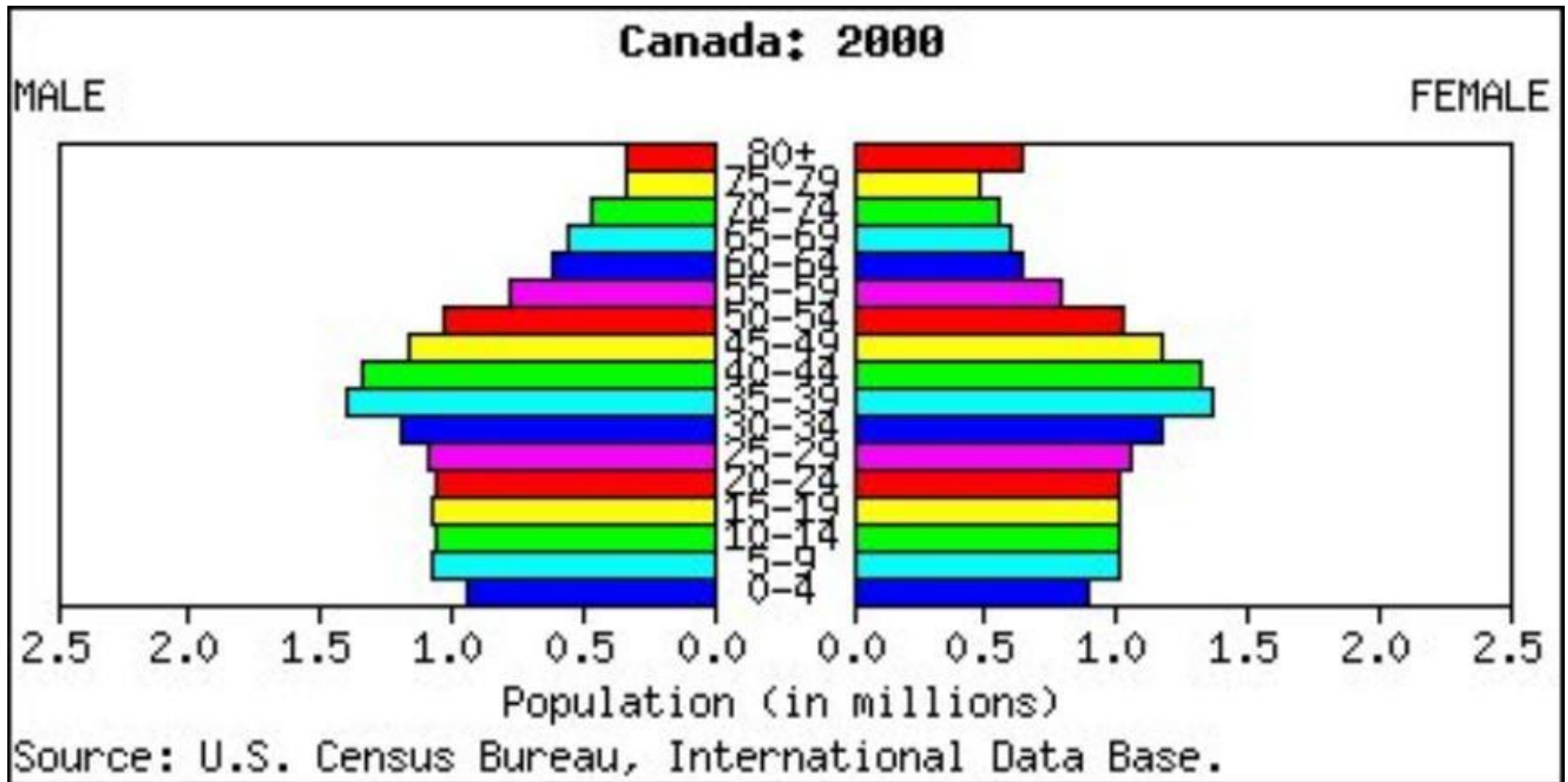


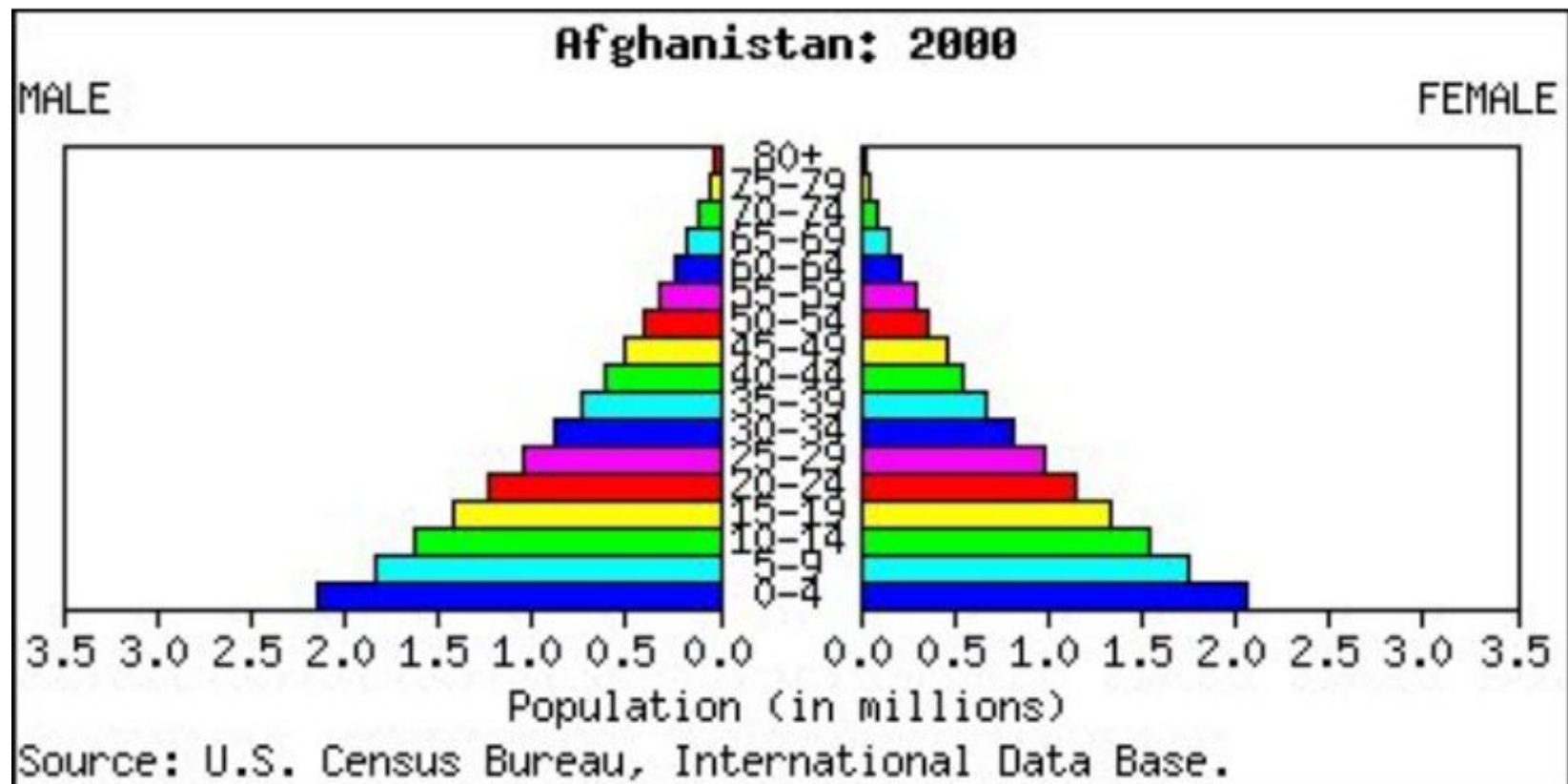
Population Pyramids

Population pyramids are graphs that show the age structure of a population by age & gender

