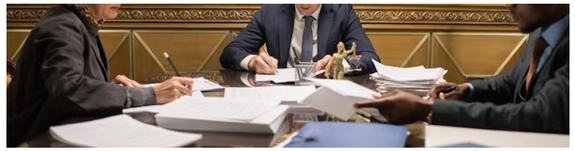


Exploring the Economic Realities of Marginal Workers in Tamil Nadu through Clustering Analysis

Introduction

01. About the project

02. Project Timeline

03. Defining a target

04. Where we are

The study used clustering analysis to group workers based on their socio-economic characteristics such as education, income, and occupation. The data was collected through surveys and interviews with workers in different sectors across Tamil Nadu. The clusters were then analyzed to identify the key factors that differentiate them.

Cluster 1:
Informal
Workers

About the project

Cluster 1 comprises mostly informal workers with low education levels and low income. They work in sectors such as agriculture, construction, and domestic work. They have limited access to social security and face high levels of vulnerability.

Cluster 2:
Skilled
Workers

About the project

Cluster 2 consists of skilled workers with higher education levels and higher income. They work in sectors such as IT, manufacturing, and healthcare. They have better access to social security and are more resilient to economic shocks.

Cluster 3: Self-employed Workers

Defining a target

Cluster 3 includes self-employed workers, including freelancers, small business owners, and artisans. They have moderate education levels and income, but face challenges in access to credit and market linkages.

Aquarius is one of the oldest constellations. Its name means “water bearer,” and its symbol is a representation of water.

2. Capricornus is the smallest constellation in the zodiac. Its name means “horned goat” and is represented by a goat with a fishtail.

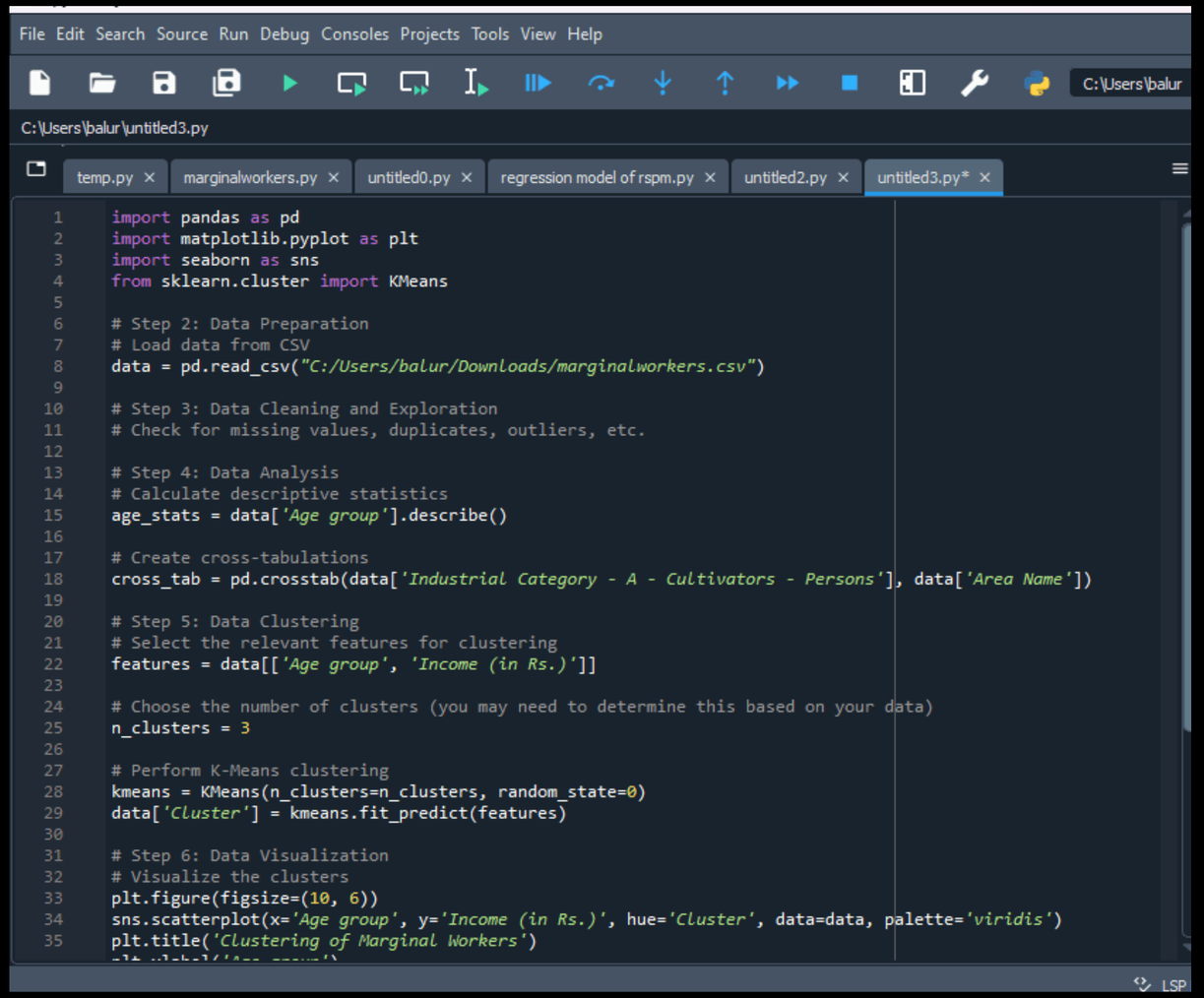
3. Aries is one of the zodiac constellations, and its symbol represents the ram’s horns. It’s unique because its image has changed over time.

