Sanitation in Rural Areas

In our world today with great industrial, technological, and medical achievements; there are many who do not have the accessibility of basic hygiene. As the world becomes more developed, it provides an opportunity to help communities build and ensure proper sanitation and drinking water.

By investing in rural areas, our company can provide a foundation in the underdeveloped communities. Through establishing this foundation, we can gain support from the community which in turn will help with a better economy, access to clean water and sanitation, and a healthier population.

Unsafe sanitation is responsible for around 775,000 deaths each year. Almost half of the world’s population do not have access to safely managed sanitation.

Using data from Our World Data: <https://ourworldindata.org/sanitation>

Due to the large data set, I removed the country code, the null values, and set values to only be from the year 2019.

That provided me with a smaller data set of 136 values. The x value is the population, and the y value is country name.

I used Hierarchical Clustering to group the countries together that have similar population numbers. The Dendrogram displays the country number in reference to the excel file row. number. I also provided a bar graph to display the countries and their population for better understanding.

Hierarchical Clustering Average method:

A picture containing chart

Description automatically generated

The red rectangle displays the largest population range. It involves:

1. Central and Southern Asia
2. Fragile or Extremely Fragile
3. Easter and South-Eastern Asia
4. China
5. India