

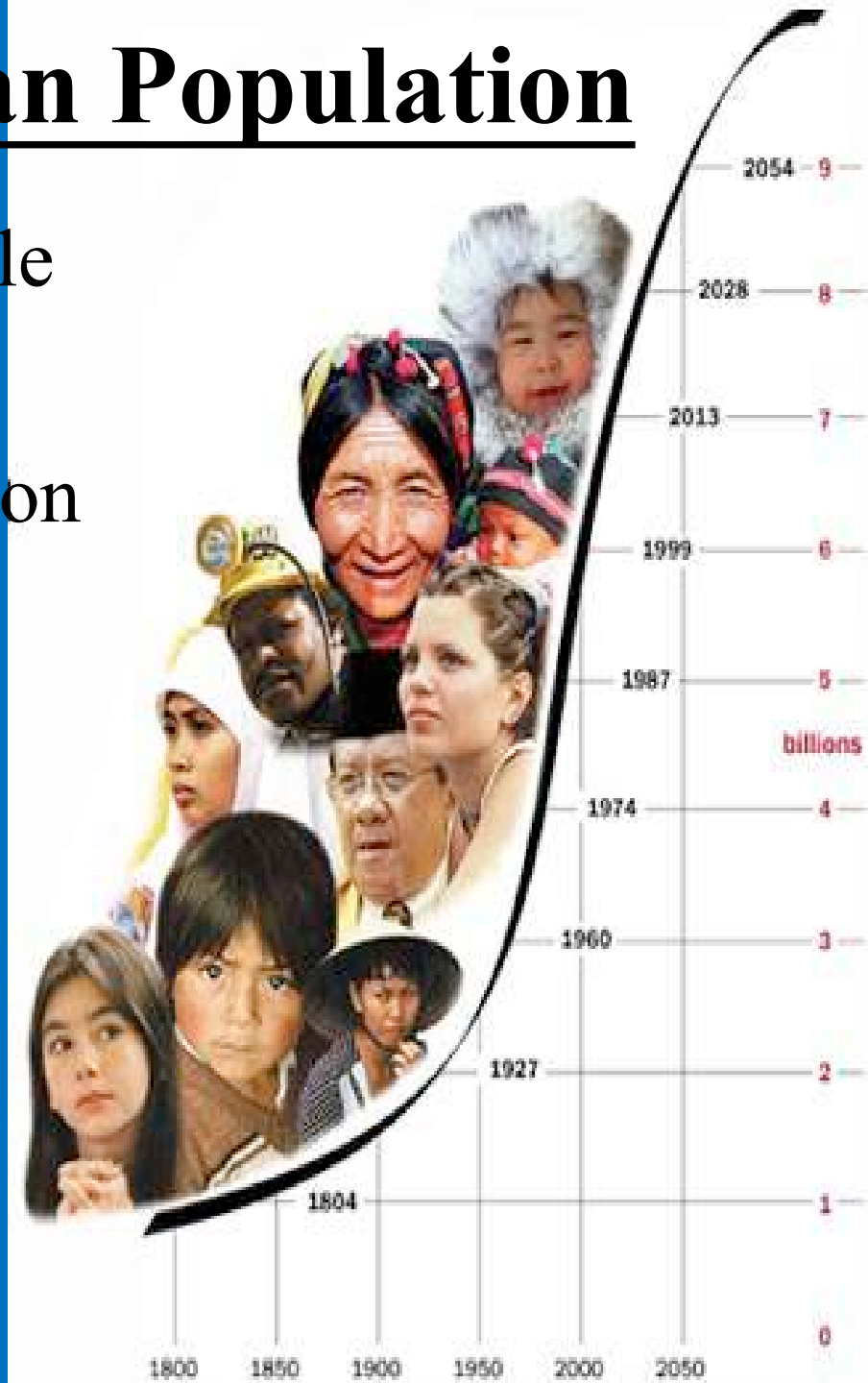
An aerial photograph of a very crowded street market. In the center, a red double-decker bus and a green van are visible. The street is filled with people, many holding umbrellas, suggesting a rainy or sunny day. The background shows a dense urban area with many buildings and more people.

