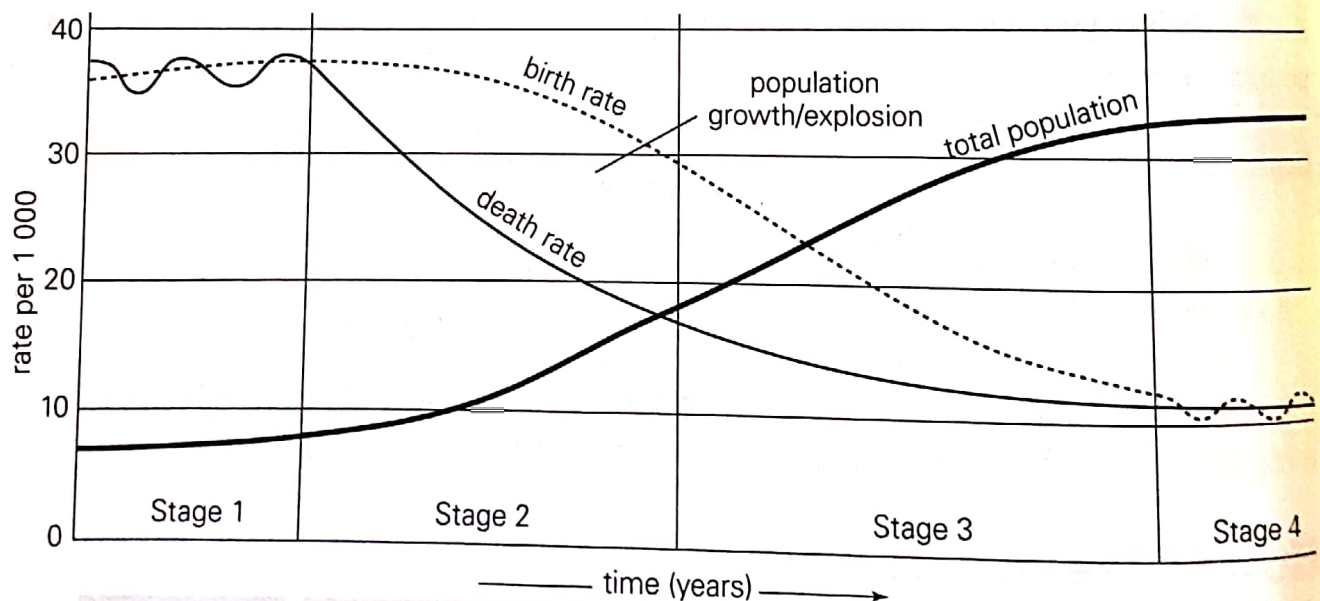


Unit 25

Demographic transition model, population characteristics, population explosion

Summary of concepts

1. A country's population characteristics and structure change over time. Every country in the world has its own population characteristics at any time.
2. Geographers developed a model showing how a country's population changes over time, i.e. **the demographic transition model**. A model is something that represents reality; demography is the study of population; transition means 'change'.
3. Study the diagram below, showing how a country's population changes over time. Note that the vertical graph axis shows rate or number, and the horizontal axis shows time in years. The model shows BR, DR and how total population grows over time. The model shows four stages that each country is thought to pass through. Different countries can be at different stages at the same time.



Stage 1: High stationary phase: BR and DR both high; total population low.

Stage 2: Early expanding phase: BR remains high (slight decrease); DR drops; population starts to grow.

Stage 3: Late expanding phase: BR continues to drop; DR drops and levels off, population growth increases and levels off.

Stage 4: Low stationary phase: BR and DR both low; total population stabilises.

Note: The model does not have a fifth stage, but maybe you could think about what may happen.

Fig 4.3 Demographic transition model

4. A **population explosion** takes place in stage 2 because there is a large difference between the BR and DR.

5. Looking at the population pyramids for Ethiopia, Mauritius, Switzerland and South Africa in Unit 24, we can see that Ethiopia is in stage 2, Mauritius is between stages 3 and 4, Switzerland is in stage 4 and South Africa (because of its negative growth rate) cannot be classified according to the model.

This links to ...

You will revisit levels of development in Unit 45.

How to learn this unit

- Learn the four stages' names and what happens in each stage to the BR, DR and population growth.
- You must be able to redraw the model.
- You must be able to recognise which stage a country is in given its BR, DR and population growth.

Practice questions

Look at the demographic transition model in figure 4.3.

1. Why are the BR and DR high in stage 1? (2)
2. Why does the DR drop in stage 2? (2)
3. Why is there a population explosion in stage 2? (1)
4. Why does the total population grow the most in stage 3? (1)