**Project 3:**

**TN Marginal Workers Assessment**

**Phase 1: Problem Definition and design thinking**

**Problem Definition:**

We are concerned about the socio well-being and working conditions of marginal workers in Tamil Nadu. The main objective of this project is to analyse the characteristics, employment patterns and living conditions of these workers. By gaining insights into their challenges, disparities and opportunities for improvement we aim to develop recommendations and solutions based on data. Our ultimate goal is to enhance the socio status and overall well-being of workers in Tamil Nadu."

This problem statement clearly defines the projects scope by focusing on workers, in Tamil Nadu. It highlights our interest in their socio well-being and working conditions while setting out our purpose; analysing their demographics and living conditions to gain insights that will inform our recommendations and solutions. This approach allows us to leverage data analytics techniques alongside design thinking principles

**Design thinking:**

**Problem objective:**

The TN Marginal Workers Assessment project aims to analyse the demographic characteristics, age distribution, gender distribution, employment patterns, living conditions, socio-economic disparities, education and skill levels, healthcare access, social support systems, vulnerabilities and risks faced by marginal workers, and develop data-driven recommendations and solutions to address their needs and challenges. The project aims to provide a comprehensive understanding of the socio-economic status and well-being of marginal workers in Tamil Nadu.

**Analyse approach:**

The TN Marginal Workers Assessment project involves a structured approach to extract, clean, and analyze data. This includes data collection, cleaning, analysis, and interpretation. The process includes data cleaning, data preparation, and data analysis. The analysis includes demographic, employment, living conditions, healthcare, and social support analysis. Recommendations and solutions are then proposed, and the process is documented and reported. Validation and peer review are sought to ensure the quality of the analysis. Continuous monitoring is established to evaluate the effectiveness of the proposed solutions.

**Visualization Selection:**

Bar charts are the most suitable visualization for analyzing the demographic characteristics of Tamil Nadu marginal workers. They display the distribution of demographic variables by age groups, education levels, industrial categories, and gender, providing valuable insights and identifying trends.