

AGE STRUCTURE PYRAMIDS

Population growth is affected by *age structure*—the number of individuals in different age groups—as well as by the numbers of births and deaths. Age structure is usually illustrated by a *population profile*, a graph in which horizontal bars represent the percentage of the population in each age group. Males are shown on the left and females on the right. The ages (or in some cases, the years of birth) for each bar are listed along the vertical axis of the graph, usually in five-year intervals. Each age group is called a *cohort*. The longer a bar is, the greater the proportion of individuals in that age group. Population profiles are useful for tracing the history of a population and for projecting future population trends. A population profile with more long bars for the younger age groups would indicate a growing population; when these large numbers of young begin to reproduce; they will add even more offspring to the population than did the older age groups.

Objectives:

- To interpret population profiles
- To understand the relationship between age structure and population growth

Procedure:

1. Create an age pyramid for your country.
2. Label the country as the following:
 - a. Developed or developing?
 - b. Rapid growth, steady growth, rapid decline, no growth?

Conclusion Questions:

Using only the graph you created answer the following questions on your own paper:

1. What country did you graph?
2. What is the percentage of people under 20? Over 60? (Show your work.)
3. Is the population a young, growing one; an older, declining one; or a stable one?
4. Is there evidence in the diagram of the baby boom that followed World War II (1946-1964)? Is so; is there evidence of the effect of this baby boom in more recent years?
5. Describe any changes that have occurred in family size over the generations.
6. What are some abiotic and biotic factors that might affect the shape of a country's pyramid?
7. What is one incentive that the government of your country could offer its citizens that would favor a reduction in the growth rate of its population? Why would this work?