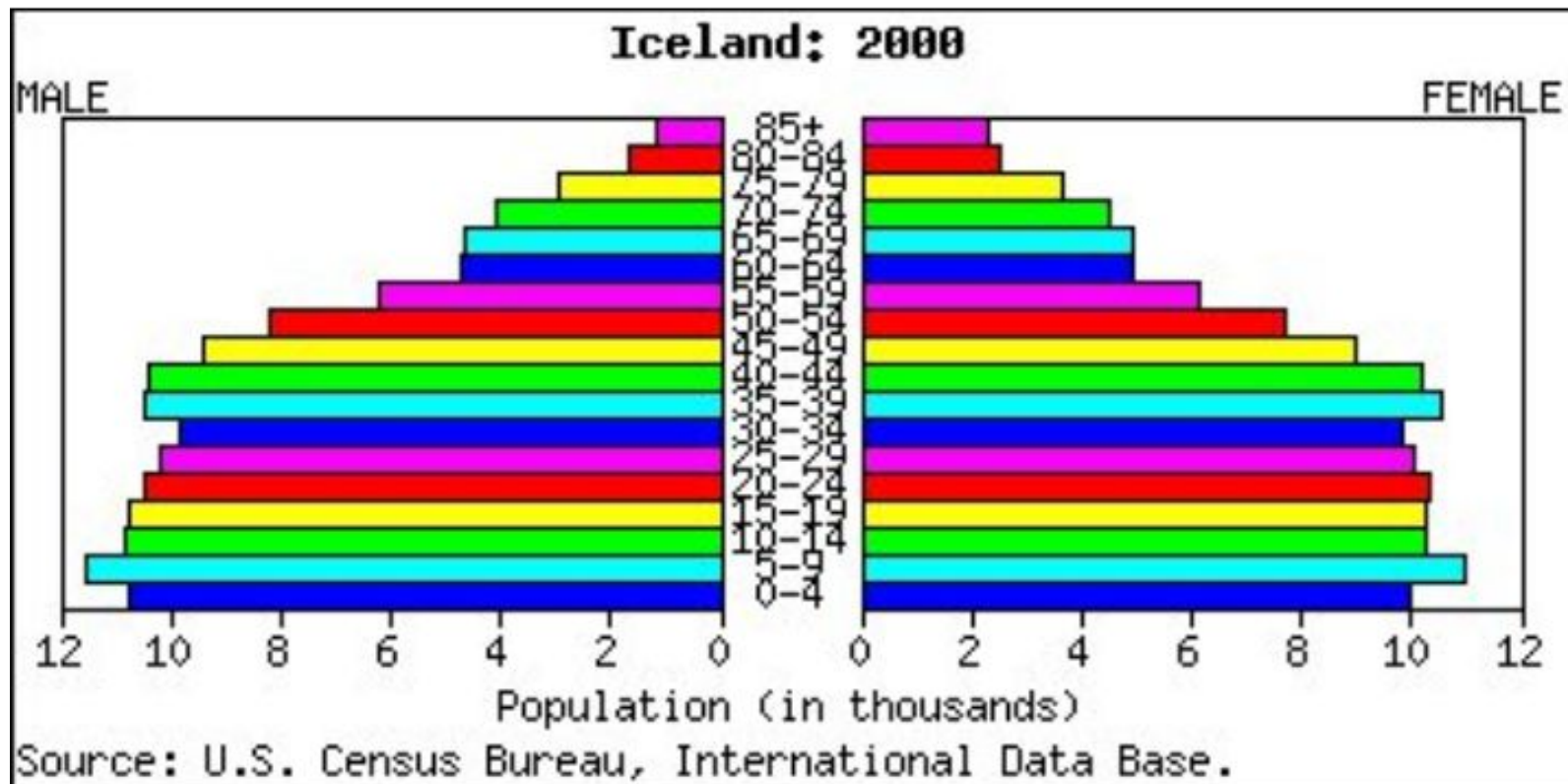
- Males are on the left and females are on the right
- age categories are in 5 year increasing intervals labeled up the center axis
- horizontal axis is measured in millions



