

10.3 Analyze the challenges and possible responses associated with high population growth rates

Review Early Expanding: Refer to pp. 75-77 to summarize some of the key aspects of the Early Expanding stage of the demographic transition model.

Read “What Is the Population Explosion?” on pp. 88-99 and respond to the items below.

1. **Knowledge:** What is the demographic trap and why is it an issue for LEDCs?

2. **Knowledge:** What is a feedback loop? How does this relate to high population growth rates?

3. **Gather Information:** What are some solutions to “break” the demographic trap? Give a brief explanation of your solutions. (Hint: Read the case study below page and think about how Canada and other MEDC countries transitioned to the Low Stationary stage, while others might not).

Case Study: Afghanistan - DTM Stage 2 Early Expanding

In 2013, Afghanistan had one of the higher rates of natural increase (birth rate minus death rate; or net increase) in the world at 2.7% – much higher than any other central Asian nation. Data provided from the [Population Reference Bureau](#) had the Afghan birth rate at (35/1000) and the death rate at (8/1000). What is most significant here is that the death rate in Afghanistan is low and it continues to decline. Only a decade ago the death rate was over 20/1000, peaking around 2004. This fast reduction in the death rate is interesting to demographers because although life expectancy has risen quickly, one of the primary indicators of a lowered death rate (child mortality) remains high. Afghanistan currently has the highest rate of child mortality in the world, where one in ten children do not live past the age of 5. Why then the decrease in death rate? Overall public health has greatly improved, and even though the child mortality rate is still high it is an improvement, as is the increased access to food and sanitation that has allowed adults to live longer. Quite remarkable for a country that has experienced so much war during the same time period.

Looking beyond the numbers of birth and death rate brings the discussion back to the Demographic Transition Model's focus on progress. Like Afghanistan, many countries in Stage 2 are categorized as "developing." The rates of birth and death are both the cause and effect of social and political factors within a country. Afghanistan has experienced decades of war both internally, and externally, and this has had significant impacts on the overall health and health care system of the country. With continued improvement to both, the expected outcome determined by the DTM is a transition into Stage 3 where total population growth continues, but at a lower rate. The DTM does not provide a time table for transition, but the large gap between the birth and death may signal that the country is nearing the end of Stage 2. For that transition to occur, Afghanistan will need to address outstanding social and economic factors that lead to lower birth rates, most notably in the areas of education and the status of women. Afghanistan has a very high illiteracy rate and limited educational opportunities for women, both indicators towards a high birth rate. Without either of those issues being addressed, the country will remain in Stage 2, with a high rate of population growth. If the current growth rate continues the total population of Afghanistan is expected to double in just 25 years.

3. **Draw Conclusions:** According to the case study, why is it possible that Afghanistan could experience an even higher rate of growth in the future? What solutions are given that could help Afghanistan transition to Stage 4: Low Stationary?

4. **Comparison:** Read about approaches to population control used by India and China on pp. 89-98. Compare the strategies and initiatives these countries have taken to address population growth.

INDIA'S APPROACH TO POPULATION CONTROL	
Strategies used	Effects of strategies
CHINA'S APPROACH TO POPULATION CONTROL	
Strategies used	Effects of strategies
<p>The Case of Kerala (pp. 96-98) - Kerala, a state within India, has been much more successful in limiting its population growth. What lessons can be learned from its example?</p>	

5. **Values:** Read “What Is the Future of Population Control?” on p. 99. What goals must be established by the international community in order to effectively curb population growth in LEDCs? In your opinion, which of these are most important? Explain.