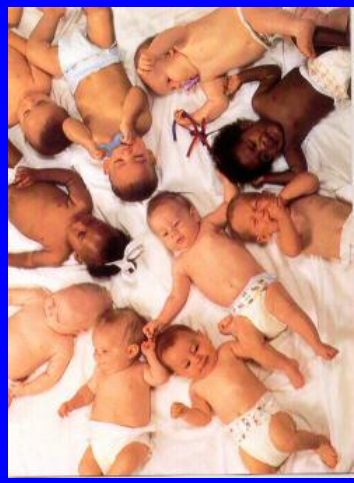
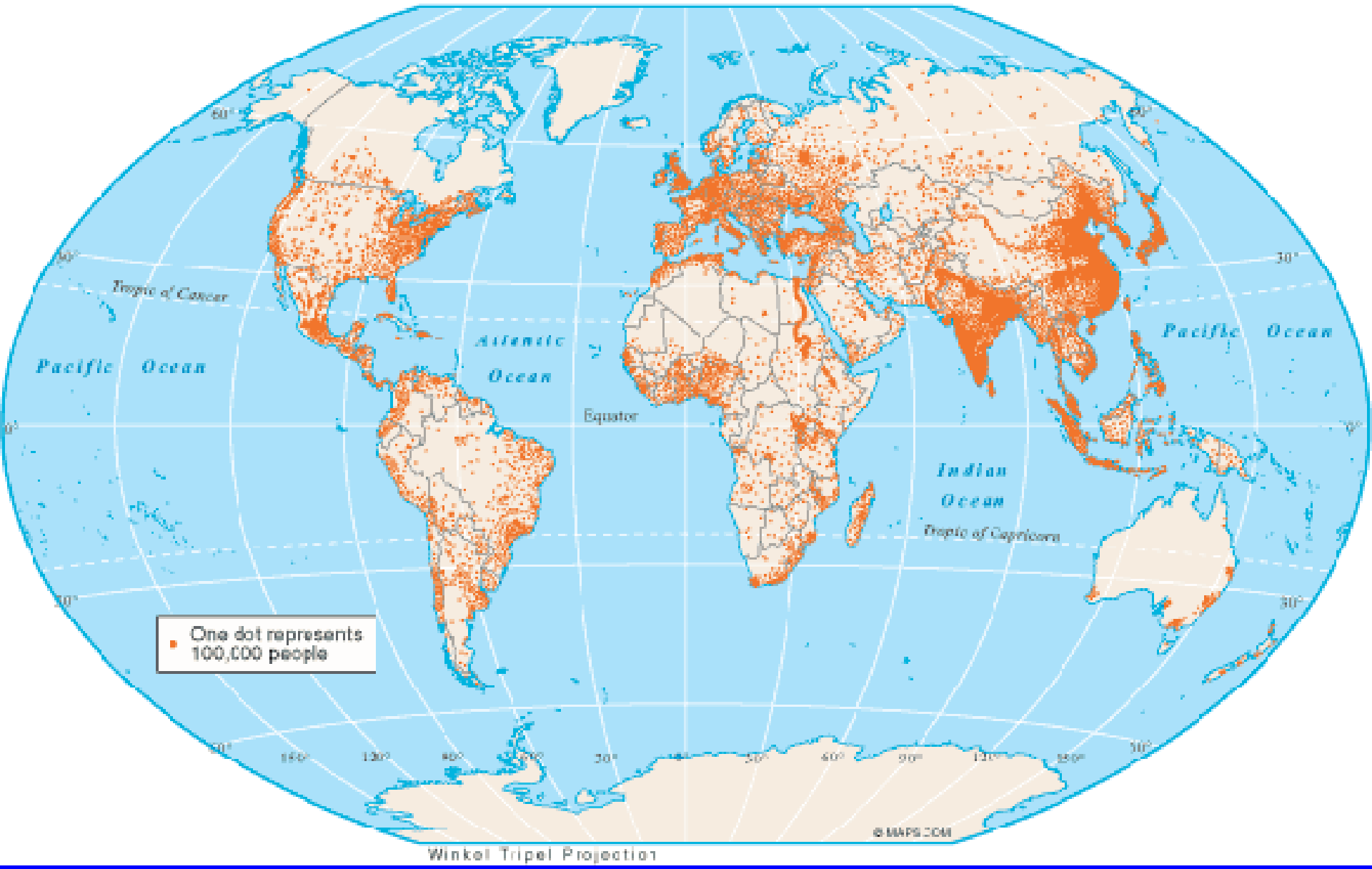
Geografi Penduduk

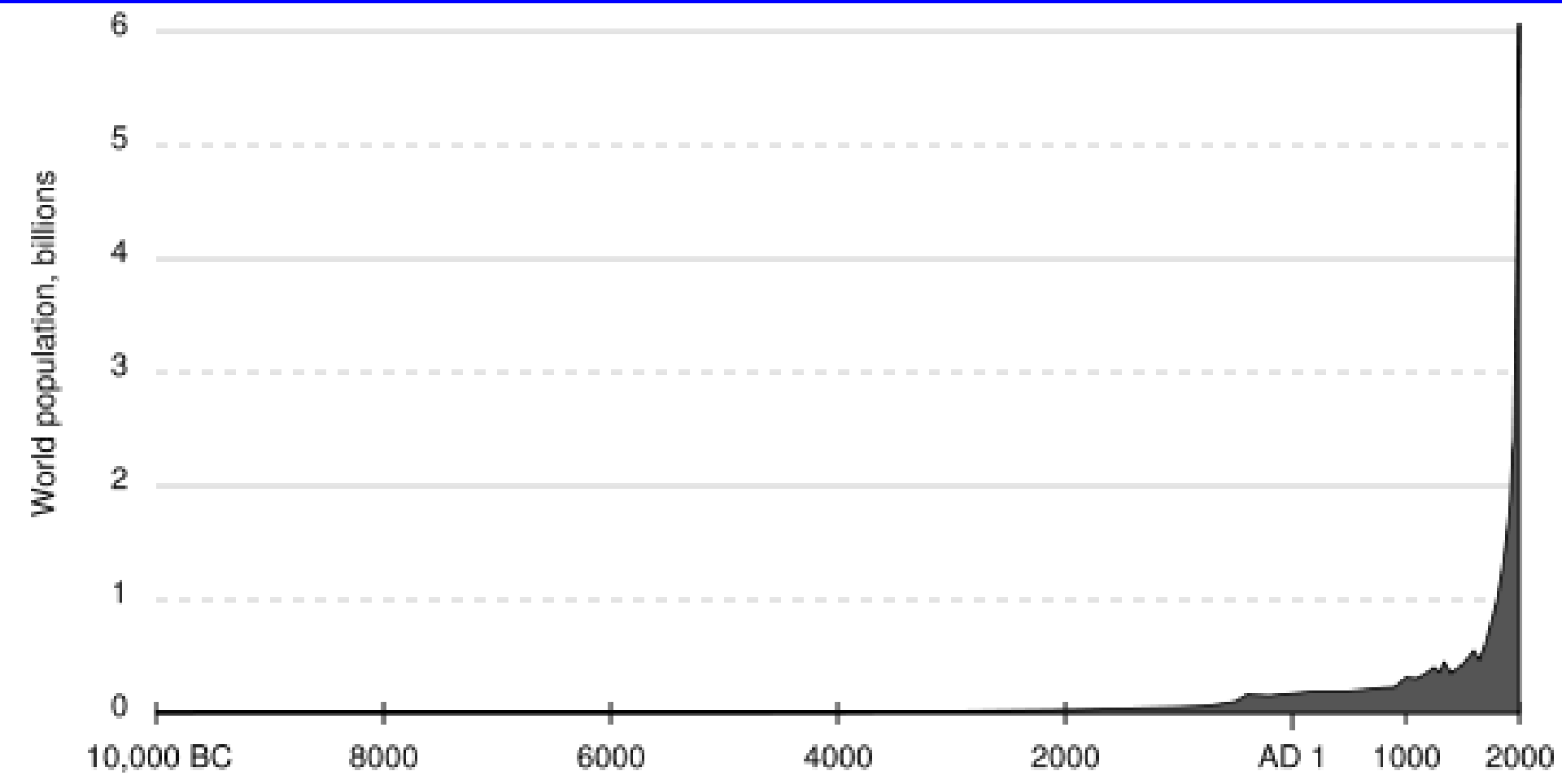


- Geografi?
- Penduduk?
- Teba:
  - Sejarah asal usul manusia
  - pertumbuhan, kepadatan dan persebaran penduduk
  - interaksi penduduk dengan sumberdaya alam

