

WORLD BANK- Health Data

Group #32

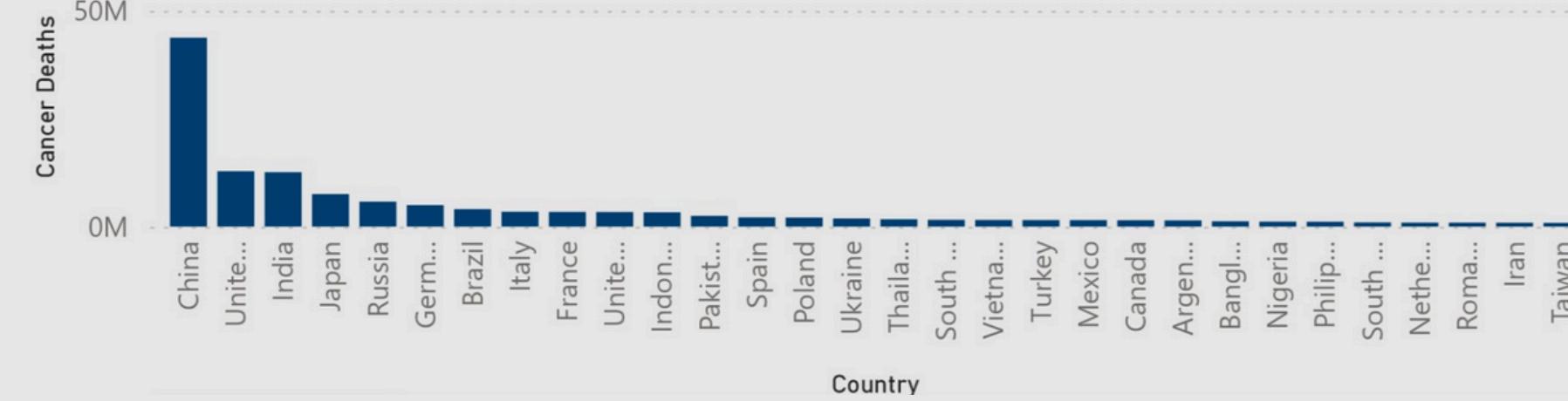
Francisco Magalhães 20221883
Gonçalo Farinha 20221871
Martim Pires 20221939
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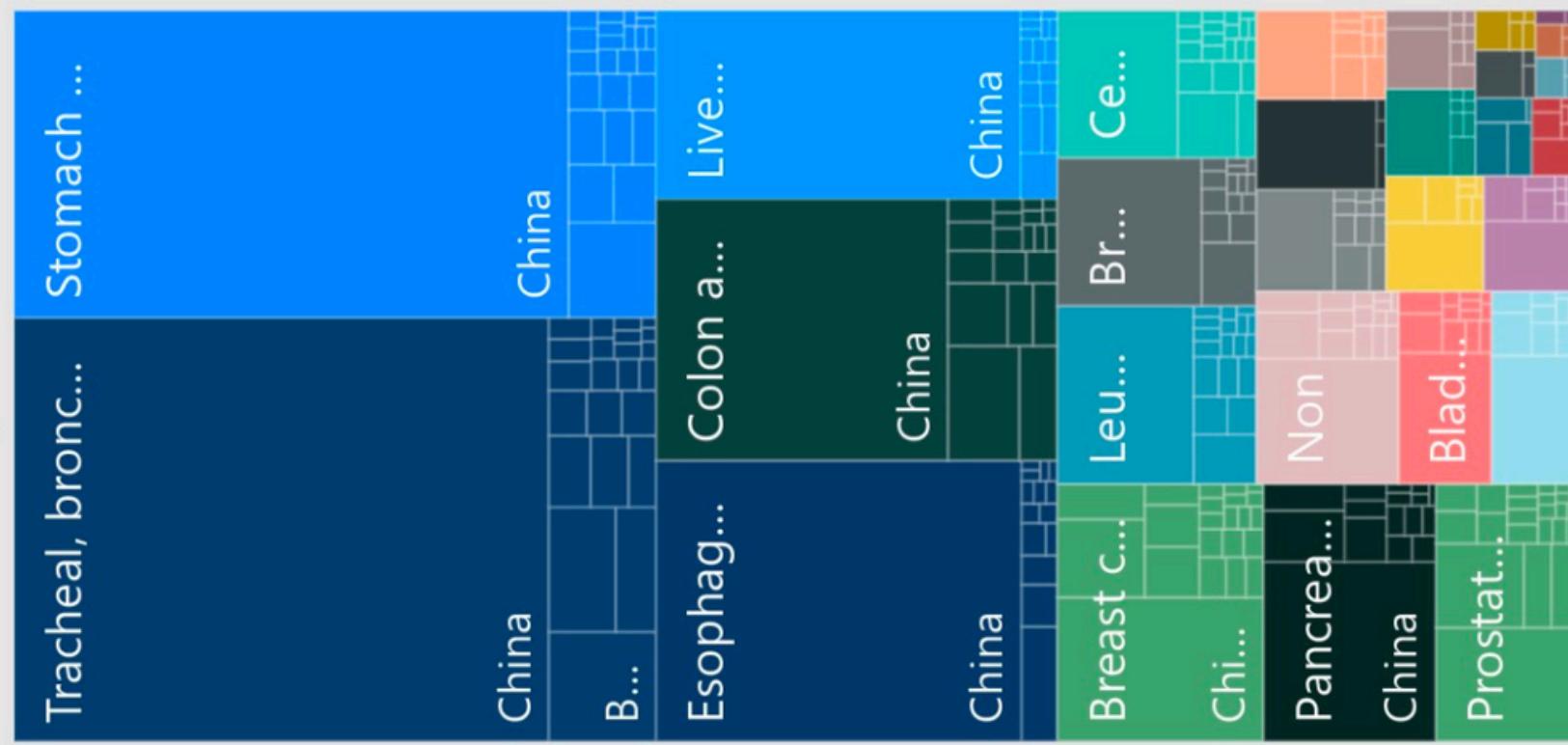
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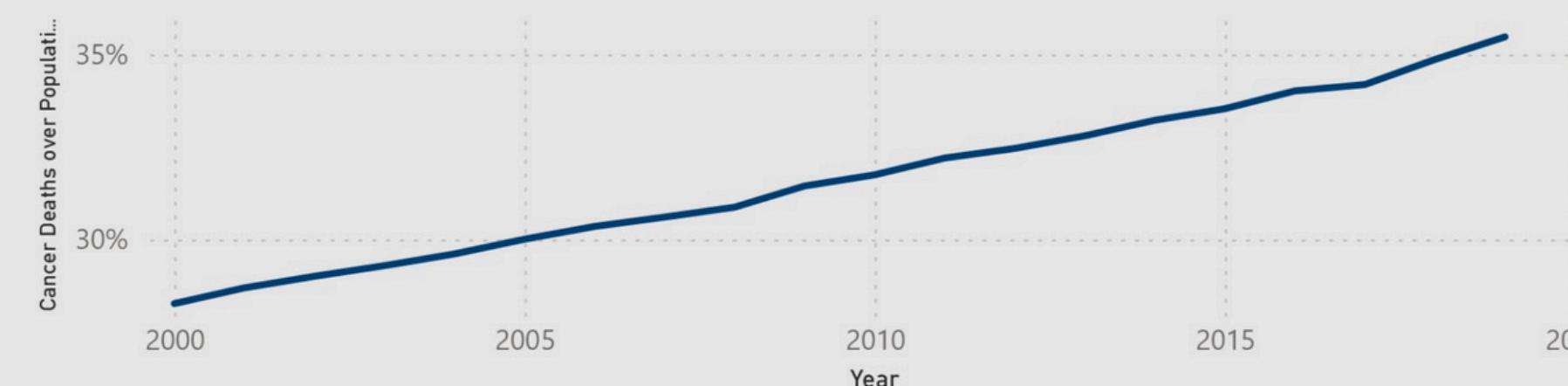
Cancer Deaths by Country



