across different categories.
- Use Python and data visualization libraries to generate informative plots.

## Step 5: Socioeconomic Analysis:

- Perform a socioeconomic analysis to derive insights from the demographic data.
- Explore the relationships between age, industrial categories, and gender in the context of marginal workers.
- Identify any disparities or patterns that emerge from the analysis.

## CONCLUSION:

By following this approach, we aim to thoroughly analyze the demographic characteristics of marginal workers in Tamil Nadu, visualize their distribution, and perform a socioeconomic analysis. This process will enable us to better understand the status of marginal workers in the region and potentially inform policy decisions and interventions.

**Dataset Link:** [DATASET](#)