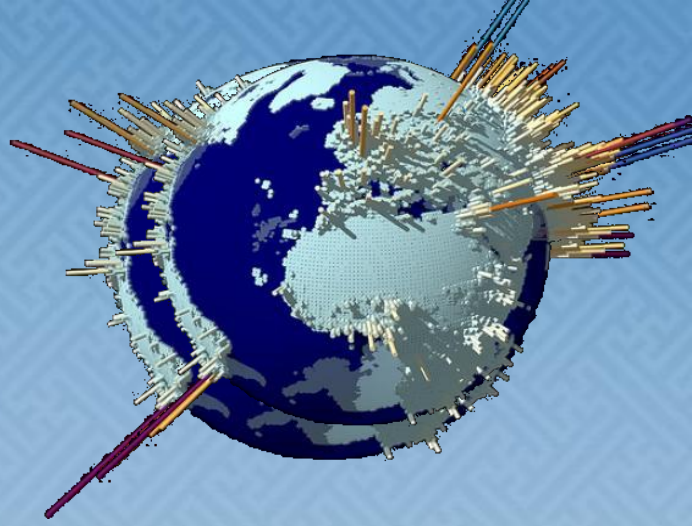
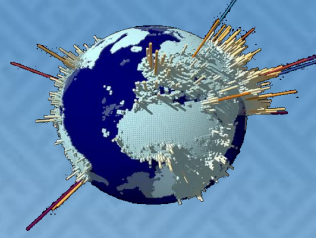
# Globalization and Diversity: A Roadmap for the Course Part I



No two countries that both had McDonald's had fought a war against each other since each got its McDonald's.

Thomas Friedman

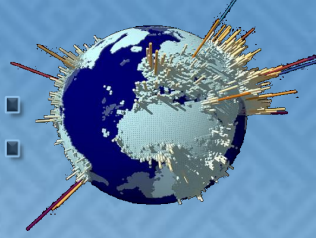
# Diversity Amid Globalization



- Globalization: the increasing interconnectedness of people and places through the converging processes of economic, political and cultural change
- Converging Currents of Globalization
  - communications and transportation
  - economic transformation
    - multinational corporations, financial institutions
    - global free-trade agreements
    - market economies and privatization
    - global markets
    - globalization of labor

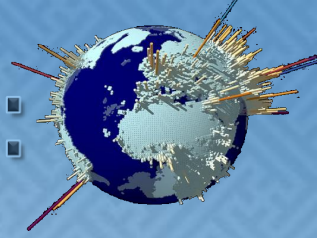
South Indian family rents out TV viewing time

# Diversity Amid Globalization: Concepts



- Conceptual approaches
  - physical geography - the natural features of the earth
  - human geography - human culture and its impact on the earth, the scope of this course
- Perspectives - There are two ways to study Human Geography. We'll use both.
  - regions
  - themes

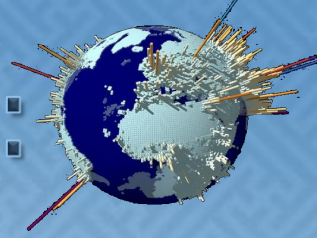
# Diversity Amid Globalization: Concepts



- Global to Local
  - complicated linkages
  - scale - Global changes in climate, environment, economies, populations, governments and cultures converge in localities. Changes at a local scale, in turn, contribute to global changes as well as being affected by them.
  - region - an area broadly divided by physical characteristics, human impact characteristics and the interaction of humanity and the environment

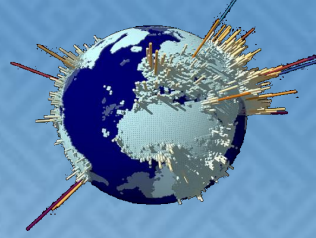
Guilin, China

# Diversity Amid Globalization: Concepts



- scale
  - local - At the local scale, humans possess a strong sense of place - that is, a feeling for the features that contribute to the distinctiveness of a particular location on Earth.
  - regional - The sense of place that humans possess may apply to the scale of a region as well as to a specific point. A region can apply to any area larger than a point and smaller than the entire planet.
  - global - Global scale is an increasingly important concept in geography because of globalization.

# Regions: Formal, Functional and Vernacular



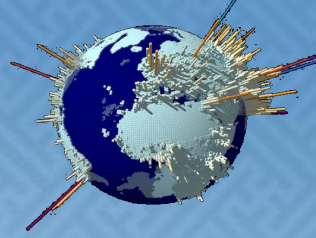
- Formal region
  - marked by a certain degree of homogeneity in one or more variables (culture, physical, etc)
  - entire area shares essential uniformity (the state of Texas)
- Functional region
  - a region formed by a set of places and their functional integration, marked less by its sameness than its dynamic internal structure (cell phone coverage, English-speaking states)
  - a spatial system focused on a central core (a city) and its hinterland ("country behind")– the area surrounding a core (its suburbs)

# Regions: Formal, Functional and Vernacular

- Vernacular region
  - common perception of cultural identity (the Deep South)

This map of northern California identifies examples of all three types of regions.

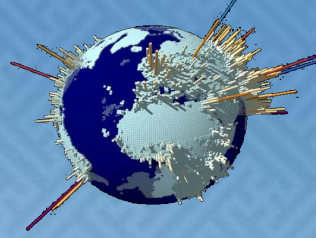
# Regions in World Geography



The twelve regions we are studying in this course are:

1. North America
2. Middle America
3. South America
4. Sub-Saharan Africa
5. North Africa and Southwest Asia
6. Europe
7. The Russian Domain
8. Central Asia
9. East Asia
10. South Asia
11. Southeast Asia
12. Australia, New Zealand and Oceania

# Themes in World Geography



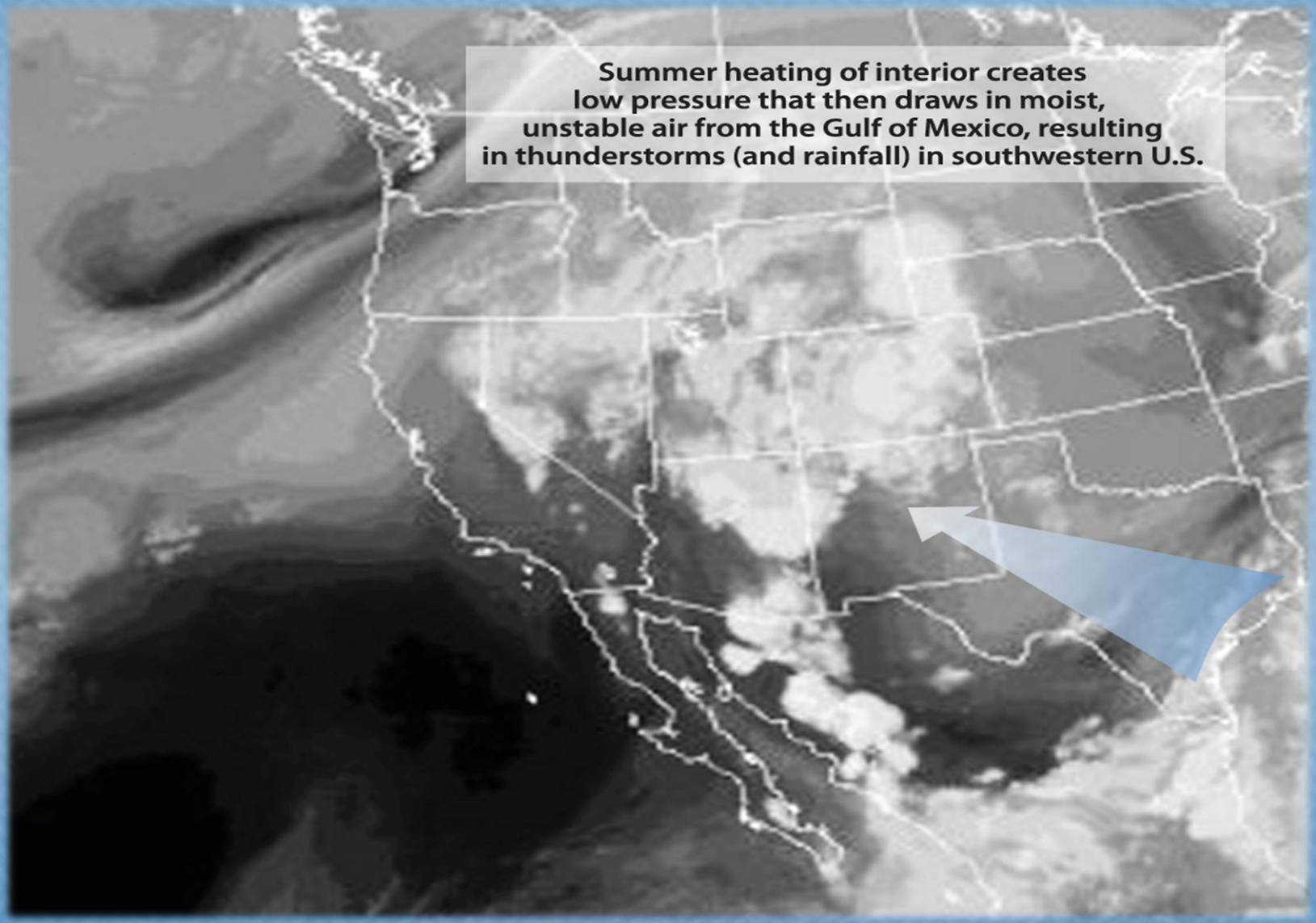
We said earlier that there are two ways to study Human Geography – regions and themes – and that we'll use both.

