

Geography: chapter 1

World population & sustainable development.

The world's population has reached 7 billion in 2011. In 1999, according to the UN, the world's population was six billion. The curve indicates that by the middle of this century there will be more than nine billion of us. At a rate of 80 million babies per year, by 2100 planet earth will have 10 billion humans living on it.

Key question. *What is the impact of these changes on world resources and sustainable development?*

Web resources: www.euronews.com > "UN urges urban planning for 7 bn people" (video) – www.bbc.co.uk/news/world "7 billion people and You" - *The Economist* "Now we are seven billion", October 22th, 2011 (<http://www.economist.com/node/21533409>) – www.dsc.discovery.com "China revealed – Three Gorges Dam" (video on Discovery Channel).

1. World population growth :

1a. A dramatic change since the 1950s.

The world's population is growing rapidly. Having reached its first billion in the early 1800s the global population now stands at about 7 billion. Every day the global population grows by 225 000 - more than 82 million a year or by more than 3 every second (see world population clock at <http://www.worldometers.info> + homework 1).

PREDICTED	POPULATIONS,
2050	
1	India, 1,628m (2)
2	China, 1,437m (1)
3	United States, 420m (3)
4	Indonesia, 308m (4)
5	Nigeria, 307m (9)
Source: PRB (2004 position in brackets)	

1b. Different patterns of population growth

Rates of population growth vary across the world. Although the world's total population is rising rapidly, not all countries are experiencing this growth.

Much of this increase is projected to come from the **high-fertility countries**, which are LEDCs, mainly in Africa and in Asia.

Explanations. High fertility is due to poverty: the poor cannot afford contraception, they need to rely on child labour to increase their income and compensate for the lack of old age pensions. A large family is considered a source of solidarity and, in most religions, a benediction from God.

Useful words. – 7 billion people (and NOT ~~7 billions of people~~) to experience a rapid growth/a dramatic change – high-fertility countries – birth/death rate – natural increase – LEDCs/MEDCs – child labour – old age pensions – a resource – to level off – inequalities – unequal/uneven

-In MEDCs- By contrast, the population of developed countries will **level off** at around 1.2 billion. **In the UK**, for example, population growth is slowing, while in Russia or in Germany the population has started to decline. MEDCs have low population growth rates, with low death rates and low birth rates.

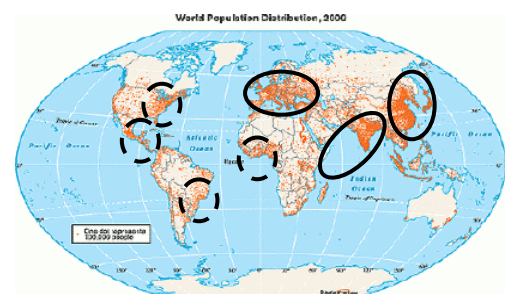
2. An uneven distribution of the world population.

People are **not evenly distributed** over the earth's surface.

2a. Three major population centres around the world.

They include:

- ✓ East Asia (China, the Koreas, and Japan);
- ✓ South Asia (India, Pakistan, and Bangladesh);



✓ Europe (except for Northern regions).

In fact, two countries each contain over one billion people: **China** (with 1.37 billion) **and India** (with 1.21 billion). Since Earth's population is over six billion, this means that China and India each contains at least one-sixth of the Earth's total human population.

2b. The rise of megacities.

Cities and urban regions have seen dramatic increases in population over the last fifty years, with much growth continuing at present and into the future.

Currently the Earth's urban population is estimated to be around 3.5 billion people.

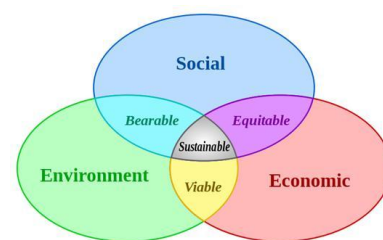
Megacities (metropolises with over 10 million people) were only 2 in 1970 (New York and Tokyo), but by 2000 there were 18 and 2015 could see 23. Nearly all of them are in developing countries, like Lagos (Nigeria), Mumbai (India)...



3. What sustainable growth?

Definition - Sustainable development (SD) is a pattern of resource use, that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come

It ties together environmental sustainability, economic sustainability and socio-political sustainability (which includes equal access for all to vital resources).



3a. Are cities going green?

A growing population has to face **major challenges** in the future (cf Quiz + worksheets on sustainable/green futuristic cities) – urbanisation and migration will be on the rise, because cities are more appealing in terms of job opportunities, and access to basic services (education, health, information and communication, etc.). Urban-rural inequal distribution will raise high concerns over transportation, housing, waste management, food distribution, access to safe drinking water, energy, etc. Wealth and poverty is another major economic inequality which demands attention, as well as gender imbalance, with more boy babies carried to term than girls

3b. Water resources under the pressure of human activities.

By 2050, the amount of fresh water available per person will be about 25% of the 1950 figure. On every continent, water tables are dropping and underground water reserves are being used faster than they are replenished. Cf. debate about the building of large dams (worksheet + mystery).

Conclusion. As world population has reached its seventh billion, major problems are still at issue: feeding the world, providing everybody with clean water and other vital resources in a safe environment, providing education, jobs, healthcare, etc. to all people, especially the poor. Is it still a utopia? Or an absolute necessity?

Analysing a graph - to peak (at) : to reach the highest point or level ; **to grow by x % or millions** ; the **growth** (noun) ; **On average** (:en moyenne) ; **To carry on + -ing** : to continue doing something ; **to increase by x millions – to level off/out** : to stop going up or down and continue at the same height or to stop rising or falling and become steady ; **to level off at around** (:se stabiliser à environ) – **to remain steady**.