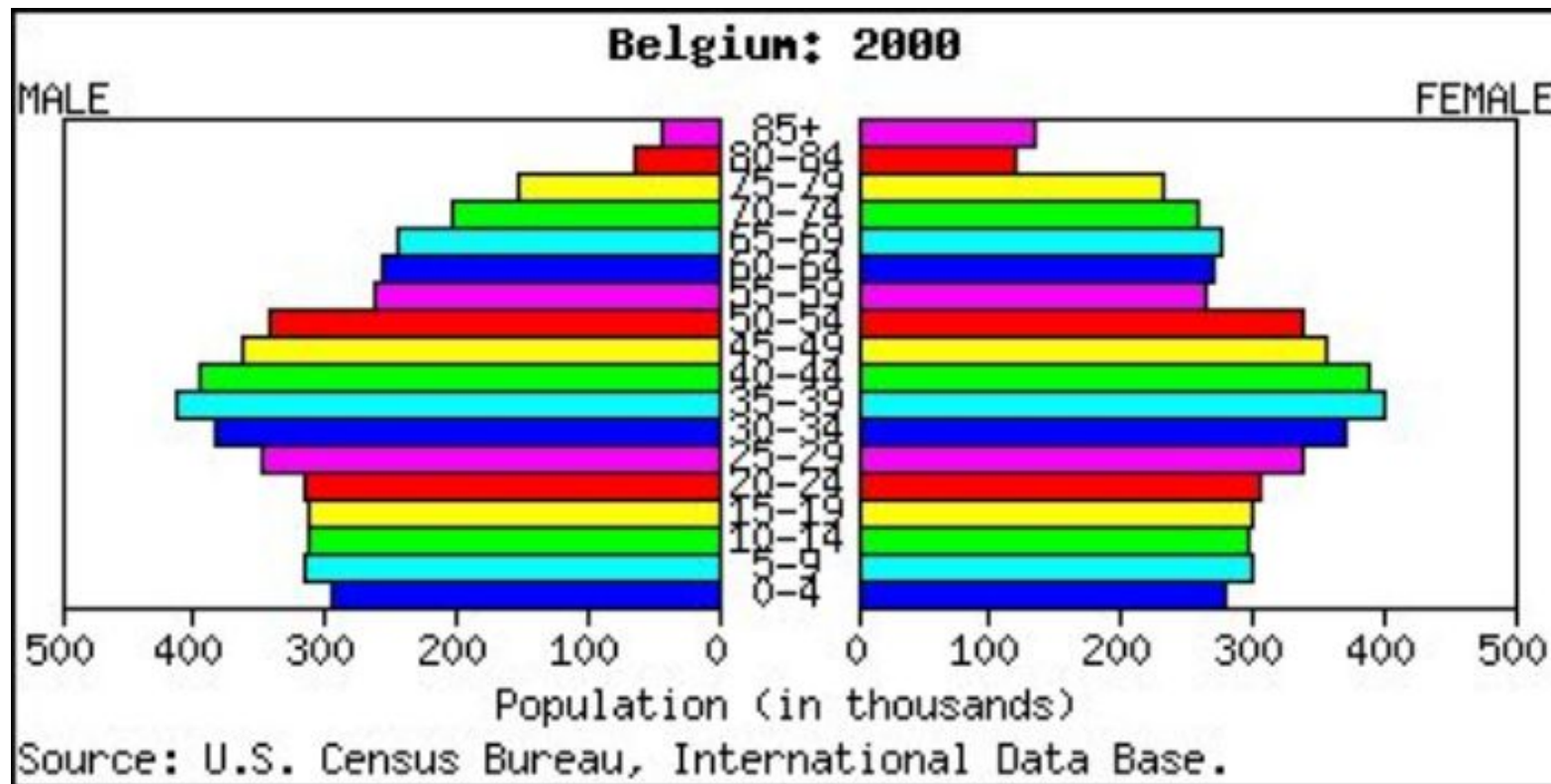
- **EXPANSIVE OR EXPANDING** population pyramids have this classic triangular/pyramid shape. The wide base of this population pyramid indicates a high birth rate & the narrow top indicates a high death rate.
- Generally speaking an expanding population is characteristic of a lower standard of living
- High birth rate due to poor access to birth control, lack of education etc; high death rate due to poor medical care and nutrition