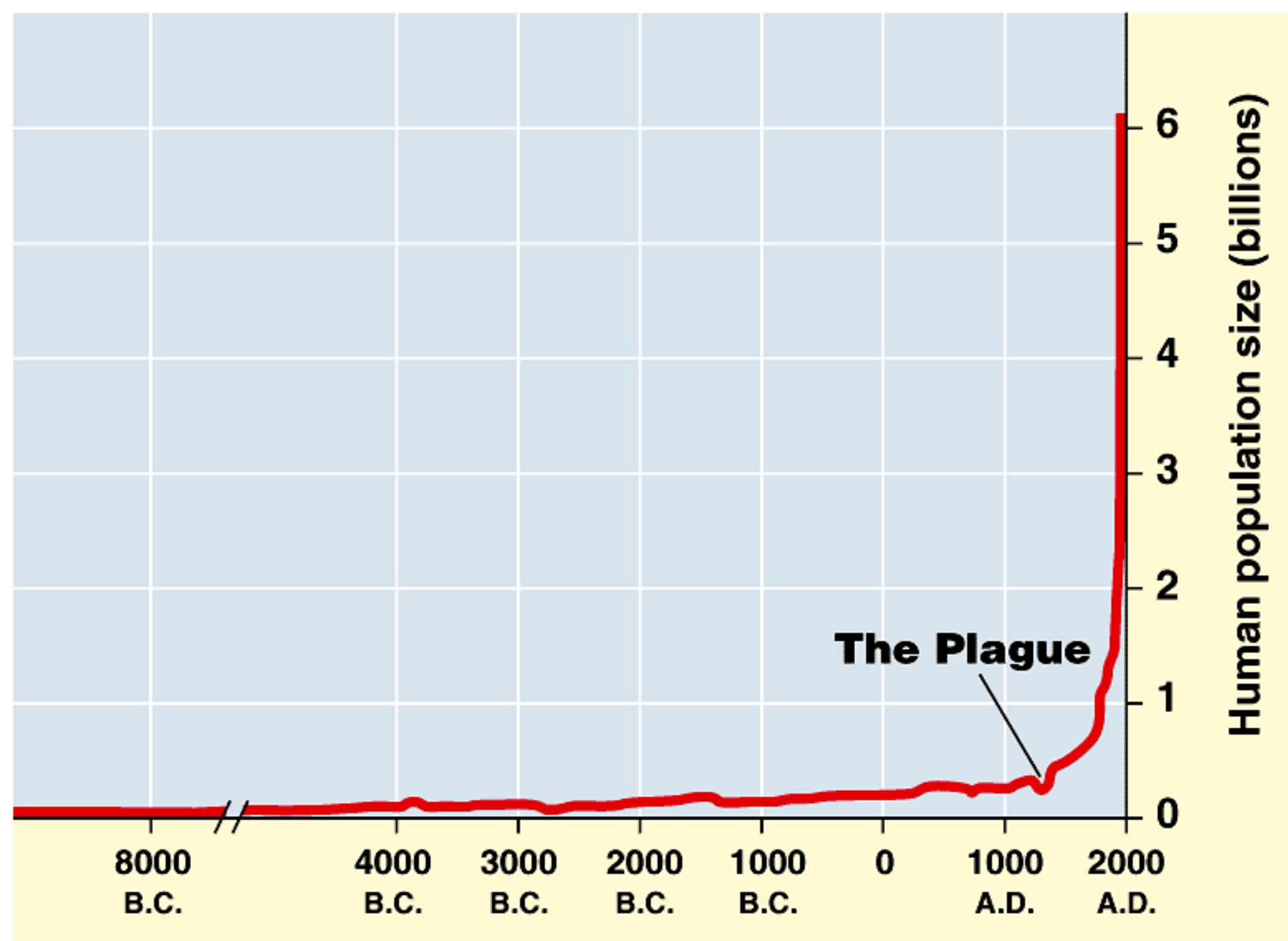
Human Population

Chapter 3

History of the Human Population

- _____ - 500 Million people
 - _____ - 6 Billion
- Prediction: 2050 – 10 Billion
2100 – 12 Billion
- Human population has the potential to increase much faster than the food supply.





