

DECODING DEMOGRAPHIC SHIFTS: A GLOBAL POPULATION ANALYSIS (1970–2022)

POWER BI DASHBOARD USING GLOBAL
COUNTRY-WISE POPULATION DATA

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Introduction



- Covers population trends from 1970 to 2022 across 230+ countries.
- Tracks growth patterns, rank shifts, and regional population shares.
- Highlights high-growth (e.g., UAE, Qatar) and declining (e.g., Bulgaria, Georgia) countries.
- Focuses on Asia, Africa, and Europe for regional analysis.
- Built using Excel (cleaning), Power BI (dashboard), Canva (presentation).



Problem Statement



- The global population has changed dramatically between 1970 and 2022, with uneven growth across countries and continents.
- While countries like UAE and Qatar have surged, others like Bulgaria and Georgia have declined in rank.
- There's a need to analyze trends, shifts, and distribution to understand global demographic patterns.
- This project aims to uncover key changes in country-wise population ranks, growth rates, and regional trends.



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Tools & Software Used

Tools & Usage:

- Excel – Data cleaning, adding derived columns
- Power BI – Visual dashboard creation & DAX calculations
- Canva – Presentation and design

Derived Columns Created:

- Population Growth Rate (%): $((\text{Population}_{2022} - \text{Population}_{1970}) / \text{Population}_{1970}) * 100$
- Rank Change: $\text{Rank}_{1970} - \text{Rank}_{2022}$ to measure upward/downward shifts
- Population Buckets: Categorized countries into size ranges (e.g., <10M, 10–50M, etc.)



Power BI



KPIs & Slicers

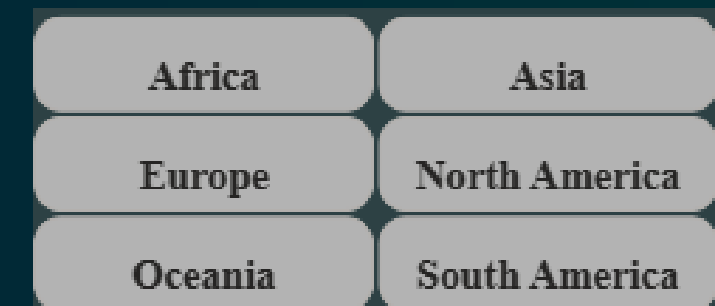


Key Performance Indicators (KPIs):

- Total Population (2022): Sum of the population across all countries in the year 2022.
- Average Growth Rate (%): Mean of population growth rates between 1970 and 2022 across all countries.
- Most Populous Country: Country with the highest population in 2022.
- Highest Growth Country: Country with the maximum percentage increase from 1970 to 2022.
- Smallest Populous Country (2022): Country with the lowest population in 2022.

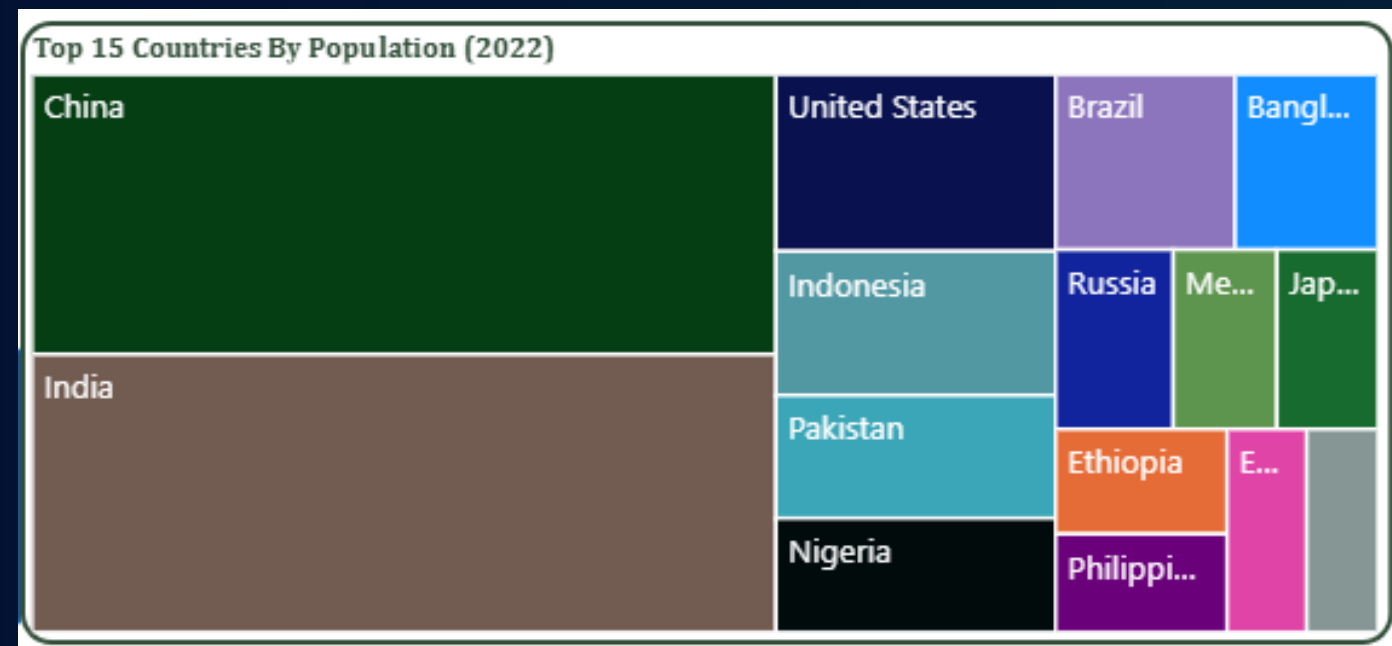
Slicer:

- Continent Slicer: Allows filtering and comparison of countries and visuals by their respective continents.



Page 1: Population Overview

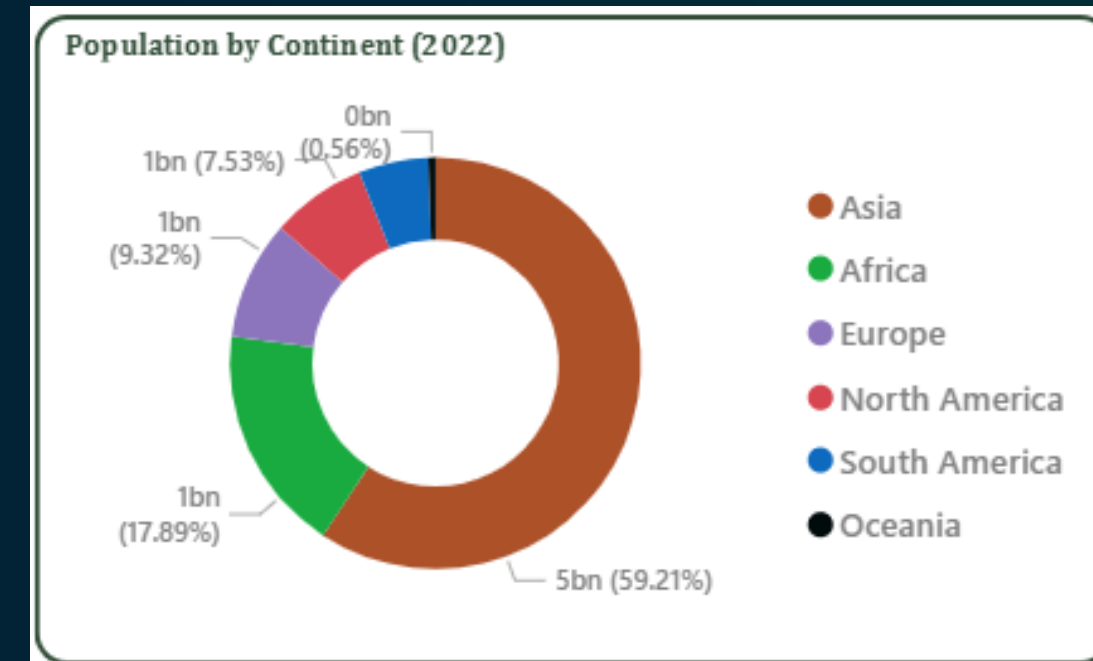
01.



Top 15 Countries by Population (2022) - Tree Map

- China and India dominate with significantly larger blocks.
- Most top countries are from Asia; only a few from other continents.
- Highlights strong population concentration in limited geographies.

02.



Population by Continent (2022) - Donut Chart

- Asia has the largest share, followed by Africa.
- Oceania contributes the least.
- Population is unevenly distributed across continents.