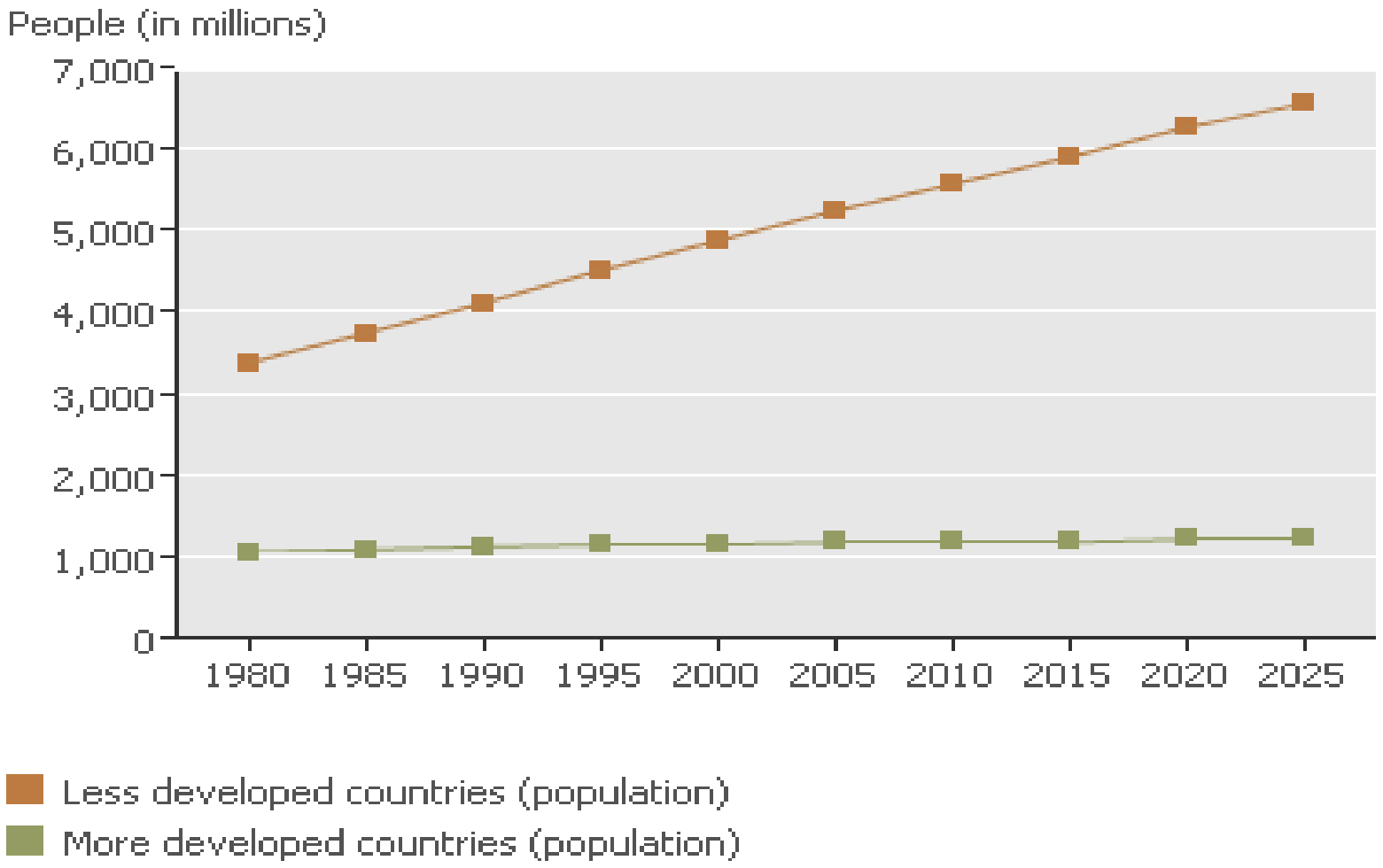
World Population Distribution, 1998

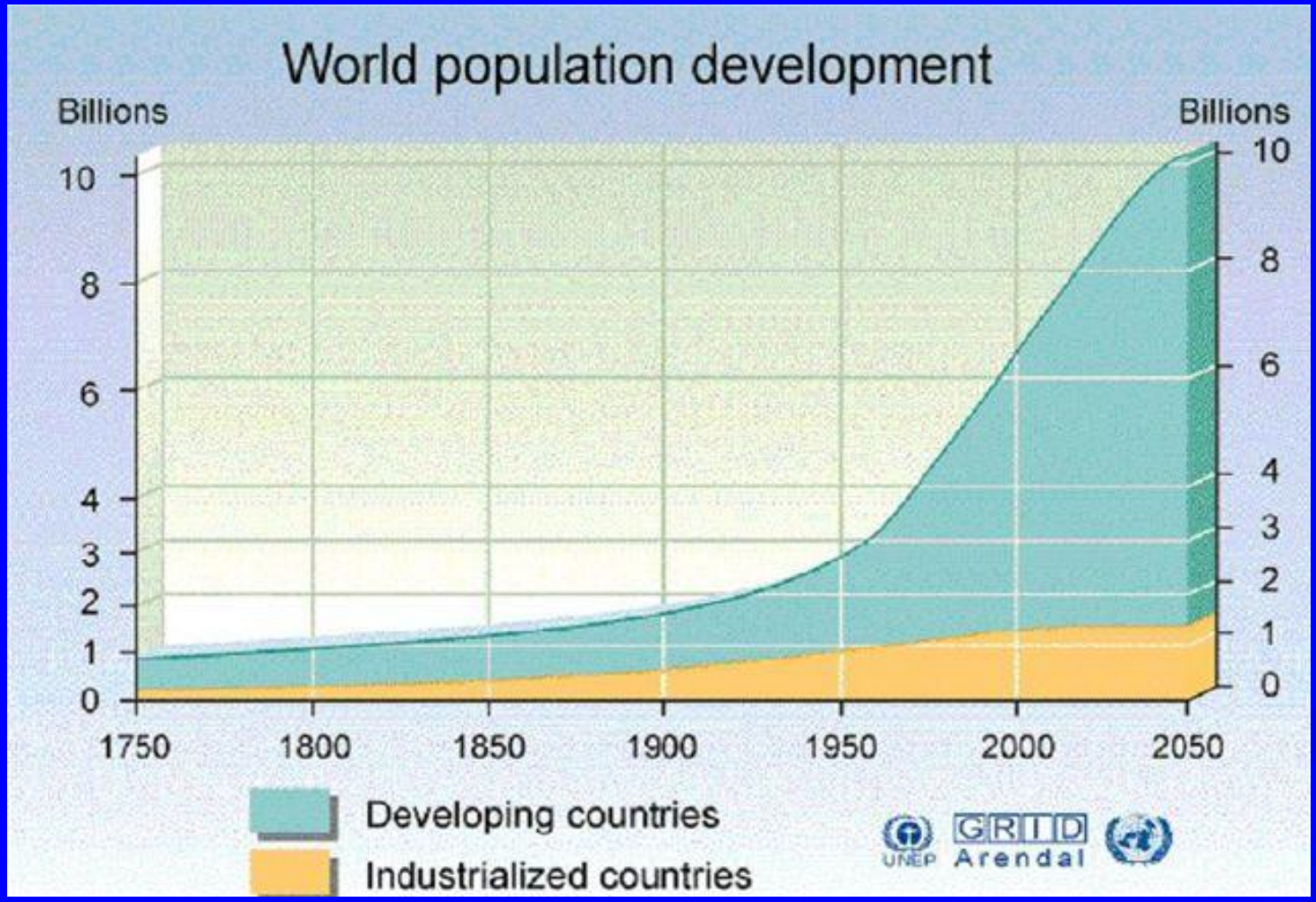


Pertumbuhan Penduduk Dunia

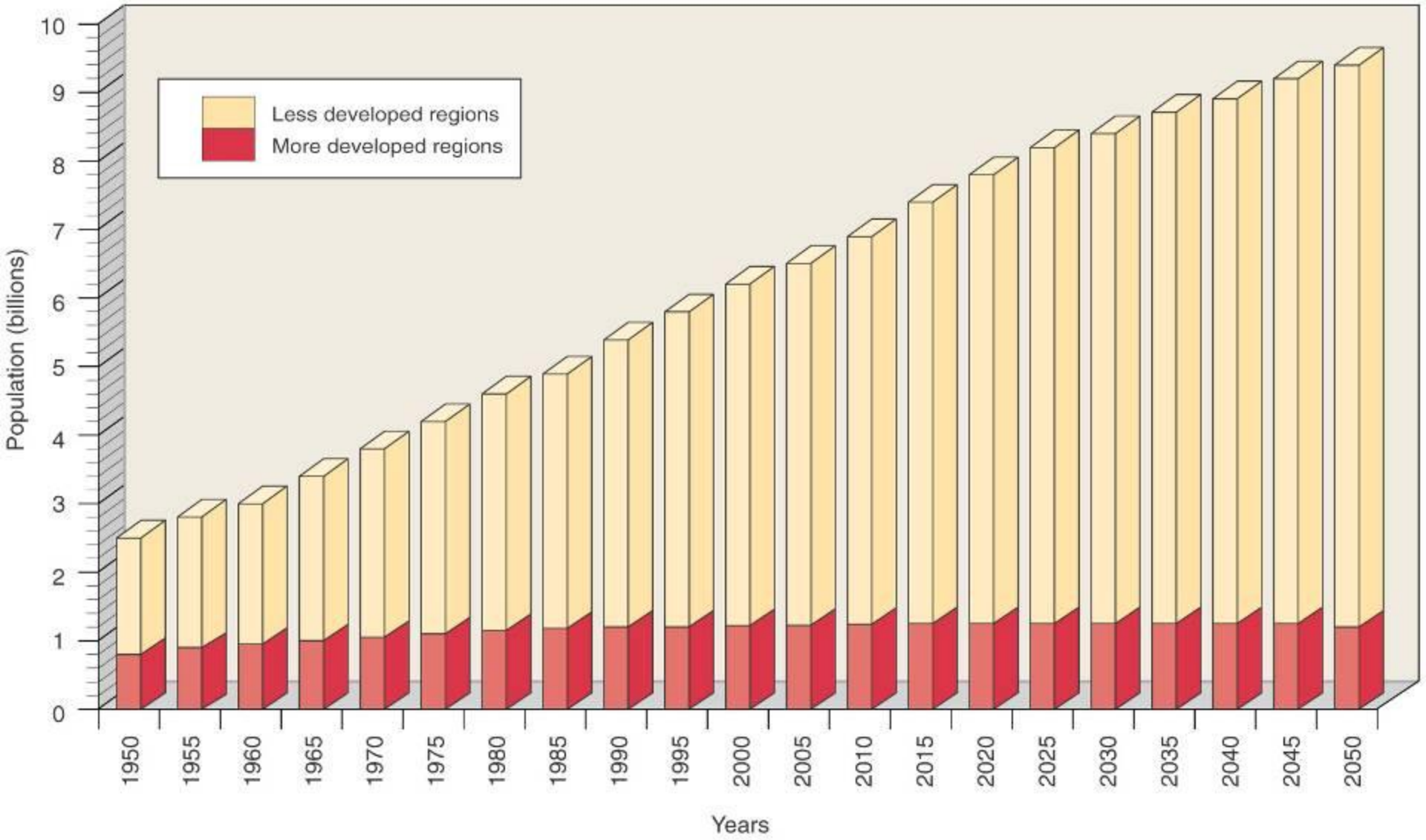


PERTUMBUHAN PENDUDUK DUNIA




World population development
Billions
Billions
10
8
6
4
3
2
1
0
1750
1800
1850
1900
1950
2000
2050
Developing countries
Industrialized countries
UNEP
GRID
Arendal

Population Shift



Population Distribution

- Population Concentrations
  - East Asia
  - South Asia
  - South East Asia
  - Europe
  - North America
- Sparsely Populated Regions
  - dry lands
  - wet lands
  - high lands
  - cold lands

World and Country Population Totals

Distribution and Structure: 3/4 of people live on 5% of earth's surface!