We've just identified the twelve regions we'll be studying. We'll look at each region using these five themes:

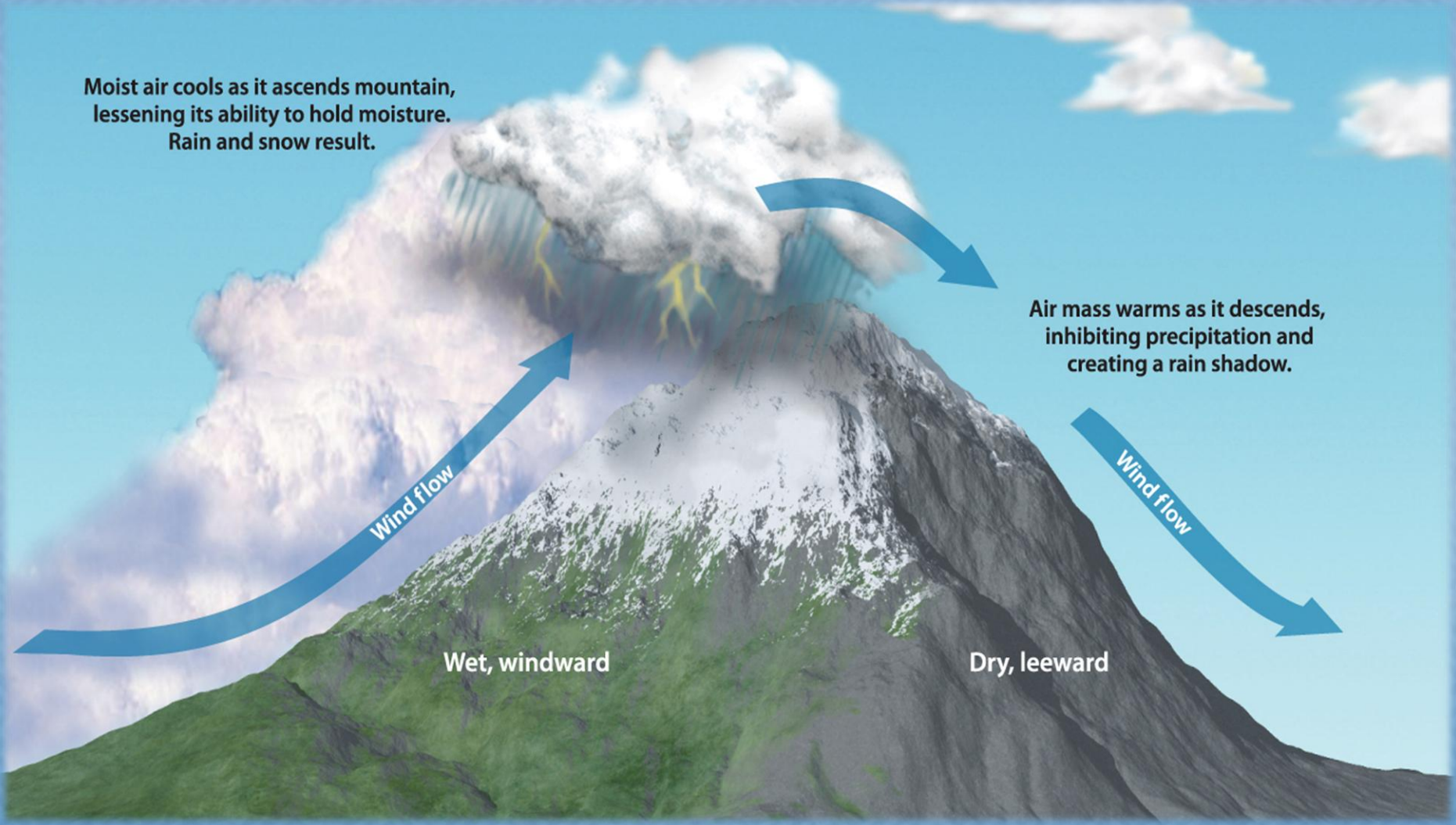
1) The physical setting, including environmental issues
2) population and settlement
3) cultural coherence and diversity
4) geopolitical framework
5) economic and social development

The rest of this presentation will provide a general overview of each of those themes.

