A. Geographical analysis of population
   1. Density, distribution, and scale

Where do people live and why?

Vocabulary:

Demographics – study of population
Population Density – total population divided by land area
  Arithmetic Density – total population divided by ALL the land
  Physiological Density – total population divided by only the ARABLE land
  • This number is always greater than Arithmetic Density

<table>
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<th></th>
<th>Arithmetic Density</th>
<th>Physiological Density</th>
<th>Agricultural Density</th>
<th>Percent Farmers</th>
<th>Percent Arable</th>
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Distribution of the Earth’s Population

The Earth and no country has an evenly distributed population. Why? too hot, too cold, too dry, too wet, too mountainous

Ecumene - the portion of Earth's surface occupied by permanent human settlement.

Historically people settled in areas that they could grow food (arable land) and cities developed in these agricultural regions.

5 major concentrations: (see world map)
1. East Asia – E. China, Japan, Korea, and Taiwan  (1 in 4 people in the world lives here)
   • Growing cities (urban areas), but majority of the people live in rural areas
2. South Asia – India, Bangladesh and coastal Pakistan  (1 in 5 people in the world lives here)
   • Like E. Asia cities are growing in size, but the majority of people live in the countryside
3. Europe – entire continent.  (1 in 10 people in the world lives here)
   • 80% of the population lives in urban areas (cities)
4. Southeast Asia – Indonesia, Philippines, and Papua New Guinea
   • Majority of the people live in rural areas (countryside)
5. NE USA / SE Canada – major area runs from Boston, NYC, Baltimore, to Washington DC
• Majority of the people live in Megalopolis – huge urban area (Bosnywash)

**World Distribution Map**

90% of the world’s population lives above the equator. (more land above the equator)

More than half all of all the people on Earth live on about 5% of the Earth’s land. 90% of the population live on 20% of the Earth’s land. (worldwide urban areas are becoming dominate)

Most people live in areas close to the sea. Most arable land is in lower elevations, as are areas closest to rivers and oceans, which provide access to water and transportation.

About two-thirds of the world population lives within 300 miles of the ocean. People throughout history have congregated near bodies of water.

A. **Geographical analysis of population**

   2. **Consequences of various densities and distributions**

Most consequences for a high population density are negative. For example: increase demand for water and food, decrease in living conditions and the degradation of the natural environment.

Important to consider physiological density when thinking about overpopulation (circumstances when there are too many people for the land to support)

**Carrying Capacity** – the number of people an area can support on a sustained basis.

- Not consistent
- Depends on an areas technology
- Farmers with irrigation and fertilizer will create a larger carrying capacity
- Highly industrial countries have a larger carrying capacity because of wealth