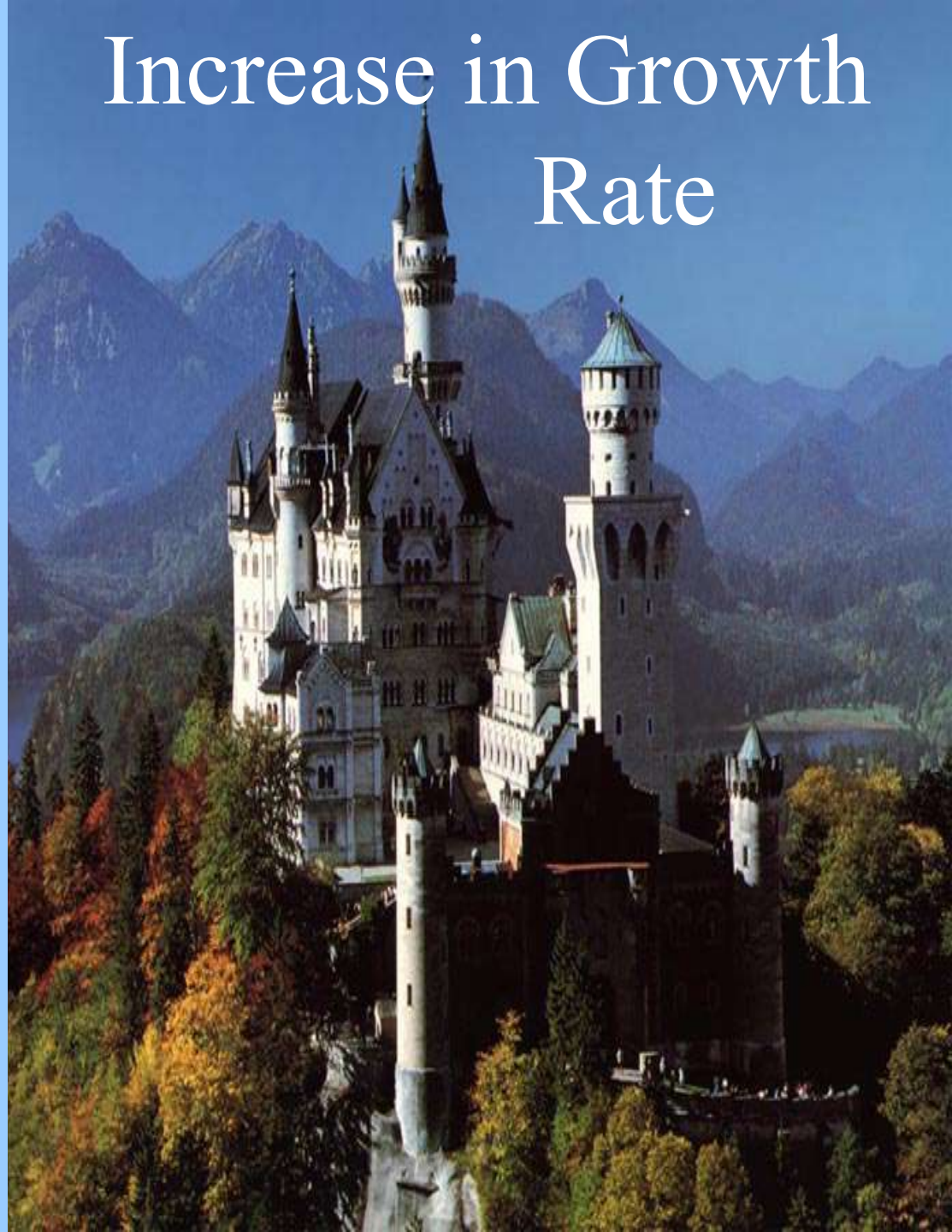
crowded world

**If China's car
ownership matches
that of the USA, it
will need 80 million
barrels of oil a day**

Dr Norman Myers

Increase in Growth Rate

- _____, _____, and _____ prevented people from living long lives. (35 Old Age)
- Permanent settlements led to protection, less starvation and increased population size.



Agriculture



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shift from harvesting wild food sources to producing food through the techniques of farming and herding.
- Farming communities provided steady food supply, which increased population.
- Death rates decreased and increased life expectancy.