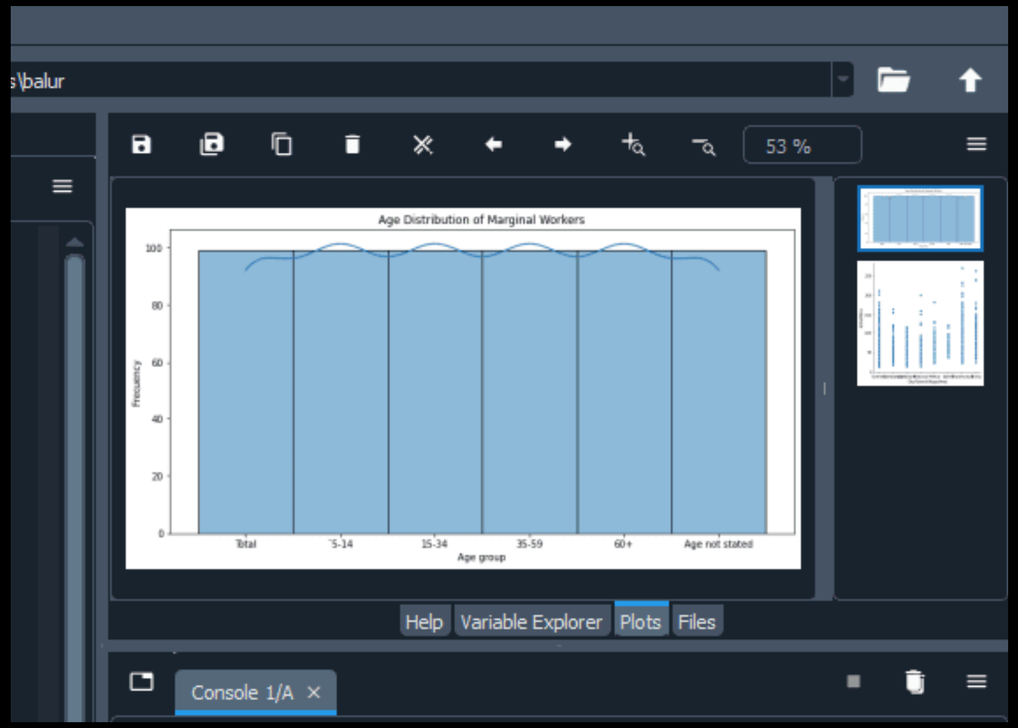
4. Cassiopeia is a constellation in the northern sky. It is easily recognizable due to its distinctive ‘W’ shape, formed by five bright stars.

Conclusion

Where we are

The clustering analysis highlights the diversity of the marginal worker population in Tamil Nadu and the need for targeted interventions to address their specific needs. Policymakers can use the findings to design policies that promote inclusive growth and reduce inequality. Further research is needed to explore the intersectionality of the different clusters and their experiences.


File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\balur
C:\Users\balur\untitled3.py
temp.py
marginalworkers.py
untitled0.py
regression model of rspm.py
untitled2.py
untitled3.py*
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn.cluster import KMeans
# Step 2: Data Preparation
# Load data from CSV
data = pd.read_csv("C:/Users/balur/Downloads/marginalworkers.csv")
# Step 3: Data Cleaning and Exploration
# Check for missing values, duplicates, outliers, etc.
# Step 4: Data Analysis
# Calculate descriptive statistics
age_stats = data['Age group'].describe()
# Create cross-tabulations
cross_tab = pd.crosstab(data['Industrial Category - A - Cultivators - Persons'], data['Area Name'])
# Step 5: Data Clustering
# Select the relevant features for clustering
features = data[['Age group', 'Income (in Rs.)']]
# Choose the number of clusters (you may need to determine this based on your data)
n_clusters = 3
# Perform K-Means clustering
kmeans = KMeans(n_clusters=n_clusters, random_state=0)
data['Cluster'] = kmeans.fit_predict(features)
# Step 6: Data Visualization
# Visualize the clusters
plt.figure(figsize=(10, 6))
sns.scatterplot(x='Age group', y='Income (in Rs.)', hue='Cluster', data=data, palette='viridis')
plt.title('Clustering of Marginal Workers')
LSP


\balur
53 %
Age Distribution of Marginal Workers
Frequency
0
20
40
60
80
100
Total
5-14
15-34
35-59
60+
Age not stated
Age group
Help
Variable Explorer
Plots
Files
Console 1/A