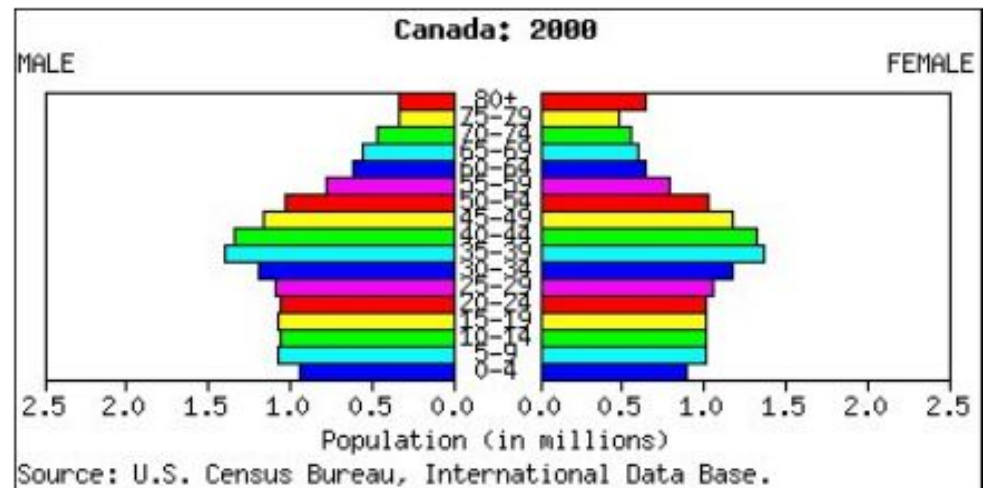
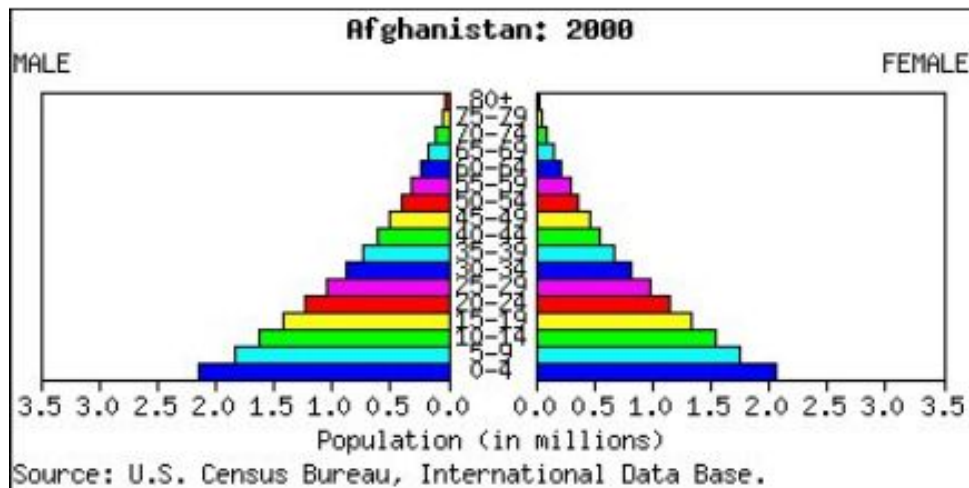
- **STATIONARY OR STABLE** population pyramids have a 1/2 ellipse shape. The base of this population pyramid is similar in width to the population of the reproductive ages which indicates a stable population.
- Generally speaking stable populations are characteristic of a high standard of living due to low birth rate due to good family planning, access to birth control, financial planning, education, etc.; low death rate due to good medical care, nutrition, education etc.



- **CONTRACTIVE OR CONTRACTING** population pyramids have a narrower base than the reproductive age population. This indicates a decreasing population trend. The low birth rate is indicative of a well developed country.



- Reading Population Pyramids
- Width of the base
- birth rate varies with the width of the base. A wide base indicates a high birth rate and a narrow base indicates a low birth rate.
- Symmetry: statistically speaking pyramids should be relatively symmetrical. Any asymmetry indicates a difference in the male and female population. This pyramid shows more females at the 85+ age range which indicates that women are living to older ages than males.