Industry

- _____ – Technological advances have improved food production and distribution, shortened the work day, and provided safer work environments.

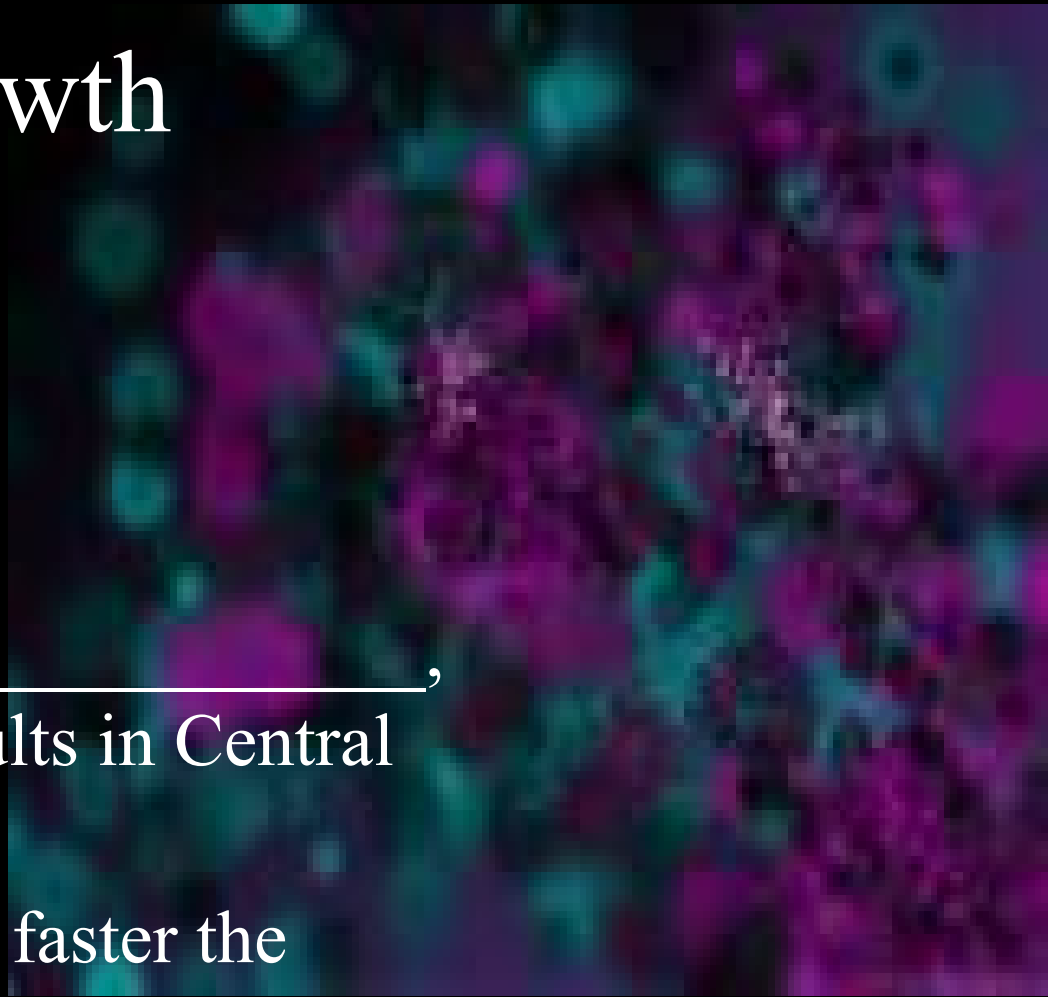
Health Care



- _____, better methods of waste disposal, and water treatment are responsible for reducing the death rate.
- Life-threatening diseases were wiped out or controlled by the discovery of antibiotics and vaccines.
- Infant death rates decreased significantly.

Declines in Growth Rate Disease

- _____, or _____, claimed 25% of the adults in Central Europe and Asia.
- The denser the city, the faster the disease can spread.
- Other :, typhus, malaria, yellow diseases fever Cholera, and smallpox.