Cancer Deaths by Type and Country



Cancer Mortality Growth



Global Cancer Mortality Trends

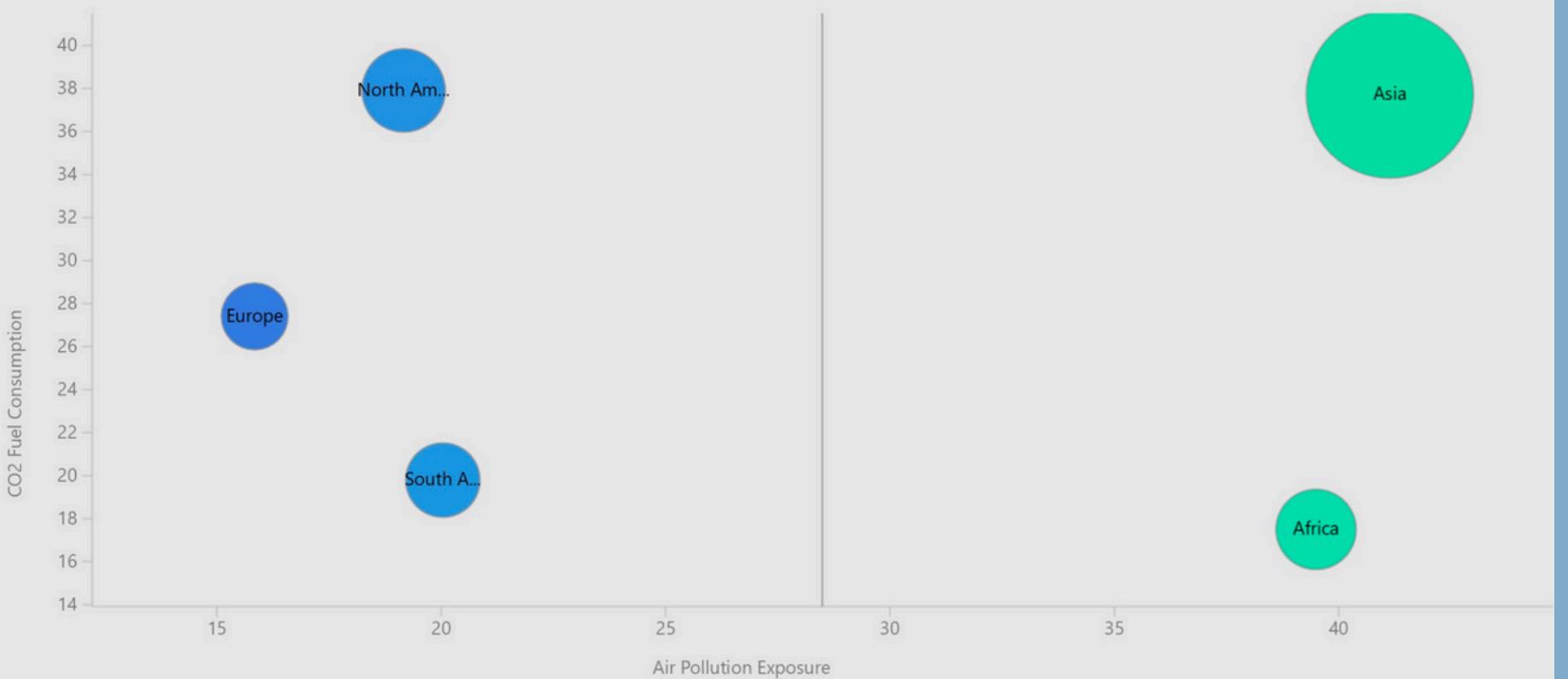
- Cancer remains a leading cause of death globally, with significant variations in mortality rates across countries.
- China exhibits notably high cancer mortality rates, particularly from stomach and liver cancers.
- The bar graph highlights China's leading position in cancer deaths compared to other populous nations like India, the USA, and Russia, which have lower mortality rates.
- Factors such as environmental issues and historical exposure to nuclear testing at sites like Lop Nor may contribute to these high rates.

Pollution Exposure

Emissions and Consumptions

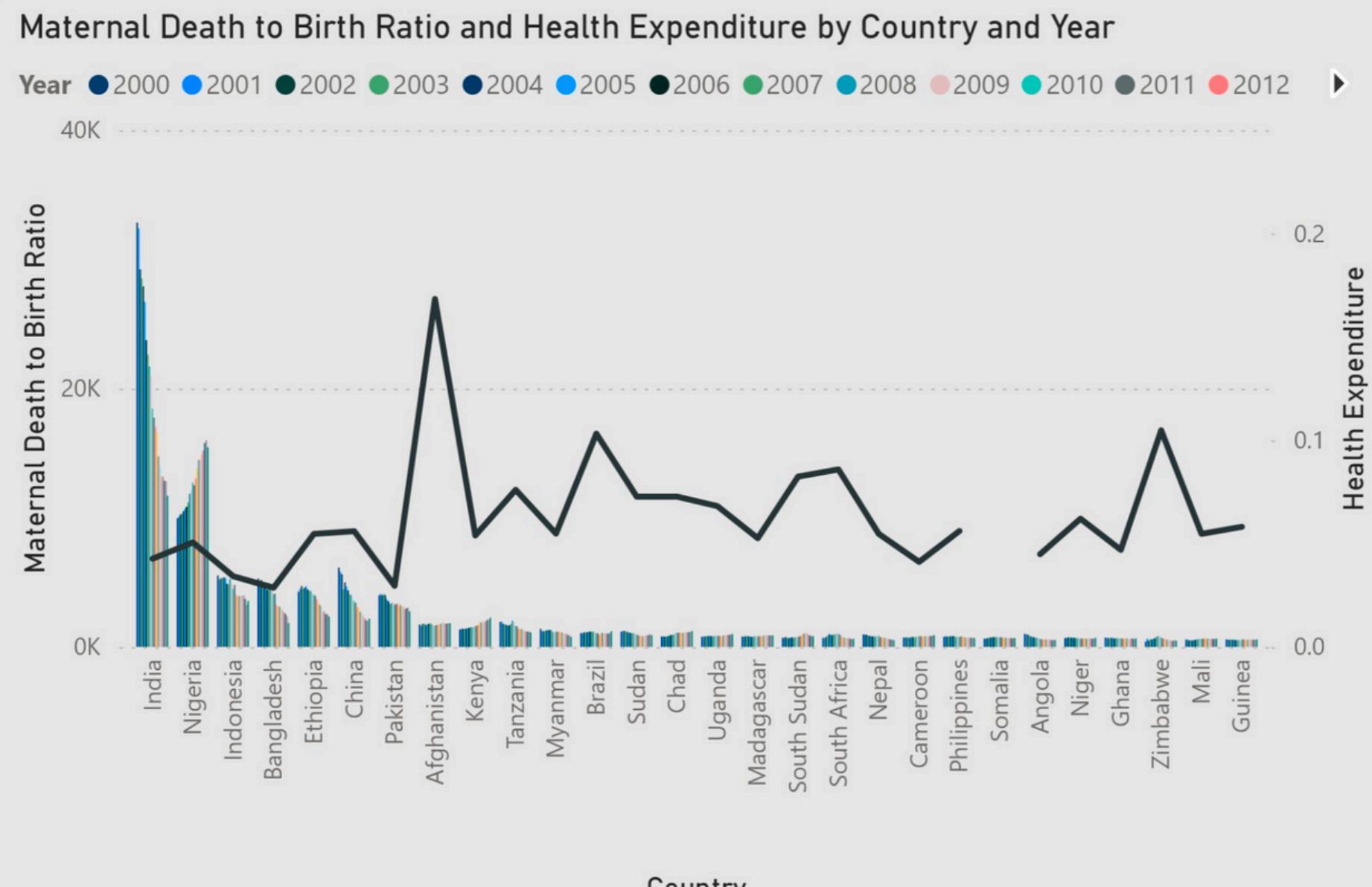
- The chart illustrates a correlation between air pollution exposure and the levels of CO2 and methane emissions across different continents from 2000 to 2023.

Air Pollution Exposure, CO2 Fuel Consumption and Energy Methane Emissions by Continent

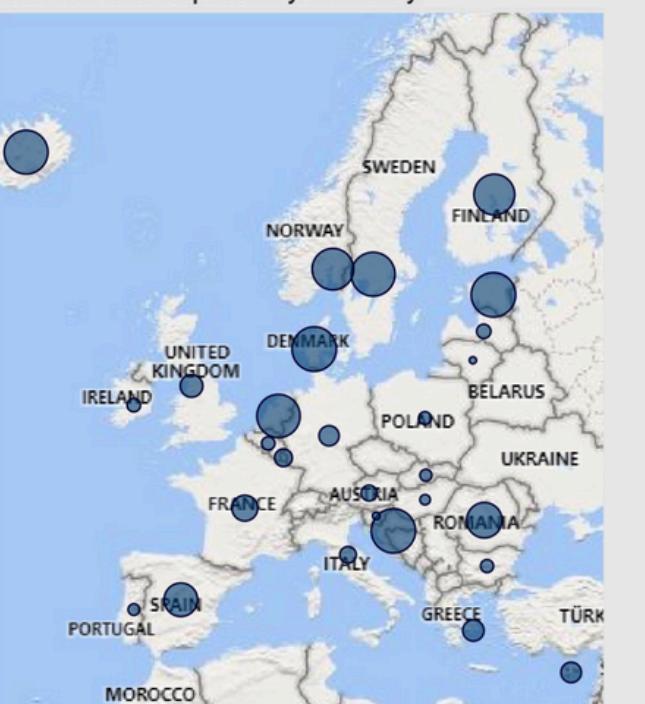


- In Asia and North America there is a high pollution exposure accompanied by high greenhouse gas emissions, reflecting significant industrial and energy activities.
- In Europe and South America the pollution levels and emissions are lower, suggesting effective pollution control measures or different energy usage patterns.
- Africa is notable for high pollution exposure but low CO2 emissions, indicating disparities in industrial activities or energy sources.
- The data points to a direct boost in greenhouse gases due to higher pollution levels, particularly in Asia and North America.