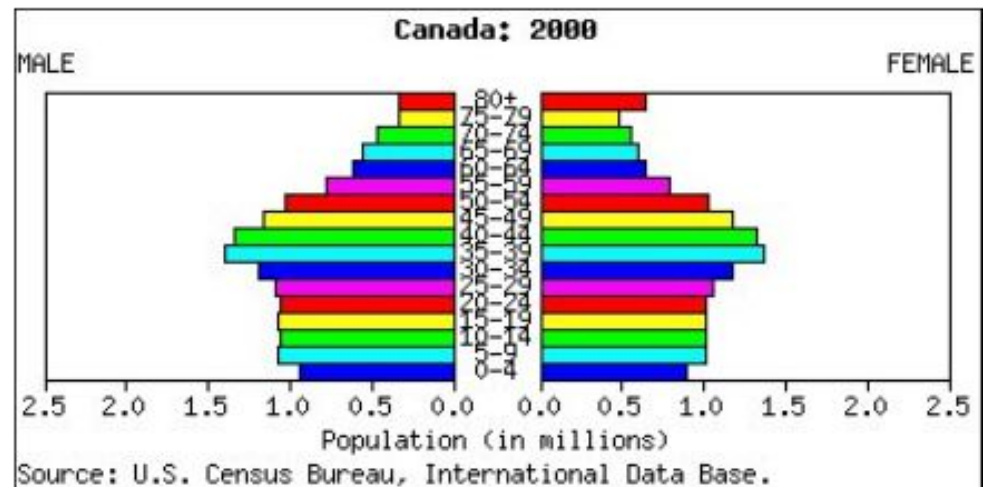
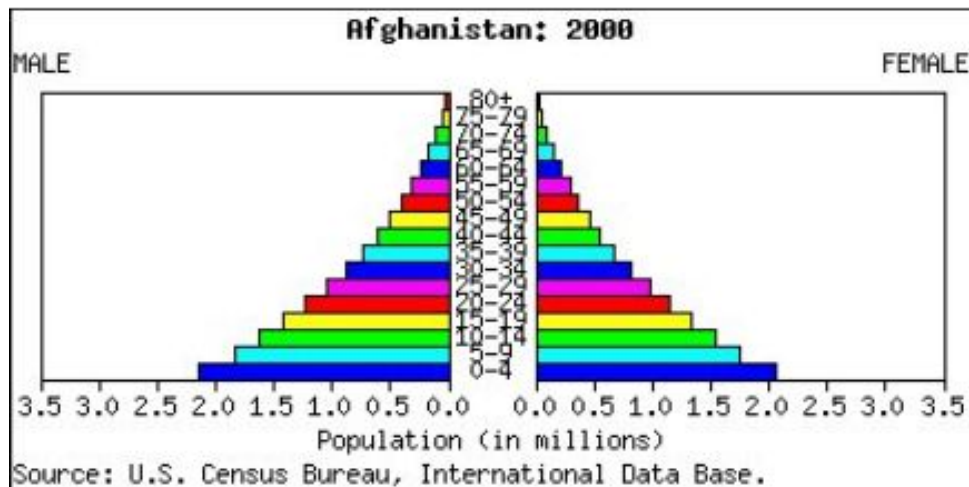


- **SHAPE OF SIDES**

- **Concave sides indicate a high death rate and convex sides indicate a low death rate**

- **This population pyramid exhibits concave sides indicating a high death rate**

- **Bumps in the sides: irregularities in the sides indicate a demographic anomaly. The 30 -50 age group in this population pyramid represents the baby boom. This bump will travel upward as the baby boomers age.**



- **DEPENDENCY RATIO**

- For statistical purposes we recognize people between 15 and 65 as the workers of a society.

- People under 15 and over 65 are considered dependant upon the working population

- The dependency ratio (DR) of a population indicates how many people are dependent upon every 100 workers.

- The formula

$$\text{DR} = \frac{(\text{pop. 0-14}) + (\text{pop. 65+})}{(\text{pop. 15-64})} \times 100$$

- What would the DR of a STAGE 2 Nation look like?

- 1:1 or worse. One worker to one dependent

- What would the DR of a STAGE 4 Nation look like?

- 1:2 or better. Two workers to one dependent