Chapter 13.3: Problems Related to Population Growth

- Rapid population growth consequences
 - o Shortage of fuel wood
 - o Contaminated water
 - o Displacement of people from homes
- Fuel wood is a limiting resource in developing countries
 - o Enough food, not enough wood
 - o Life or death
 - Some food releases nutrients when cooked or is inedible unless cooked
 - Can result in starvation
 - Can boil water
 - Gets rid of water born parasites and diseases
 - o Developed counties, safe to drink tap water
- About 10 million people die from diseases for H₂O every year
 - o Most are children
- Developing countries water supply used for
 - o Drinking
 - o Washing
 - o Sewage disposal
- Becomes breeding ground for dysentery, typhoid and cholera

Lima, Peru 1991

- 1st cholera epidemic in western hemisphere in over 75 years
- Directly linked to population growth
 - o 3 million 1970 \rightarrow 8+ million today
- Half population in shanty towns
 - o Houses made of plastic, packing cases and other garbage
 - o No running water, no sewage system
 - Perfect environment for bacteria
- In order to stop disease:
 - o Clean up water supply
 - o Hygienic sewage disposal for all people
 - Population grows too fast to fix
 - 2% increase each year
- Growing population → people live in cities
 - Seek work or education
 - o Shortage of fertile land, no jobs in countryside

- Even more people move to city
- Flood of new people overwhelms city
 - o People live in streets or shanty towns
- Projected by UN: by 2020 ¼ of the world will be homeless
- Rapid population growth = conflicts between groups competing for scarce resources
- One group can dominate gov't and monopolize jobs
 - o Can lead to civil wars
- Disputes between two or more nations
 - o Ex: fight over water rights of a river flowing through multiple countries
 - Ex: food riots in Egypt
 - Ex: illegal immigration in U.S. and Europe
- Environmental damage (not just war) can create refugees

Environmental refugees – people driven from their homes by severe environmental damage

- Ex: Chernobyl 10,000+ residents displaced
- Ex: Somalia, Kenya, Ethiopia search for food
 - o Intensive farming has destroyed fertile soil
 - Civil war, drought also part of story
- Can't return, carrying capacity of the land takes 100's of years to recover
- Refugees overwhelm host countries w/ education, healthcare, jobs
- World population grows, food more scarce, environmental refugees increase
- Solving population growth problem considered vital to peace and prosperity
- Many benefits to slow population growth
 - o Better education/healthcare services
 - o Damage to natural resources can be slowed
 - o Better sustained families (healthy ones)
 - Family planning considered
- Developed countries consumption crisis
 - o 21% of the world's population, but use 75% of all nrg produced
 - 70% of the world's carbon monoxide emissions (CO)
 - 90% of all the worlds global hazardous waste
- U.S. citizens consume 10x's the amount of resources as someone from a developing country
 - Also use more nrg
 - 2x's more than Japan
 - 100x's more than Bangladeshi (India)
- For a sustainable future we need to solve
 - o Population growth problem
 - Over consumption problem
- Effort is needed from both developed and developing countries