Famine



- Irish Potato Famine of 1840, more than 1 million deaths.
 - Potato – Main food supply
 - Potato Crop destroyed = Severe Starvation
- China 1877-1888, 9 million deaths

War

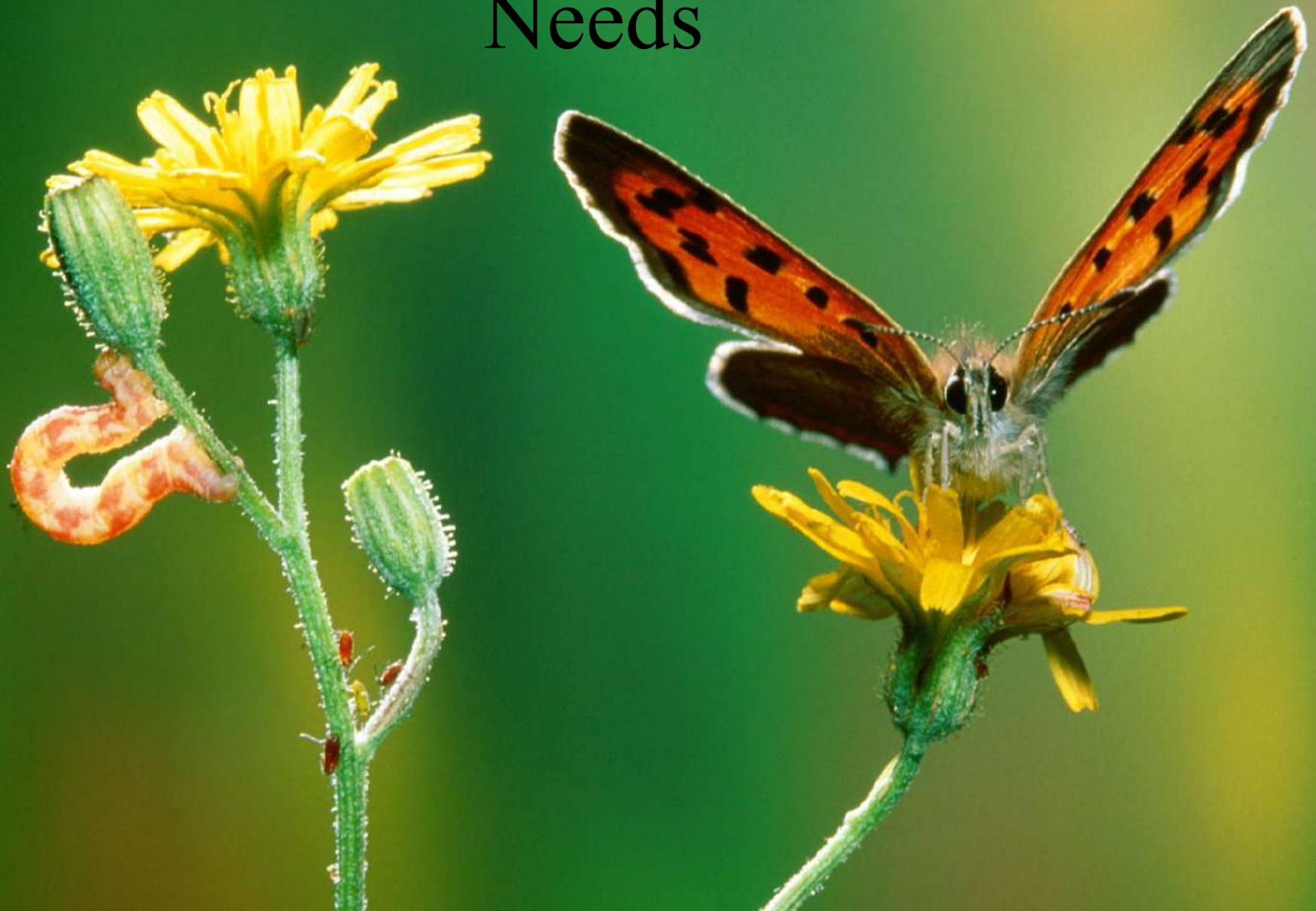
- Tribal and Civil Wars
- World War I = 21.5 Million Deaths

- World War II = 35 – 60 Million Deaths

- Combat, disease, environmental destruction, and starvation all lead to deaths during war.