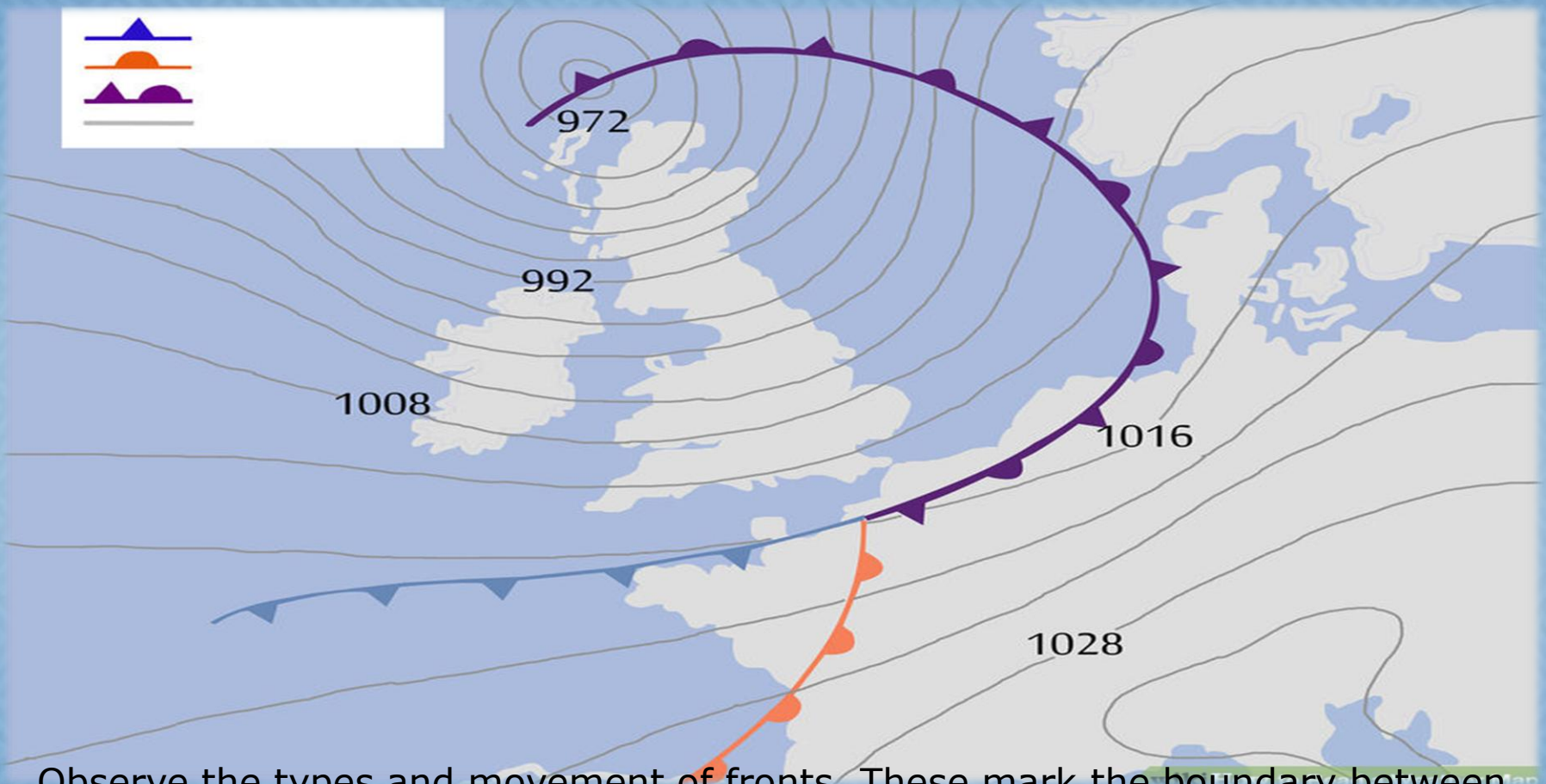
# Physical Setting: Weather



# Physical Setting: Weather

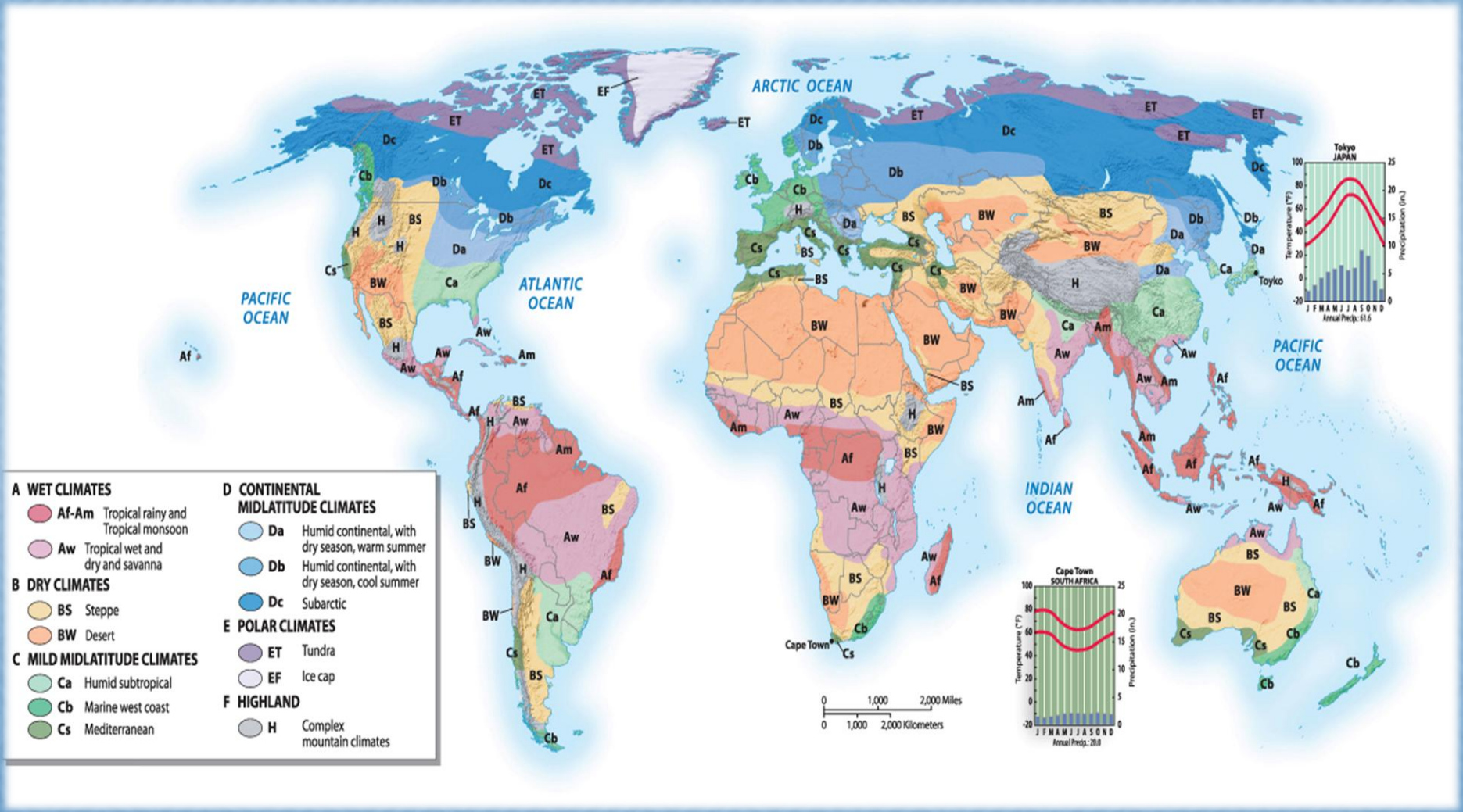


# Physical Setting: Weather

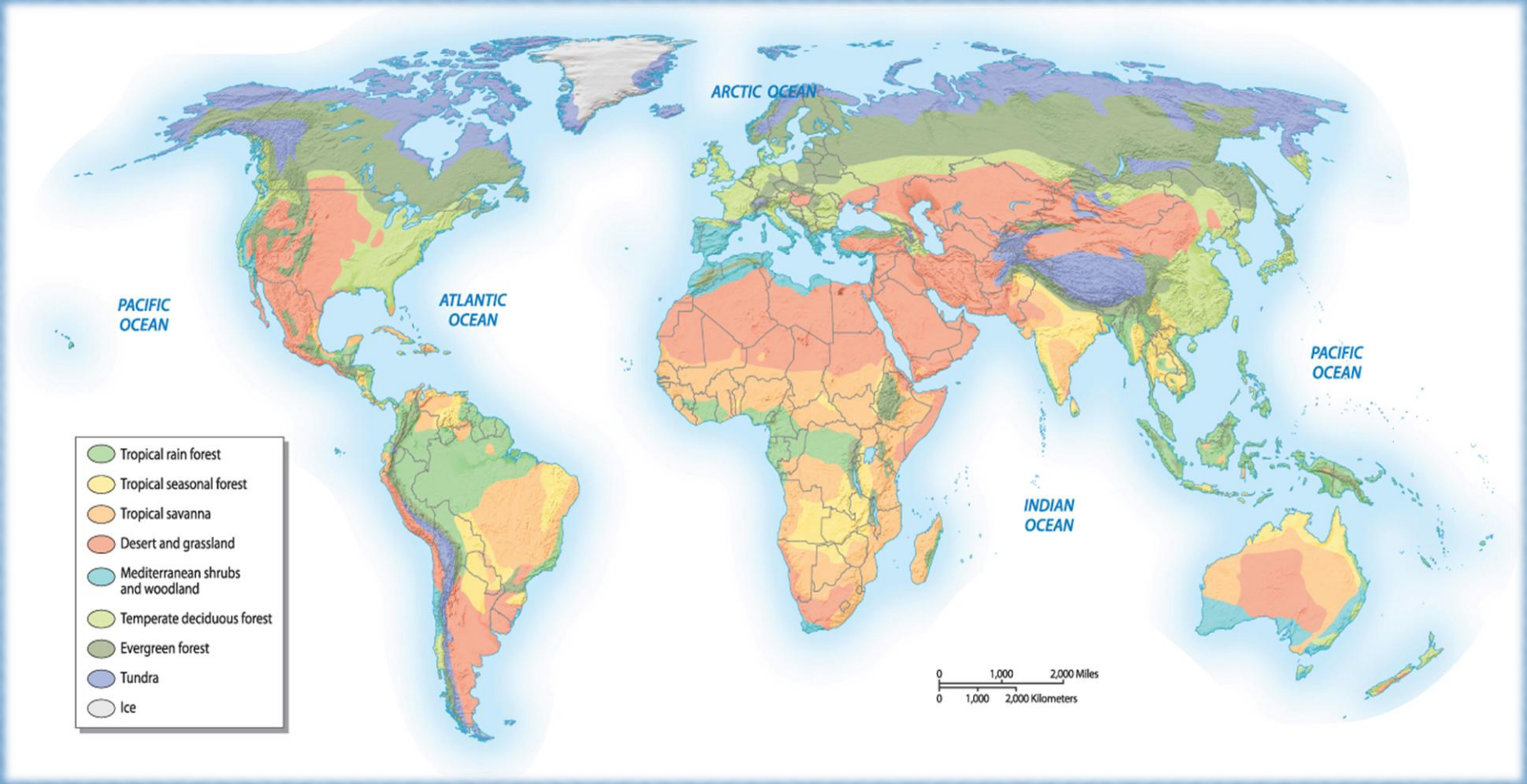



Observe the types and movement of fronts. These mark the boundary between warmer air on one side and colder air on the other. Mountains and large bodies of water can distort its path. On a weather map, you will notice some lines that have semi-circles or triangles on either side, or both. These indicate the boundaries for various types of fronts: cold, warm, occluded or stationary.

# Physical Setting: Climate Types



# Physical Setting: Biomes




A biome is a large, distinctive complex of plant communities created and maintained by climate. Temperature, altitude and rainfall are the major influences on biomes.