Page 1: Current Demographic Snapshot

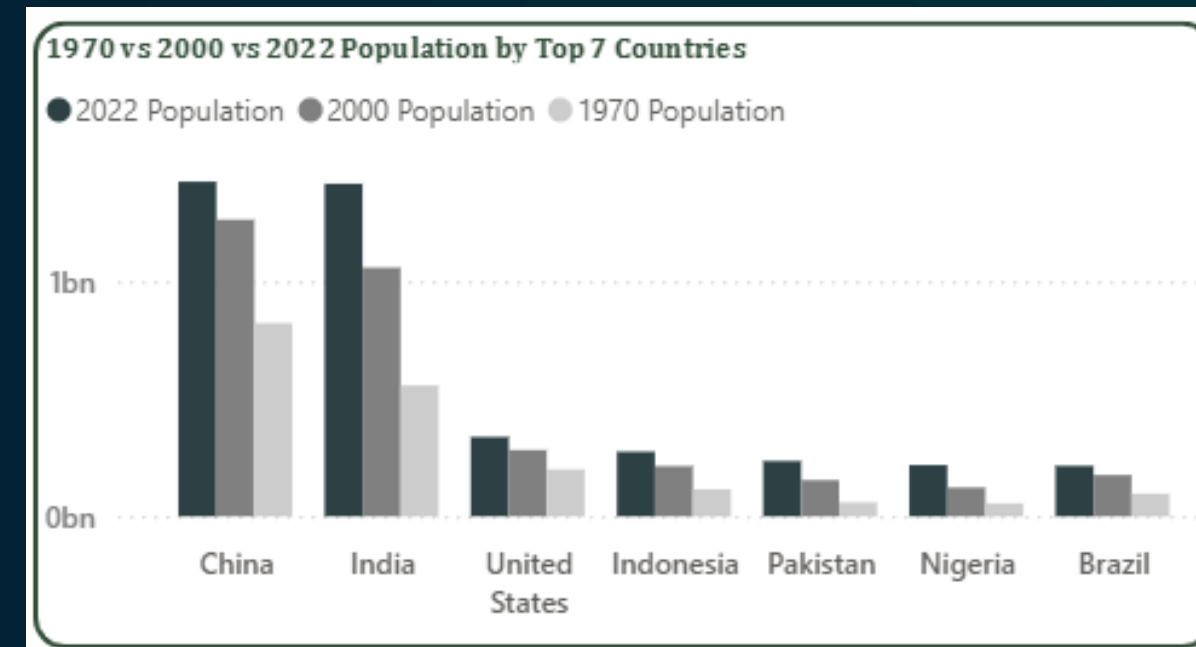
03.

Country/Territory	1970 Population	1980 Population	1990 Population	2000 Population	2010 Population	2022 Population
China	822534450	982372466	1153704252	1264099069	1348191368	1425887337
India	557501301	696828385	870452165	1059633675	1240613620	1417173173
United States	200328340	223140018	248083732	282398554	311182845	338289857
Indonesia	115228394	148177096	182159874	214072421	244016173	275501339
Pakistan	59290872	80624057	115414069	154369924	194454498	235824862
Nigeria	55569264	72951439	95214257	122851984	160952853	218541212
Brazil	96369875	122288383	150706446	175873720	196353492	215313498
Bangladesh	67541860	83929765	107147651	129193327	148391139	171186372
Russia	130093010	138257420	148005704	146844839	143242599	144713314
Mexico	50289306	67705186	81720428	97873442	112532401	127504125

Top 10 Countries: (1970 to 2022) - Table

- China, India, and the U.S. remain consistently in top ranks.
- Historical growth trends visible—e.g., steady rise of Indonesia, Nigeria.
- Russia shows population stagnation over the decades.

04.



1970 vs. 2000 vs. 2022 Population by Top 7 Countries - Clustered Column Chart

- India shows major upward trend, nearing China by 2022.
- U.S. population continues growing, but at a slower pace.
- Russia shows minimal change across decades.

