

## **Data Visualization Project – Phase1 - Report**

**Dataset sourced:** <https://databank.worldbank.org/source/world-development-indicators>

**Project Team:** Goka Keerthana, Jothsna Praveena Pendyala.

### **Project Overview:**

The data visualization project focuses on analysing health, nutrition, and population statistics from the World Data Bank's database, specifically the "Health Nutrition and Population Statistics". This dataset covers health indicators across 256 countries over a period of 15 years. The project team, consisting of Goka Keerthana and Jothsna Praveena Pendyala, aims to leverage this dataset to gain insights into global health trends.

### **Dataset Description:**

The dataset contains 16 attributes related to health and nutrition, including fertility rates, prevalence of anemia in children and reproductive women, immunization rates, health expenditures, and child mortality rates. These attributes provide a comprehensive view of various health-related metrics across different countries and regions.

### **Research Questions:**

- Investigating Trends in Global Health Statistics for women and children in the last 15 years: This research question aims to analyze trends in health indicators such as fertility rates, children mortality rates, and vaccination coverage over the past 15 years.
- Finding the trend of the percentage of women and children affected by anemia globally: This question seeks to examine the prevalence of anemia among women and children and identify any trends or patterns over time.
- Global Health Expenditure Statistics Analysis: This research question focuses on analyzing health expenditure trends across different countries and regions to understand spending patterns and allocations in the healthcare sector.
- Comparison of fertility rates in different countries over the years: This question involves comparing fertility rates across countries and regions to identify disparities and trends in population growth and demographics.
- Analysis of adolescent fertility globally: This research question aims to examine adolescent fertility rates and trends globally, focusing on potential implications for public health policies.

### **Data Limitations:**

Two main limitations of the dataset are acknowledged:

**Data Quality Issues:** Common issues such as errors, inconsistencies, duplications, and missing information may affect the accuracy and reliability of the analysis. Addressing these issues is essential to ensure the validity of the findings.

**Privacy and Security Regulations:** Due to the sensitive nature of health data and strict privacy regulations, certain aspects of the data may be restricted or unavailable. This limitation may impact the comprehensiveness of the analysis and the ability to draw conclusive insights.

In conclusion, the data visualization project aims to provide valuable insights into global health trends using the "Health Nutrition and Population Statistics" dataset. By addressing data limitations and employing robust analytical techniques, the team aims to contribute to informed decision-making in the health sector.