

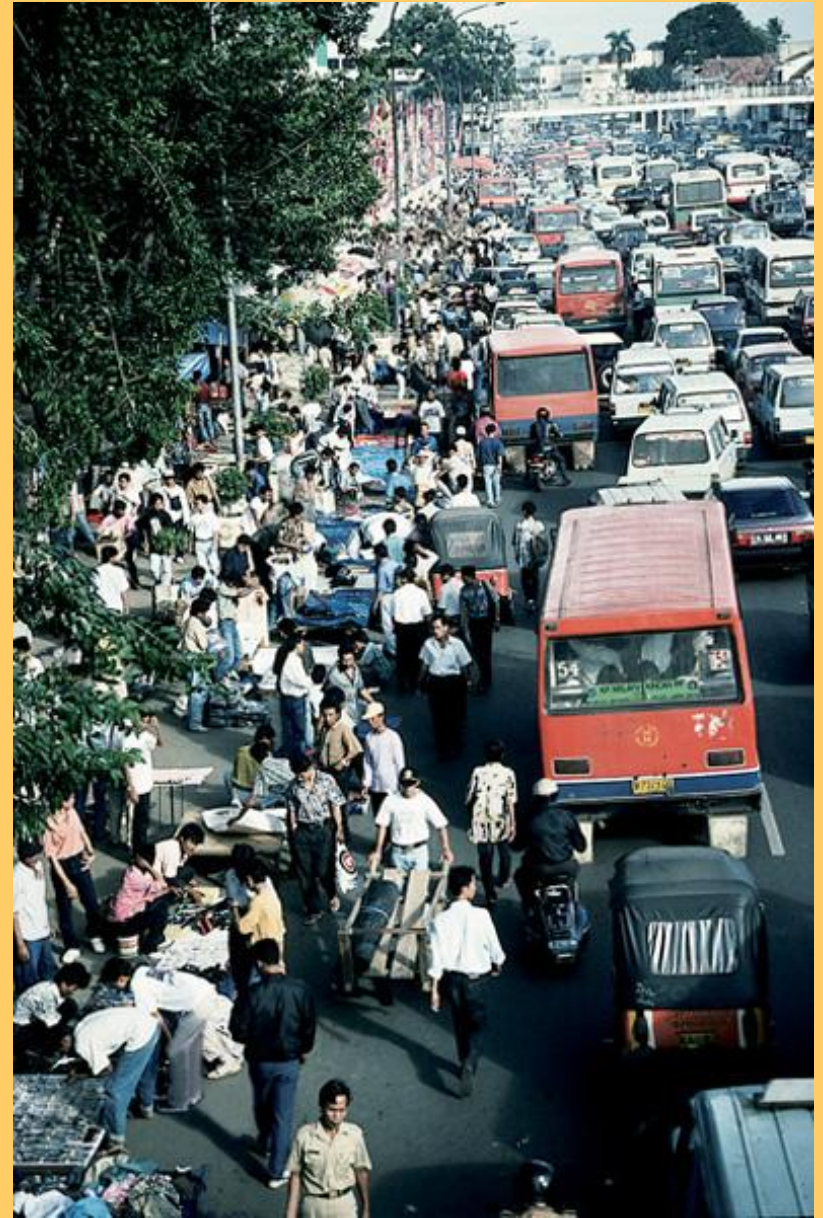
Population

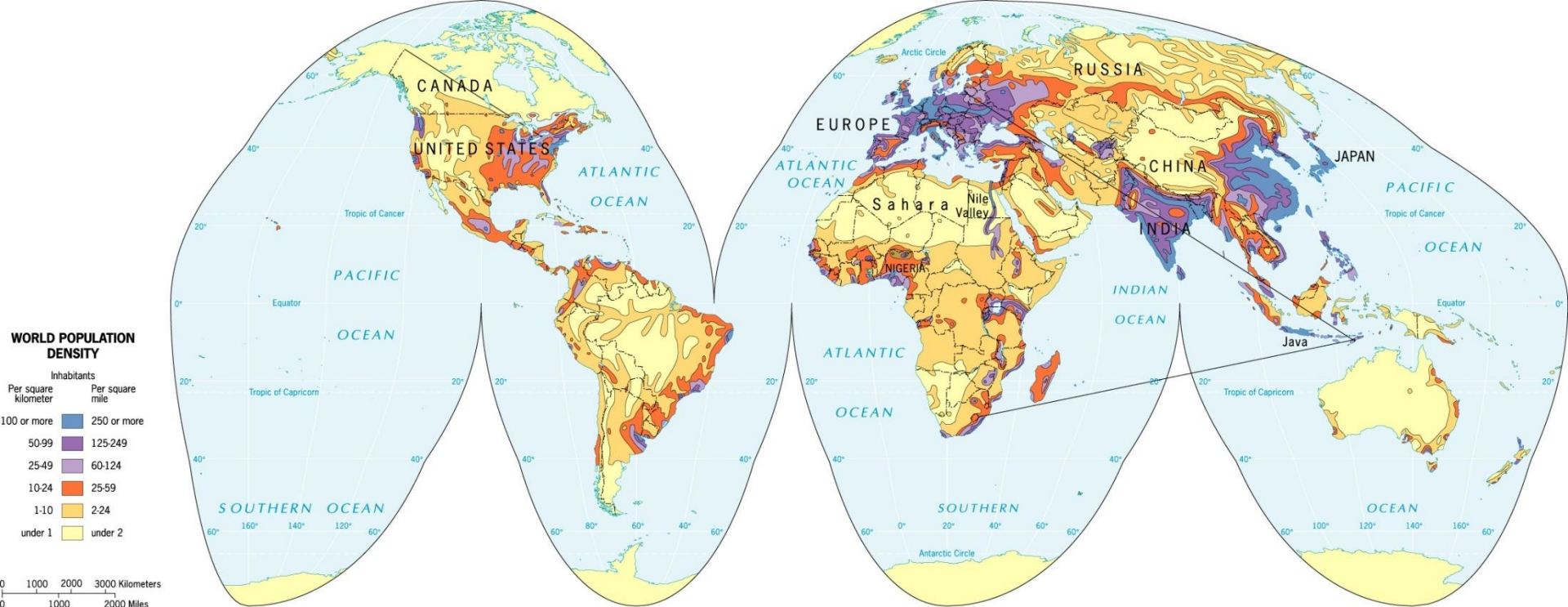
Key Question:

**Where in the World do People
Live and Why?**

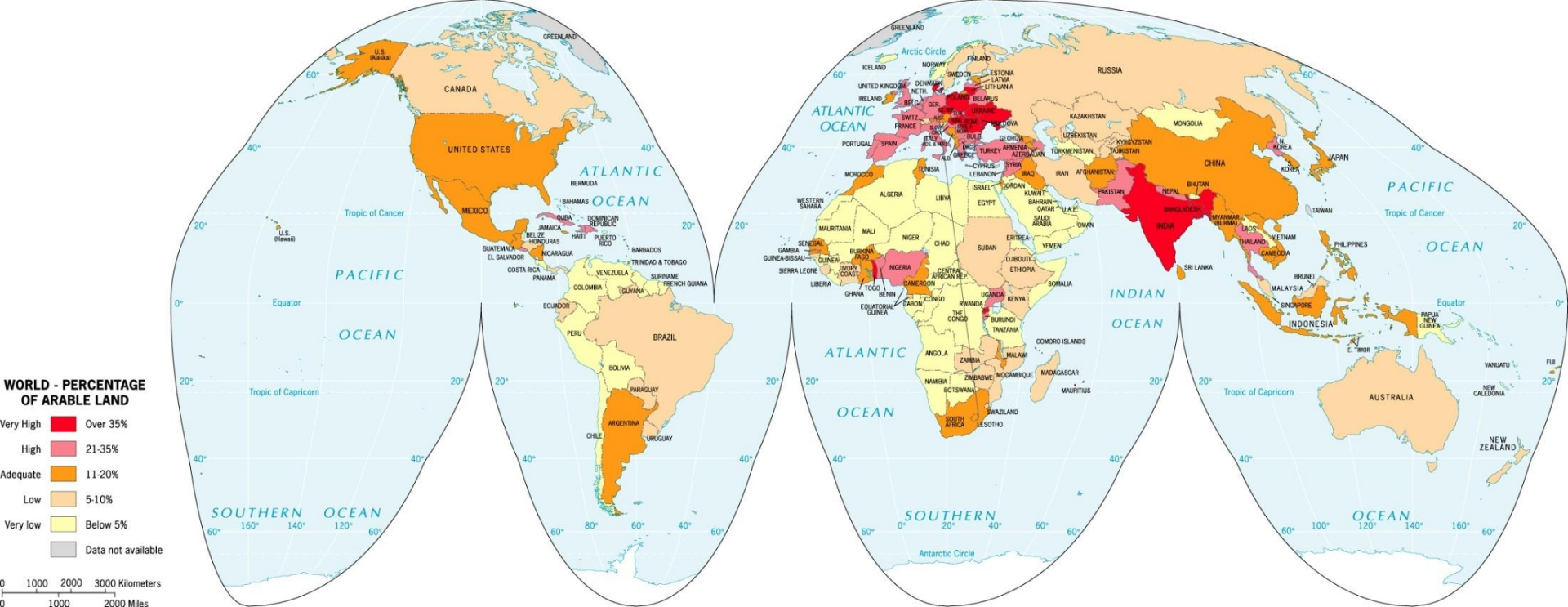
Many Ways of Measuring Population:

Population Density –
measure of total
population relative to land
size (arithmetic population
density).





World Population Density



Physiologic Population Density –

number of people per unit area of agriculturally productive land (takes this map into account).