Total: 6.8 billion on planet as of March 5, 2010

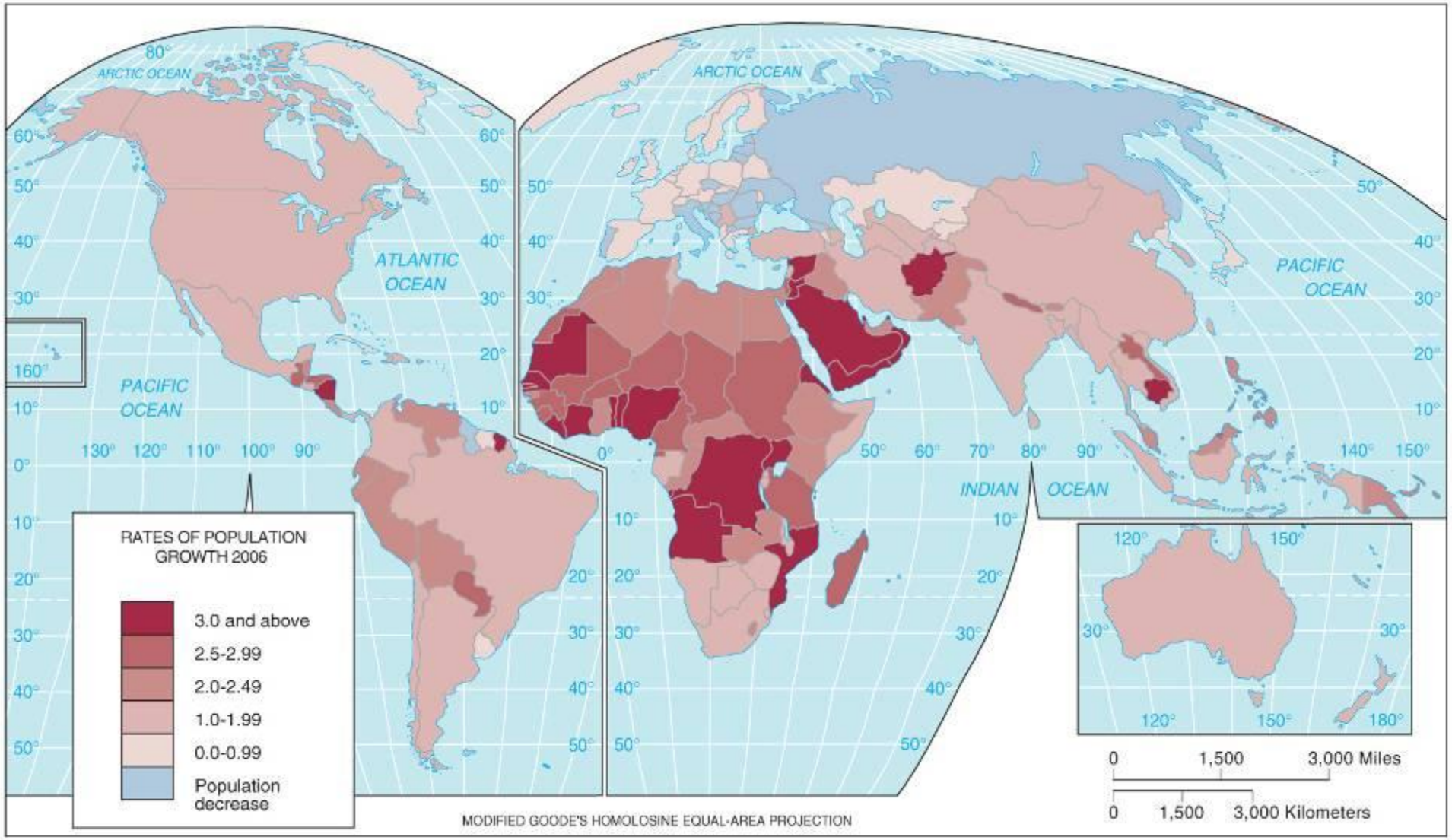
Current World Population Counter from U.S Census Bureau

Five most populous regions and countries

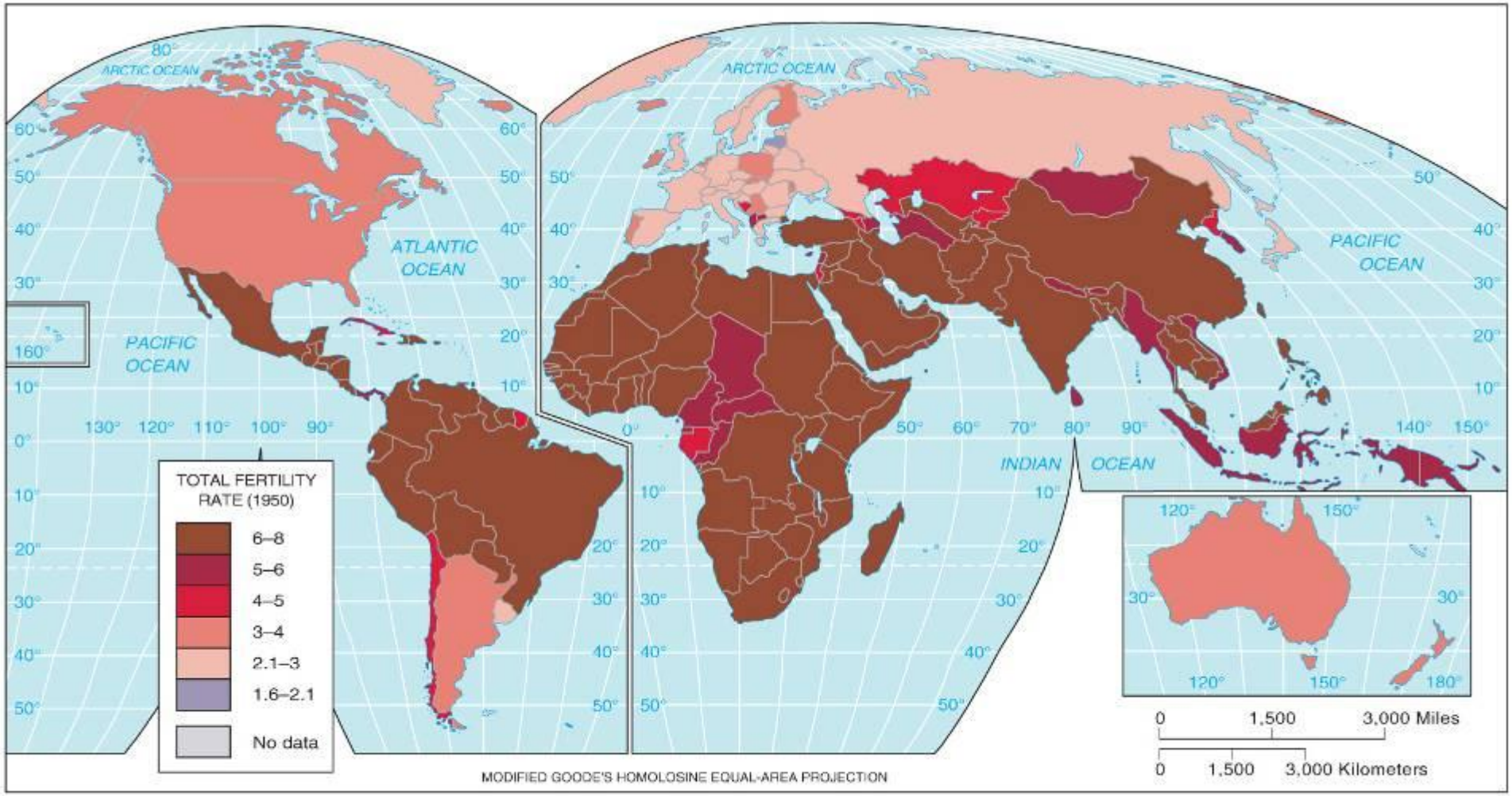
REGION	POPULATION	COUNTRY	POPULATION
East Asia	1.6 billion	China	1.3 billion
South Asia	1.5 billion	India	1.1 billion
Europe	1 billion	U.S.	300 million
SE Asia	600 million	Indonesia	250 million
E N. America & Canada	275 million	Brazil	188 million

Overpopulation is when there are too many people relative to available resources. Simple density is not the determinant.

Rates of Natural Increase

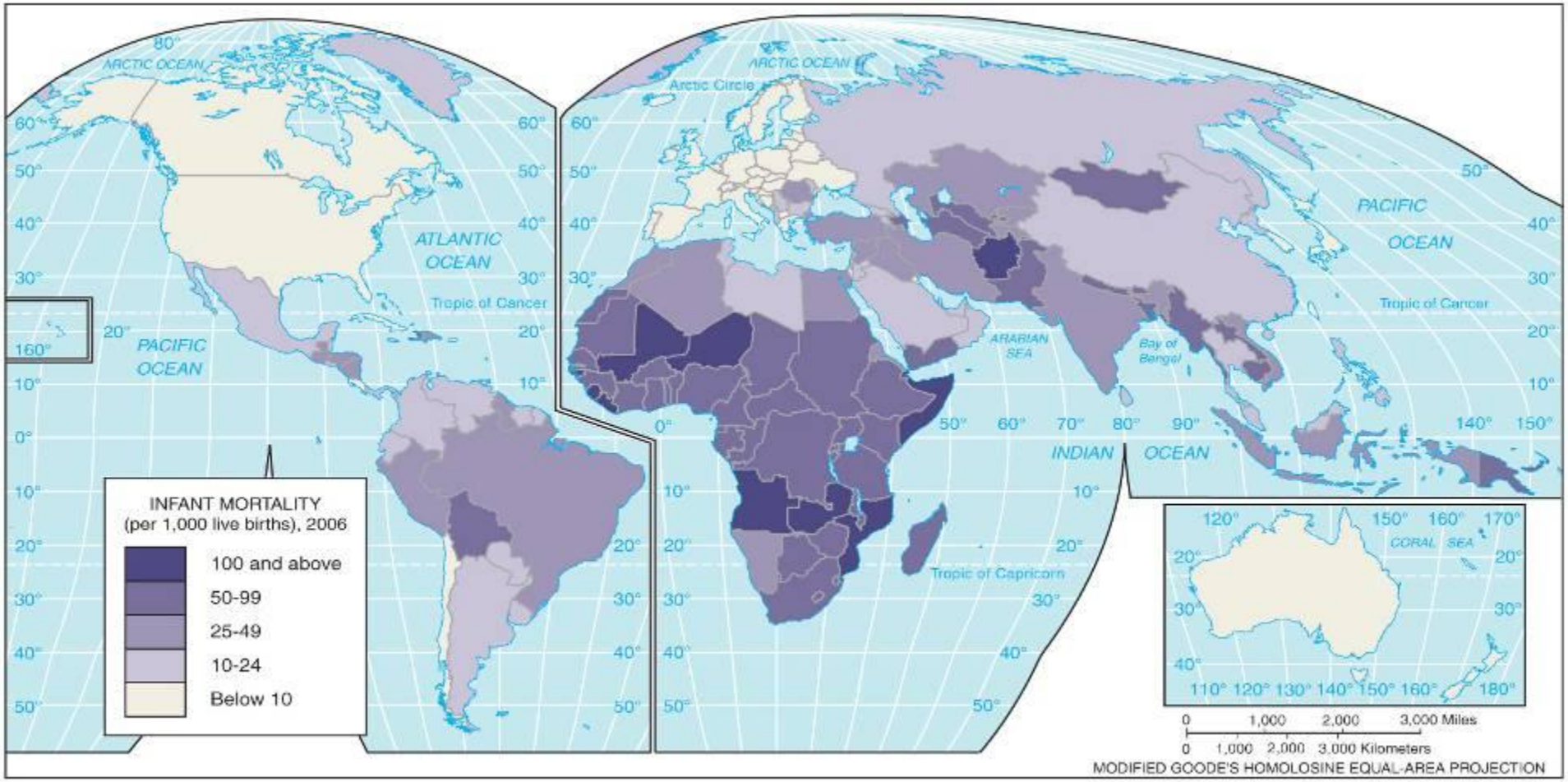


Total Fertility Rate



(a)

Infant Mortality Rate – the number of deaths of children under the age of one *per thousand live births*. The rate ranges from as low as 3 (Singapore, Iceland) to as much as 150 (Sierra Leone, Afghanistan). The U.S. rate is just over 6. High *infant mortality* tends to result in higher fertility rates as families seek "insurance" for the loss of children.



