

Human Population - More is Less

It is possible that the most pressing environmental issue of our time is the problem of human population growth. To see why this is so, we need to consider two aspects of human population growth: the quantity of human life and the quality of human life. First, consider the quantity of human life

Population growth occurs when the number of organisms entering a population exceeds the number of organisms leaving it. The population of a city, for example, rises if the people moving into it (immigration) plus the number of people born in it is greater than the sum of the number of people moving out (emigration) and the number of deaths. When considering the Earth, we need to consider in the birth rate (per 1000 people in a year in) as compared to the death rate (number of deaths per 1000 people per year).

For most of human existence, the death rate nearly equaled the birth rate, and the population grew very slowly. That is no longer the case.

1. Look at the list of items below and decide whether each item used is generally “good” for people and the environment or is generally “harmful”. If it is good, place a “+” next to the item. If it is harmful place a “-“ next to the item. If you can’t decide, place a question mark.

<input type="checkbox"/> Clean water	<input type="checkbox"/> energy	<input type="checkbox"/> noise	<input type="checkbox"/> buildings
<input type="checkbox"/> over grazing	<input type="checkbox"/> hunger	<input type="checkbox"/> luxury items	<input type="checkbox"/> polluted air
<input type="checkbox"/> minerals	<input type="checkbox"/> space to live	<input type="checkbox"/> cars and roads	<input type="checkbox"/> unemployment
<input type="checkbox"/> food	<input type="checkbox"/> soil erosion	<input type="checkbox"/> forests	<input type="checkbox"/> wildlife
<input type="checkbox"/> acid rain	<input type="checkbox"/> garbage	<input type="checkbox"/> poverty	<input type="checkbox"/> oil spills
<input type="checkbox"/> crowded cities	<input type="checkbox"/> endangered species	<input type="checkbox"/> contagious diseases	<input type="checkbox"/> traffic
<input type="checkbox"/> available housing	<input type="checkbox"/> international conflicts		<input type="checkbox"/> recreational space
<input type="checkbox"/> opportunities for solitude			

2. Now consider the effect of a significantly increased human population on each item. Make two lists, one labeled “decrease” the other labeled “increase.” If increasing the human population would tend to increase the item write the item under the “increase” list. If increasing the human population would tend to decrease it, write the item in the “decrease” list.

Questions

1. Describe the effect of exponential growth on a population.
2. What sorts of things tend to increase with population increases? What sorts of things tend to decrease? In general, did the “good” things tend to increase or decrease with increased population? In general, did the “harmful” things tend to increase or decrease with increased population?
3. The United States has about 4.5% of the Earth’s human population and is responsible for about 30% of the annual resource use and pollution. What does this tell us about the lifestyle that is possible for the world’s population?
4. Which is more important, to halt population growth in the rapidly growing less developed areas such as Africa or in the more slowly growing developed areas such as the United States? Explain your answer.
5. List some advantages of reduced human population.
6. Discuss the importance of quantity of life vs. quality of life.
7. Briefly state how human population growth affects each of the following: Extinction of other species, quality of air and water, space available for recreation, food available for people, stress and conflict, energy resources available per person, competition for jobs and housing, the spread of

contagious diseases, your lifestyle in the next 40 years, your children's lifestyles.

8. a) Should governments enact and enforce laws to limit population? Explain your answer.

b) Should governments encourage population control through such measures as education, tax incentives for smaller families, and making birth control more available? Explain your answer.

9. How can a country's birth rate decline yet its population increase?

Distinguish between a reduced rate of population growth and a reduced population.

10. How might population growth in our local area affect your life 10, 20, 30, or 40 years from now?