8. DEMOGRAPHIC TRANSITION

Discuss

- 1. What is demographic transition, what does it represent?
- 2. How many stages are there in the Demographic transition model?
- 3. How is the model different for developed and developing countries?
- 4. Can this model predict future development in fertility rates?
- 5. What is a population pyramid?

Read the text and check your answers.

Demographic transition refers to the transition from high birth and death rates to low birth and death rates as a country develops from a pre-industrial to an industrialized economic system. This is typically demonstrated through a demographic transition model (DTM). The theory is based on an interpretation of demographic history developed in 1929 by the American demographer Warren Thompson (1887–1973). Thompson observed changes, or transitions, in birth and death rates in industrialized societies over the previous 200 years.

Most developed countries are in stage 3 or 4 of the model; the majority of developing countries have reached stage 2 or stage 3. The major (relative) exceptions are some poor countries, mainly in sub-Saharan Africa and some Middle Eastern countries, which are poor or affected by government policy or civil strife, notably Pakistan, Palestinian Territories, Yemen, and Afghanistan.

Although this model predicts ever decreasing fertility rates, recent data show that beyond a certain level of development fertility rates increase again.

From Wikipedia, the free encyclopedia

Draw the graph of the demographic transition model and describe it.

Vocabulary for describing graphs

fluctuate level off	at high level at low level		remain high / lo become steady	1	fall rapidly drop slightly		rapid growth slow increase	
Complete syn	onyms							
FALL	D P	D	Е	D	Е	Р	Т	
GROW	R E	Ι	E	S R	_	R	T	

Demographic Transition and Population Pyramids

https://www.youtube.com/watch?v=nonCD5GR9bw

- **1. Watch the first part of the video and decide whether the statements are true or false.** 2.14 4.30
 - A) Stage 1: In the first stage birth and death rate vary.
 - B) Stage 2: The drop of the death rate is due to improvements in education.
 - C) Stage 3: The population grows because children are seen as a necessity.
 - D) Stage 4: Natural increase of population approaches zero.
 - E) Stage 5: Many countries are in shrinking population stage.
 - F) Natural increase in stage 4 resembles natural increase in stage 1.

2. Watch the second part of the video and complete the table below.

4.30 - 5.50

1. A population pyramid is this type of graph	
2. This characteristic of a pyramid gives a lot of information	
3. Where to start to analyze a pyramid	
4. Sharply pointed end of a pyramid means high	
5. If the top of a pyramid is thick, this is high	

3. Watch again and complete the gaps: 2.14-5.50

- 1. In stage 1, birth and death rates tend to each other out.
- 2. In stage 2, societies experience extremely rapid in the death rate.
- 3. During stage 3, the birth rate begins to
- 4. In stage 4, country's population may begin to
- 5. Population pyramid is a for analyzing the structure of a population.
- 6. Some pyramids show the numbers as, others show total population.
- 7. If the bottom is smaller than the, the country has lower birth rate.

SUMMARY OF THE THEORY

In pairs describe the meanings of these words. Then put parts A – D in the right order.

shrinking population	sanitation	life span	stagnant de	development	
subsistence agriculture	contracept	on econ	omic burden	imbalance	

A During this stage there are both low birth rates and low death rates. Birth rates may drop to well below replacement level as has happened in countries like Germany, Italy, and Japan, leading to a shrinking population, a threat to many industries that rely on population growth. As

the large group born during stage two ages, it creates an economic burden on the shrinking working population. Death rates may remain consistently low or increase slightly due to increases in lifestyle diseases due to low exercise levels and high obesity and an aging population in developed countries.

B In this stage, that of a developing country, the death rates drop rapidly due to improvements in food supply and sanitation, which increase life spans and reduce disease. These changes usually come about due to improvements in farming techniques, access to technology, basic healthcare, and education. Without a corresponding fall in birth rates this produces an imbalance, and the countries in this stage experience a large increase in population.

C In this stage, birth rates fall due to access to contraception, increases in wages, urbanization, a reduction in subsistence agriculture, an increase in the status and education of women, a reduction in the value of children's work, an increase in parental investment in the education of children and other social changes. Population growth begins to level off.

D In this stage, pre-industrial society, death rates and birth rates are high and roughly in balance.

Now try to draw population pyramids representing 4 stages of the model.

1. 2. 3. 4.

DESCRIPTION OF STAGES Stage One 1. Complete the missing terms. There are three extra words that will not be needed.

exceeding	determine	d fluctua	ted co	ntribution	mort	tality	deaths
	nonexistent	siblings	insurance	edu	cation	incre	ased

During this stage, the society evolves in accordance with Malthusian paradigm, with population essentially 7..... by the food supply. Any fluctuations in food supply (either positive, for example, due to technology improvements, or negative, due to droughts and pest invasions) tend to translate directly into population fluctuations. Famines resulting in significant 8..... are frequent.

2. Work in pairs. One of you has got stage 2, the other stage 3. Try to find as many differences as possible.

Birth and death rates	
Countries in this stage	
Population growth	
Age structure of the population	
Factors in the decline of birth / death rates	

LISTENING: Hans Rosling: Global population growth, box by box

https://www.ted.com/talks/hans_rosling_on_global_population_growth

1. Which well-known supermarket is this - [ai'kia]?

2. Professor Rosling talks about aspirations (to buy something) of people in different countries. What do you think these aspirations are?

- In developing countries
- In (newly) industrialized countries
- In the richest countries

3. In your opinion, what can stop the global growth of the world population?

Compare your answers with the presentation.

sources http://www.i-study.co.uk/Students/IB%20Population%20SoW.html https://en.wikipedia.org/wiki/Demographic_transition E. Čoupková, English for Geographers