Page 2: Rank Shifts

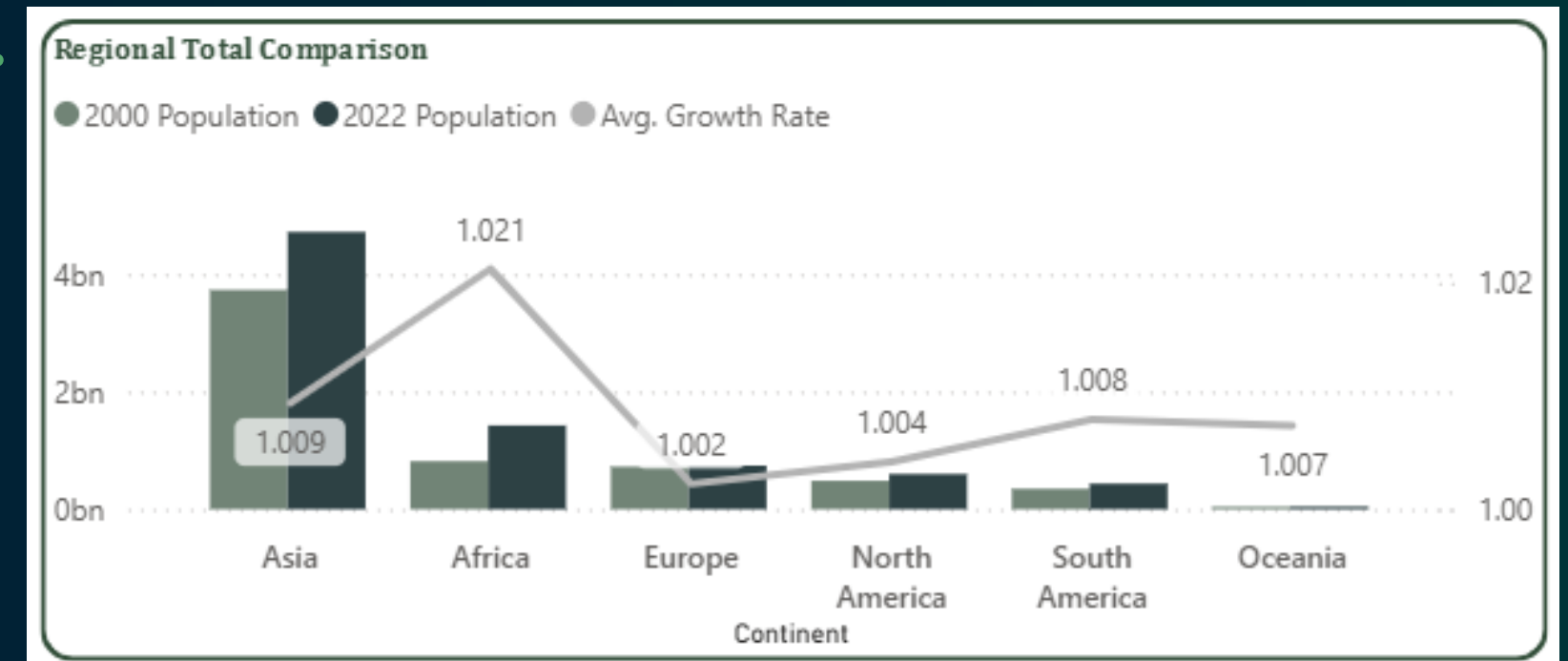
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Country Rank Change (1970 vs 2022)			
Country/Territory	Rank 1970	Rank 2022	Rank Change
China	1	1	0
India	2	2	0
United States	3	3	0
Indonesia	5	4	1
Pakistan	10	5	5
Nigeria	12	6	6
Brazil	7	7	0
Bangladesh	9	8	1
Russia	4	9	-5
Mexico	15	10	5

Country Rank Change (1970 vs 2022) - Table

- UAE jumped from 167th to 97th – major upward shift.
- Bulgaria and Georgia dropped in ranks due to slower or negative growth.
- Reflects demographic boom in some countries vs. decline in others.

02.