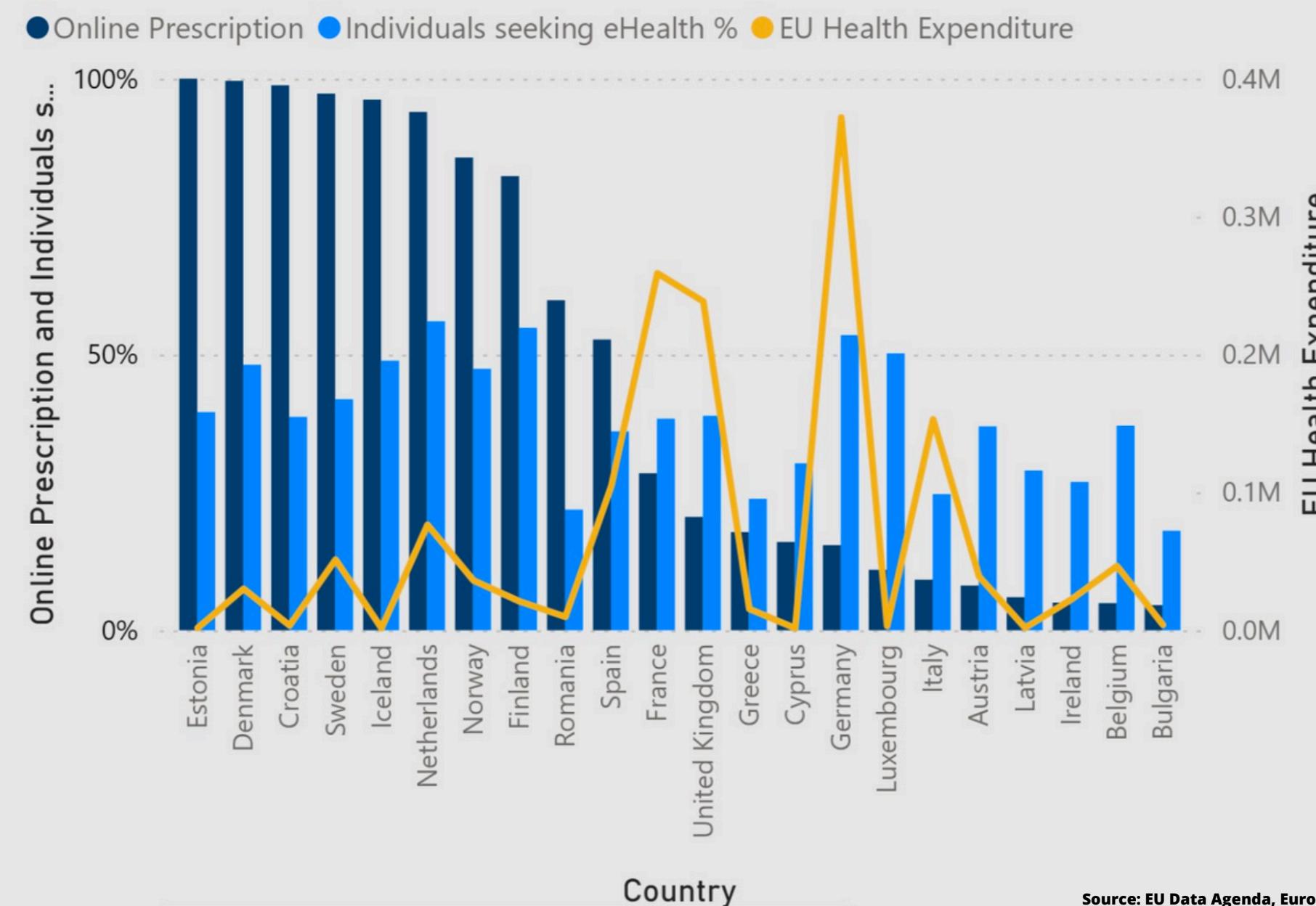
Health Expenditure in Maternal Deaths Context



- The chart demonstrates the relationship between maternal mortality ratios and health expenditure by country from 2000 to 2012.
- High Mortality Countries: India and Nigeria show high maternal mortality rates despite varying health expenditures.
- While some countries exhibit gradual improvements in maternal health outcomes, disparities persist, particularly in countries with low health expenditures.
- Proves that beyond expenditure, the quality of healthcare infrastructure and accessibility to maternal services significantly affect outcomes.



Online Prescription, Individuals seeking eHealth % and EU Health Expenditure by Country

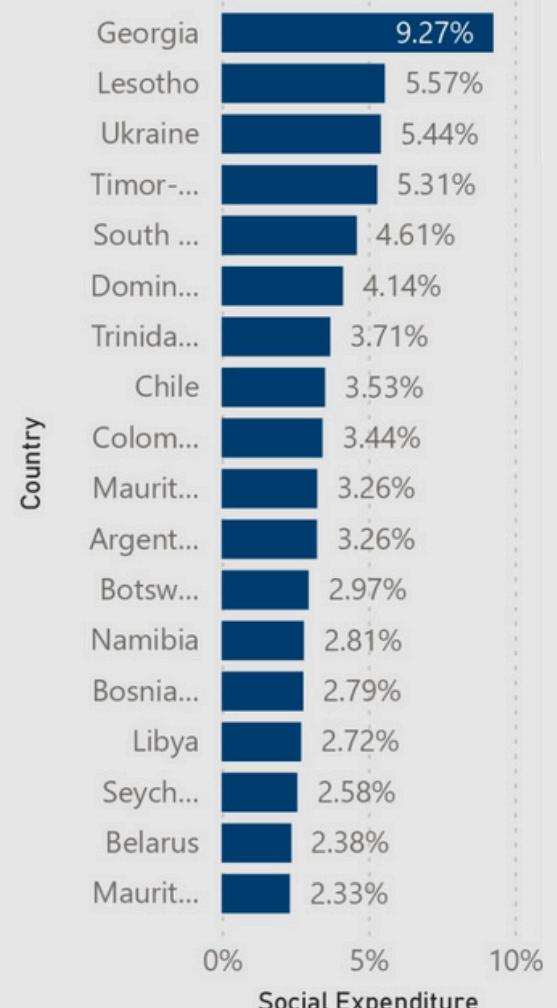
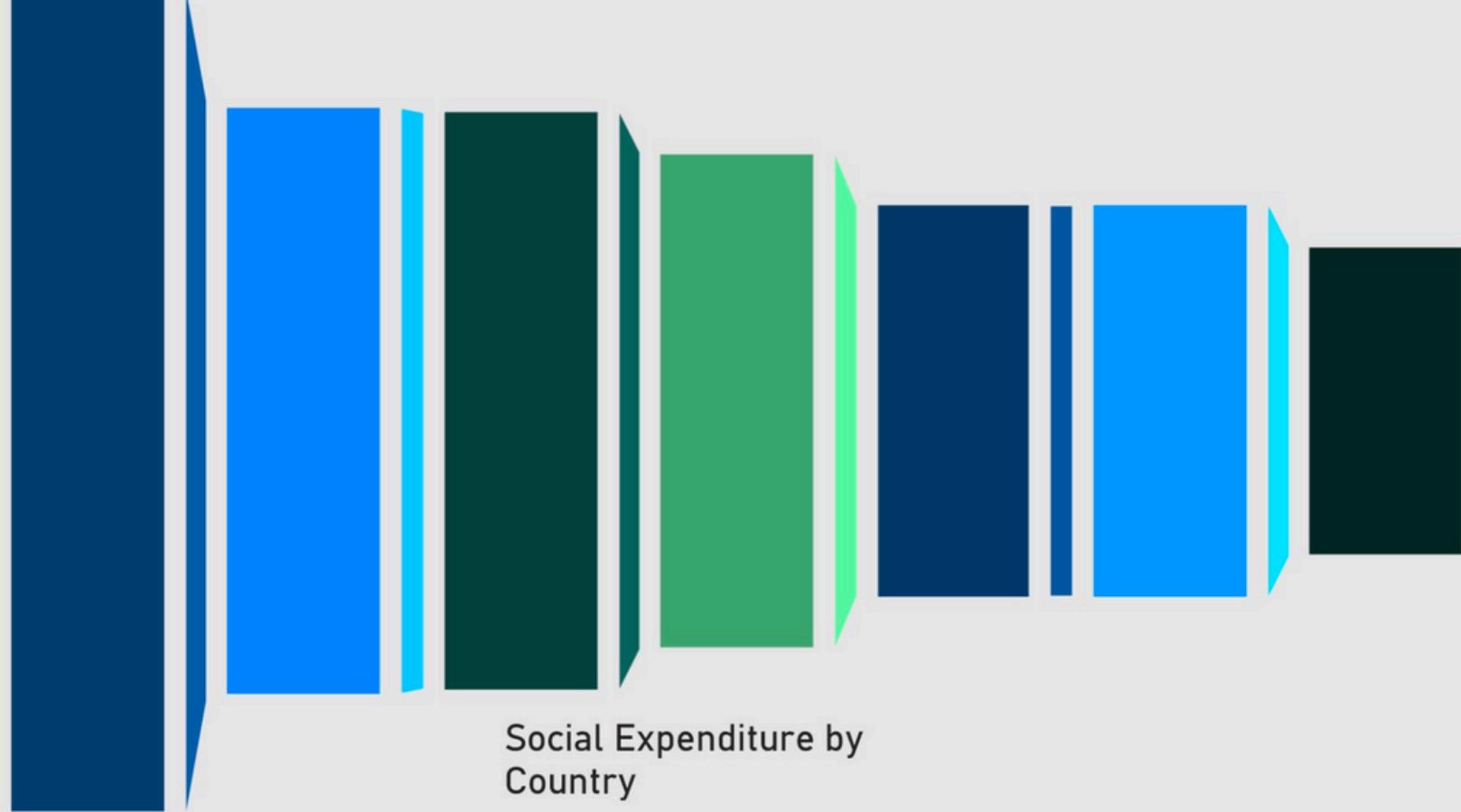


eHealth in the European Context

- The data illustrates the relationship between online prescription usage, individual engagement in eHealth services, and healthcare expenditure across various European countries.
- Countries like Estonia and Denmark show a high utilization of online prescriptions which correlates with lower healthcare expenditures.
- Despite varying levels of online prescription usage, the percentage of individuals seeking health information online remains consistent, indicating widespread digital health literacy from 2011 to 2019.

Living in Slums % of population by Country (?)