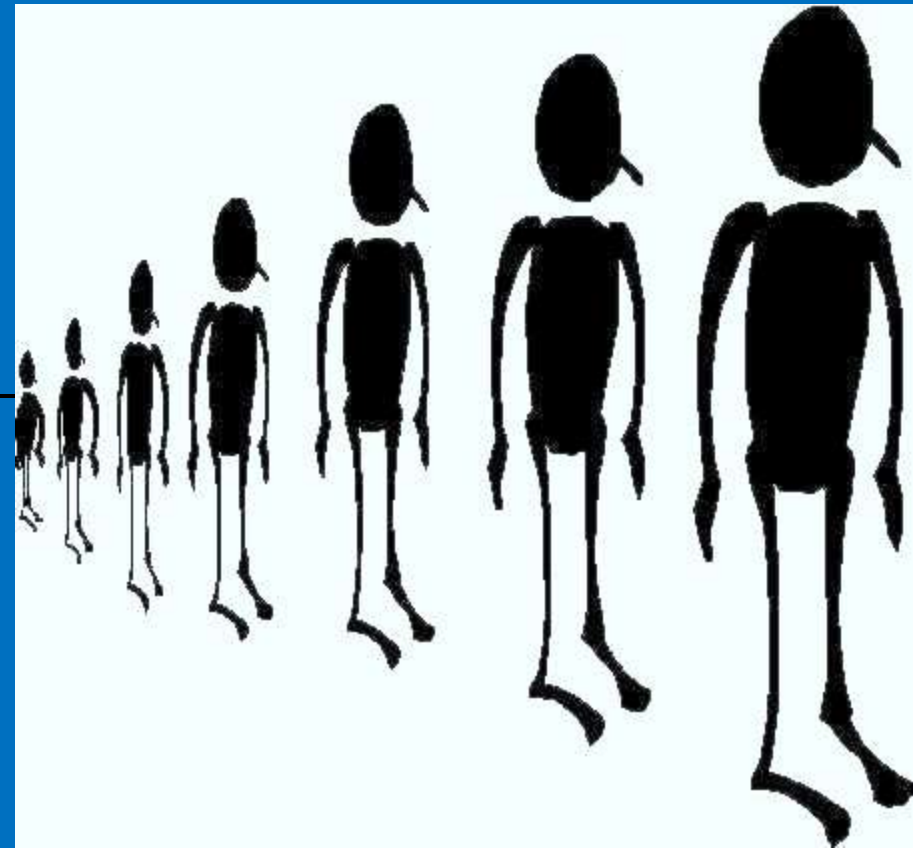
13.2 Growth and Changing Needs



Growth and Changing Needs

- Environmentalists believe that overpopulation is one of the most serious problems we face.

- Environmental problems may never be resolved unless _____.



Measuring Growth Rate

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- Housing, Food Supplies, Jobs, Education, Water, Energy, and Health Facilities will suffer due to population increasing.

- Immigration – _____.

- Emigration – _____.



Demography

- _____ – the science of the changing vital statistics in a human population.

