

## Economic and Population Factors on Environmental Health

### Introduction

The climate is changing slowly and our environment is progressively getting worse over years. In this project, our analysis will focus on two parts: Correlation analysis and comparative analysis. In the correlation analysis we will look for if there is an association between the given variables. In the comparative analysis we will look at the countries that contribute to global CO2 emissions the most as a whole country and as a person.

### Analysis:

In the analysis we will mainly use scatter plots for correlation and bar graphs for comparisons. For each variable we will have a data summary.

### Correlation analysis:

**GDP and CO2 emissions:** Look for an association between economic welfare and carbon dioxide emission to understand how economic growth affects environmental health.

**Safely managed water and GDP:** Explore how economic wealth correlates with safely managed drinking water.

**Population density vs CO2 emissions:** Investigate if more densely populated areas are correlated with carbon dioxide emissions.

**Population density vs concentration of PM2.5:** Investigate if more densely populated areas are correlated with amount of small particles in the air that 2.5 micrometers in size. Here these particles are like dust, metals, smoke, soot, bacteria, pollen etc.

### Comparative Analysis:

**Countries contribute CO2 the most:** Identify the countries with the highest carbon dioxide emissions.

**Countries per capita contribute CO2 the most:** Identify countries with the highest carbon dioxide emission per capita

### Expected Results:

Countries with high economic prosperity reach safely managed drinking water more. Densely populated countries and economically wealthy countries contribute more to CO2 emissions.

### Conclusion:

The correlation analysis will provide an understanding on how demographic and economic factors are related to environmental health. The comparative analysis will underline major contributors to global carbon dioxide release.