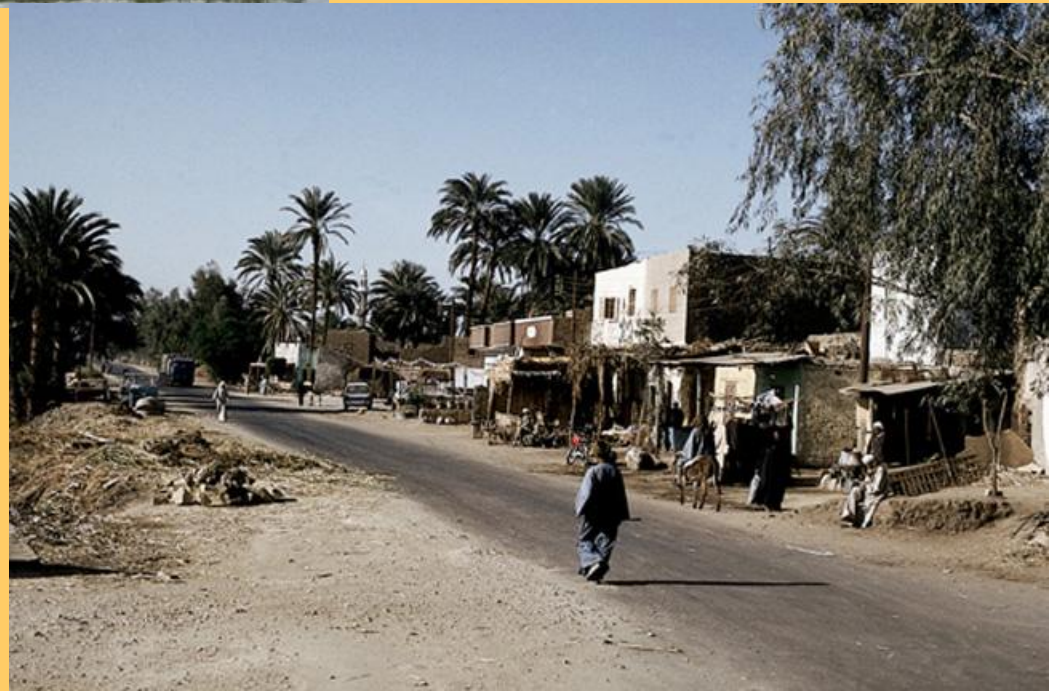


**Physiologic
Population
Density**

Luxor, Egypt

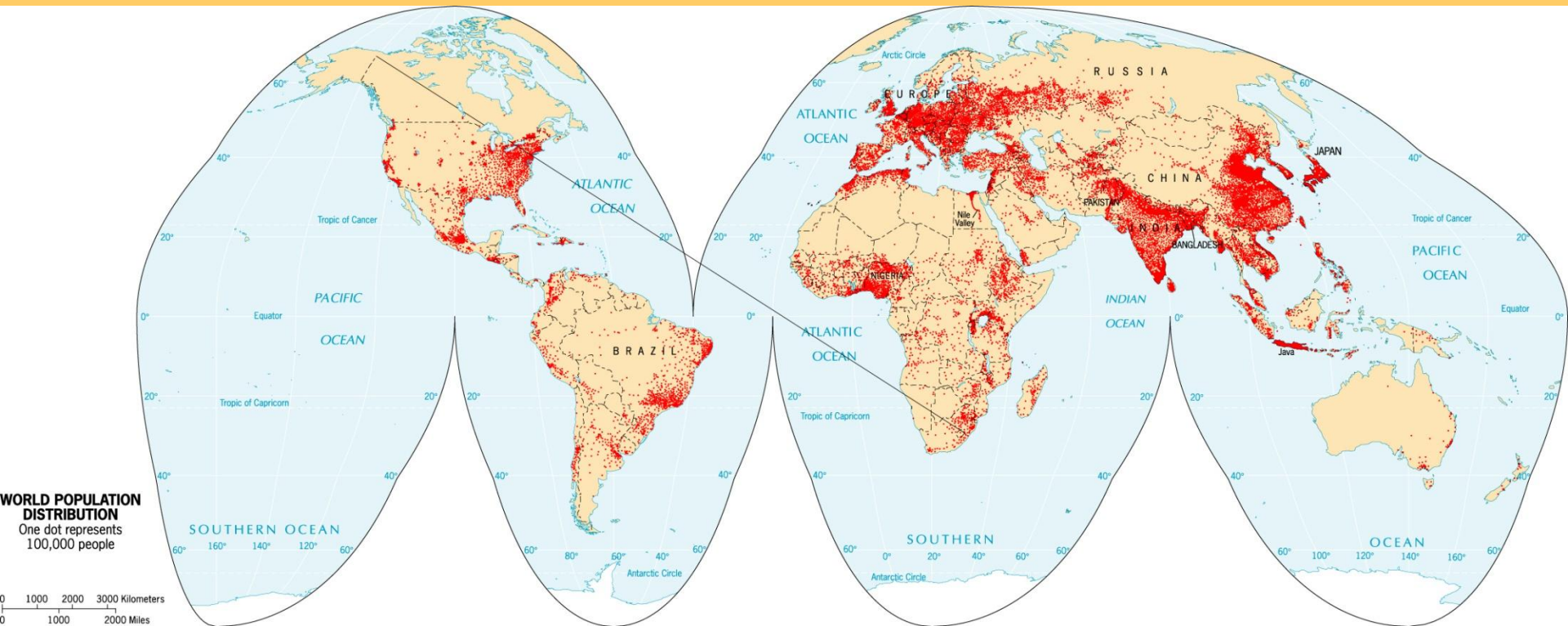
**Egypt's arable lands are
along the Nile River Valley.**

**Moving away from the river a
few blocks, the land becomes
sandy and wind-sculpted.**



Population Distribution –

Descriptions of locations on the Earth's surface where individuals or groups (depending on the scale) live.