Total Fertility Rate - the average number of children a women will have in her childbearing years. This rate varies from just over 1 (Japan, Italy) to around 7 (Niger, Mali). The U.S. rate is 2.

2.1 is generally regarded as the replacement rate (the rate at which a population neither grows nor shrinks) in the developed world. In less developed countries this rate should be higher to account for so many children not reaching childbearing age.

Palestinian Territories	Fertility Rate
1975-1980	7.39
1980-1985	7.00
1985-1990	6.43
1990-1995	6.46
1995-2000	5.99
2000-2005	5.57

U.K.	Total fertility rate
1975-1980	1.72
1980-1985	1.80
1985-1990	1.81
1990-1995	1.78
1995-2000	1.70
2000-2005	1.66

Africa	Fertility Rate
1975-1980	6.60
1980-1985	6.45
1985-1990	6.11
1990-1995	5.67
1995-2000	5.26
2000-2005	4.97

Doubling Time

- How long will it take for a population of a given area to double in size?
- Doubling time assumes the population will grow at a given annual rate
- Approximated by dividing the annual rate of population increase into 70

Source: National Geographic Magazine

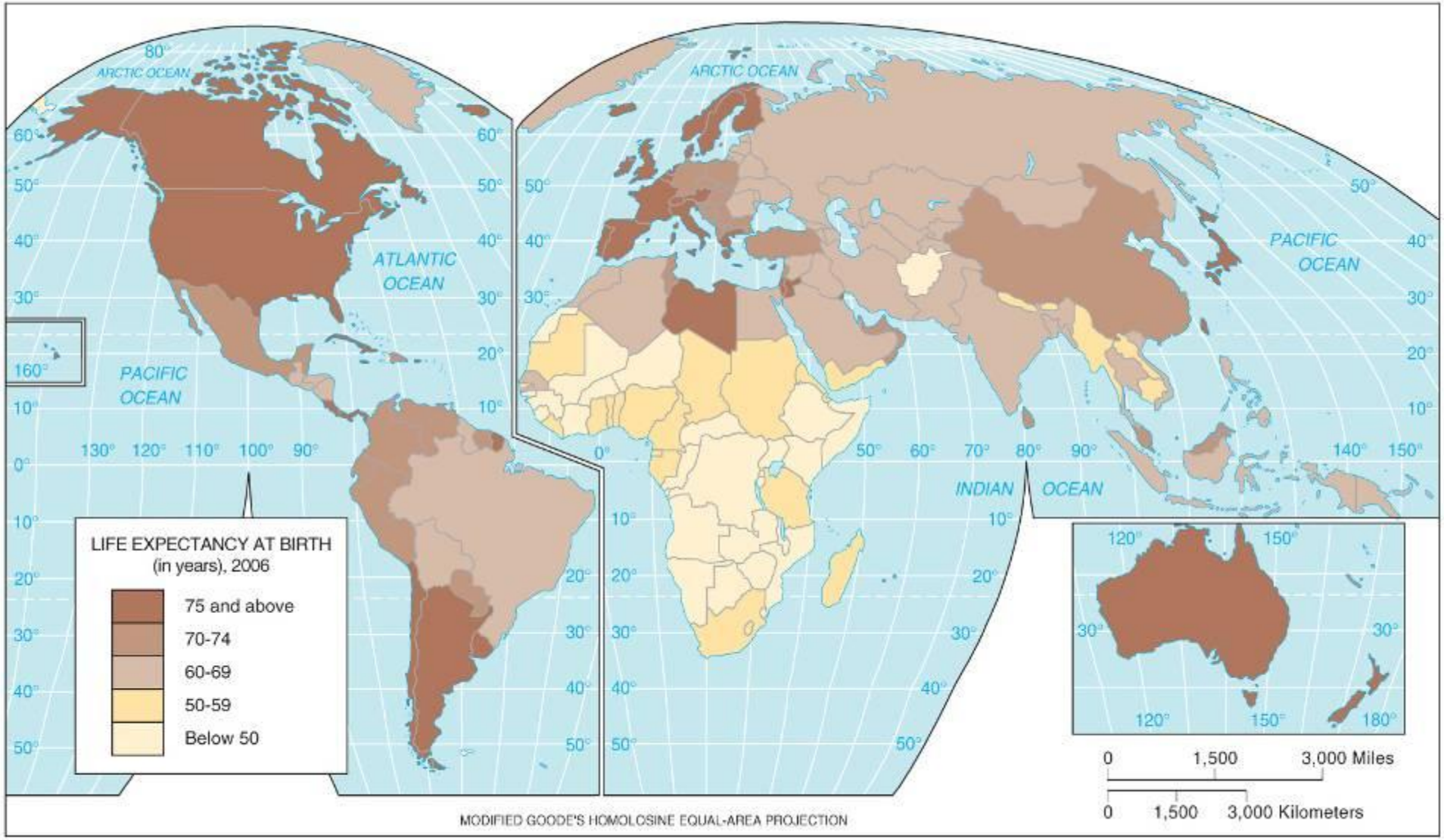
World = 50
U.S. = 35
MDC = 550
LDC = 40
Honduras = 22
Denmark = 700
Russia = never?

Example: Bangladesh

70 / R.N.I. => 70/2.09 = 33.5 years

Bangladesh with a population of 144.3 million people in 2005 will have approximately 288.6 million people in 2038, if the population continues to grow at current rates.

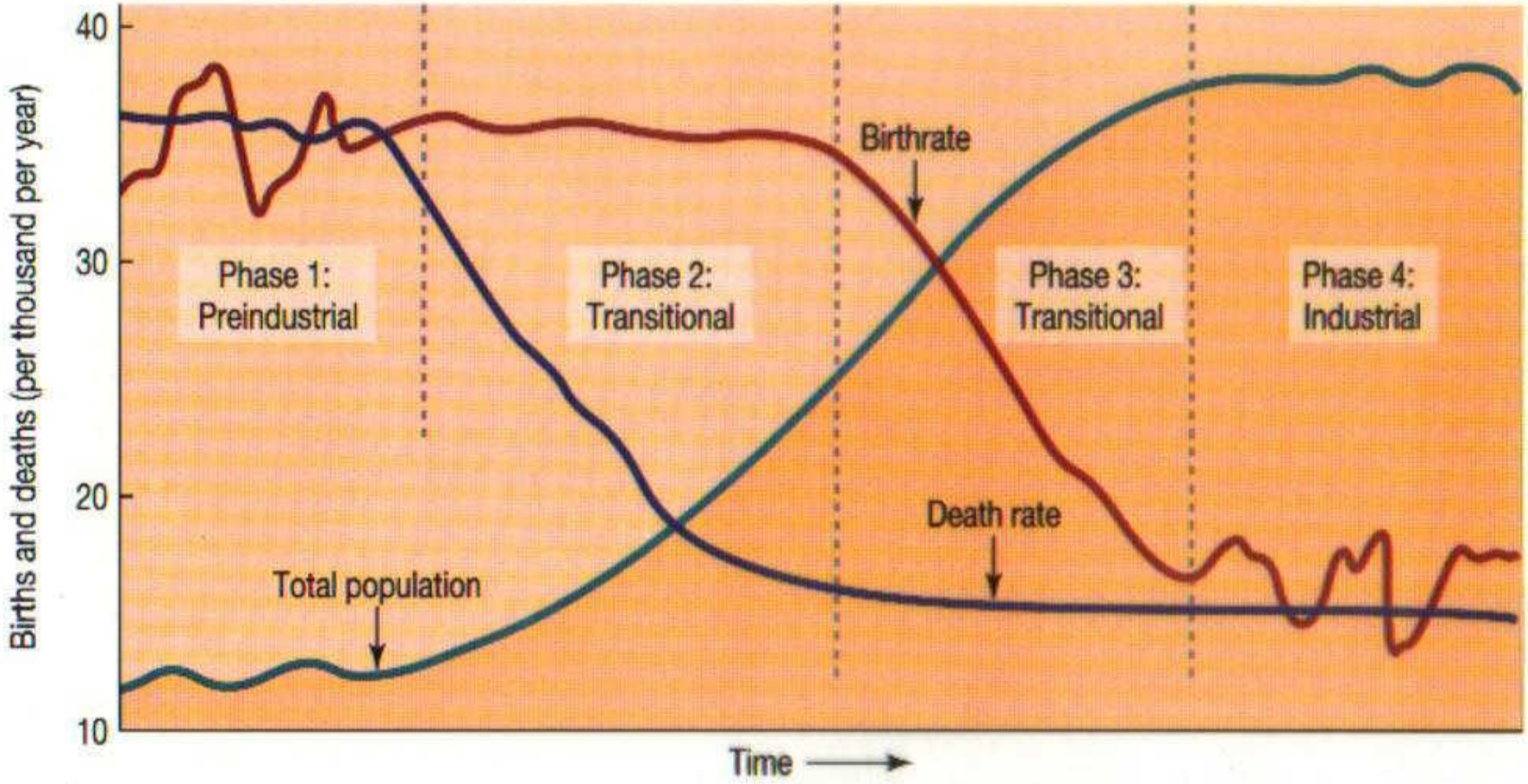
Life Expectancy



Life Expectancy

- Rapid increase throughout world
- Infant mortality rate declining in most countries
- Antibiotics/immunization

