

Chapter 9 THE HUMAN POPULATION

Section 2: Changing Population Trends

E.Q.: What are some major problems caused by rapid population growth and ways countries could reduce population growth?

Think about what would happen if the population in your city or town doubled or even tripled but the number of schools, roads, stores, and houses remained the same. Describe the changes you think would take place and what your neighborhood would be like.

Objectives

- **Describe three problems caused by rapid human population growth.**
- **Compare population growth problems in more-developed countries and less developed countries.**
- **Analyze strategies countries may use to reduce their population growth.**
- **Describe worldwide population projections into the next century.**

Changing Population Trends

- **Throughout history, and currently in many parts of the world, populations that have high rates of growth create environmental problems.**
- **A rapidly growing population uses resources at an increased rate and can overwhelm the infrastructure of a community.**
- **Infrastructure is the basic facilities of a country or region, such as roads, bridges, sewers, power plants, subways, schools, and hospitals.**

Problems of Rapid Growth

- **A rapidly growing population can use resources faster than the environment can renew them, unless resources come from elsewhere.**

- **Standards of living decline when wood is removed from local forests faster than it can grow back, or when wastes overwhelm local water sources.**
- **Symptoms of overwhelming populations include suburban sprawl, polluted rivers, barren land, inadequate housing, and overcrowded schools.**

A Shortage of Fuelwood

- **In many of the poorest countries, wood is the main fuel source.**
- **When populations are stable, people use fallen tree limbs for fuel. When populations grow rapidly, deadwood does not accumulate fast enough to provide enough fuel.**
- **People then begin cutting down living trees, which reduces the amount of wood available in each new year.**
- **A supply of fuel ensures that a person can boil water and cook food.**
- **In many parts of the world, water taken directly from wells is not safe to drink. Food is often unsafe to eat unless it is cooked.**
- **Water can be sterilized, and food can be cooked, but fuel is needed to do so. Without enough fuelwood, many people suffer from disease and malnutrition.**

Unsafe Water

- **In places that lack infrastructure, the local water supply may be used not only for drinking and washing but also for sewage disposal.**
- **As a result, the water supply becomes a breeding ground for organisms that can cause diseases such as dysentery, typhoid, and cholera.**
- **Many cities have populations that are doubling every 15 years, and water systems cannot be expanded fast enough to keep up with this growth.**

Impacts on Land

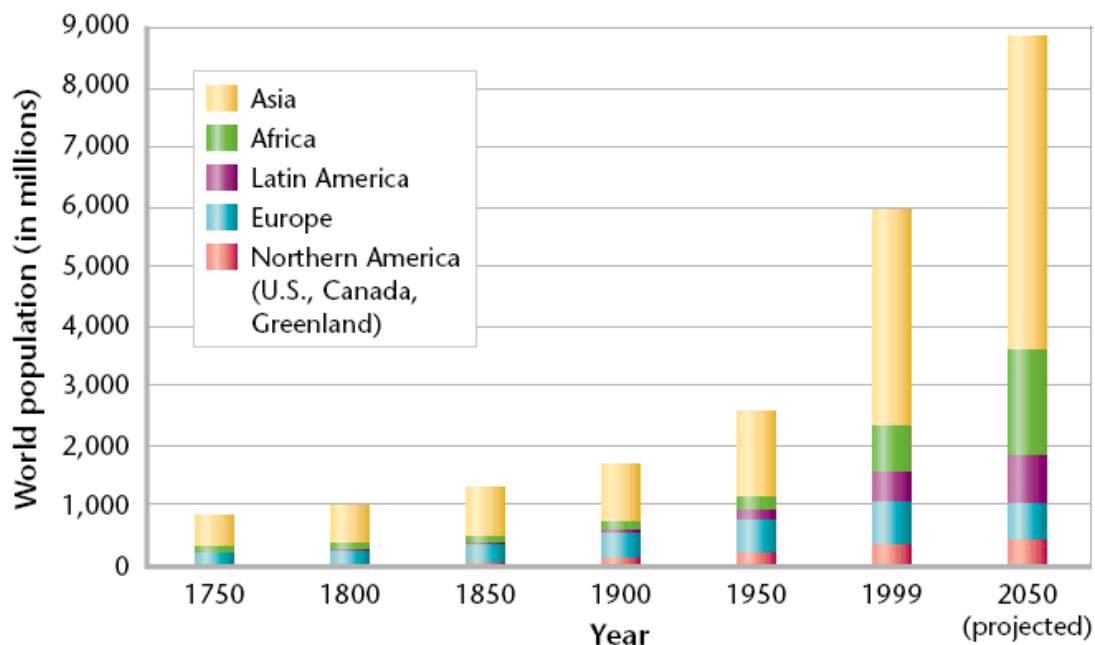
- **Growing populations may have a shortage of arable land.**
- **Arable land is farmland that can be used to grow crops.**
- **Growing populations also make trade-offs between competing uses for land such as agriculture, housing, or natural habitats.**
- **For example, Egypt has a population of more than 69 million that depends on farming within the narrow Nile River valley.**
- **Most of the country is desert, and less than 4 percent of Egypt's land is arable.**
- **The Nile River Valley is also where the jobs are located, and where most Egyptians live. They continue to build housing on what was once farmland, which reduces Egypt's available arable land.**
- **Urbanization is an increase in the ratio or density of people living in urban areas rather than in rural areas.**
- **People often find work in the cities but move into suburban areas around the cities.**
- **This suburban sprawl leads to traffic jams, inadequate infrastructure, and reduction of land for farms, ranches, and wildlife habitat. Meanwhile, housing within cities becomes more costly, more dense, and in shorter supply.**

A Demographically Diverse World

- **Not every country in the world is progressing through each stage of demographic transition.**
- **Some countries now have modern industries, but incomes remain low. A few countries have achieved stable and educated populations with little industrialization.**
- **Some countries seem to remain in the second stage and are unable to make enough educational and**

economic gains to reduce birth rates and move into the third stage.