# Physical Setting: Tropical Rain Forest Biome

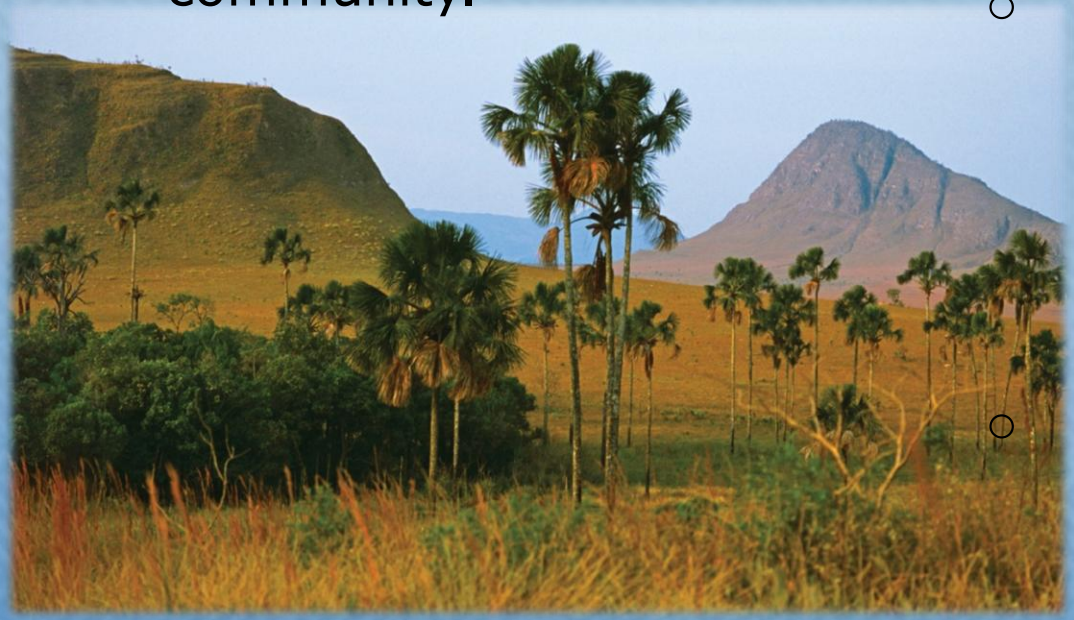
- covers about 7% of the world's land area.
- rainfall amounts of 70 - 150 inches are common.
- most diverse of all biomes
- *Environmental Issue*: deforestation

# Physical Setting: Tropical Seasonal Forest Biome

- tropical forest that grows in regions with a marked dry season
- some defoliation during the dry season, the degree depending on the severity of the moisture deficit
- structure of the forest simpler than that of the rain forest, with fewer tree strata and less luxuriant growths of climbing and herbaceous plants
- *Environmental Issues*: clearing for crops, cut for use in building or for charcoal, population pressure

# Physical Setting: Tropical Savanna Biome

- Associated with the tropical wet and dry climate type (Koeppen's Aw) but they are not generally considered to be a climatic climax.
- Savannas develop in regions where the climax community should be some form of seasonal forest or woodland but conditions or disturbances prevent the establishment of those species of trees associated with the climax community.



- Characterized by a continuous cover of perennial grasses, often 3'-6' tall at maturity. May also have an open canopy of trees or an open shrub layer.
- *Environmental Issues*: air and water pollution, climate change, invasive plant species

# Physical Setting: Desert and Grassland Biome

- deserts - rainfall less than 5” per year
- prairie - wet (10”-30”/year, water drains very slowly so water content in the soil is very high over long periods of time), mesic (retain some water that slowly drains so water content can be high for short periods of time) and dry (water is drained quickly so little moisture is left in the fine-textured soil, windy, drought prone, Dust Bowl of 1930s)
- steppes - rainfall 5”-10” per year
- *Environmental Issues*: drought, desertification, sandstorms


Sonoran Desert


Iowa USA mesic prairie


Mongolian steppe landscape

# Physical Setting: Mediterranean Shrubs and Woodland Biome

- precipitation exceeds 10” per year
- prolonged summer season
- drought of 3-4 months
- chaparral/maquis
- oak and pine trees
- *Environmental Issues*: development, fire

# Physical Setting: Temperate Deciduous Forest Biome

- warm summers and cold winters, 50˚F average annual temperature
- cleared extensively in North America and Europe because of rich soils
- year round fall
- 30”-60” rain per year
- *Environmental Issues*: invasive insect and plant species, deforestation and fragmentation, overgrazing

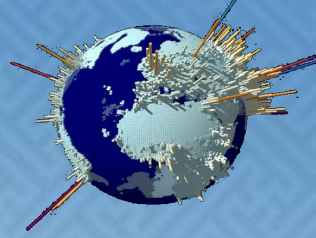
# Physical Setting: Evergreen Forest Biome

- the largest terrestrial biome
- temperatures average below freezing for at least one month per year
- annual precipitation (primarily snow) around 40”
- boreal forests, taiga - mostly cold-tolerant evergreen conifers with needle-like leaves, such as pine, fir and spruce
- *Environmental Issues*: logging, clear for grazing or crops

# Physical Setting: Tundra Biome

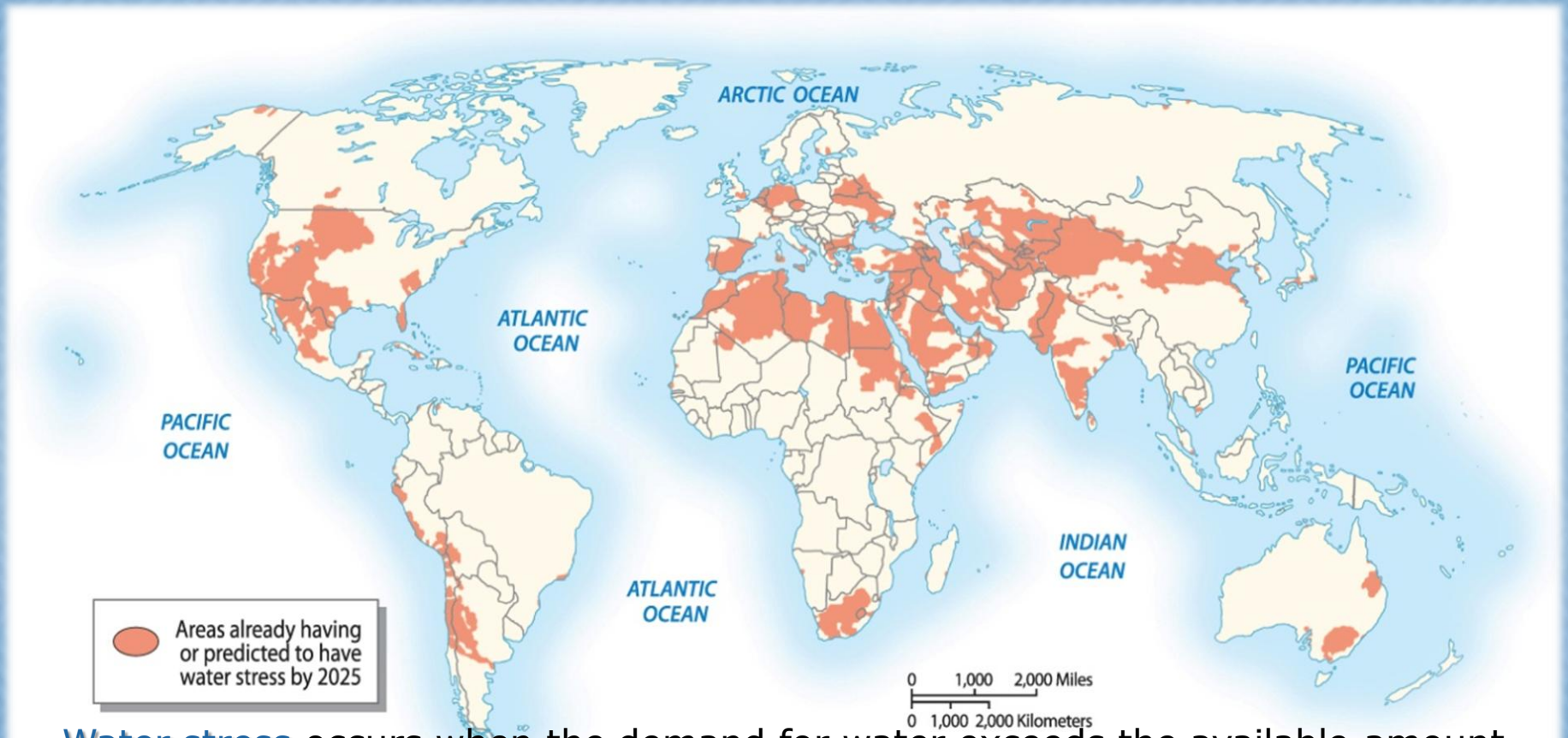
- arctic tundra
- alpine tundra
- primarily treeless because of the short growing season
- Climate so cold in winter that **permafrost** beneath the surface layers of soil seldom if ever thaws
- stores vast amounts of methane
- *Environmental Issues*: oil drilling, hunting, global warming

# Physical Setting: Water, A Scarce World Resource



- To conceptualize the limited amount of water available for consumption:
  - See the total global water supply as 26 gallons.
  - Of that, only 0.8 gallons is freshwater.
  - And, of that, only about half a teaspoon is available for consumption.
- On a world with 26 gallons of water, about half a teaspoon is available for drinking, bathing, cooking, cleaning, irrigation, herds, pets, etc.