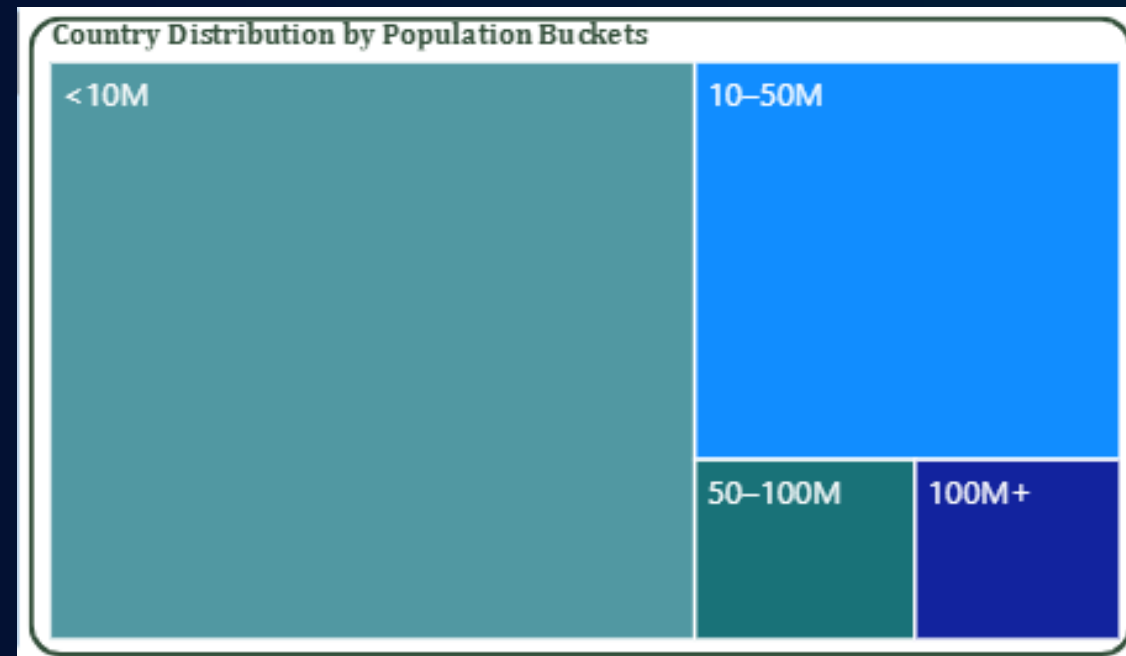


Regional Total Comparison - Line and Clustered Column Chart

- Africa has the highest growth percentage overall.
- Europe shows minimal growth, with some countries declining.
- Reflects changing power dynamics in global population shares.

Page 2: Growth Patterns

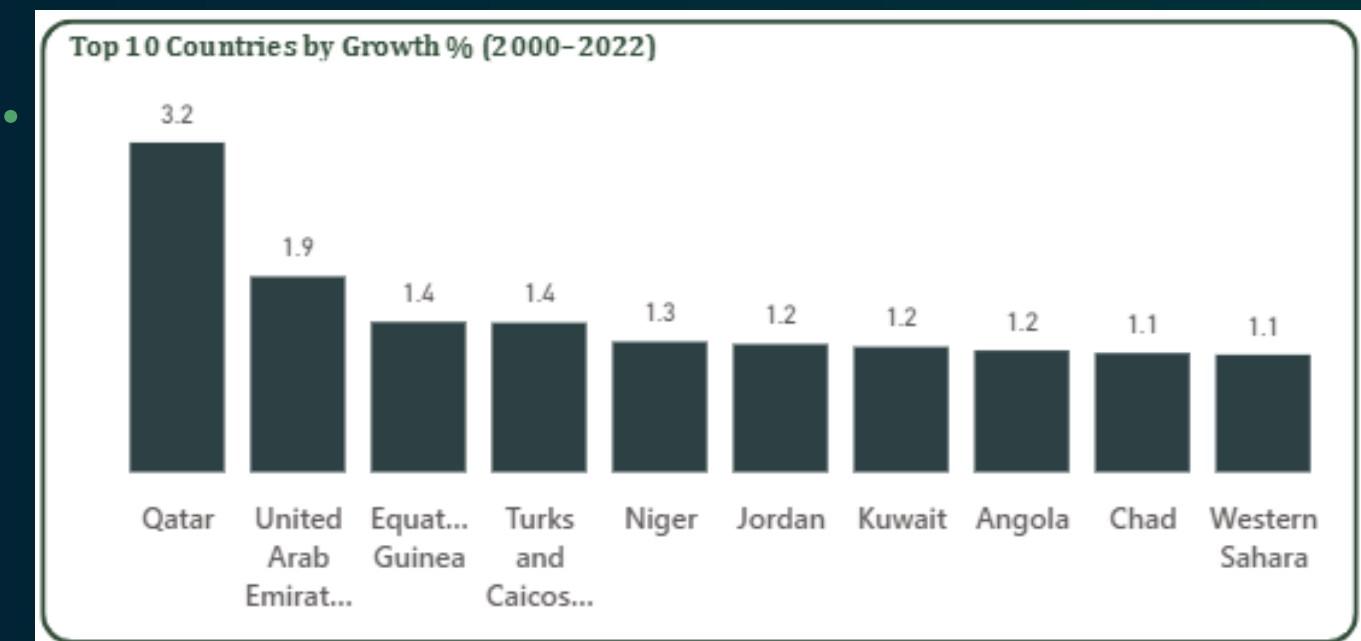
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**Country Distribution by Population Buckets
- Tree Map**

- 141 countries have <10M population, showing large number of small nations.
- Only 14 countries have >100M population.
- Indicates global skew in population distribution.

04.



Top 10 Countries by Growth % (2000 - 2022)

- Qatar leads with over 3.2% average annual growth.
- UAE and Equatorial Guinea follow with high sustained growth.
- Highlights rapidly urbanizing or migrant-attracting nations.

Key Insights & Takeaways

- Asia leads in total population, but Africa shows the fastest growth.
- Countries like UAE, Qatar, and Equatorial Guinea saw major growth; Europe faced declines.
- Over 70% of countries have populations below 50M, showing wide distribution.
- Rank shifts from 1970–2022 reflect changing global dynamics and development patterns.
- Useful for policy, investment, urban planning, and sustainability decisions.

Thank You!!