- **In recent years, the international community has begun to focus on the least developed countries.**
- **Least developed countries are countries that have been identified by the United Nations as showing the fewest signs of development in terms of income, human resources, and economic diversity.**
- **These countries may be given priority for foreign aid and development programs to address their population and environmental problems.**
- **Populations are still growing rapidly in less developed countries, with most of the world's population now within Asia.**



Managing Development and Population Growth

- **Today, less developed countries face the likelihood that continued population growth will prevent them from imitating the development of the world's economic leaders.**
- **Countries such as China, Thailand, and India have created campaigns to reduce the fertility rates of their citizens.**

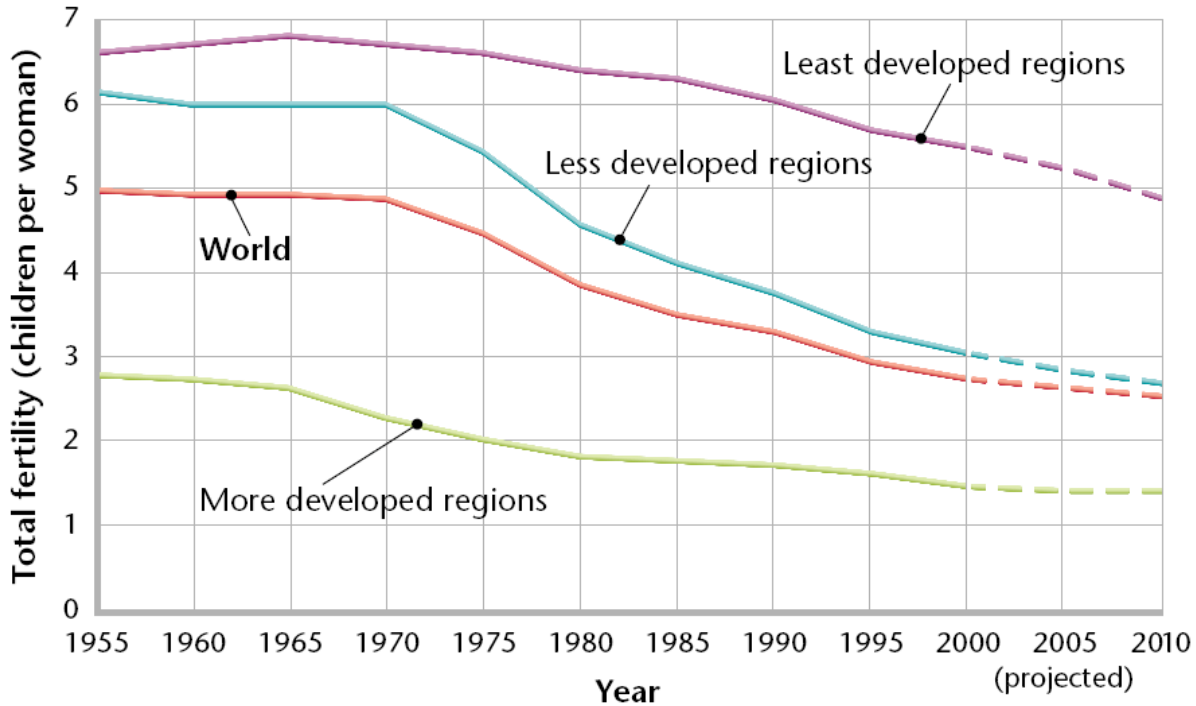
- **These campaigns include public advertising, family planning programs, economic incentives, or legal punishment.**
- **In 1994, the United Nations held the International Conference on Population and Development (ICPD),**
- **It involved debates about the relationships between population, development, and the environment.**
- **Many countries favor stabilizing population growth through investments in development, especially through improvements in women's status.**

ICPD Goals for 2015

ICPD Goals for 2015

- Provide universal access to a full range of safe and reliable family-planning methods and related reproductive health services.
- Reduce infant mortality rates to below 35 infant deaths per 1,000 live births and mortality rates of children under five years old to below 45 deaths per 1,000 live births.
- Close the gap in maternal mortality between developing and developed countries. Achieve a maternal mortality rate below 60 deaths per 100,000 live births.
- Increase life expectancy at birth to more than 75 years. In countries with the highest mortality, increase life expectancy at birth to more than 70 years.
- Achieve universal access to and completion of primary education. Ensure the widest and earliest possible access by girls and women to secondary and higher levels of education.

With these goals, worldwide fertility rates are dropping as shown below.



Growth Is Slowing

- **Fertility rates have declined in both more-developed and less-developed regions.**
- **Demographers predict that this trend will continue and that worldwide population growth will be slower this century than the last century.**
- **If current trends continue, most countries will have replacement level fertility rates by 2050. If so, world population growth would eventually stop.**

Projections to 2050

- **Looking at the graph below, most demographers predict the medium growth rate, and a world population of 9 billion in 2050.**