Demographic Transition Model

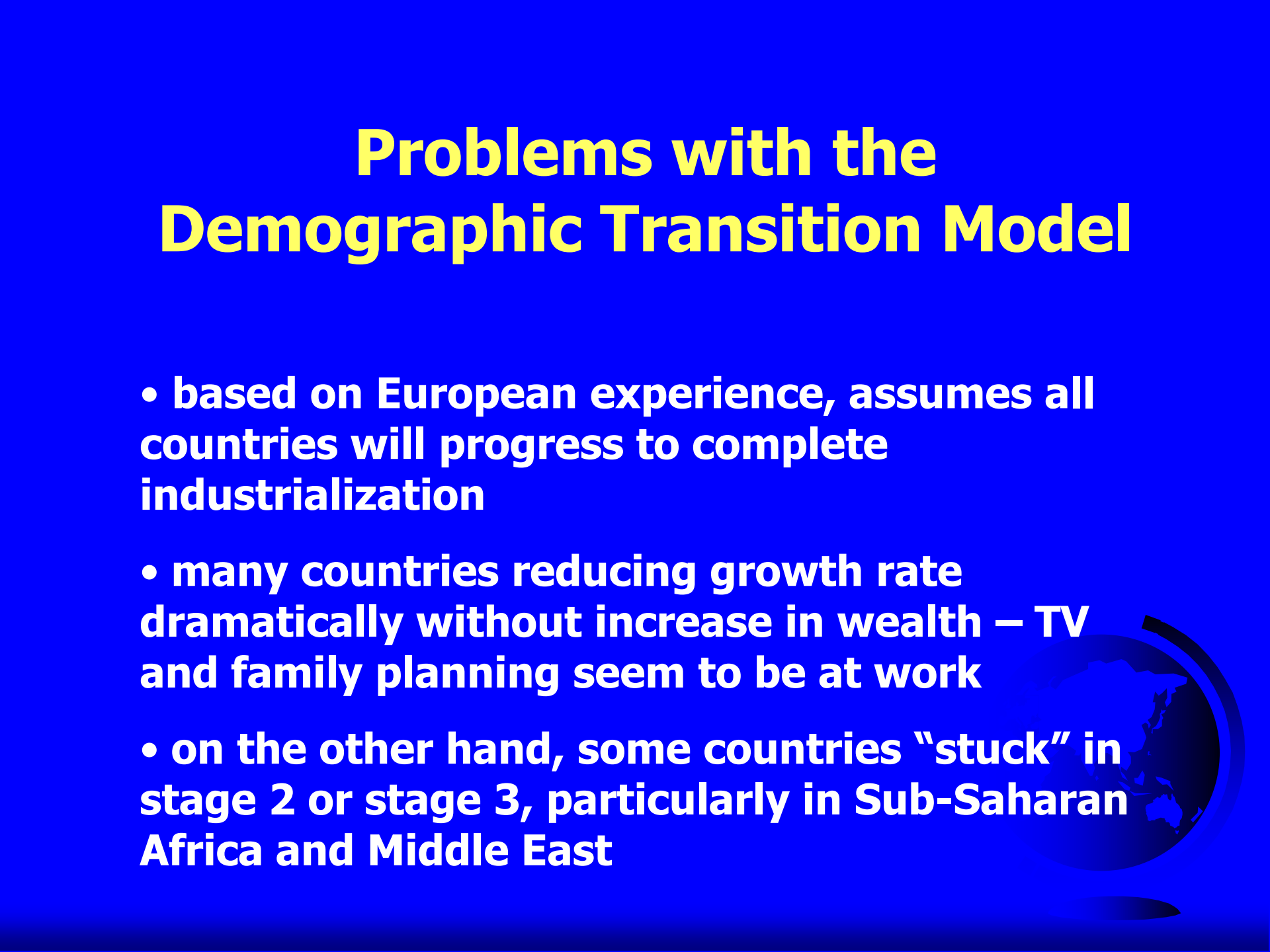


Demographic Transition Model

- **Stage one (preindustrial/pre-agricultural)**
  - Crude birth/death rate high
  - Fragile, but stable, population
- **Stage two (improved agriculture and medicine)**
  - Lower death rates
  - Infant mortality rate falls
  - Natural increase very high
- **Stage three (attitudes change)**
  - Indicative of richer developed countries
  - Higher standards of living/education
  - Crude birth rate finally falls
- **Stage four**
  - Crude birth/death rates low
  - Population stable
  - Populations aging

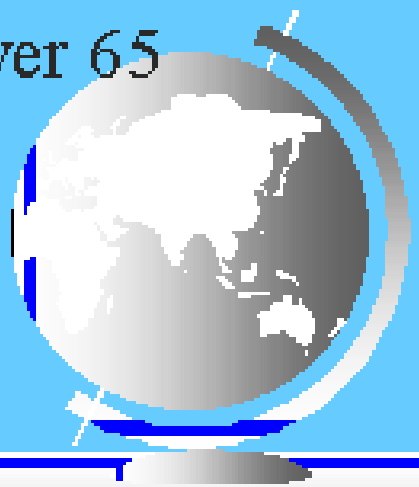
Problems with the Demographic Transition Model

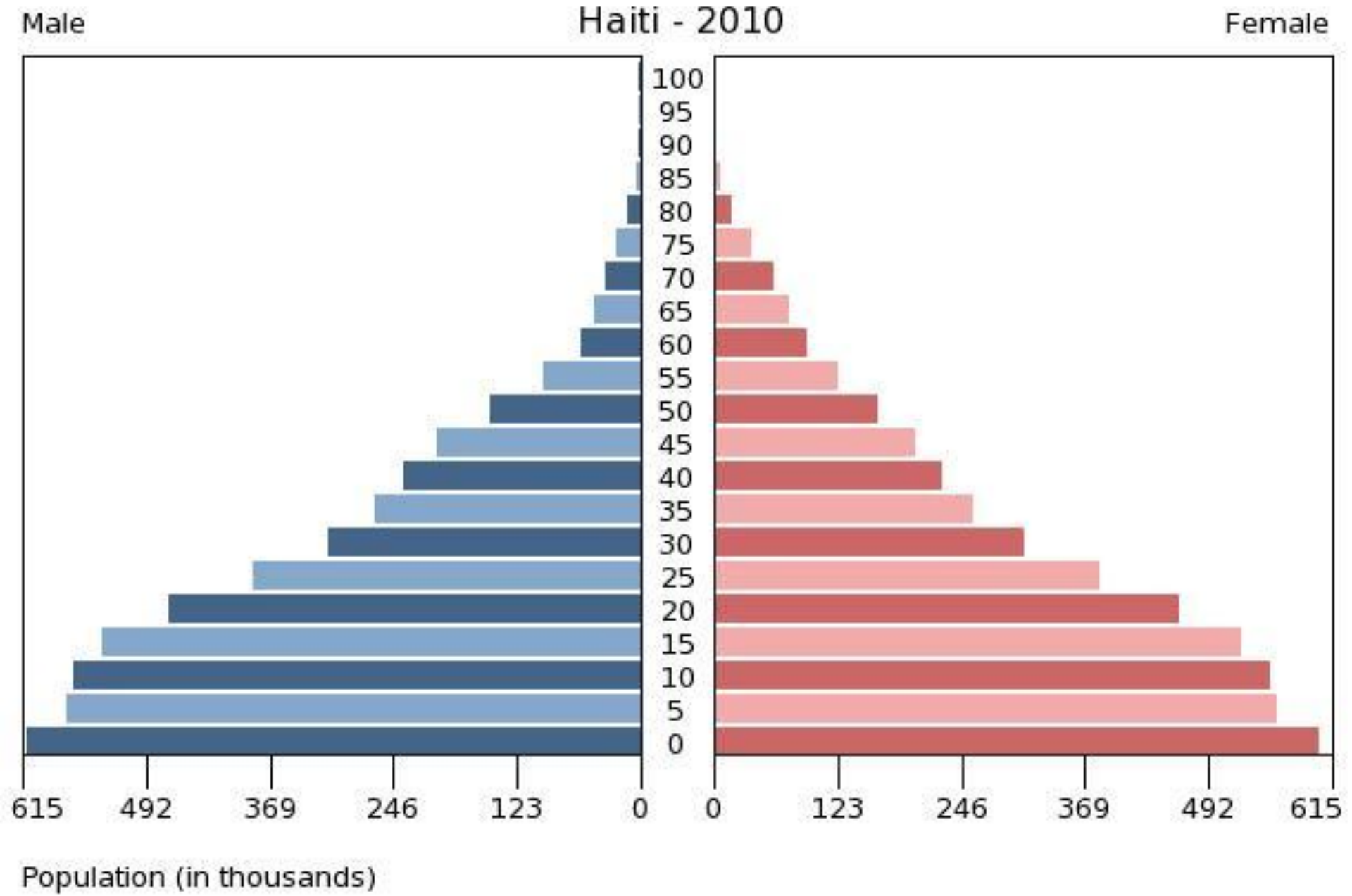
- based on European experience, assumes all countries will progress to complete industrialization
- many countries reducing growth rate dramatically without increase in wealth – TV and family planning seem to be at work
- on the other hand, some countries "stuck" in stage 2 or stage 3, particularly in Sub-Saharan Africa and Middle East