Dot Map of World Population –

On this map, one dot represents 100,000 people

World Population Distribution and Density

- **East Asia**

- 1/4 of world population here

- **South Asia**

- bound by the Himalayas and a desert in Pakistan

- **Europe**

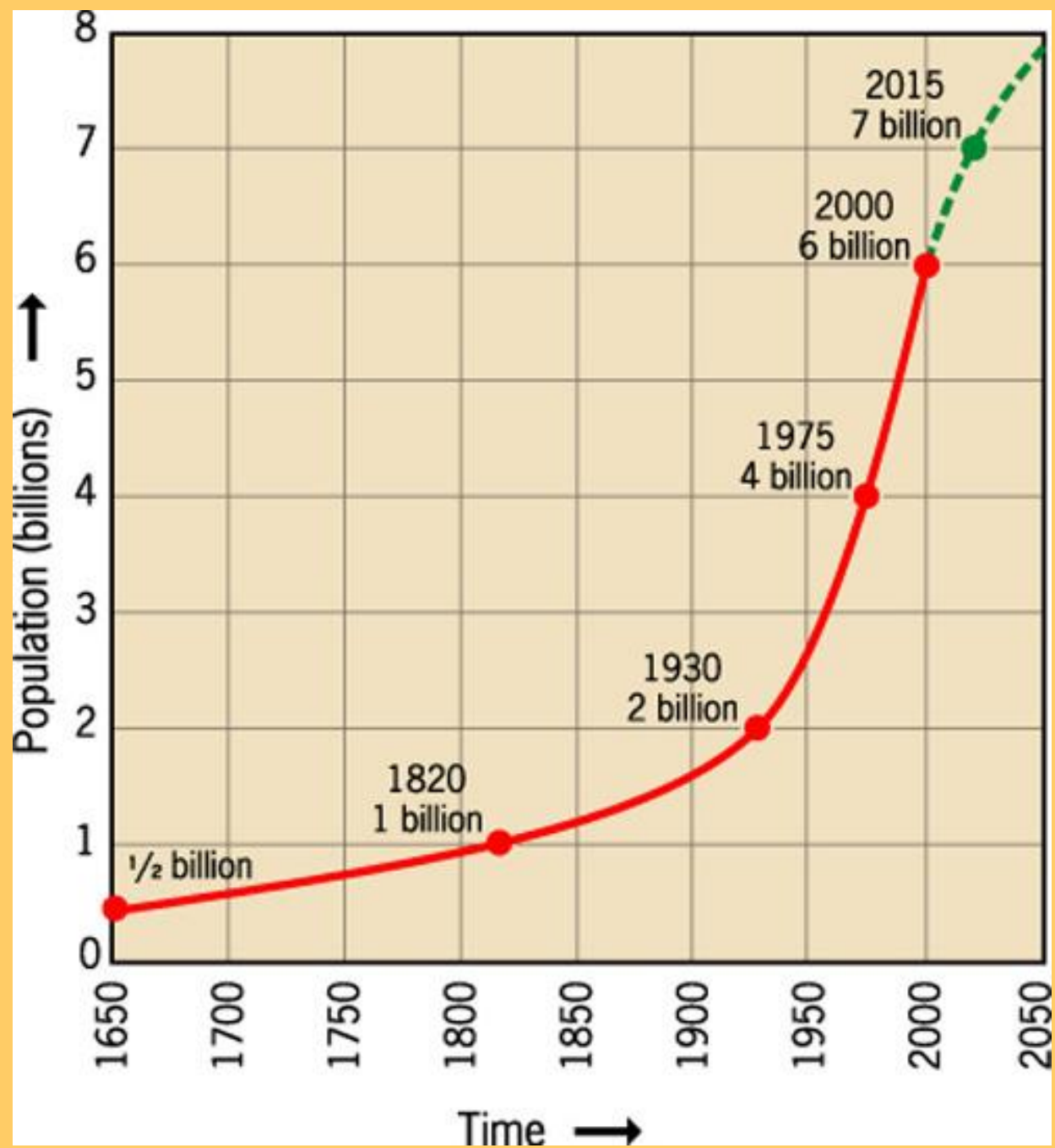
- population is concentrated in cities

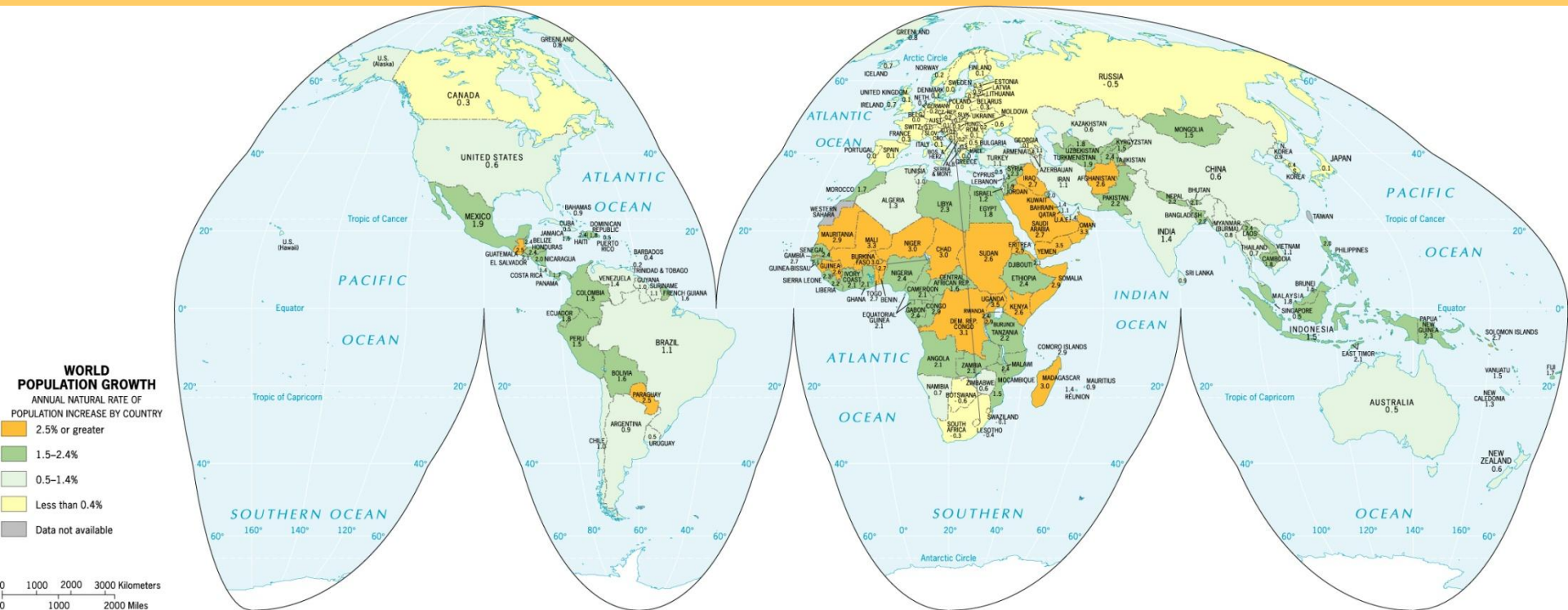
- **North America**

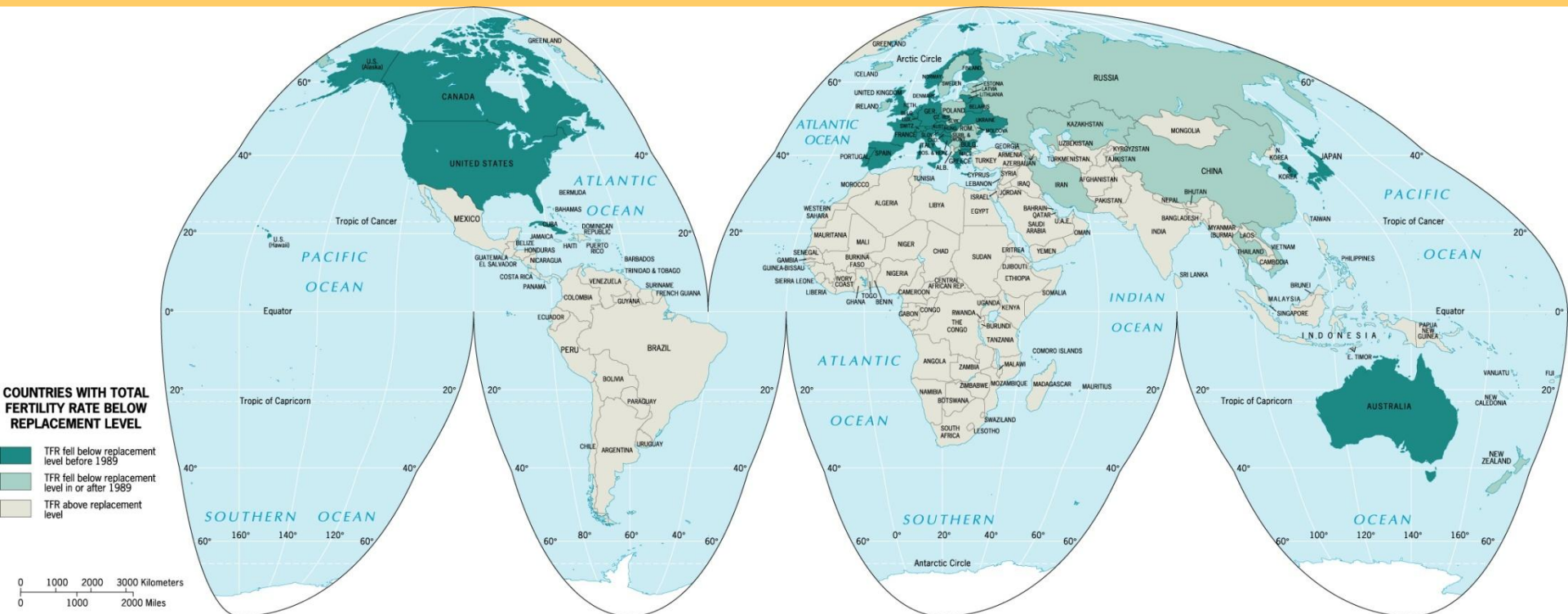
- megalopolis

Key Question:

**Why do Populations Rise or Fall
in Particular Places?**





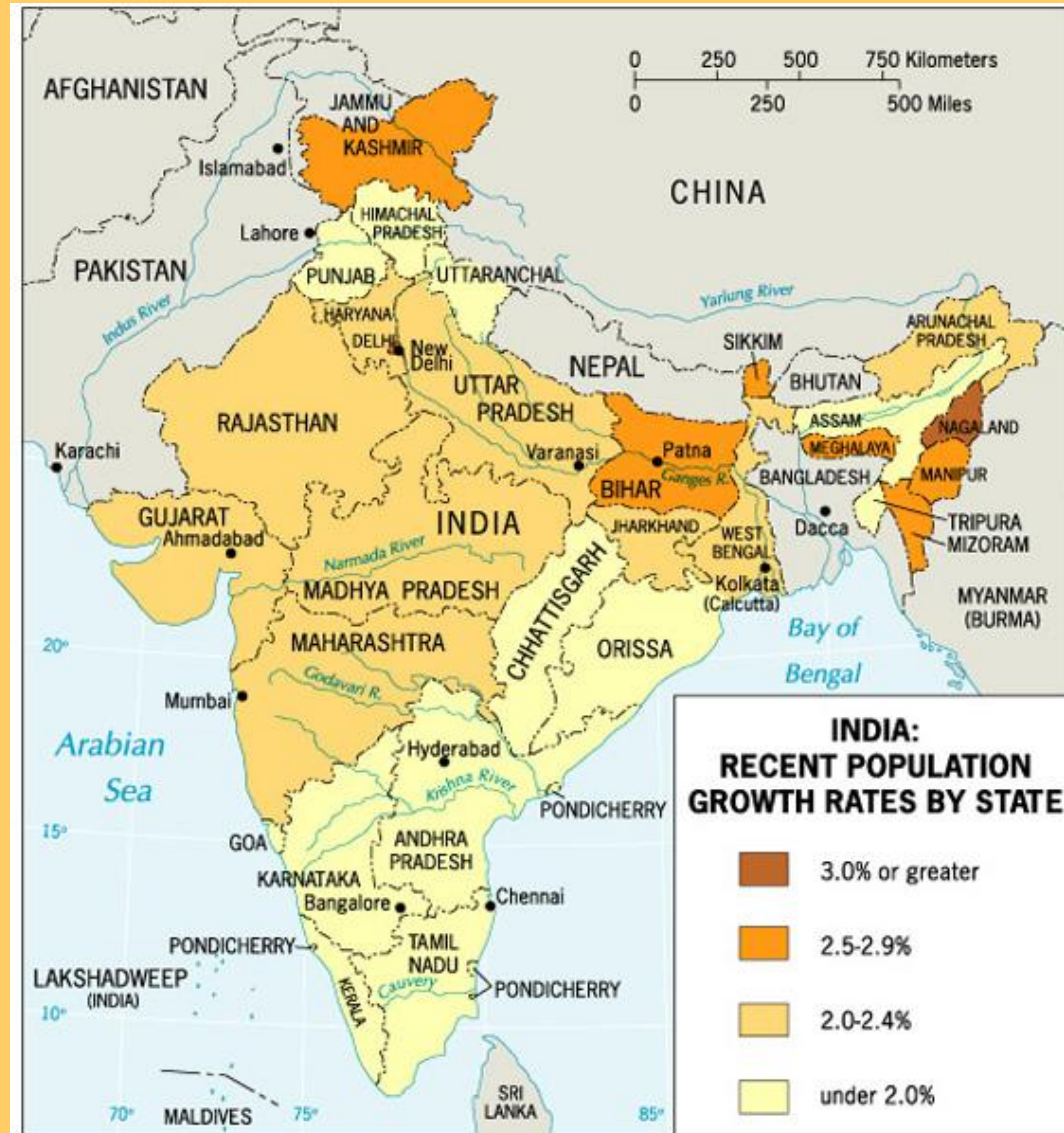


The Total Fertility Rate = the average number of children born to a women of childbearing age in that particular country

Today, the pace of world population growth is slowing.
Where have Total Fertility Rates (TFRs) fallen below replacement level and why?

Population Growth in India

- Significant demographic variations occur within countries.
 - In India, growth rates are higher in the east and northeast.



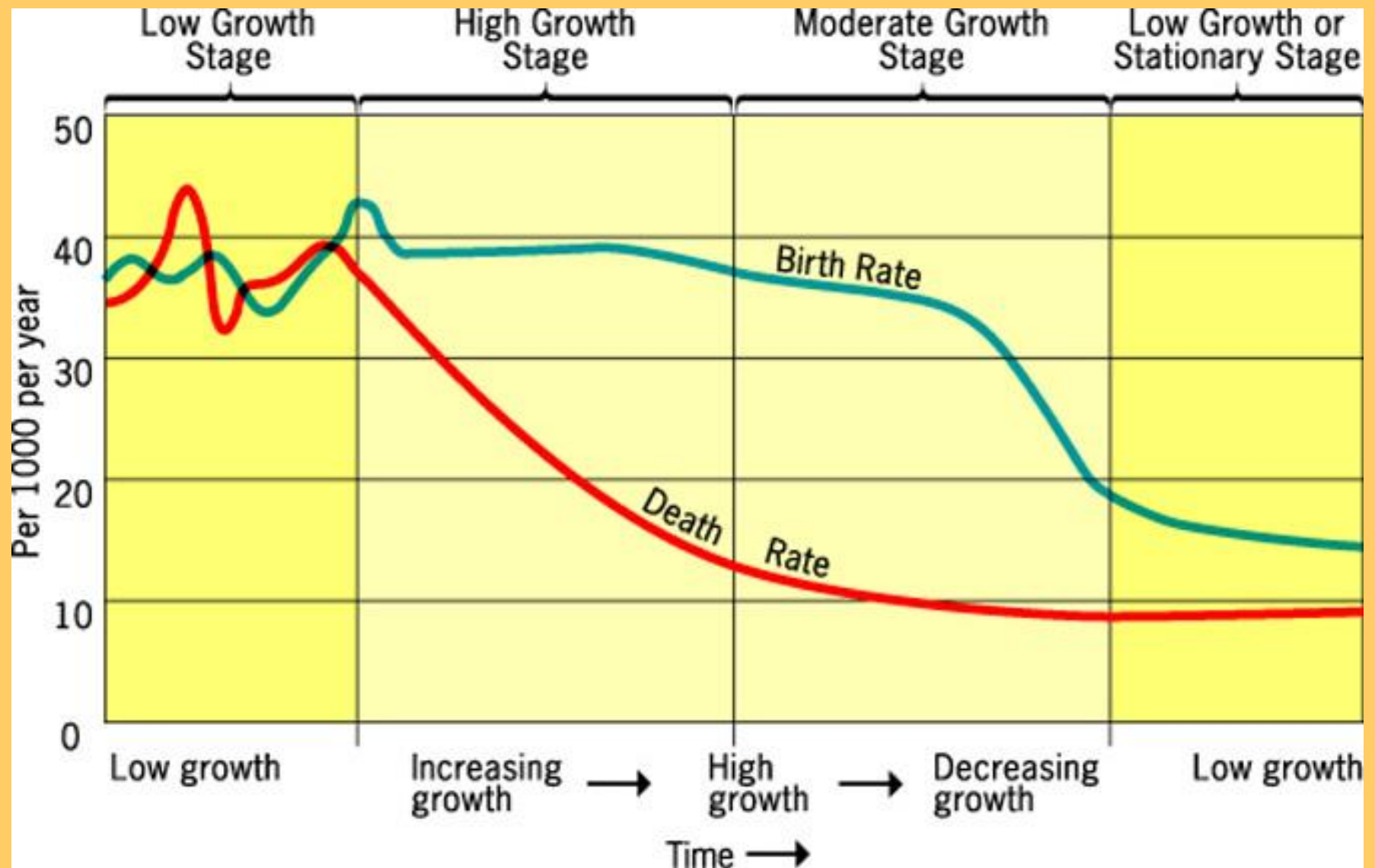
Why do Growth Rates Vary in India?