South Sudan	Nicaragua	Afghanistan	Ecuador	Lesotho	Timor-Leste	Azerbaijan
97.00%	69.00%	68.00%	58.00%	46.00%	46.00%	36.00%



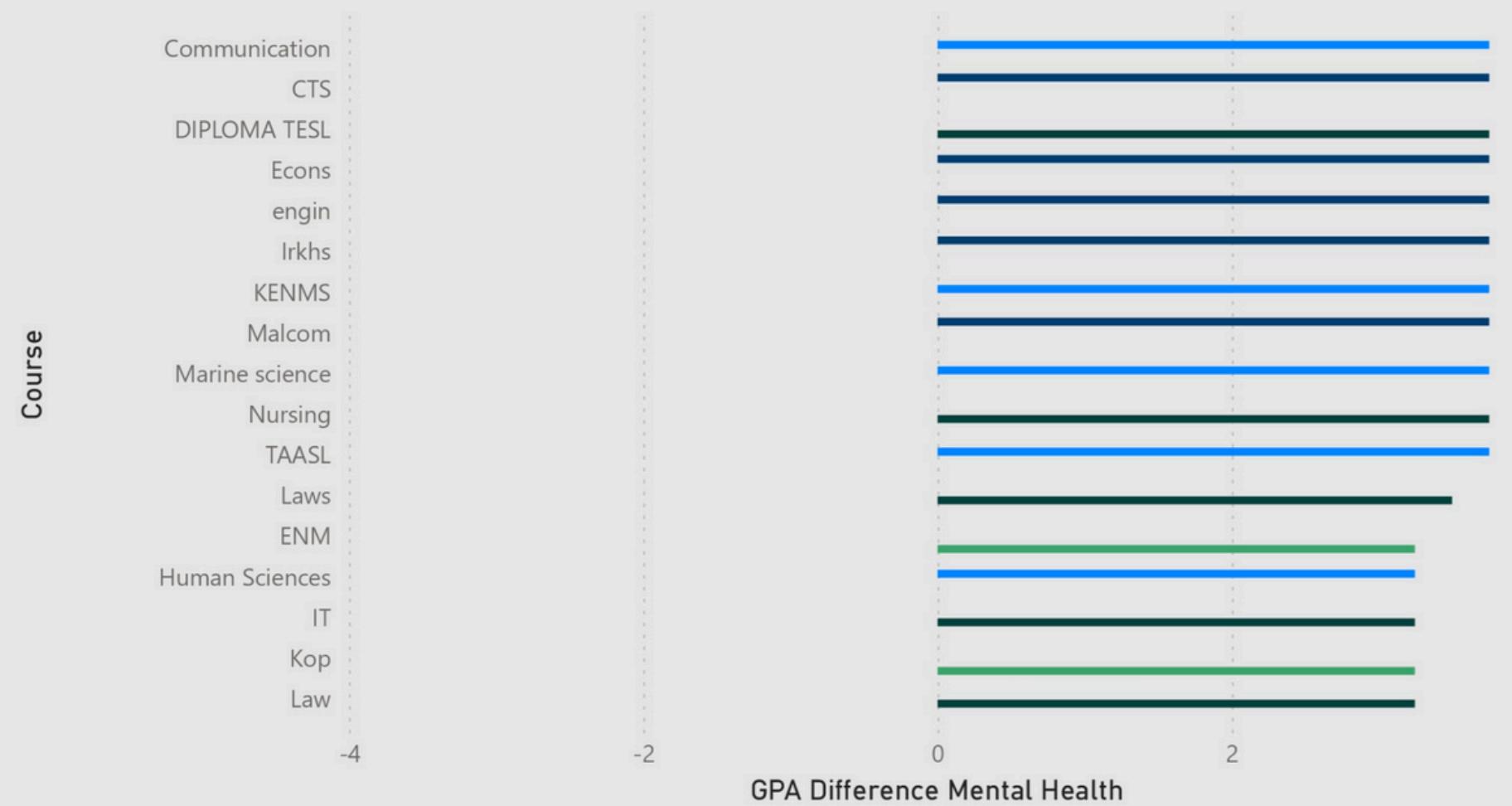
Source: DataBank World Development Indicators

Social Expenditure and Living Quality

- The chart examines the relationship between social expenditure and the percentage of the population living in slums across various countries.
- Countries like Georgia have high social spending (9.27%) which may suggest a potential link to better living conditions.
- High percentages of slum residency, like in South Sudan (97%), Nicaragua (69%), and Afghanistan (68%), indicate severe disparities in living conditions.
- Although slum residency rates are still high in countries like Azerbaijan (highest in its region) they are much lower than other regions of the globe, pointing to other influencing factors like political stability and urban policies.

GPA Difference Mental Health by Course and Year of Study

Year of Study ● year 1 ● year 2 ● year 3 ● year 4



6

Seek Treatment

16

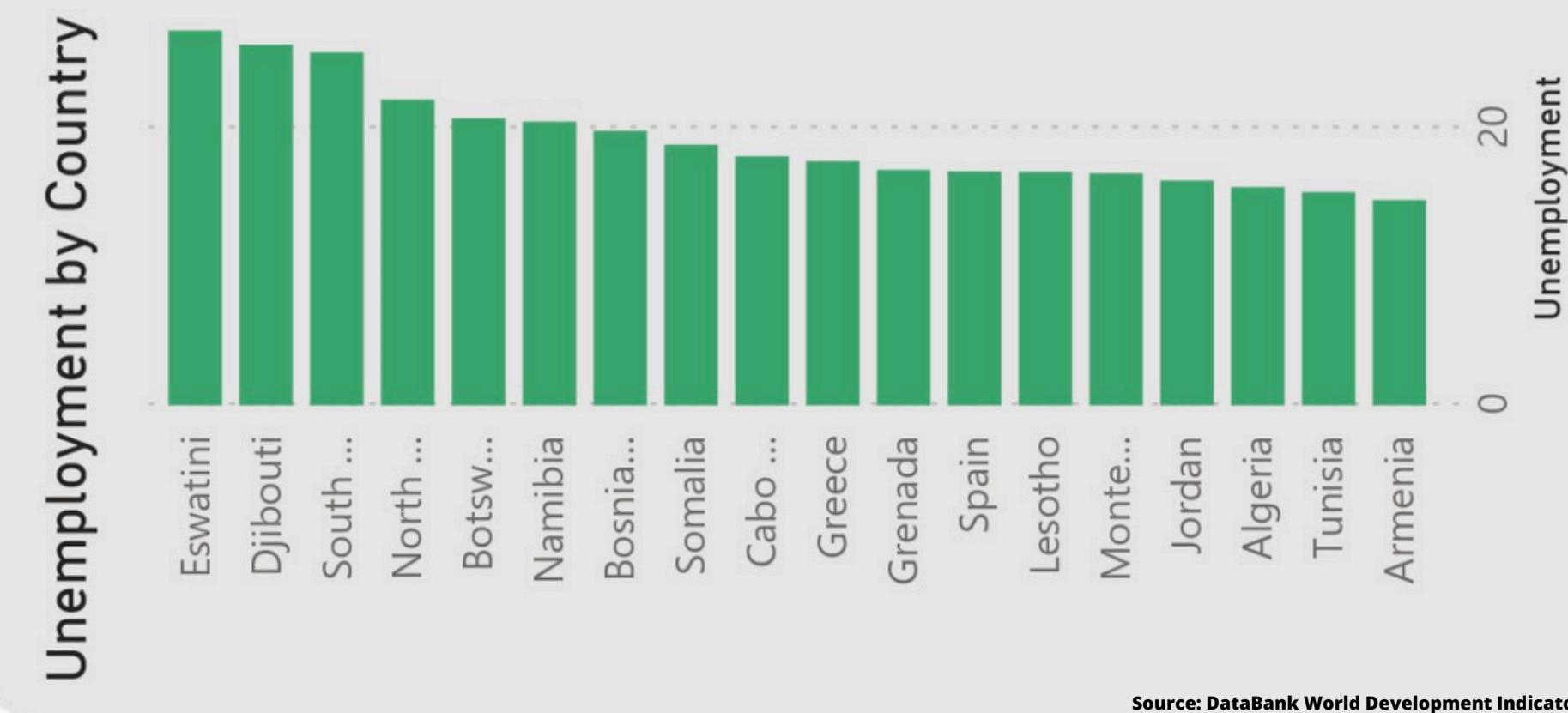
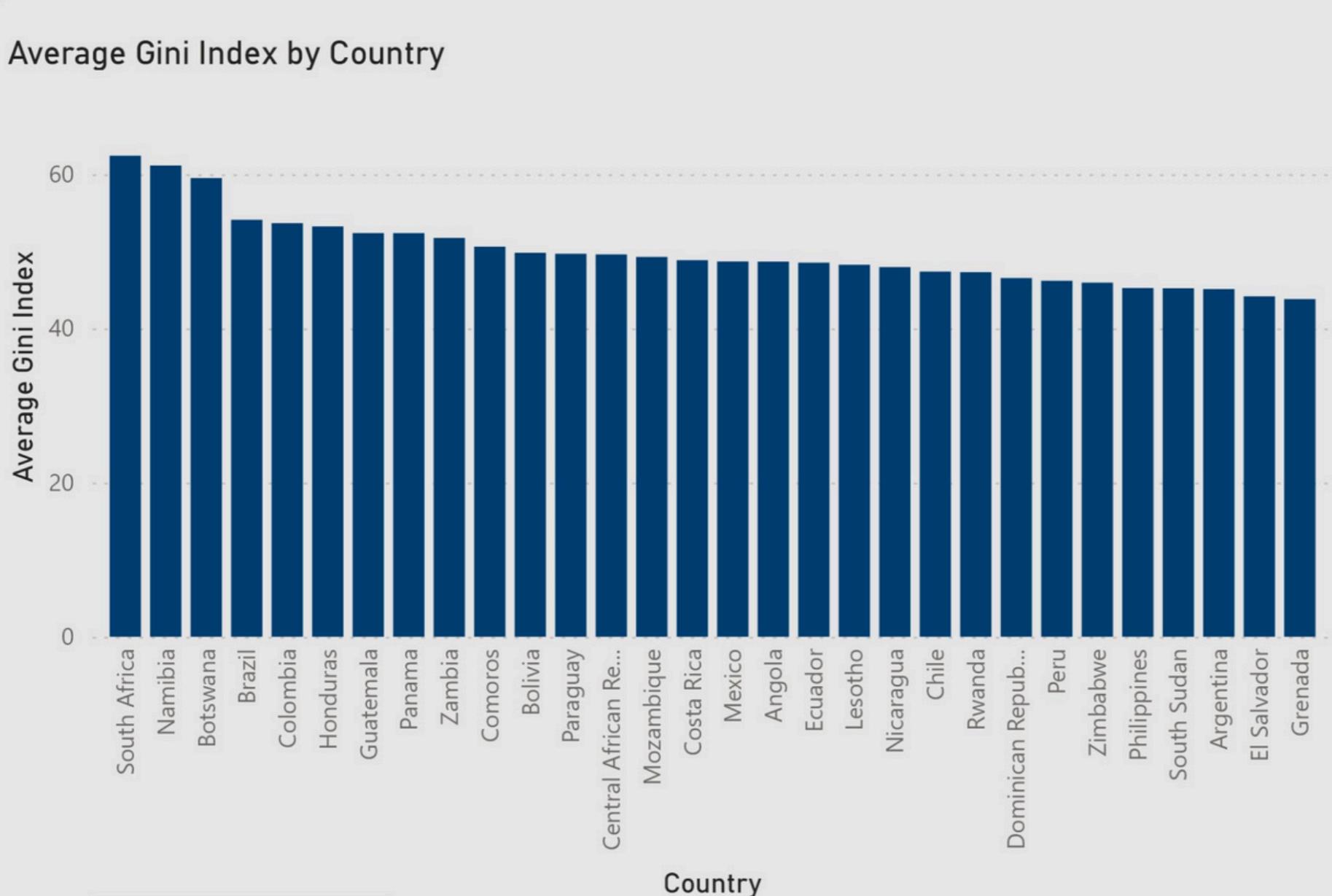
Married Students