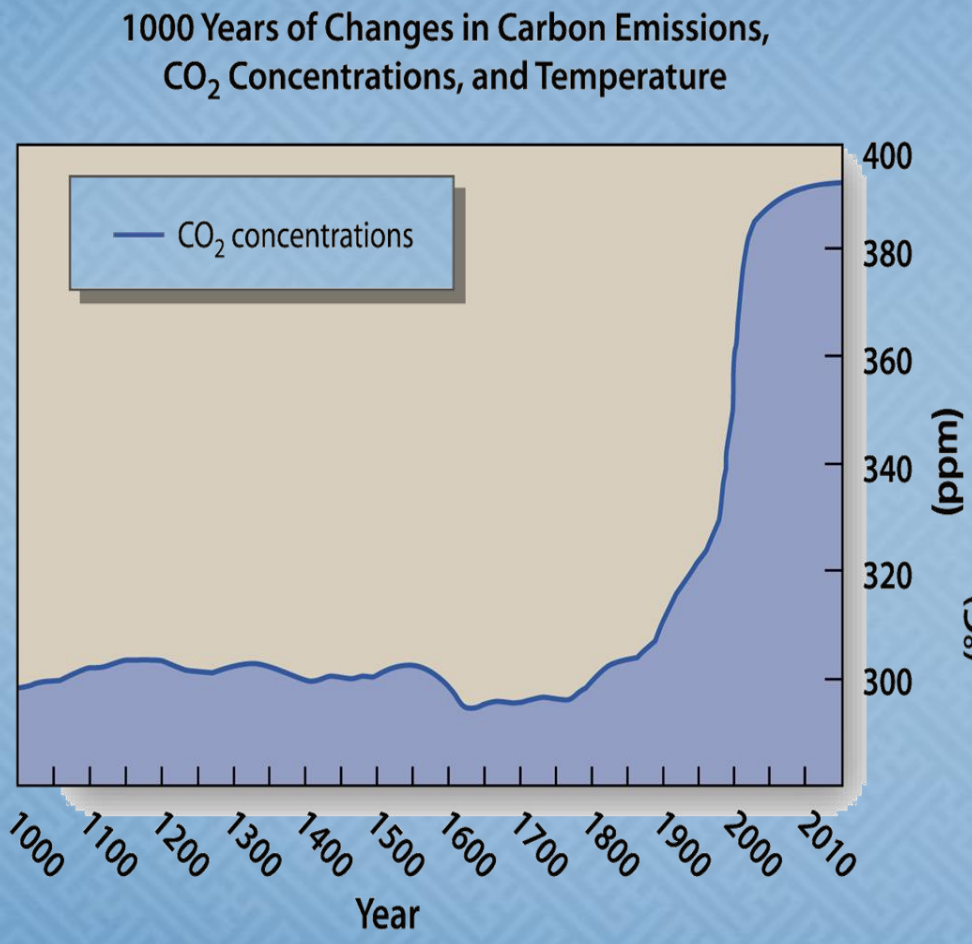
# Physical Setting: Water, A Scarce World Resource

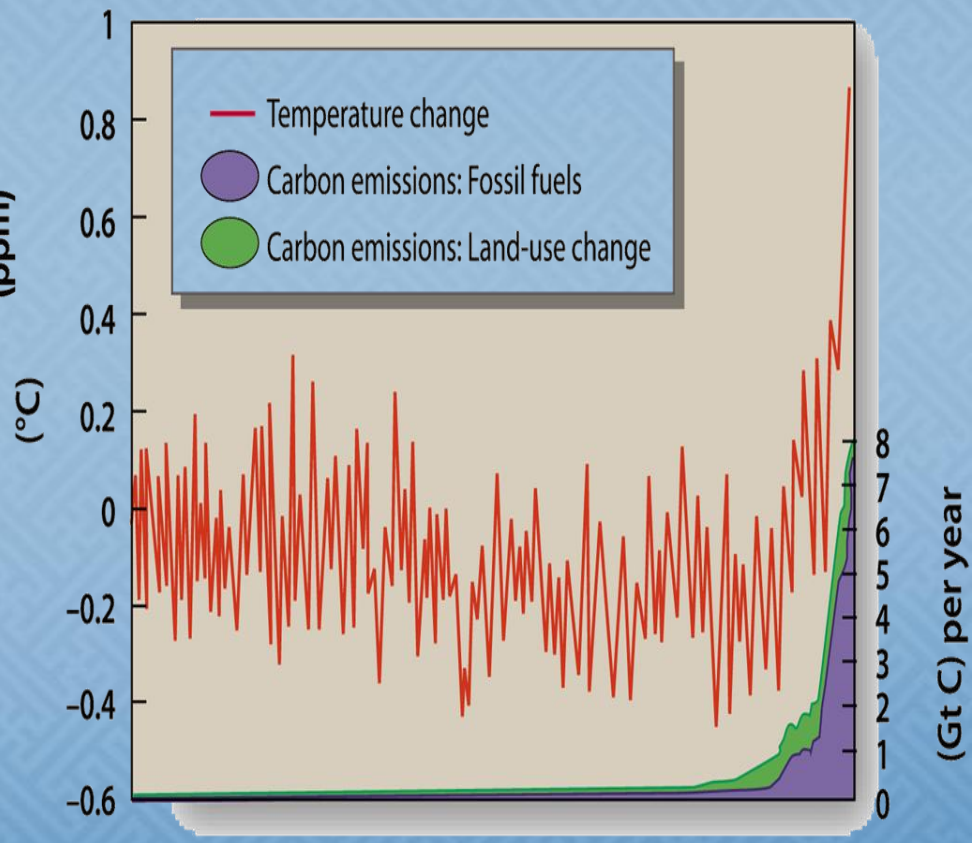



Water stress occurs when the demand for water exceeds the available amount during a certain period or when poor quality restricts its use. Water stress causes deterioration of fresh water resources in terms of quantity (aquifer over-exploitation, dry rivers, etc) and quality (eutrophication, organic matter pollution, saline intrusion, etc).

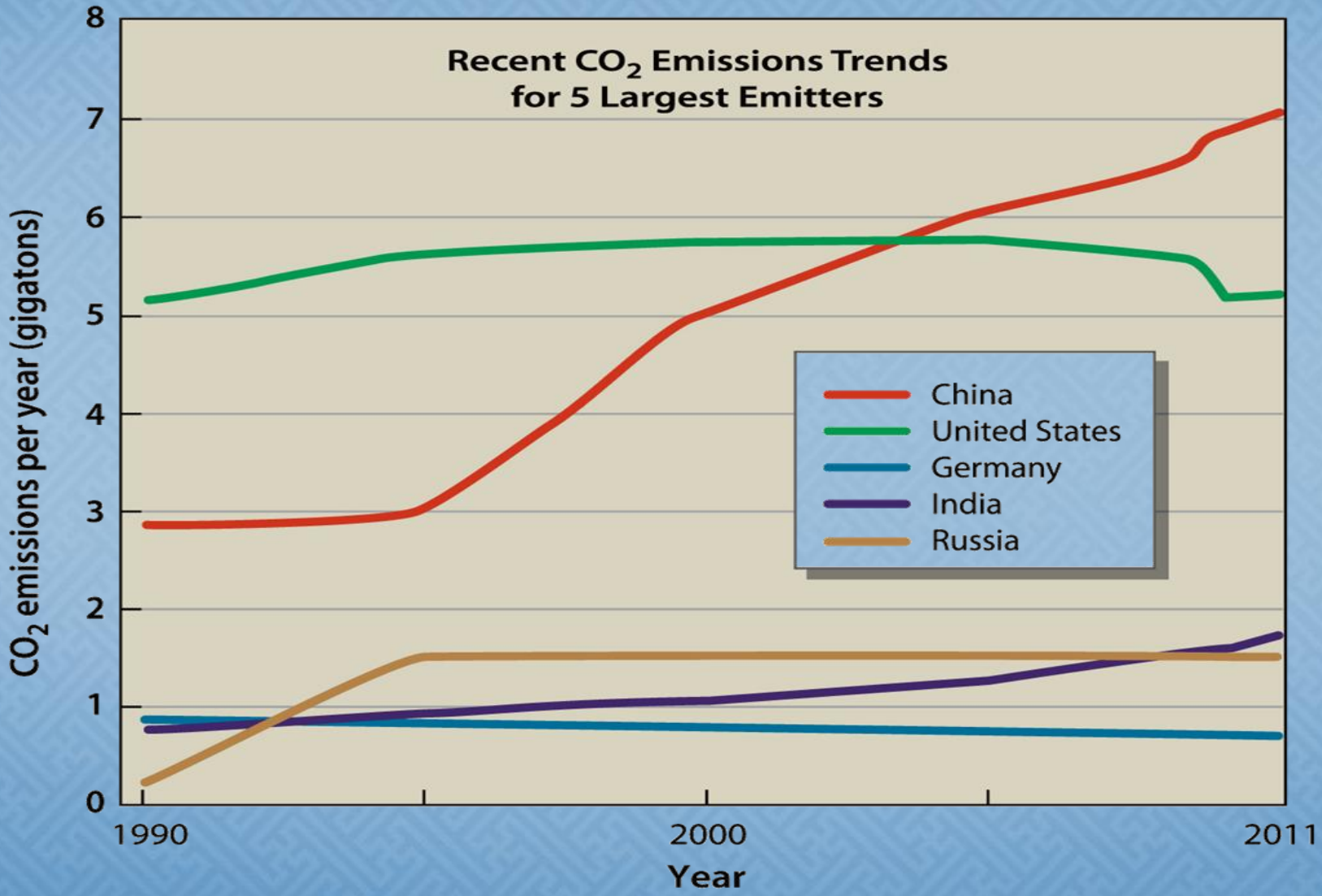
# Physical Setting: Global Warming

Note how temperature increases as $CO_2$ and carbon emissions increase.