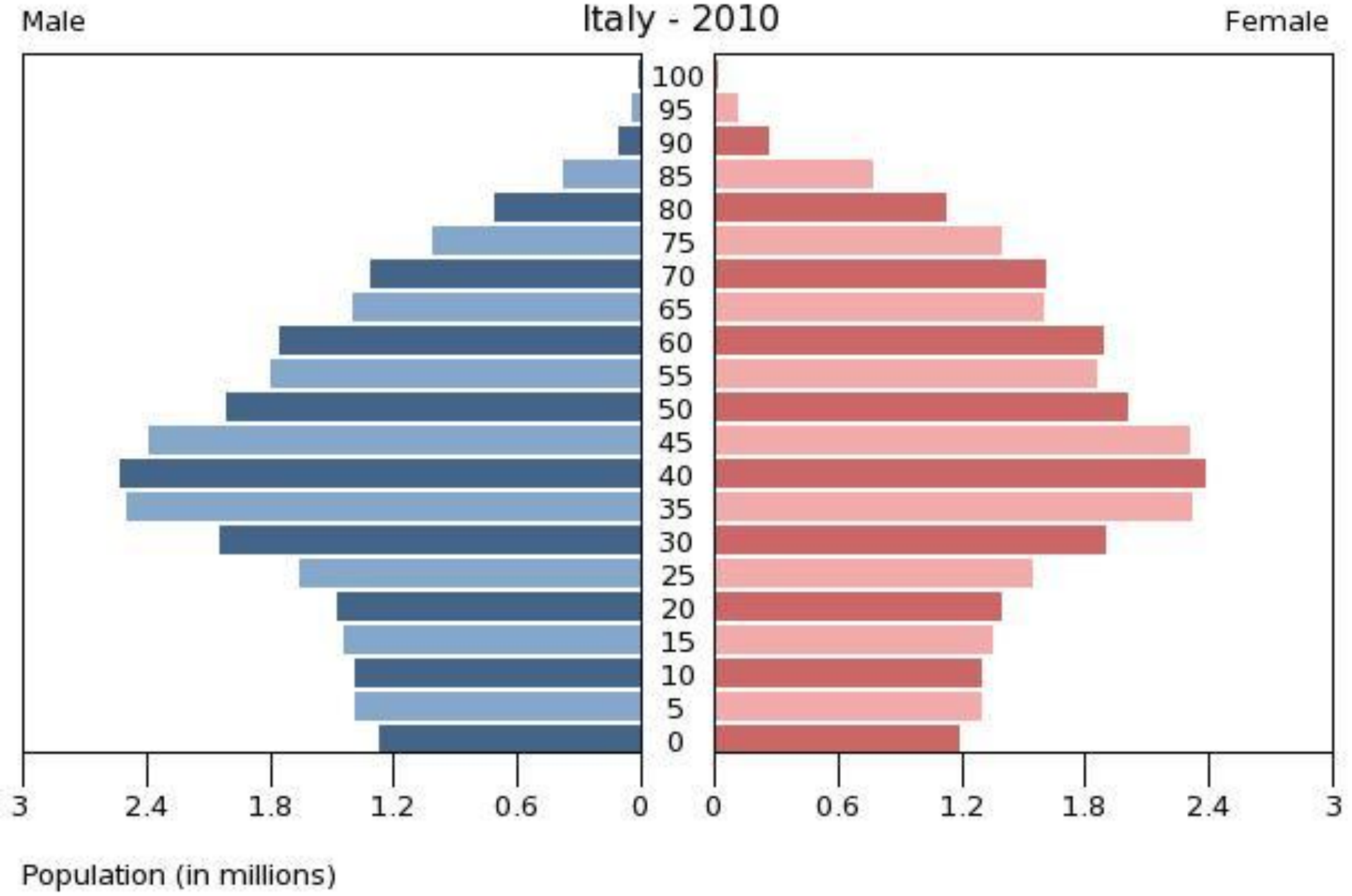


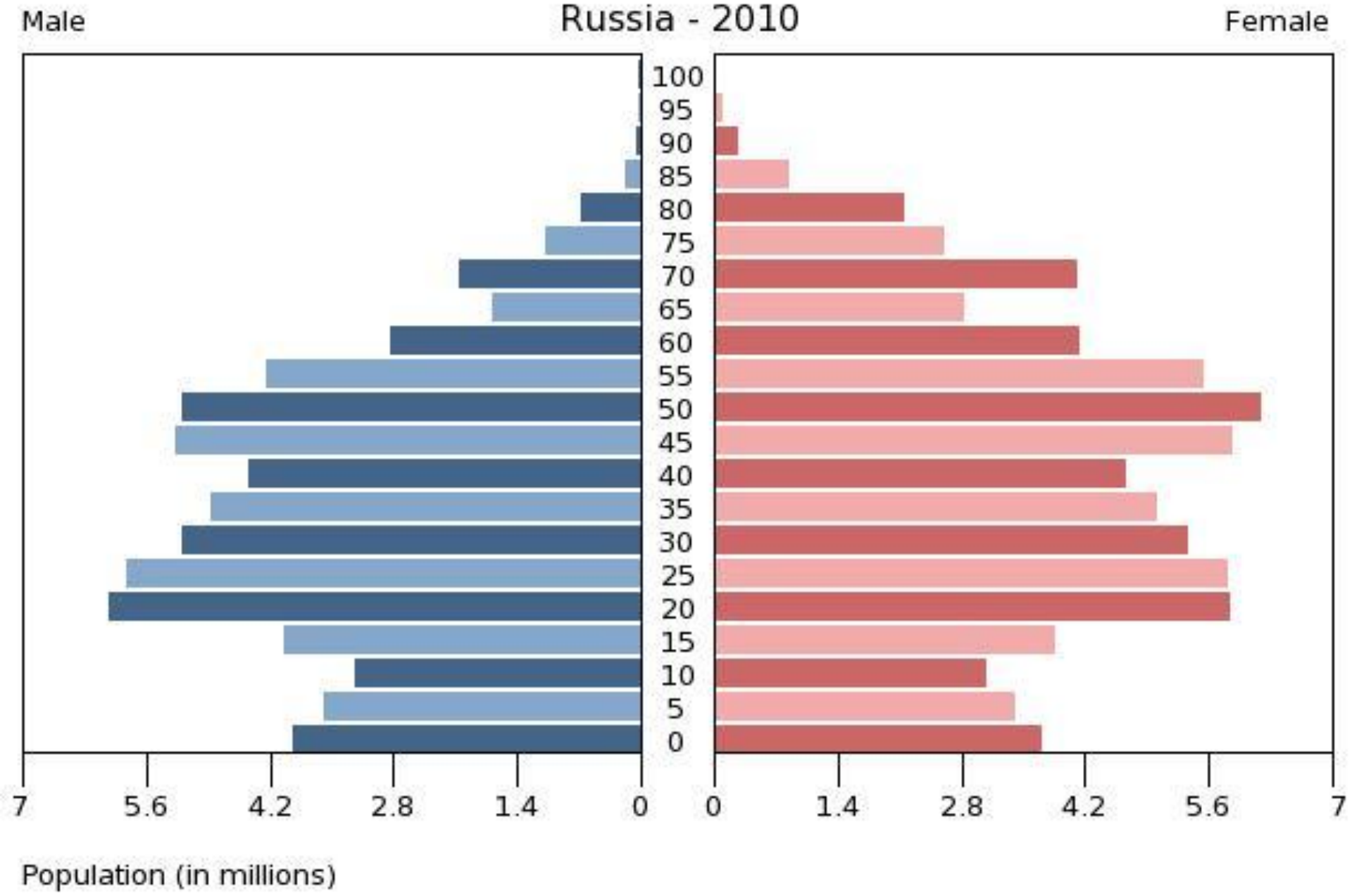
Population Pyramids

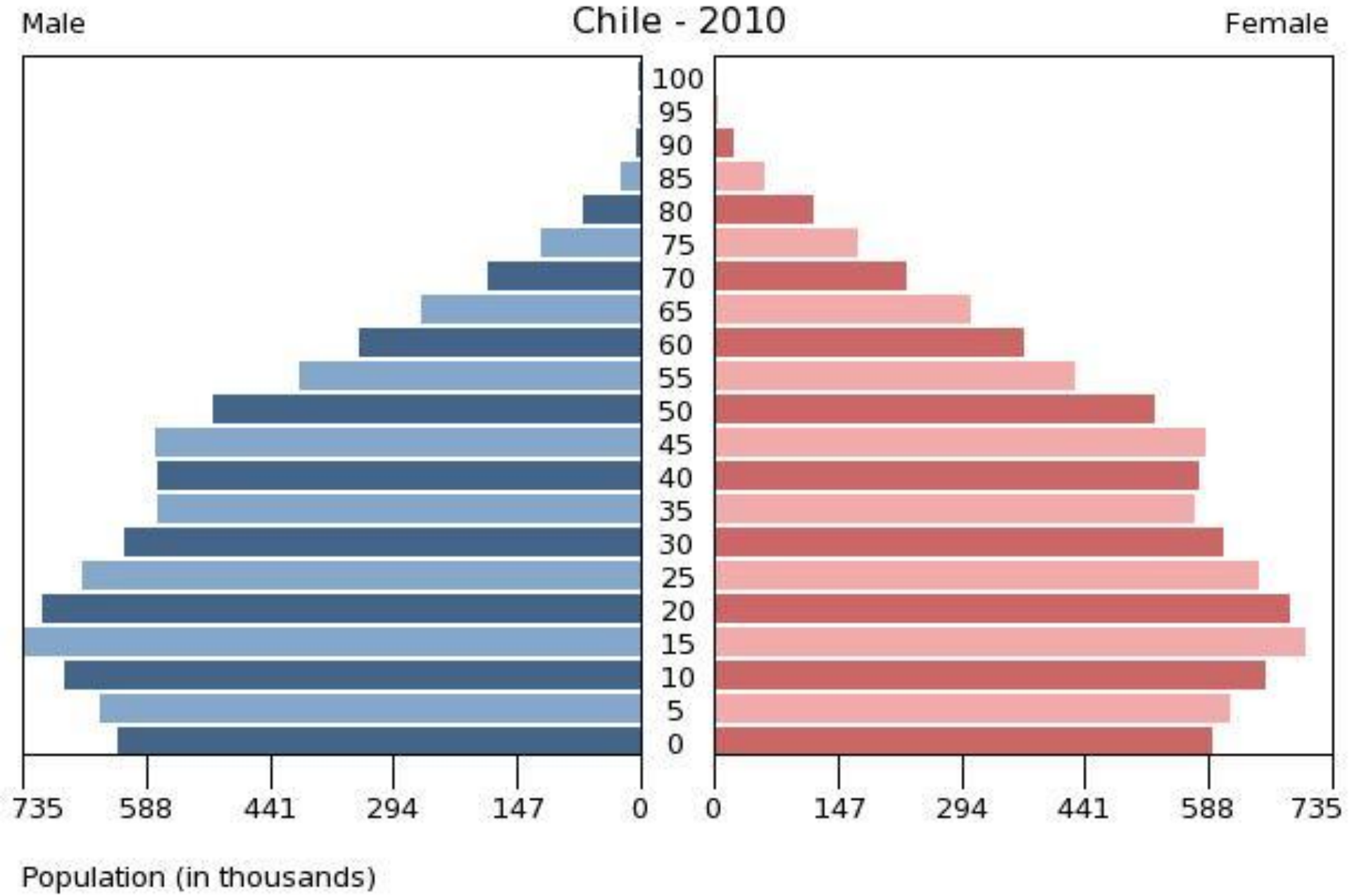
- Inverted bar graphs that show a wide population base (younger population) with a narrow top (older population).
- Population Pyramids show:
  - Age Distributions
  - Dependency Ratios of under 15 and over 65
  - Sex Ratio - Male vs. Female