64

Students Failed Y...

Students Mental Health in the Academic Performance

- The data reveals a correlation between students' mental health and their GPA across various disciplines and years of study.
- Disciplines like Psychology and Human Sciences show a positive GPA difference, indicating potentially better mental health support or coping mechanisms in these fields.
- More demanding fields such as Engineering and Law exhibit negative GPA impacts, suggesting that mental health challenges can significantly affect academic performance in rigorous environments.



Unemployment Effects on Gini Index

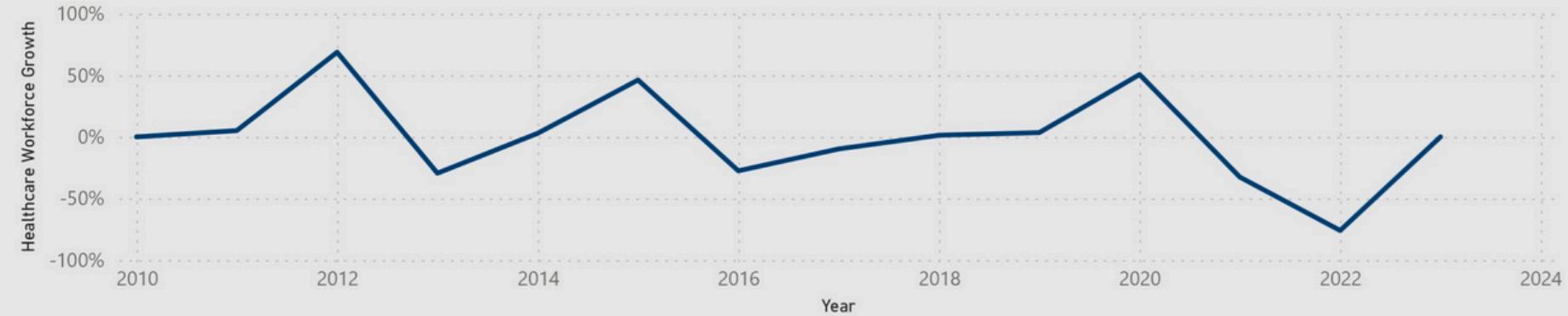
- The charts depict the unemployment rates and the average Gini Index values across multiple countries, analyzing how high unemployment may affect income inequality.
- Countries like South Africa and Namibia show high Gini Index values, reflecting significant income inequality exacerbated by high unemployment rates.
- Contrast with European countries where lower Gini Index values suggest more equitable income distribution, possibly due to stronger welfare systems.
- High unemployment rates tend to increase income disparity by concentrating wealth among fewer individuals, highlighting the social implications of unemployment.

Health Workforce Impact

Health Workforce and Mortality Population Ratio by Country

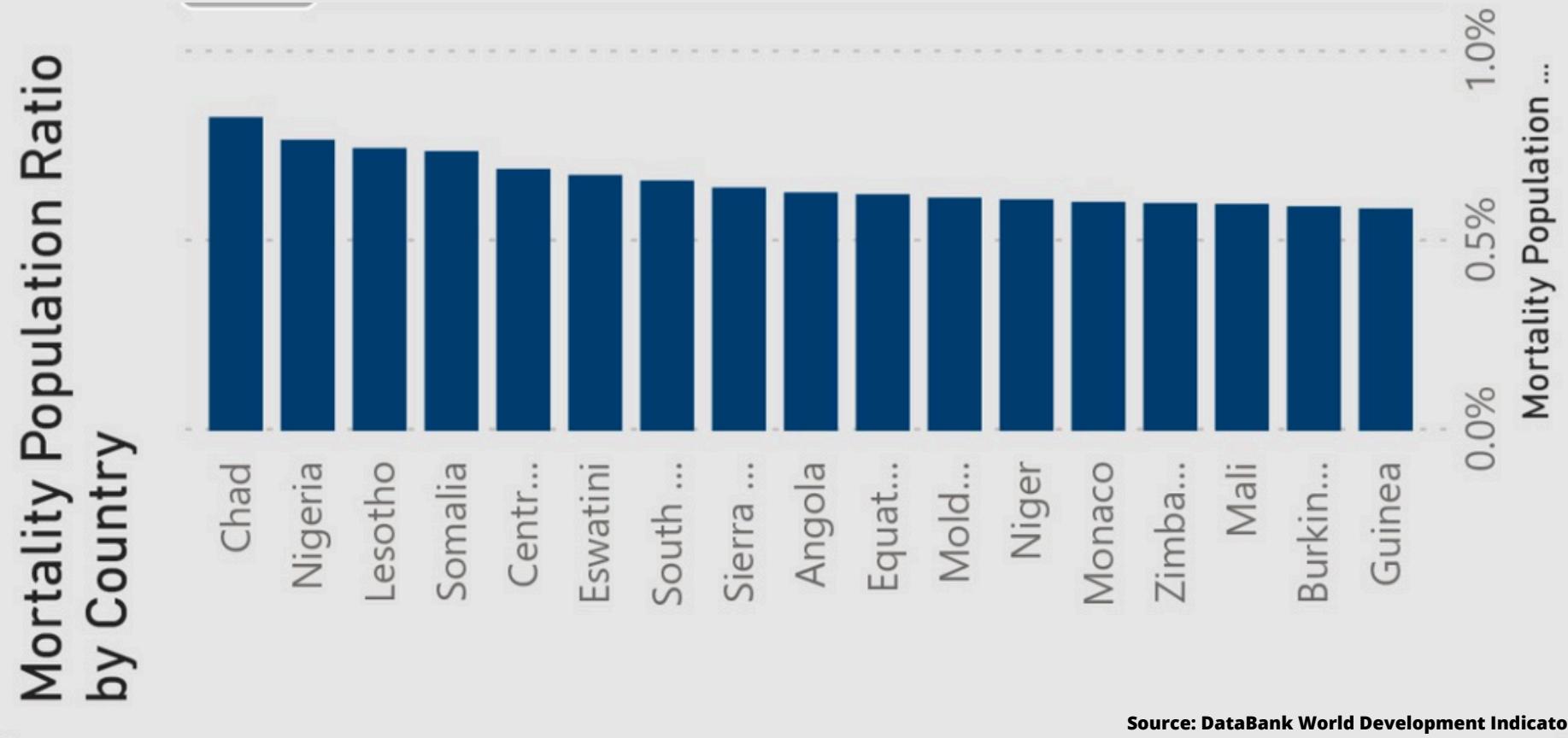


Healthcare Workforce Growth by Year



- The scatter plot demonstrates the relationship between the size of the health workforce and mortality population ratios across various countries.
- While some countries with large health workforces have lower mortality ratios, this is not uniformly seen across all, suggesting that simply having more healthcare workers does not necessarily lead to better health outcomes.
- The line graph depicts the growth in the health workforce from 2010 to 2024, highlighting significant fluctuations, especially a sharp drop in 2020 due to the COVID-19 pandemic followed by a rebound in 2022.