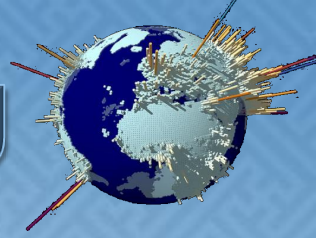


# Physical Setting: Global Warming

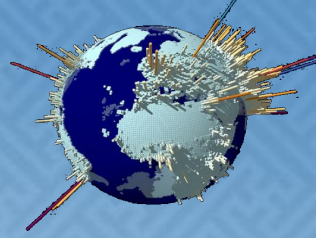


# Physical Setting: A Changing Global Environment



- Environmental elements fundamental to human settlement
  - climate
  - geology
  - hydrology
  - vegetation
- Human activities are closely linked to weather and climate.
- Due to global climate change, all forms of life will have to make adjustments.

# Population and Settlement: Terminology



**Important Population terms**

- Rate of Natural Increase (RNI): annual growth rate for a state as a percent increase, world RNI is 1.2% per year
  - Crude Birth Rate (CBR): total number of births divided by the total population, world CBR is 21 per 1,000
  - Crude Death Rate (CDR): total number of deaths divided by total population, world CDR is 9 per 1,000
- Total Fertility Rate (TFR): the average number of children born by a statistically average woman (world average is 2.7, for Europe 1.4, for Africa 5.1)
- Life Expectancy: average length of life, world average is 67, for Africa 52, for Japan 82
- Population Density: population divided by land area (usually in square kilometers), Macau's density is 18,534/km$^2$, Greenland 0.026/km$^2$, US 33/km$^2$

# Population and Settlement: Population Indicators

| Country | Population (millions) 2012 | Population Density (per square kilometer) | Rate of Natural Increase (RNI) | Total Fertility Rate | Percent Urban | Percent <15 | Percent >65 | Net Migration (Rate per 1000) 2010–15[a] |
|---|---|---|---|---|---|---|---|---|
| China | 1,350.4 | 141 | 0.5 | 1.5 | 51 | 16 | 9 | –0.3 |
| India | 1,259.7 | 383 | 1.5 | 2.5 | 31 | 31 | 5 | –0.2 |
| United States | 313.9 | 33 | 0.5 | 1.9 | 79 | 20 | 13 | 3.1 |
| Indonesia | 241.0 | 127 | 1.3 | 2.3 | 43 | 27 | 6 | –0.8 |
| Brazil | 194.3 | 23 | 1.0 | 1.9 | 84 | 24 | 7 | –0.2 |
| Pakistan | 180.4 | 227 | 2.1 | 3.6 | 35 | 35 | 4 | –1.4 |
| Nigeria | 170.1 | 184 | 2.6 | 5.6 | 51 | 44 | 3 | –0.4 |
| Bangladesh | 152.9 | 1,062 | 1.6 | 2.3 | 25 | 31 | 5 | –0.1 |
| Russia | 143.2 | 8 | –0.1 | 1.6 | 74 | 15 | 13 | 1.2 |
| Japan | 127.6 | 338 | –0.2 | 1.4 | 86 | 13 | 24 | 0.4 |

[a]Net Migration Rate from the United Nations, Population Division, *World Population Prospects: The 2010 Revision Population Database.*

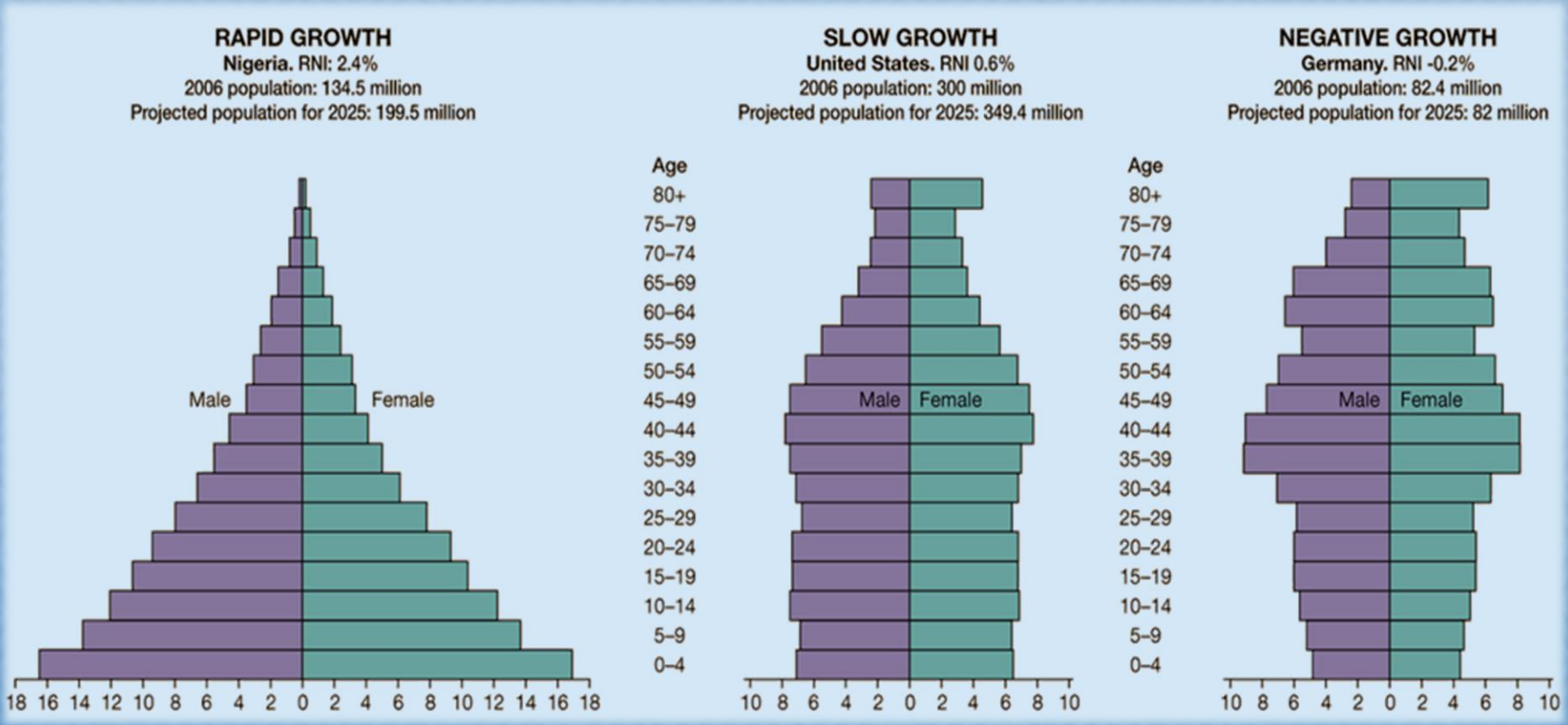
Source: Population Reference Bureau, *World Population Data Sheet*, 2012.