- 1960s population planning program
- 1970s country began forced sterilization program for men with 3 or more children.
 - 22.5 million men were sterilized.
- Today, most states use advertising and persuasion to lower birth rates.



Maharashtra, India. A sign reads “free family planning sterilization operation” closed in 1996.

The Demographic Transition



The Demographic Transition

- Stage 1: Low Growth
- Stage 2: High Growth
- Stage 3: Moderate Growth
- Stage 4: Low Growth or Stationary
- Stationary population level (SPL)?

Key Question:

**Why does Population
Composition Matter?**

Population Composition

Population Composition is concerned with:

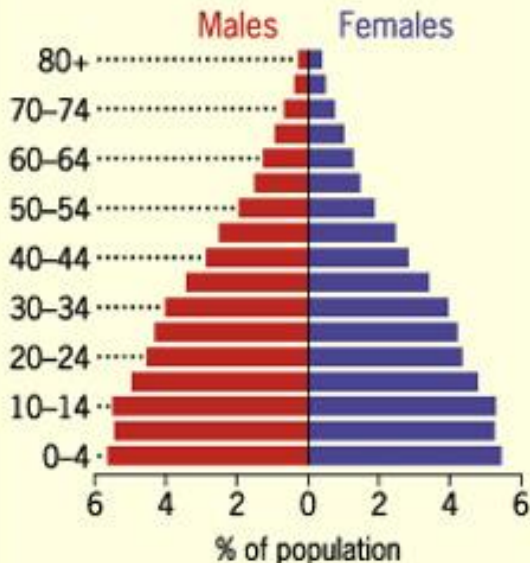
- Gender distribution**
- Age distribution**

within a country, region, or place.

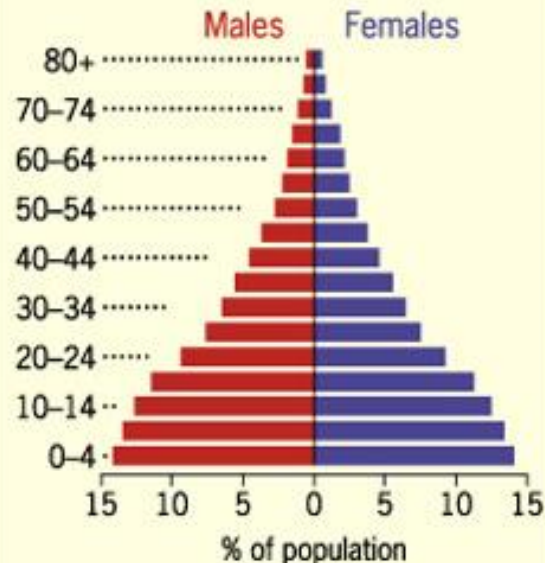
Population Pyramids –

Charts that show the percentages of each age group in the total population, divided by gender.