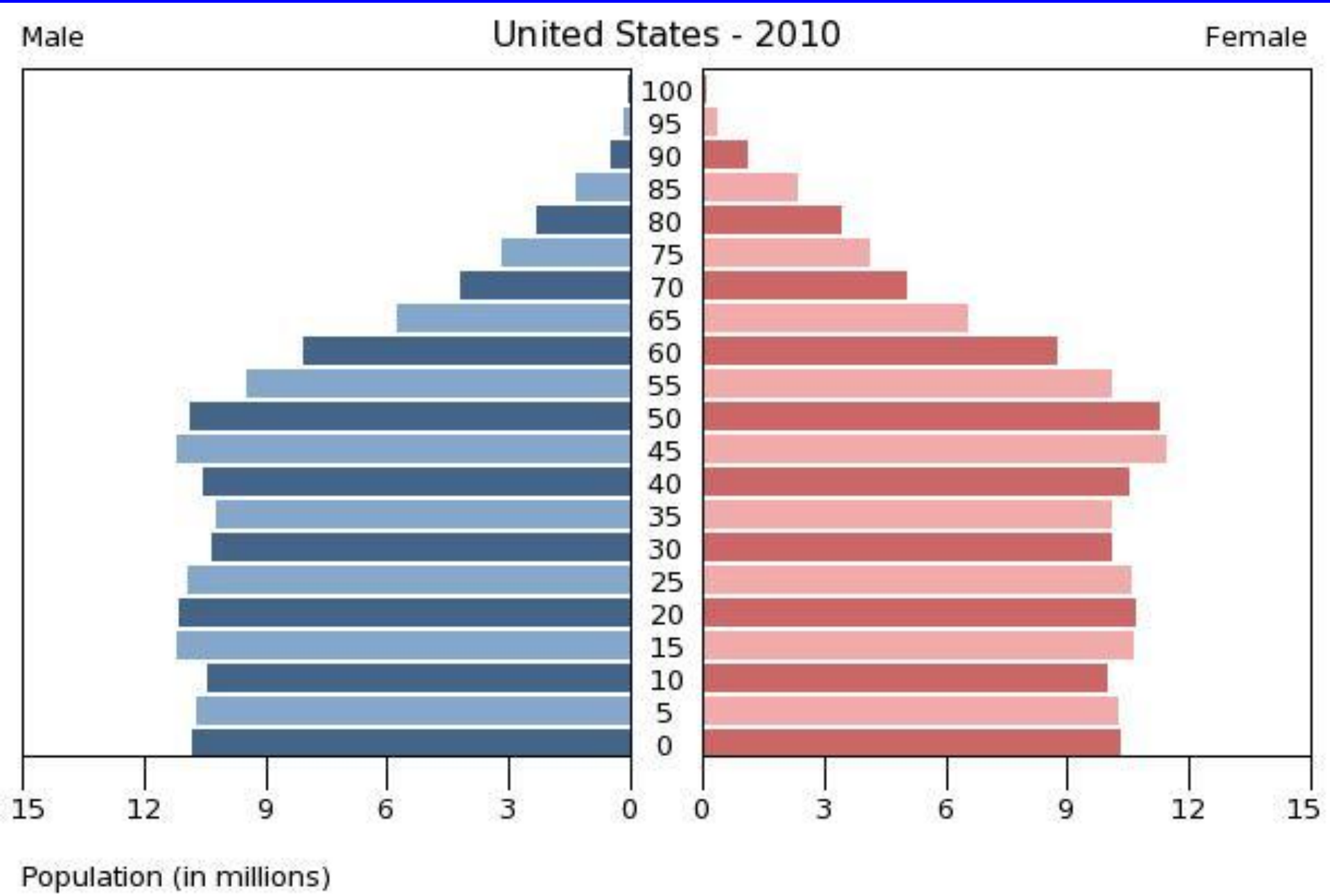



Male
Haiti - 2010
Female
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
615
492
369
246
123
0
0
123
246
369
492
615
Population (in thousands)


Male
Italy - 2010
Female
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
3
2.4
1.8
1.2
0.6
0
0
0.6
1.2
1.8
2.4
3
Population (in millions)

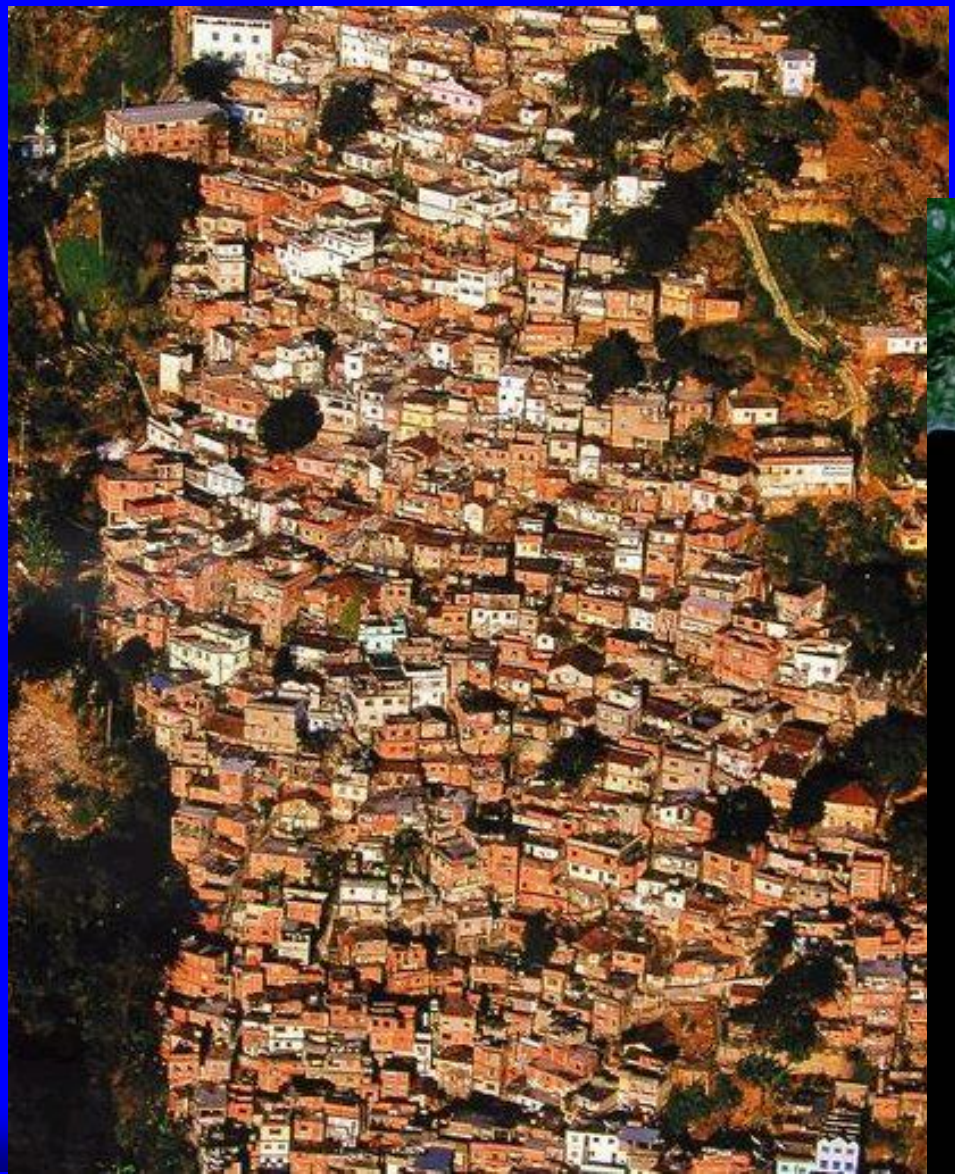

Male
Russia - 2010
Female
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
7
5.6
4.2
2.8
1.4
0
0
1.4
2.8
4.2
5.6
7
Population (in millions)

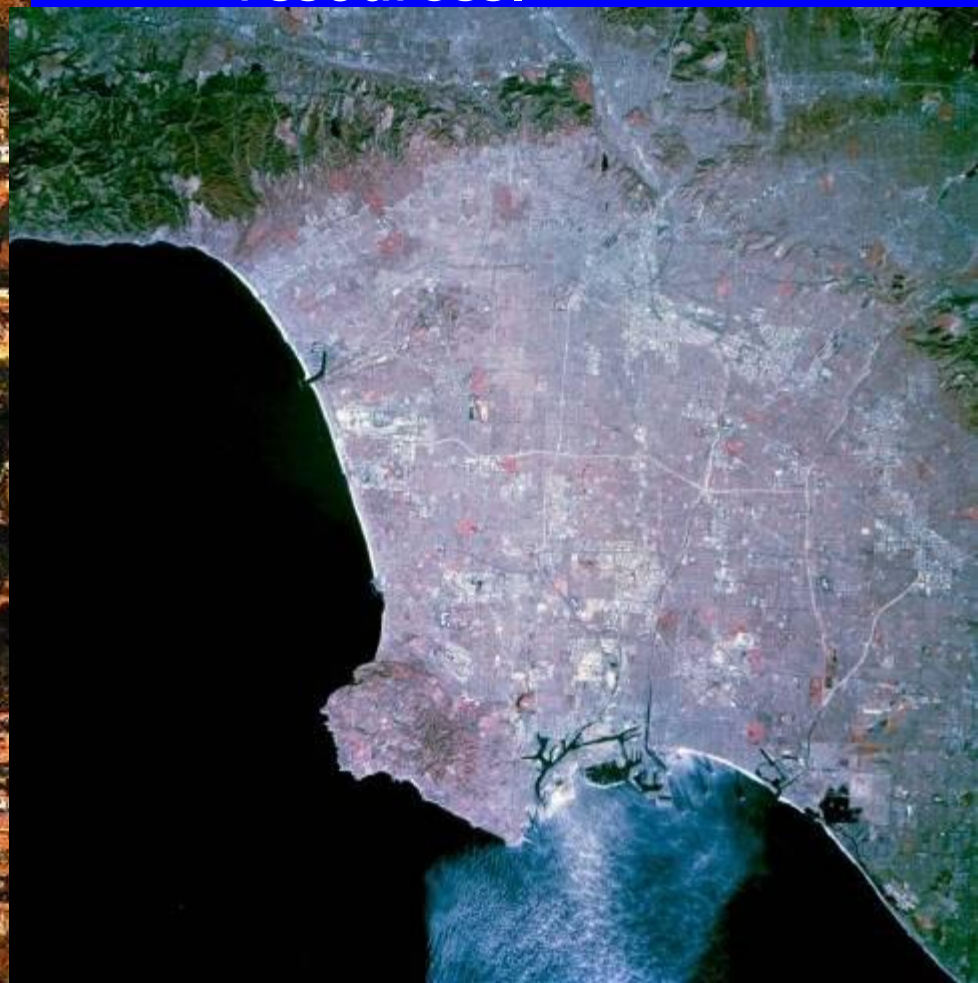

Male
Chile - 2010
Female
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
735
588
441
294
147
0
0
147
294
441
588
735
Population (in thousands)


Male
United States - 2010
Female
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
15
12
9
6
3
0
0
3
6
9
12
15
Population (in millions)

Overpopulation

- When consumption of natural resources by people outstrip the ability of a natural region to replace those natural resources.