# Population and Settlement: Population Growth

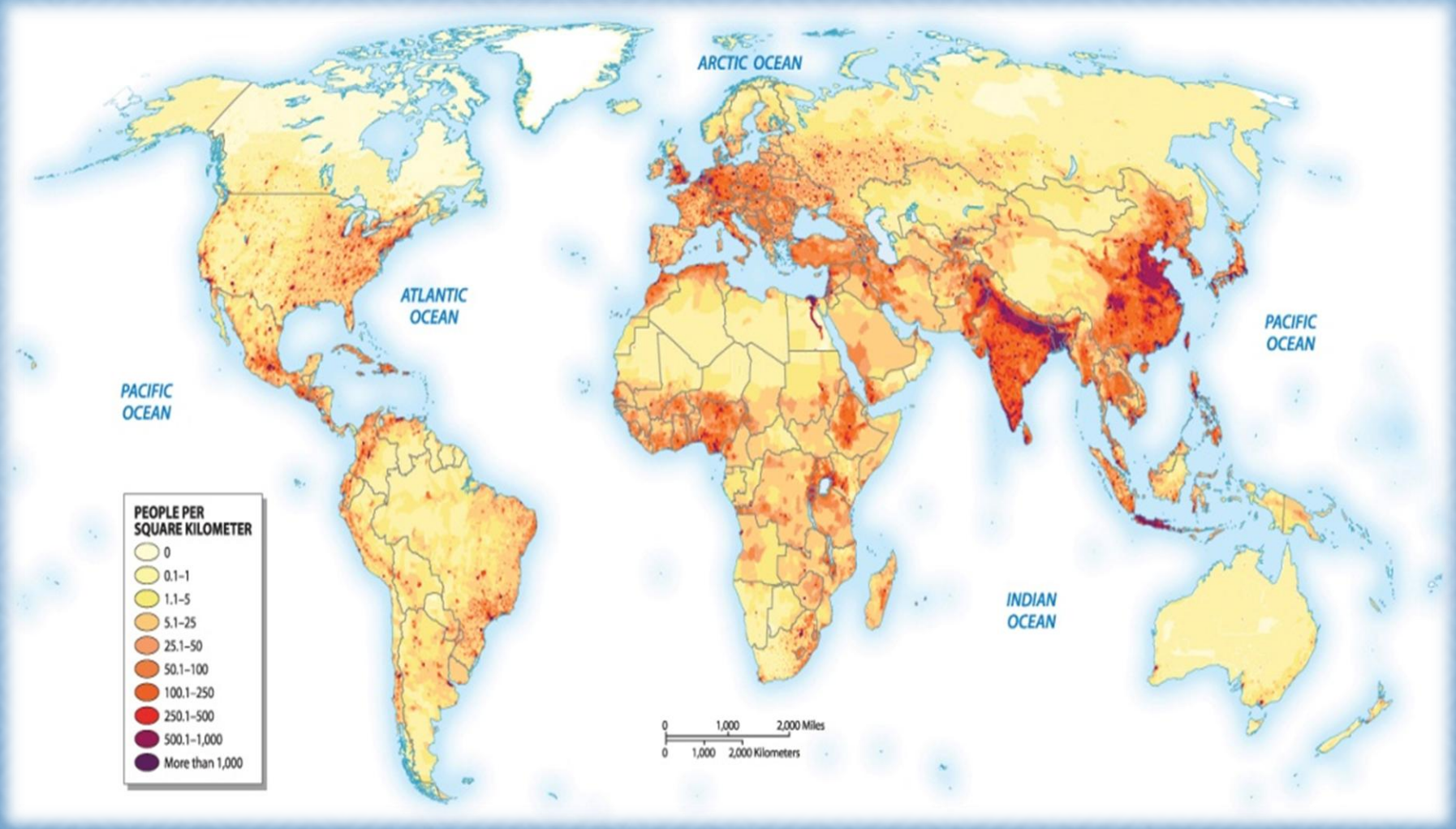
There are more than 7 billion people on earth. About 137 million are born each year (16,000 each hour). 90% of Earth's population growth is in developing regions (Africa, Latin America, South Asia, East Asia).

# Population and Settlement: Population Pyramids

Population pyramids show the gender and percentage of the population in each age group.



# Population and Settlement: Population Density



# Population and Settlement: Population Density

high-density settlement, India

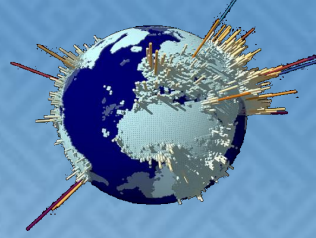
low-density agricultural landscape, Iowa USA

# Population and Settlement: Migration Patterns

- Today, about 3% of total world population are migrants.
- Linked to global economy:
  - push factors: negative conditions that drive people from a location (cultural oppression, war, unemployment, natural disasters)
  - pull factors: favorable conditions at a destination that attract people (economic opportunity, jobs, freedom, good climate)
  - Most migration involves both push and pull factors. Networks of families, friends and sometimes labor contractors connect migrants from their origins to their destinations.

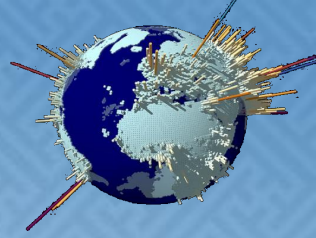
Refugees in southern Sudan

# Population and Settlement: Global Migration



- More than 190 million people live outside the state of their birth.
- net migration rate (NMR) - the difference between the number of persons entering and leaving a state during the year per 1,000 persons ... A positive value represents more people entering the state than leaving it, while a negative value means more people leaving than entering it. For example, Qatar's NMR is 22.39, while American Samoa's NMR is -21.13 (US-3.86).

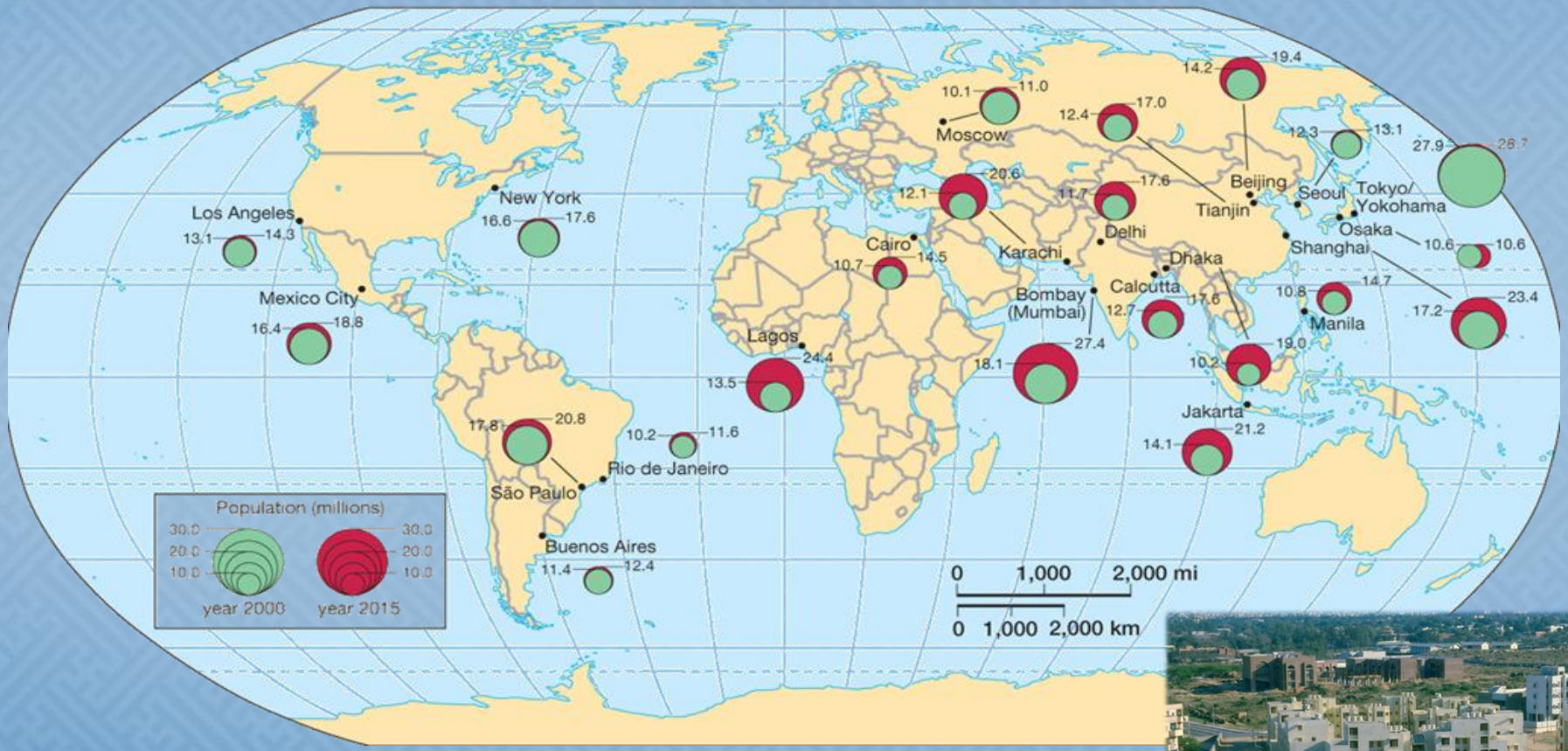
# Population and Settlement: An Urban World



- Cities are the focal points of the modern globalizing world.
- Mexico City and Sao Paolo (Brazil)
  - more than 20 million residents, add 10,000 each week, expected to double in the next 15 years
  - urbanized population: percentage of a country's people who live in cities
- On average, 48% of world's population lives in cities.
  - Developed areas more than 75% urbanized.
  - Developing areas may be much lower than 50%.
    - squatter settlements: illegal developments of makeshift housing
    - over-urbanization: urban population grows faster than provision of infrastructure

