

# Stress on Drinking Water and Population Growth

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## 1. Introduction

### 1.1 Background

Clean drinking water is one of the most important resources for civilization. Increasing clean water access across the world is essential to reduce negative health outcomes and disease burden. Some regions have greater difficulty accessing clean drinking water, and yet these same regions tend to have the highest rates of population growth. With a growing population, there is a greater need for accessible water and better water management practices. One of the regions with a fast-growing population and a lack of drinking water is Sub-Saharan African. Sub-Saharan African also shows the highest number of deaths due to the lack of clean drinking water. If we can understand the relationship between population growth and the available water resources we can have a better understanding of the level of water scarcity that future generations will face.

### 1.2 Problem

The that we face is that we have an understanding of population growth, but we don't understand how this population growth may affect water resources. This project aims to predict how much will continuous population growth affect clean water resources by analyzing different regions of the world.

### 1.3 Interest

World governments would be interested in the impact of population growth and clean water resources. As well as the people in the regions that will be most heavily affected since clean water is an essential right and resource.

## 2. Data acquisition and cleaning

### 2.1 Data Sources

The data source for this project is found in <https://ourworldindata.org>, an online publishing site that focuses on major world problems with a research group based at the University of Oxford. Our World in Data provides data on the number of people without access to drinking water over time, population growth for each region in the world, and water usage by region over time. The data of drinking water and water usage per region is from the year 1990 to 2015 giving us 25 years of data to find the correlation between population growth and available drinking water.

## 3. Methodology

## 4. Results

## 5. Discussion

## 6. Conclusion