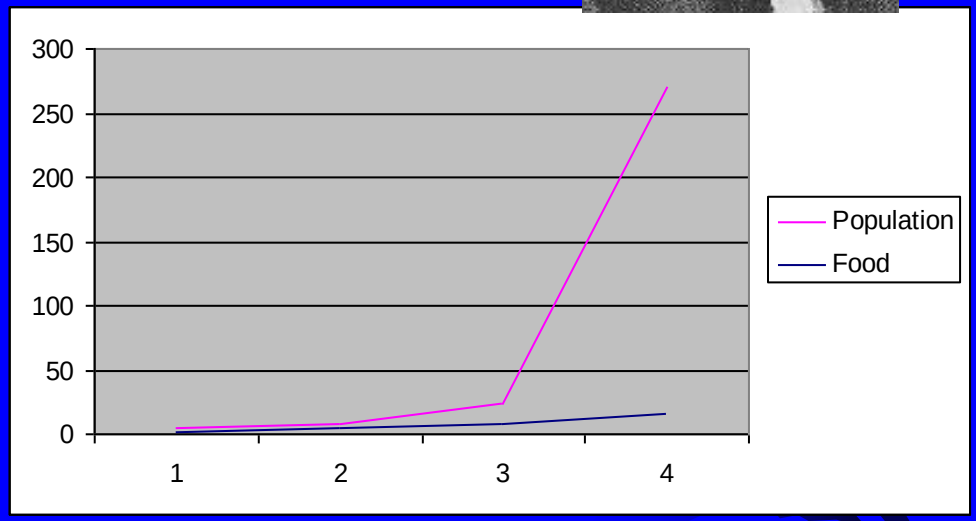




Thomas Malthus on Population

An Essay on the Principle of Population, 1798

Malthus, responding to Condorcet, predicted population would outrun food supply, leading to a decrease in food per person.



Assumptions

- Populations grow exponentially.
- Food supply grows arithmetically.
- Food shortages and chaos inevitable.

Food	Population
2	2
4	4
8	16
16	256

Population and the Environment

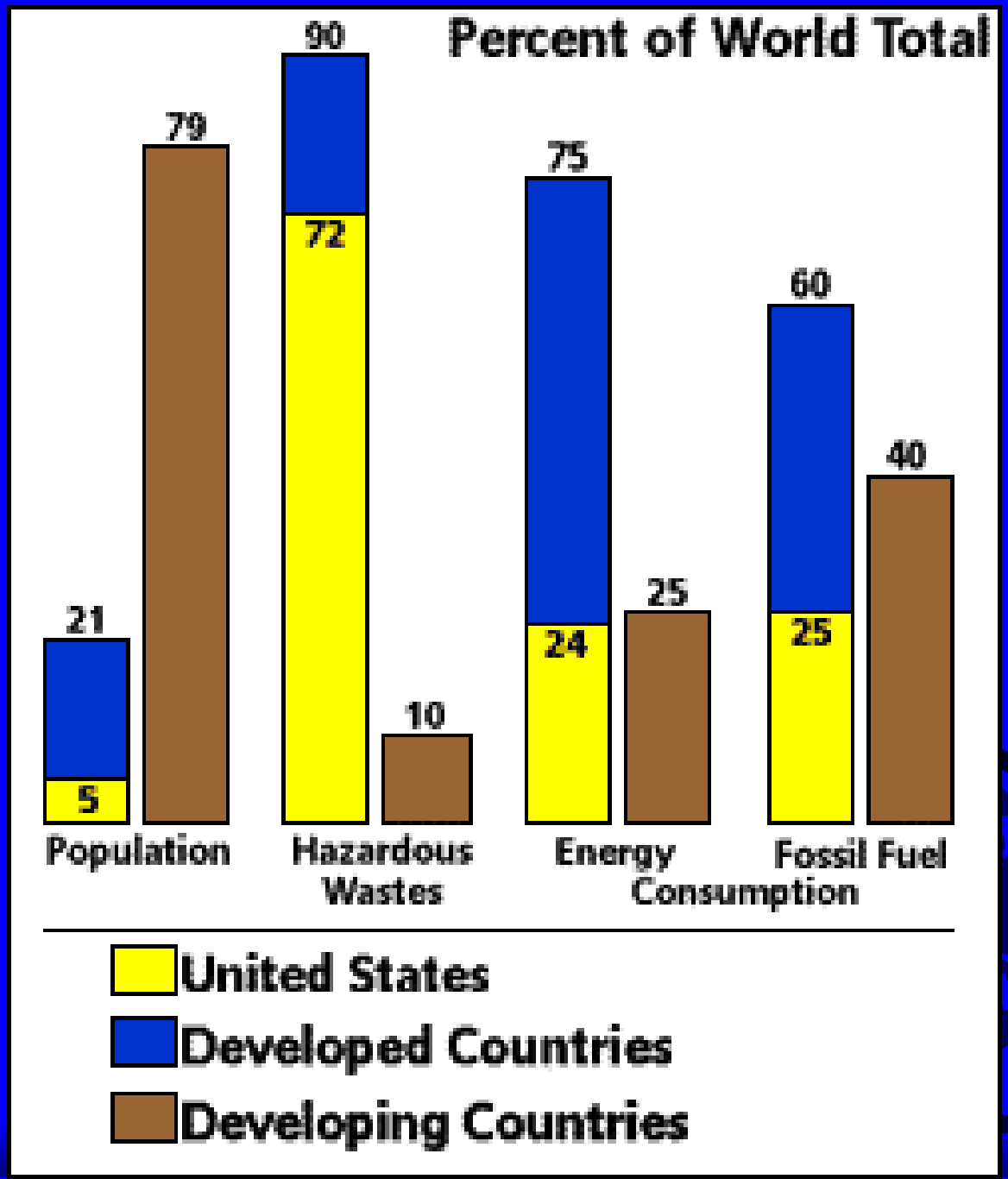
I = P x A x T

Impact = Population x Affluence x Technology

Population-influenced environmental problems:

- ***Global Warming***
- ***Habitat Loss / Endangered Species***
- ***Resource Depletion***
- ***Food Shortages? Not globally, but regionally.***

Population and Resource Consumption

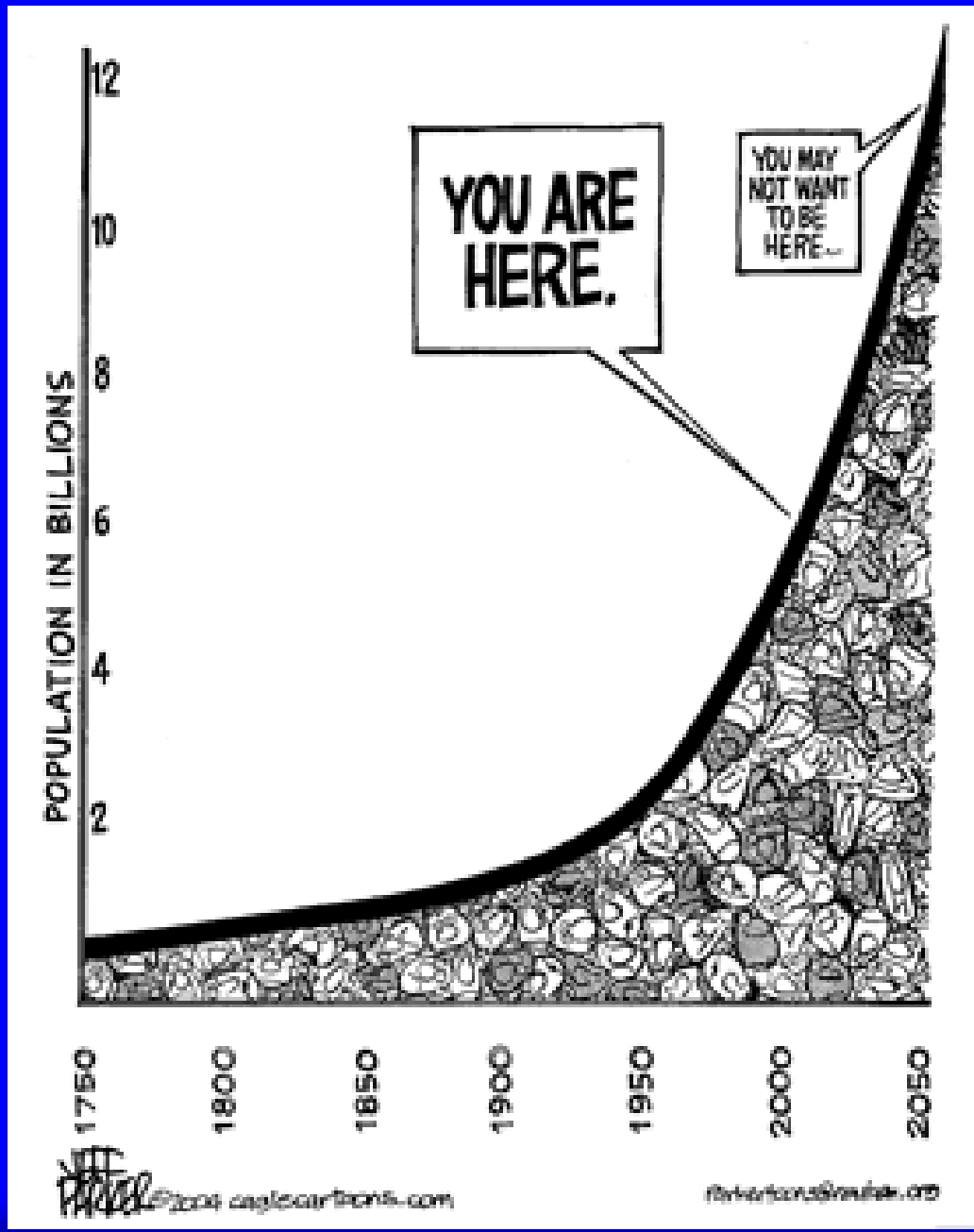


Technology, Energy Consumption, and Environmental Impact

There has been a dramatic increase in:

- individual energy use over time: 3,000 kcal/person - 300,000 kcal/person
- the power of technology to change the environment: think stone axe versus bulldozer versus atomic bomb.
- The scope and severity of environmental impacts.

Tamat


POPULATION IN BILLIONS
12
10
8
6
4
2
YOU ARE HERE.
YOU MAY NOT WANT TO BE HERE...
1750
1800
1850
1900
1950
2000
2050
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