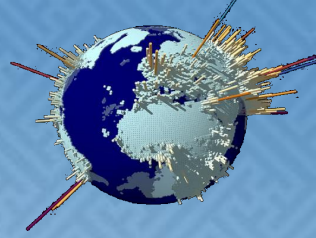
Vietnamese squatter settlements

# Population and Settlement: Growth of World Cities
(2000 – 2015)




squatter settlement in New Delhi, India

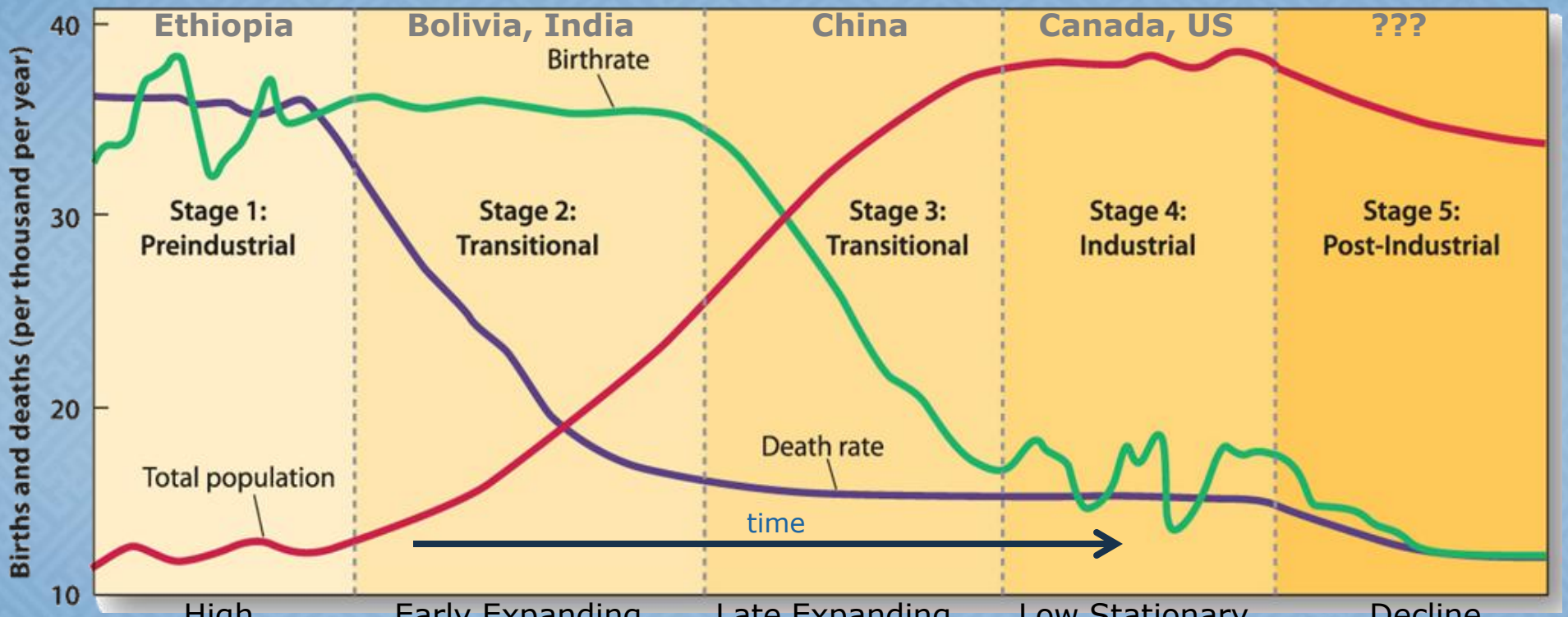
# Population and Settlement: The Demographic Transition Model



Demographic transition (DT) refers to the transition from high birth and death rates to low birth and death rates as a state develops from a pre-industrial to an industrialized economic system. This is typically demonstrated through a demographic transition model (DTM).

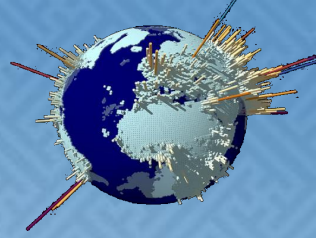
A correlation matching the demographic transition has been established; however, it is not certain whether industrialization and higher incomes lead to lower population or if lower populations lead to industrialization and higher incomes. In states that are now developed this demographic transition began in the 18th century and continues today. In less developed states, this demographic transition started later and is still at an earlier stage.

# Population and Settlement: The Demographic Transition Model



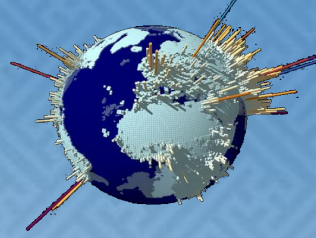

| High Stationary | Early Expanding | Late Expanding | Low Stationary | Decline |
|---|---|---|---|---|
| birth rate and death rate high, low to no population growth | death rate drops due to improved food supply, health care and sanitation, population rises | birth rate drops due to urbanization and education, population rises | both birth and death rate low, low to no population growth, population high | birth rate lower than death rate, negative population growth, population falls, decline? |

# Population and Settlement: The Demographic Transition Model



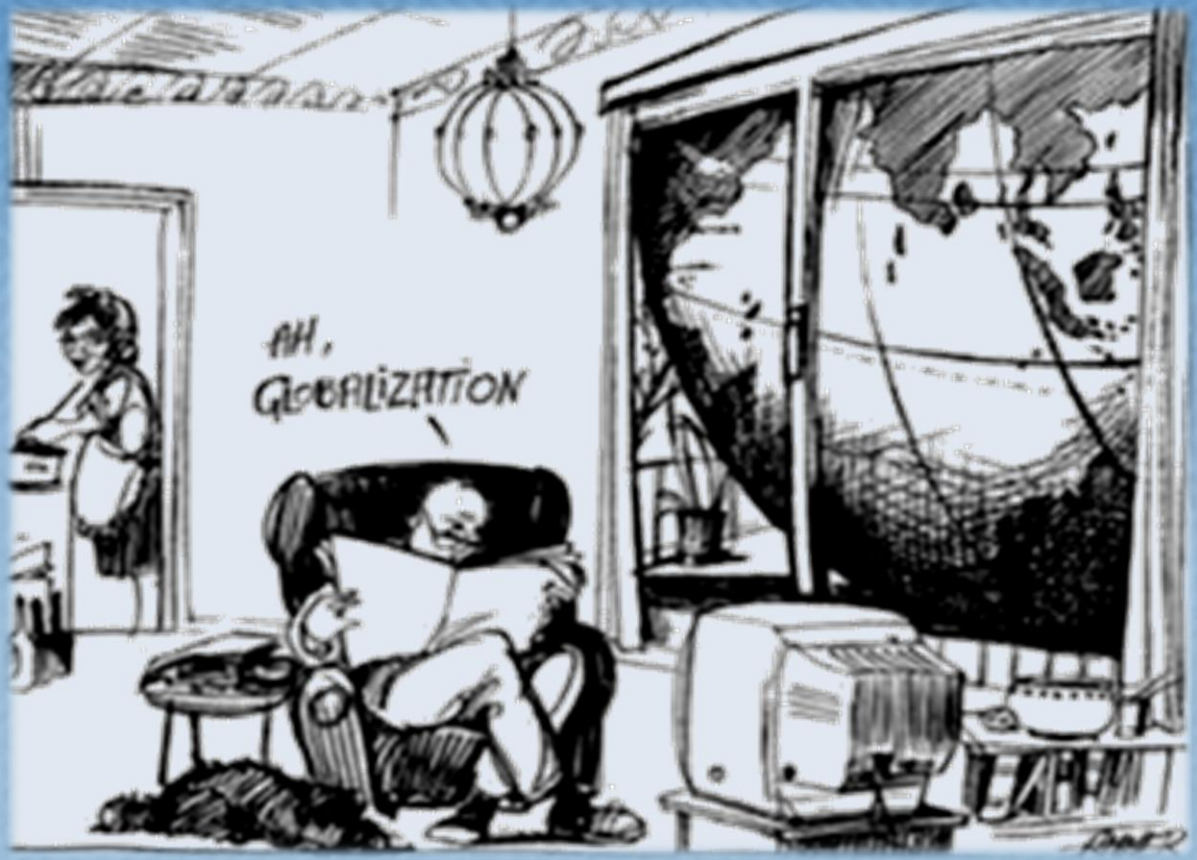
| States | Birth Rate | Reason | Death Rate | Reason |
|---|---|---|---|---|
| Less Economically Developed States | High | no contraception<br>Couples have many babies to compensate for the high death rate caused by poor health care.<br>Large families need to work on the land to contribute to family income.<br>Children look after elderly relatives.<br>religious reasons | high | poor medical facilities<br>disease<br>poor nutrition<br>high infant mortality |
| Newly Industrialized States | high/ decreasing | People are used to having many children. Takes time for culture to change.<br>changing status of women | decreasing | As an economy develops, money becomes available for better health care.<br>housing improvements<br>better childcare |
| More Economically Developed States | low | Children are expensive.<br>People know their children are going to survive so they can keep their families small.<br>widely available contraceptives<br>changing status of women | low | better health care<br>better standard of living |

# Population and Settlement: Important Points



**Several important points to remember about population:**

- Population growth rates vary from region to region.
- States have different approaches to family planning.
- Migration is an important part of globalization.
- The greatest international migration in human history is occurring NOW.
- Much of today's migration is rural to urban.
  - Earth's sustainable carrying capacity - The carrying capacity of a biological species in an environment is the maximum population size of the species that the environment can sustain indefinitely, given the food, habitat, water and other necessities available in the environment. Many scientists think Earth has a maximum carrying capacity of 9 billion to 10 billion people

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