# A demographic analysis and visualizations for marginal workers in Tamil Nadu (TN):

1. Data Collection:

- Obtain a dataset that includes information on marginal workers in Tamil Nadu. This data should include columns for age, industrial category, and sex.

2. Data Preprocessing:

- Clean and preprocess the data. Handle missing values, data type conversions, and duplicates.

3. Data Aggregation and Manipulation:

- Aggregate the data to calculate the distribution of marginal workers based on age, industrial category, and sex. You can use Python libraries like pandas for this purpose.

4. Data Visualization:

- Create visualizations using data visualization libraries such as Matplotlib and Seaborn. Here's how you can visualize the specified parameters:

a. Age Distribution:

- Create a histogram to visualize the age distribution of marginal workers in Tamil Nadu. This can help you understand the age groups that are most affected.

b. Industrial Category:

- Use bar charts or pie charts to visualize the distribution of marginal workers across different industrial categories in Tamil Nadu. This will show which industries have a higher prevalence of marginal workers.

c. Sex Distribution:

- Create a bar chart or pie chart to visualize the distribution of marginal workers by sex in Tamil Nadu. This can help you understand the gender-based disparities among marginal workers.

5. Interpretation:

- After creating the visualizations, interpret the results. Are there any age groups that are particularly vulnerable in Tamil Nadu? Do specific industrial categories have a higher percentage of marginal workers? Are there significant gender disparities in the state?

6. Conclusion:

- Summarize your findings and conclusions based on the demographic analysis and visualizations for Tamil Nadu's marginal workers.

Code:

The creation of general idea of visualizations using Matplotlib and Seaborn.

Python:

```
import pandas as pd

import matplotlib.pyplot as plt

import seaborn as sns


# Load your dataset into a DataFrame

data = pd.read_csv('tn_marginal_workers.csv')


# Age Distribution

plt.figure(figsize=(8, 6))

sns.histplot(data['Age'], bins=10, kde=True)

plt.xlabel('Age')

plt.ylabel('Frequency')

plt.title('Age Distribution of Marginal Workers in Tamil Nadu')

plt.show()


# Industrial Category

plt.figure(figsize=(10, 6))

sns.countplot(data['Industrial_Category'])

plt.xticks(rotation=45)

plt.xlabel('Industrial Category')

plt.ylabel('Count')
```

```
plt.title('Distribution of Marginal Workers by Industrial Category in Tamil Nadu')
plt.show()

# Sex Distribution
plt.figure(figsize=(6, 6))
sns.countplot(data['Sex'])
plt.xlabel('Sex')
plt.ylabel('Count')
plt.title('Sex Distribution of Marginal Workers in Tamil Nadu')
plt.show()
```

Tamil Nadu's demographic analysis of marginal workers.