Multidimensional Poverty % population by Country

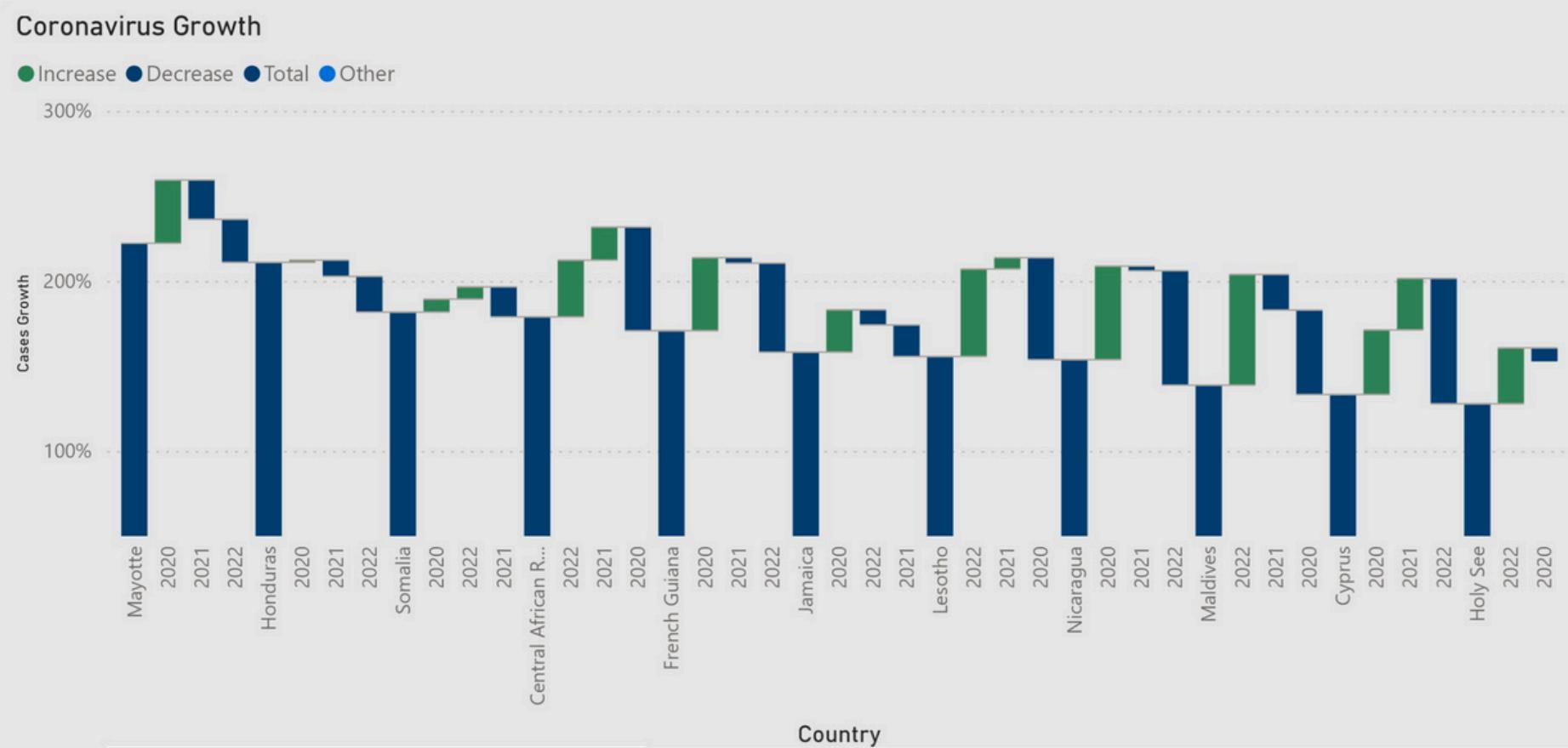


Poverty Influence Mortalities

- The data displays significant correlations between poverty levels, measured by multidimensional factors, and mortality rates across different countries.
- Countries like Chad, Nigeria, and Somalia, which have high mortality rates and are also marked by significant poverty.
- The global map shows varying degrees of multidimensional poverty, with a specific focus on Africa, which exhibits the highest poverty rates.
- It is possible to conclude that deep-rooted poverty is directly correlated with higher mortality rates, due to weaker health infrastructure and less access to essential health services.

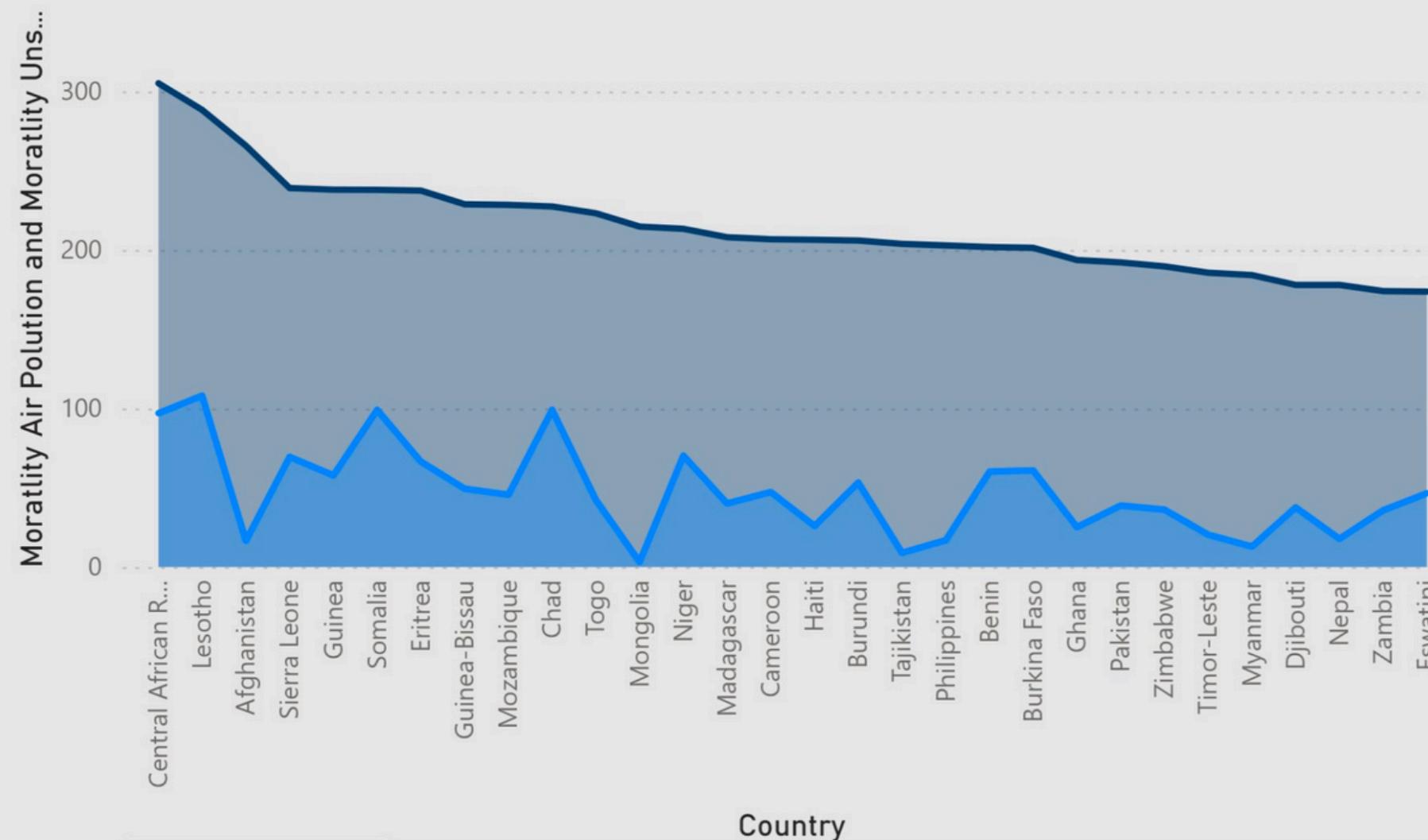
Global Coronavirus Cases

- The bar graph shows coronavirus case growth across various countries, demonstrating how different nations have managed the pandemic over time.
- Countries like Mongolia and Yemen have experienced notable spikes, highlighting challenges in containment and control.
- Countries such as Croatia and Switzerland exhibit minimal growth, indicating effective pandemic control strategies.
- The Philippines and Slovenia show increases in later years, suggesting impacts of relaxed restrictions or the emergence of new variants.
- Low or stable growth rates in European countries reflect consistent and effective virus management.
- Periodic increases and decreases in case numbers in countries like Indonesia and Malaysia show the impact of intermittent outbreaks and changing control measures.