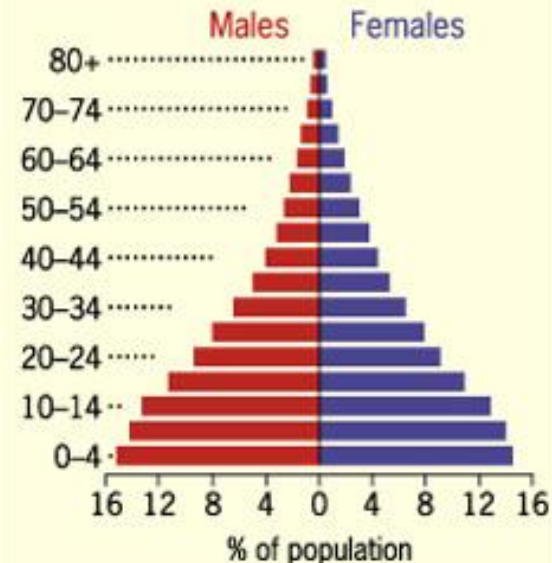
**Poorer Countries,
2004**



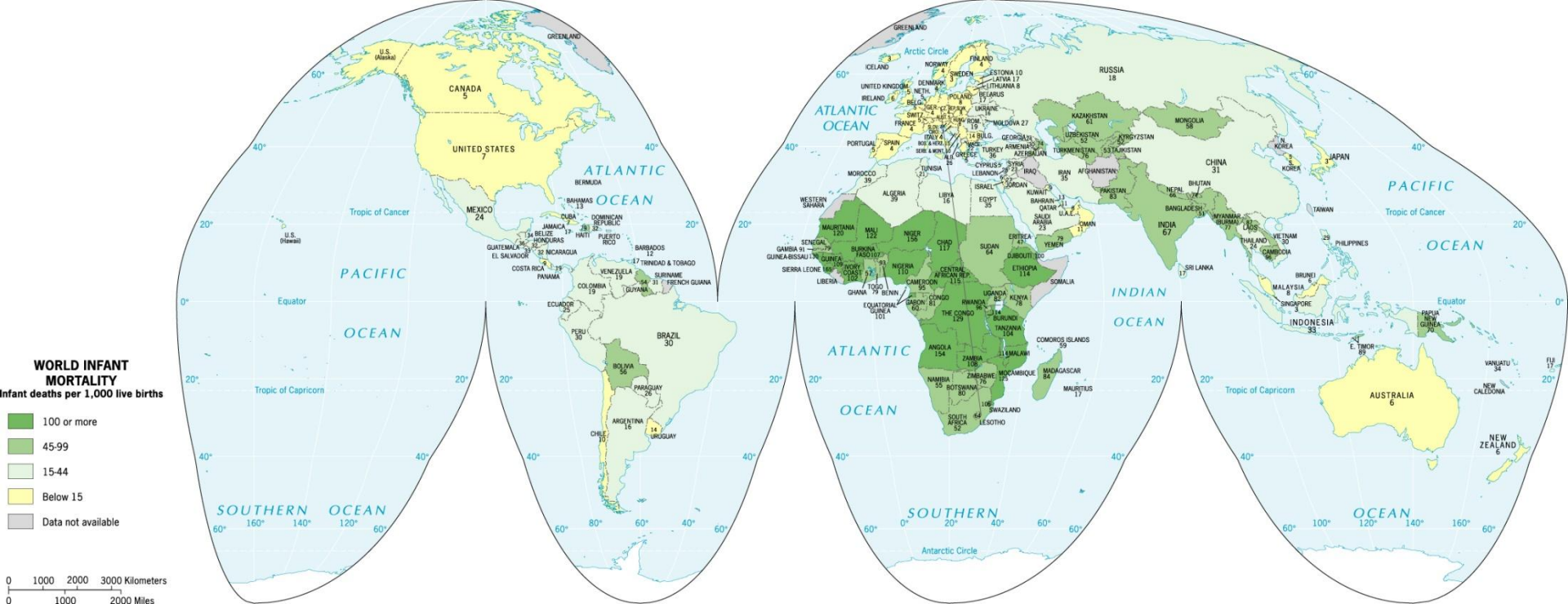
**Pakistan,
2004**



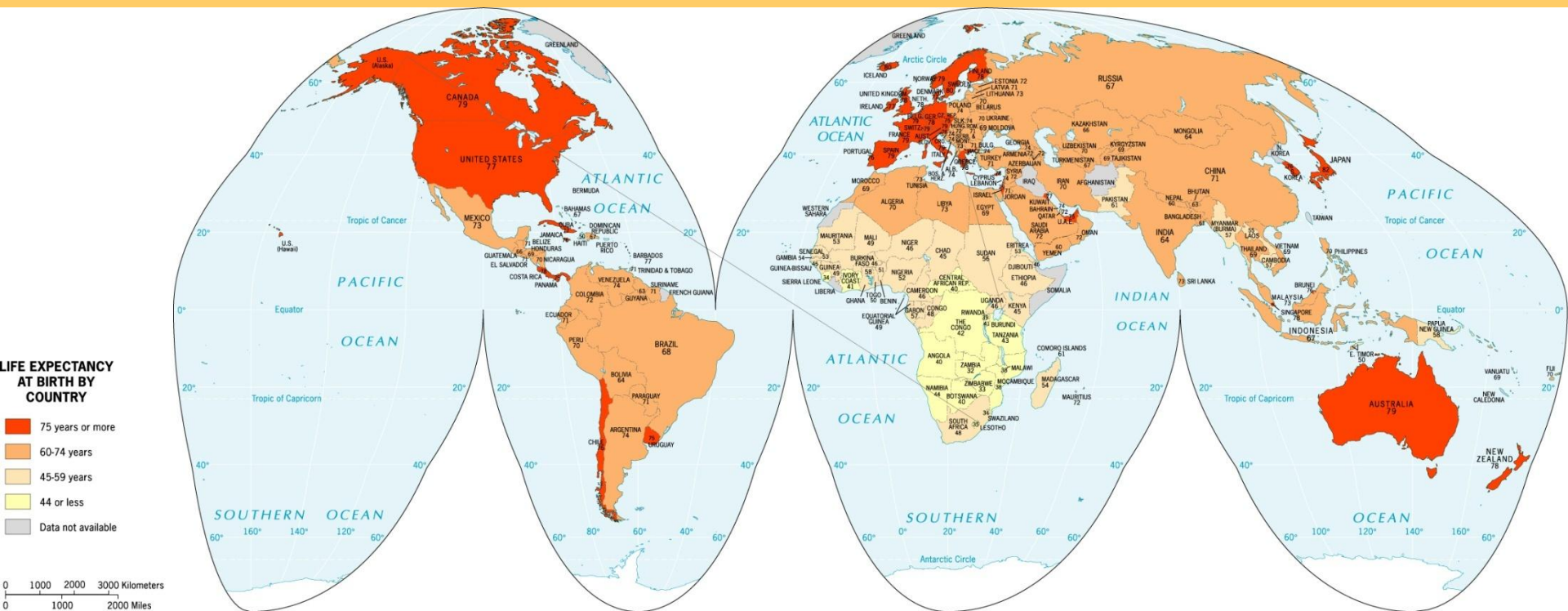
**Guatemala,
2004**



For poorer countries, the chart is shaped like a pyramid. Infant mortality rates are high, life expectancy is shorter.



In poorer countries, Infant Mortality Rates are usually high, which is reflected in the pyramid shape.

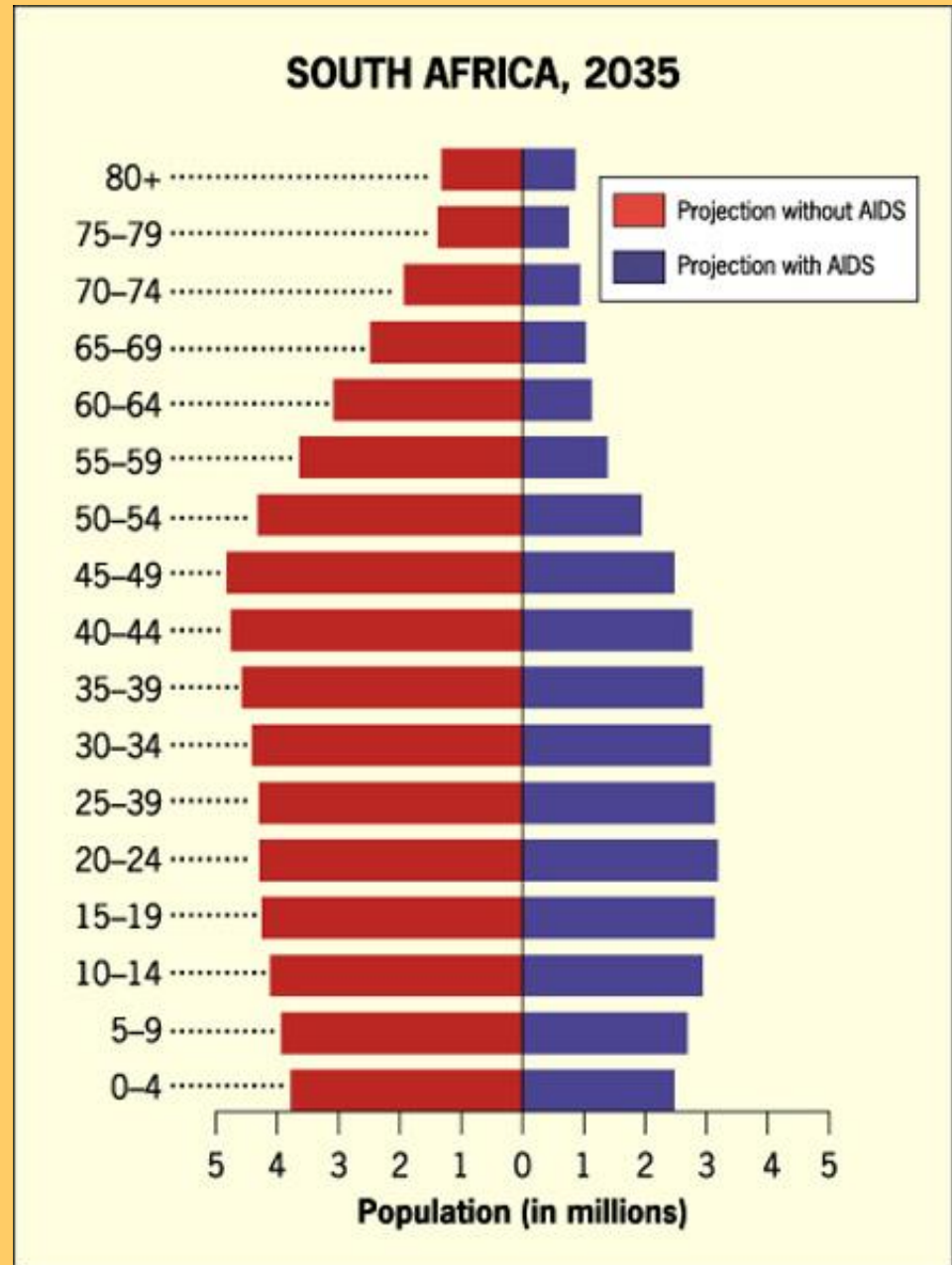


In poorer countries, Life Expectancy is usually shorter, which is also reflected in the pyramid shape.