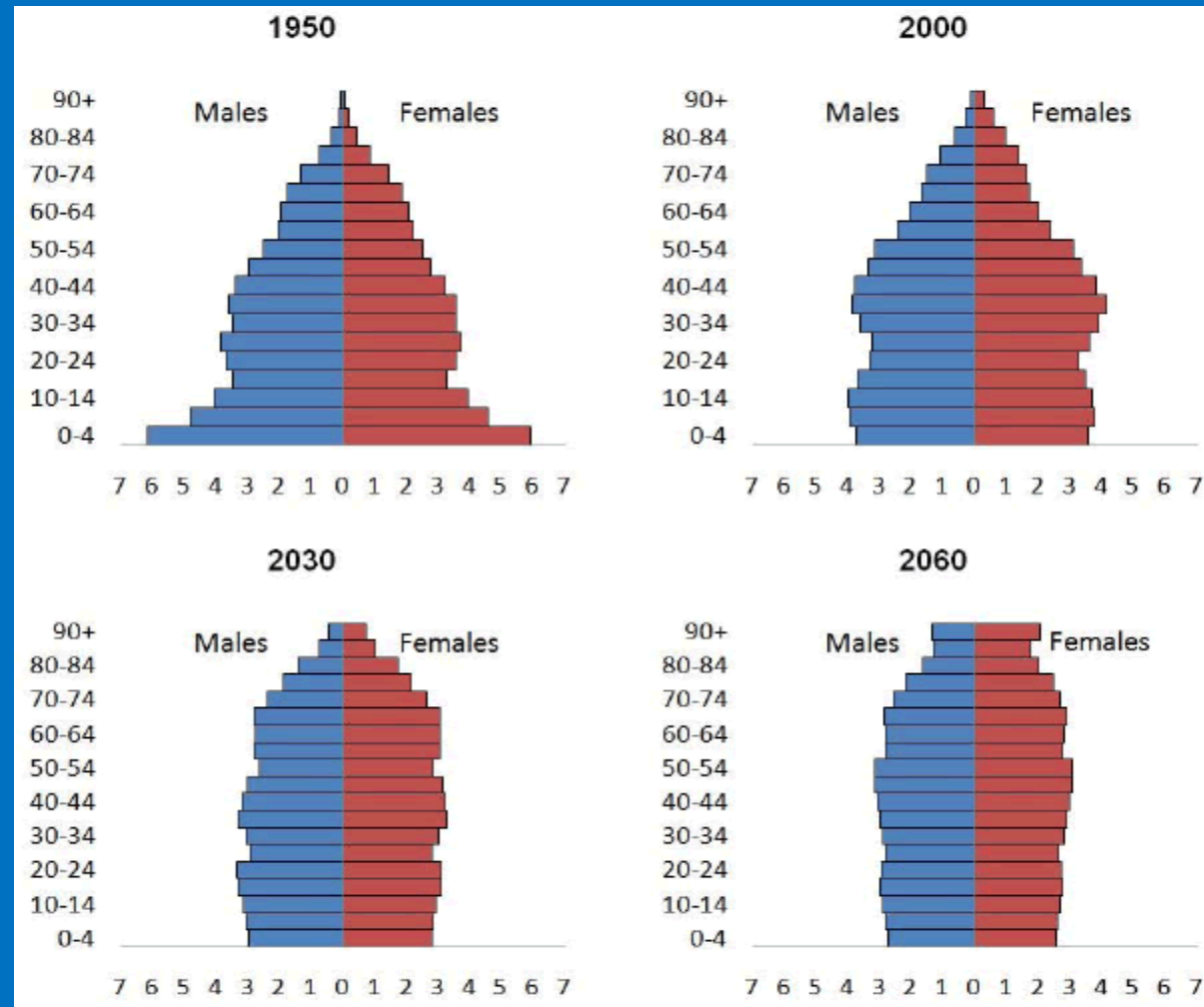
•Population Ages:

India-Growing
Rapidly)

US-Slow Growth

Japan-No Growth

- Changes in
population effect
energy consumption



Changing Needs

- Industrialized Societies use more resources than underdeveloped societies.
- The least developed nations are predicted to experience the greatest increase in population during the coming decades.
 - Their needs are expected to increase faster than the population.



Resources

~~I~~NFINITE

A large, dense crowd of people is gathered for a festival or celebration. The scene is filled with many people, mostly of East Asian descent, looking in various directions. Above the crowd, several long, yellow banners with Chinese characters are strung across the area. The background shows more people and structures, suggesting a large outdoor event. The overall atmosphere is one of a busy, crowded public gathering.