Mortality Air Pollution and Mortality Unsafe Water by Country

● Mortality Air Pollution ● Mortality Unsafe Water



Max Cumulative Air Pollution Mortalities

305.10

Central African Republic

Max Cumulative Unsafe Water Mortalities

108

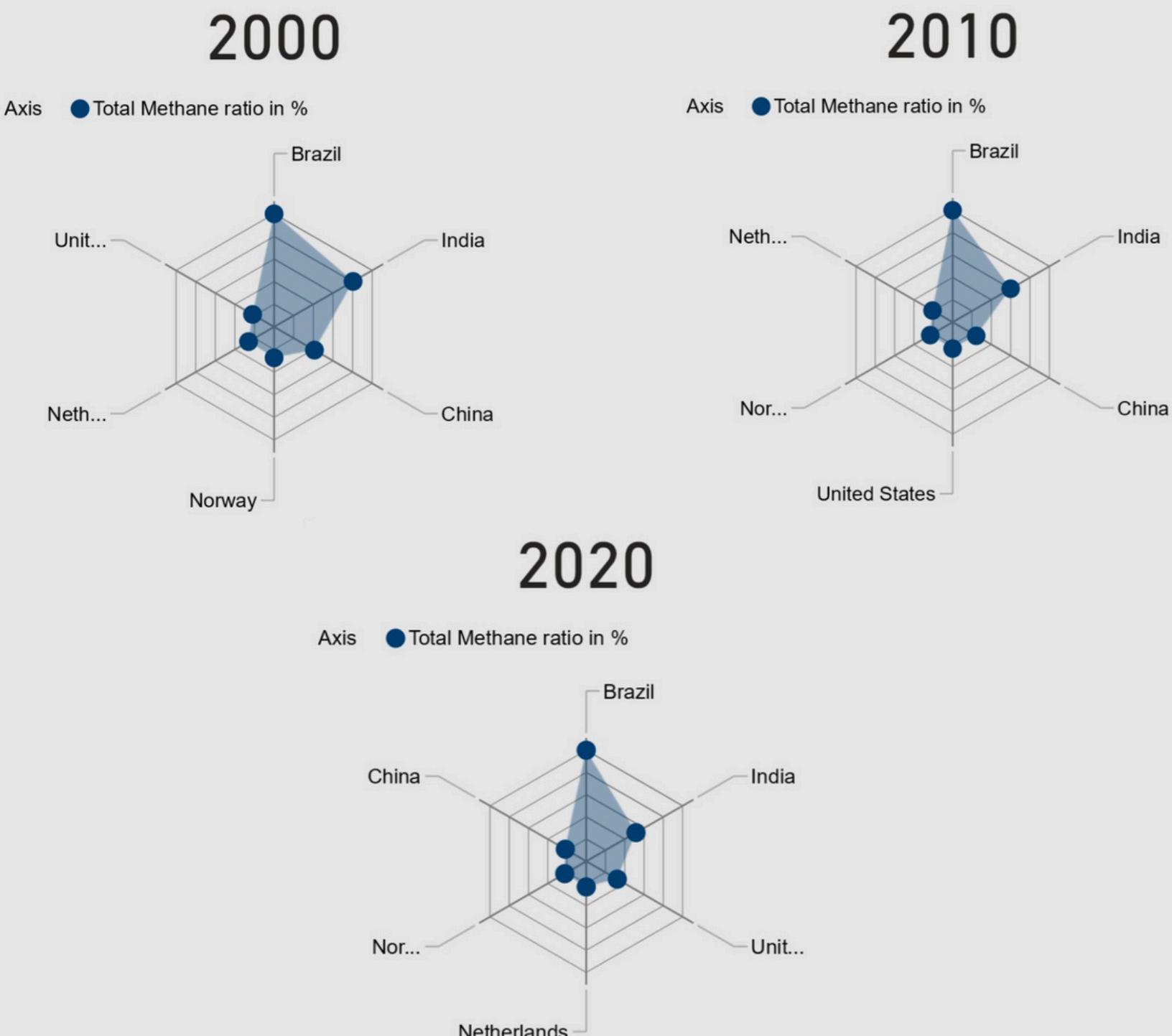
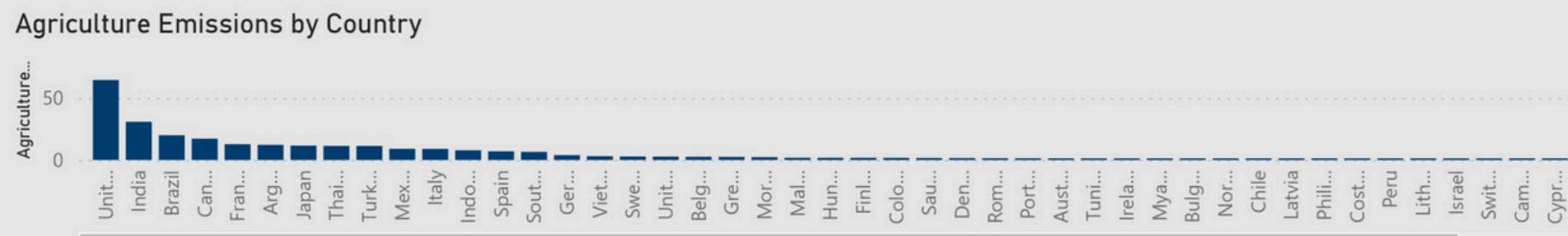
Lesotho

Source: DataBank World Development Indicators

Mortalities Air Pollution and Unsafe Water

- The data presents a comparative analysis of mortalities attributed to air pollution and unsafe water from 2000 to 2023.
- There are significant disparities in mortality rates, with air pollution causing up to 305.10 deaths per 100,000 in the Central African Republic, compared to 108 deaths per 100,000 from unsafe water in Lesotho.
- The graph shows that air pollution generally poses a greater threat than unsafe water, with higher mortality rates across most compared countries.

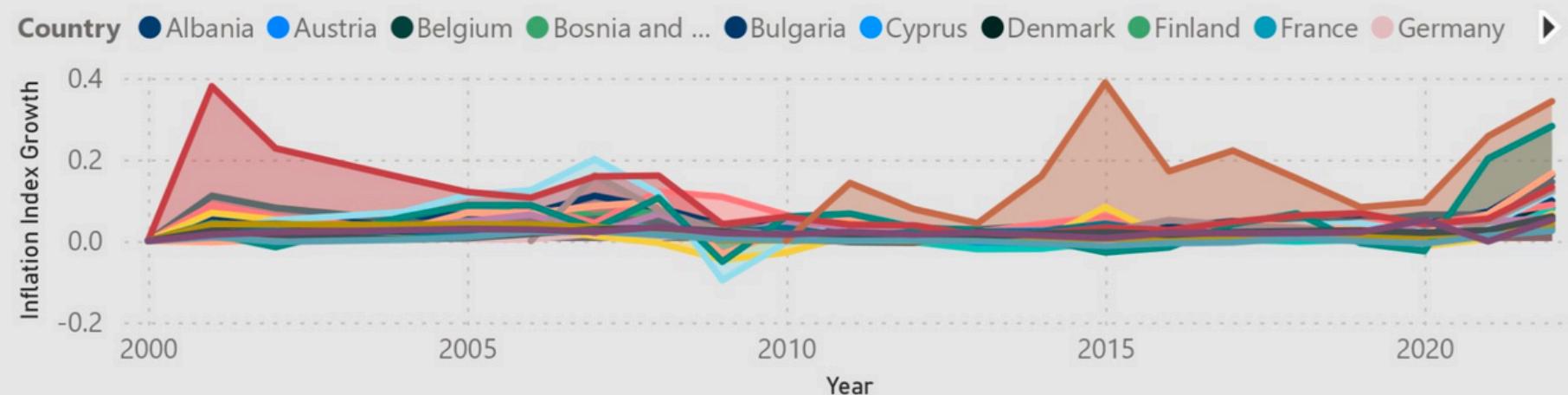
Methane Emission Along Two Decades



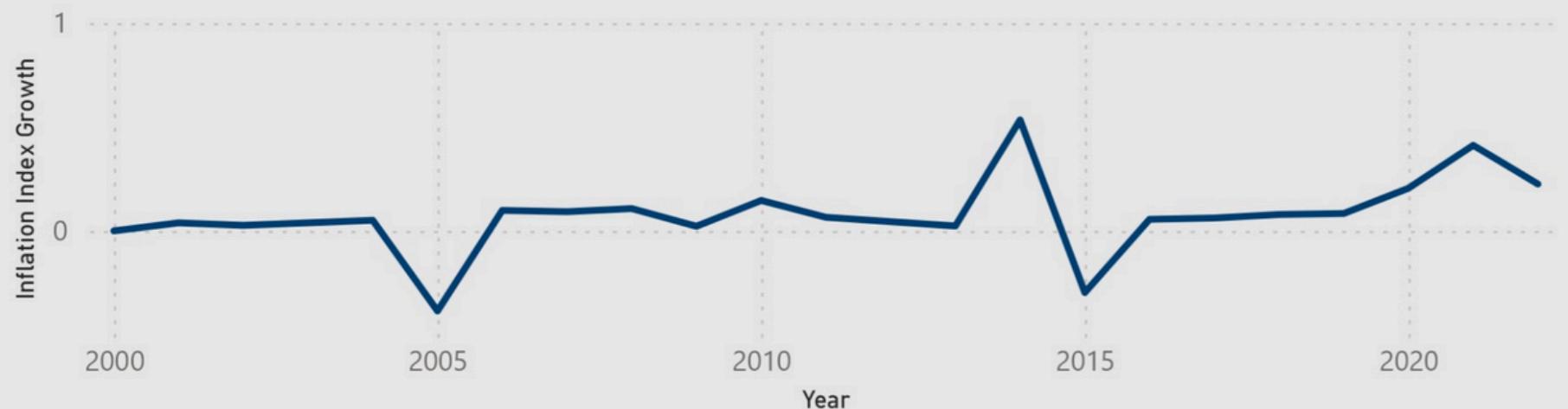
- The data showcases methane emissions from agriculture across various countries from 2000 to 2020.
- Consistently high levels of methane emissions throughout the period, likely due to extensive livestock farming.
- Variations in methane emissions in countries like the United States, China, and the Netherlands, reflecting different agricultural practices and environmental policies.

