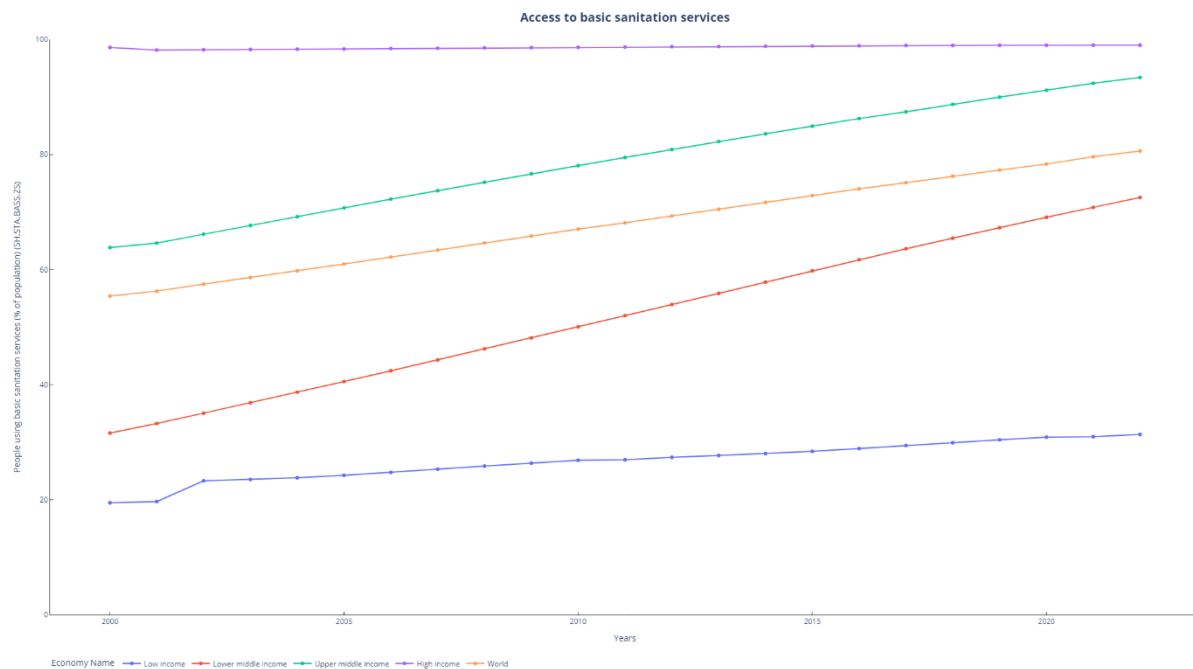


Part 1 Report

I used Python in conjunction with WBGAPI library to extract the data for the relevant series. I preferred to extract the aggregated data at income groups and world levels. This helped me to avoid the calculations and saved time to aggregate country level data to arrive at the aggregates at various levels.

While extracting the data using WBGAPI, I parameterized the code extract data for any preferred series and time range. I have also included error handling in the code to ensure smooth execution. I also realized that there is no data before year 2000 for most of the economies.

The code to create chart ensures that the chart background is transparent and takes care of all the distractions. It also adds some small but useful features considering the chart to be embedded in the document.



Below is some analysis for the chart above:

1. Overall growth for access to basic sanitation services is consistent.
2. Low Income group shows consistent, yet less growth compared to other income groups.
3. Lower and upper middle income groups show consistent and comparable growth almost like two parallel lines.
4. High income countries have consistent growth and seems to be really doing good.
5. World average seems to be constantly increasing; however, the year over year is small. The lower percentage in the world numbers could be due to the lower percentages in Low income countries. The growth could be further improved with additional initiatives targeted to low income countries.
6. Further analysis based on city categories (like Urban, Rural, etc.) could help us to have additional insights on the areas of improvement.