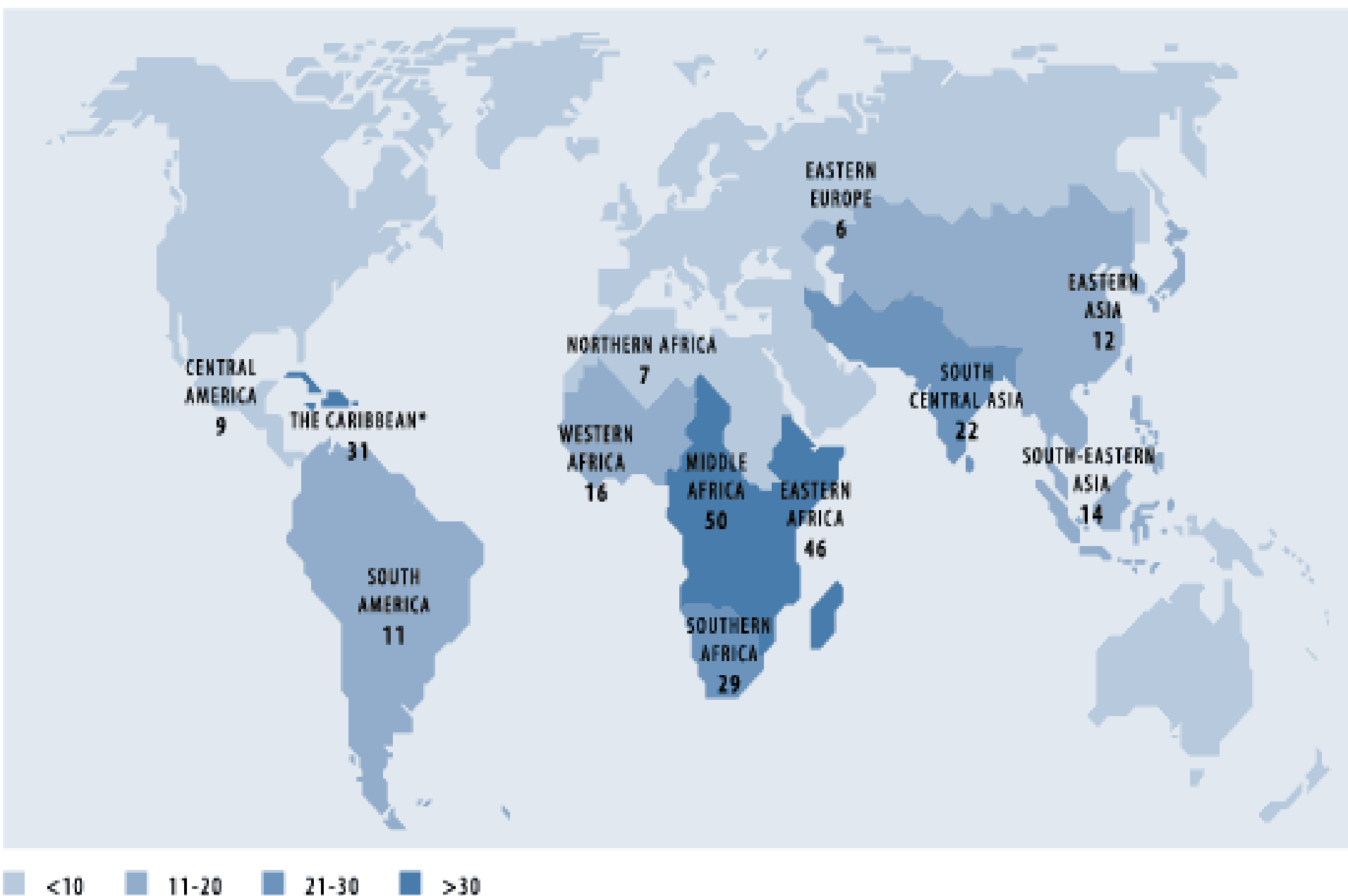
13.3 Challenges of Overpopulation

Challenges of Overpopulation

- Demands on Resources, minerals, fuels, and food.
- Lack of Space and Forests
- Pollution – Air, Water & Land
- Human Health Problems – Diseases, Malnutrition, Poor Hygiene, and lack of Medical Facilities.
- Habitat Loss



FIGURE 3: PERCENTAGE OF POPULATION UNDERNOURISHED, BY SUBREGION, 1996-1998



Source: United Nations Population Division

*Caribbean average is skewed by high malnourishment in Haiti.

Controlling Population Size

- Decreased populations (Bulgaria & Hungary) have to deal with a weakening economic and military strength.



- Limit Family Size

Is Technology the Answer?

- New Energy Resources, Genetic Engineering, and other scientific breakthroughs may aide with overpopulation.
- Earth can only support certain amount of people on the planet.