European Inflation Index Trends

Inflation Index Growth by Year and Country

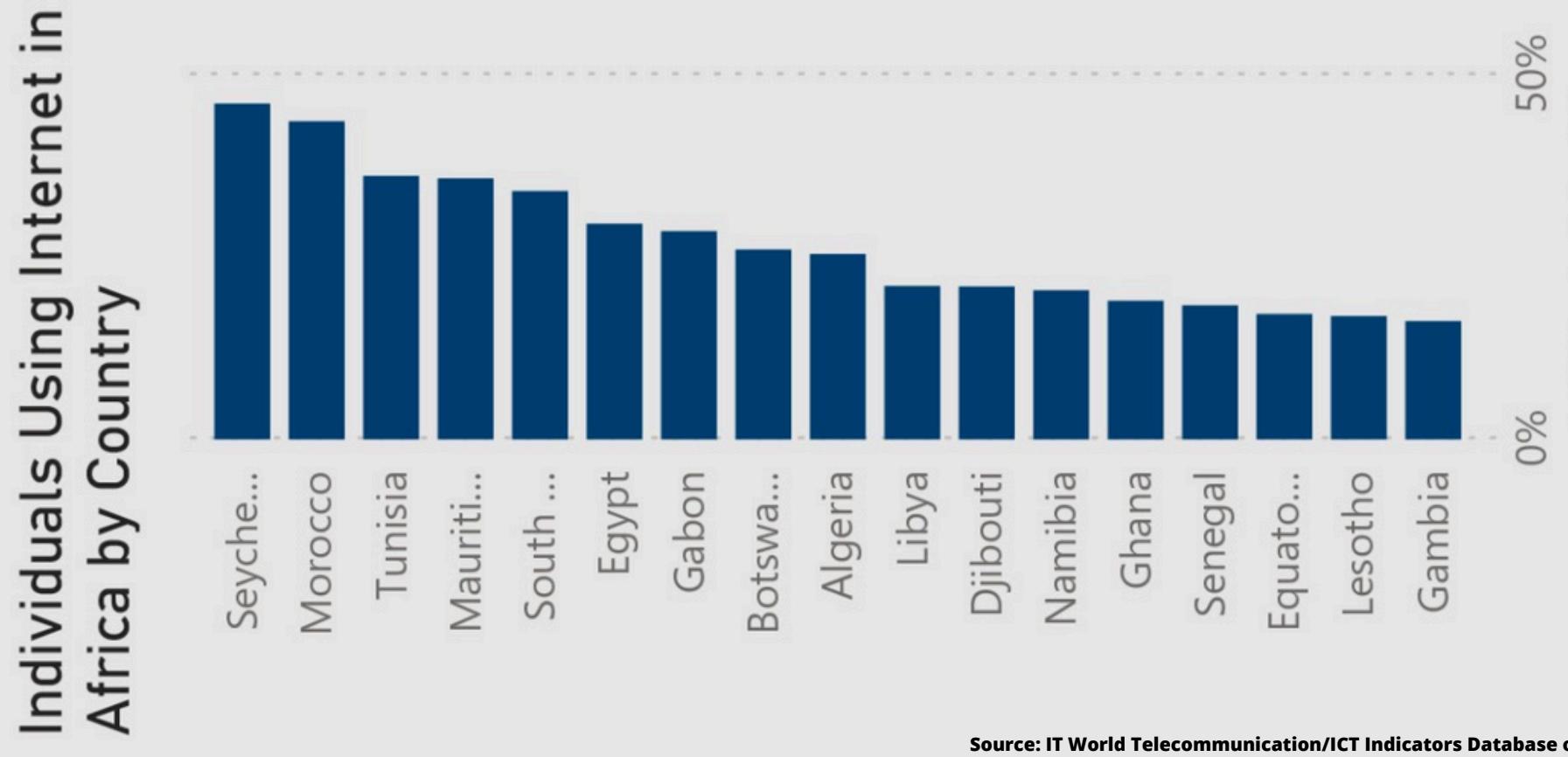
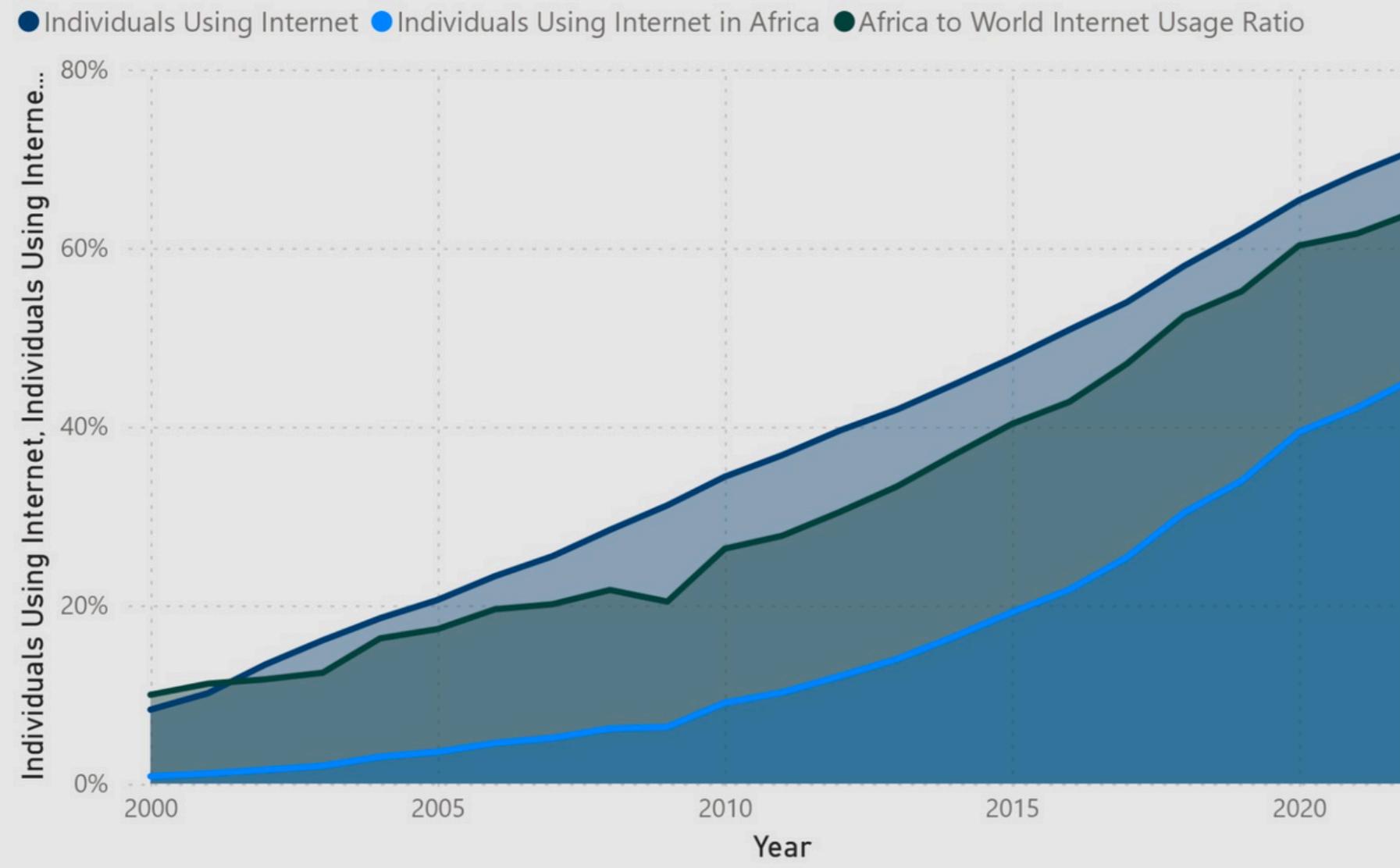


World Inflation Index Growth



- The line graph illustrates inflation index growth by year and country across Europe, revealing variations in inflation rates from 2000 to 2020.
- In the United Kingdom there is a notable increase in inflation, potentially influenced by economic policies, Brexit implications, and market reactions.
- Countries like Switzerland and Sweden show relatively stable inflation rates, indicating effective economic management.
- Countries like Ukraine exhibit pronounced fluctuations due to geopolitical situations and economic challenges.

Individuals Using Internet, Individuals Using Internet in Africa and Africa to World Internet Usage Ratio by Year



Individuals Using Internet in Africa

- The graphs highlight a significant and steady increase in internet usage across Africa from 2000 to 2020.
- The bar chart illustrates that countries like Seychelles, Morocco, and Tunisia lead in internet penetration rates, showcasing substantial national growth.
- The line graph demonstrates the overall growth of internet users in Africa compared to the global internet usage rate, indicating a closing gap in digital divide.

Conclusion

In this presentation, we have explored a wide range of global health, environmental, and socioeconomic indicators. From the alarming cancer mortality rates in China to significant effects of pollution and climate change observed across continents, the data we presented underscores the intricate links between public health and environmental factors. Additionally, disparities in health outcomes, as evident from variations in maternal mortality and the impact of social expenditures on living conditions, reveal the profound influence of economic and social policies on population health.

The analysis also highlights the importance of technology and innovation in improving health outcomes, as seen in the adoption of eHealth solutions across Europe. Meanwhile, the ongoing challenges posed by the COVID-19 pandemic and other health crises like air pollution and unsafe water emphasize the need for robust health systems and effective crisis management strategies.

In conclusion, our analysis suggests that a multidimensional approach—incorporating environmental sustainability, technological advancement, and equitable social policies—is essential for addressing the complex health challenges of the 21st century. This comprehensive perspective not only helps mitigate current disparities but also paves the way for sustainable development and a healthier global population.