## Lab: The Power of Pyramids

Age Structure Diagrams, also known as Population Pyramids, are created by plotting the percentages or numbers of males and females in the total population in each of three age categories: prereproductive (ages $0-14$ ), reproductive (ages 15-44), and postreproductive (ages 45 and older). In this lab, you will analyze various countries based on their age structure diagrams to determine trends and assumptions.

Visit the website www.census.gov. Under "Surveys/Programs" select "International Programs" then international Data Base" then, under "Available Data" select "International Data Base". Select a country of your choice on the right - please choose a different country than the students around you. Hit "submit" at the bottom. (direct link here usually works...)

Create the following table for the oldest set of data along with the current year.

| year | midyear <br> population | average <br> annual <br> growth rate | density | total fertility <br> rate | under 5 <br> mortality rate | life <br> expectancy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1995 |  |  |  |  |  |  |
| Current Year |  |  |  |  |  |  |

Answer the following questions based on the table you created and the population pyramid.

1. How has the population of your country changed over the time period represented? Explain possible causes.
2. How has the growth rate changed over the time period represented? Explain possible causes.
3. Using the growth rate from 1995, how long would it take for the population to double? (hint: use rule of 70)
4. Compare and contrast this data with the country of another student.
5. Describe the shape of your age structure diagram.
6. Looking at your age structure diagram, classify your country as preindustrial, transitional, industrial or postindustrial. Justify why you chose this classification.
7. Is there a difference in the numbers of males versus females in your country? What reasons can explain this?
8. Find a student with another country whose shape is different. What might cause these differences? (think population controllers, natural or man-made causes, etc.)
9. Using your age structure diagram, determine the percent of the population that has yet to reach child bearing age. What does this number say about the potential growth of the population?
10. What percent of the population is 55 and above? What does this number indicate about future growth?
11. If you had a business and wanted to capitalize on this demographic information, what kind of business would you own and why?
12. How might the growth trends of your country influence socioeconomic policy in the country?