Affect of AIDS on population pyramid for South Africa.

Predicted population for 2035, without and with AIDS.

With AIDS, looks like a population “chimney.”



AIDS is leaving large numbers of AIDS orphans.



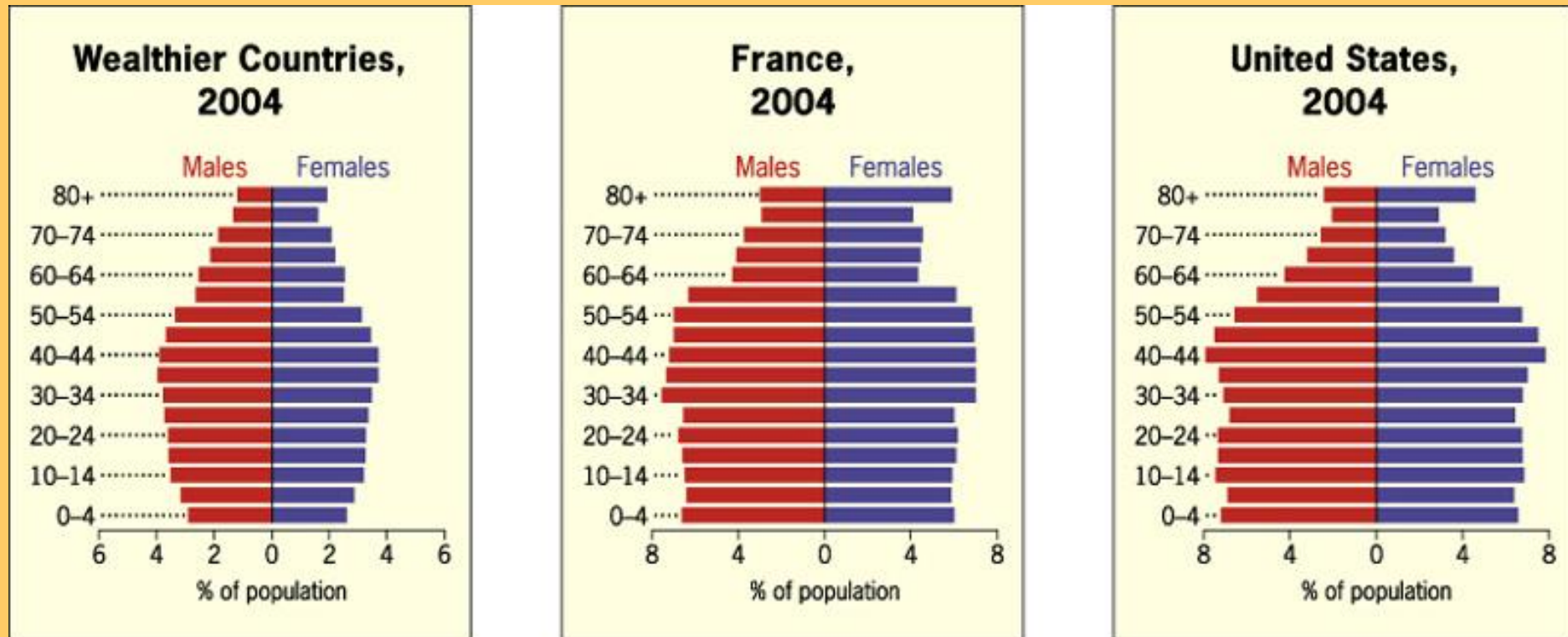
**AIDS is creating large numbers of
AIDS care-givers.**



Drawing by a Pokot boy in Kenya, the drawing shows him working in the fields and taking care of his family cattle in order to assist his sick family members.

Population Pyramids –

Charts that show the percentages of each age group in the total population, divided by gender.



For wealthier countries, the chart is shaped like a lopsided vase. Population is aging, TFRs are declining.

Age Structure of a Population

- The populations of many countries are aging.
 - eg. Europe
 - eg. Japan

Bordeaux, France



Aging Populations

- To replace the population, TFR must be 2.1.
 - TFR in Bologna, Italy is 0.8
 - Why are women having fewer children?
- What are the impacts of an aging population on a country?
- What are the “solutions” to an aging population?

Longer Life Expectancies typically mean higher rates of chronic diseases.

LEADING CAUSES OF DEATH IN THE UNITED STATES, 2002

Cause	Total	Percent
1. Heart Disease	696,947	28.5
2. Cancer	557,271	22.8
3. Stroke	162,672	6.7
4. Lung Diseases	124,816	5.1
5. Accidents	106,742	4.4
6. Diabetes	73,249	3.0
7. Influenza and Pneumonia	65,681	2.7
8. Alzheimer's Disease	58,866	2.4
9. Nephritis, Nephritic Syndrome, and Nephrosis	40,974	1.7
10. Septicemia	33,865	1.4

Key Question:

**How do Governments Affect
Population Change?**

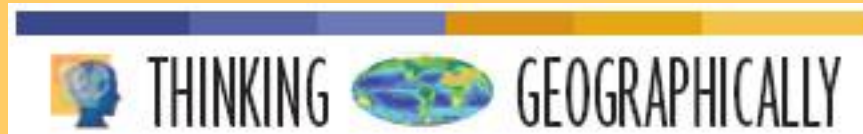
Government Population Policies

- **Expansive Population Policies**
 - Encourages population growth.
- **Eugenic Population Policies**
 - Favors one racial or cultural sector over others.
- **Restrictive Population Policies**
 - range from toleration of unapproved birth control to outright prohibition of large families.

China's One Child Policy



What are some of the limitations, unintended consequences, and contradictions found in government policies toward population growth?



When studying government policies on population, one of the most important things to remember is unintended consequences. Choose one country in the world where women have little access to education and are disempowered. Consider the previous section of the chapter on age composition, and determine how restrictive population policies in this country will alter the population composition of the country.