POPULATION ISSUES IN THE 21ST CENTURY

by Garrett Nagle

POPULATION ISSUES are at the heart of development, and are central to Geography. We are constantly reminded in the press and on TV about human suffering, injustices, and environmental crises. These boil down to inequalities in the distribution of population and resources. Any attempt to plan for a fairer society must begin with an account of how many people there are, where they live, and how fast their numbers are growing.

Falling birth rates and rising death rates

The world's population is not growing quite so fast as critics had once feared. This is mainly due to the use of contraceptives, but war and AIDS are also making a big contribution in slowing down population growth, especially in developing countries.

The world's population is now over 6 billion, and growing by over 80 million people each year. This is larger than the UK's total population of 57 million. Nevertheless, this is an improvement on the period from the mid-1980s to 1990, when the world's population increased by about 87 million people each year. The UN now believe that world population will peak at about 9.4 billion people in 2050. Other predictions are as high as 12.5 billion.

Fertility rates and population growth are declining. In India, for example, the average fertility rate for women has declined from 4.5 children to 3.4 children per woman as a result of better family planning.

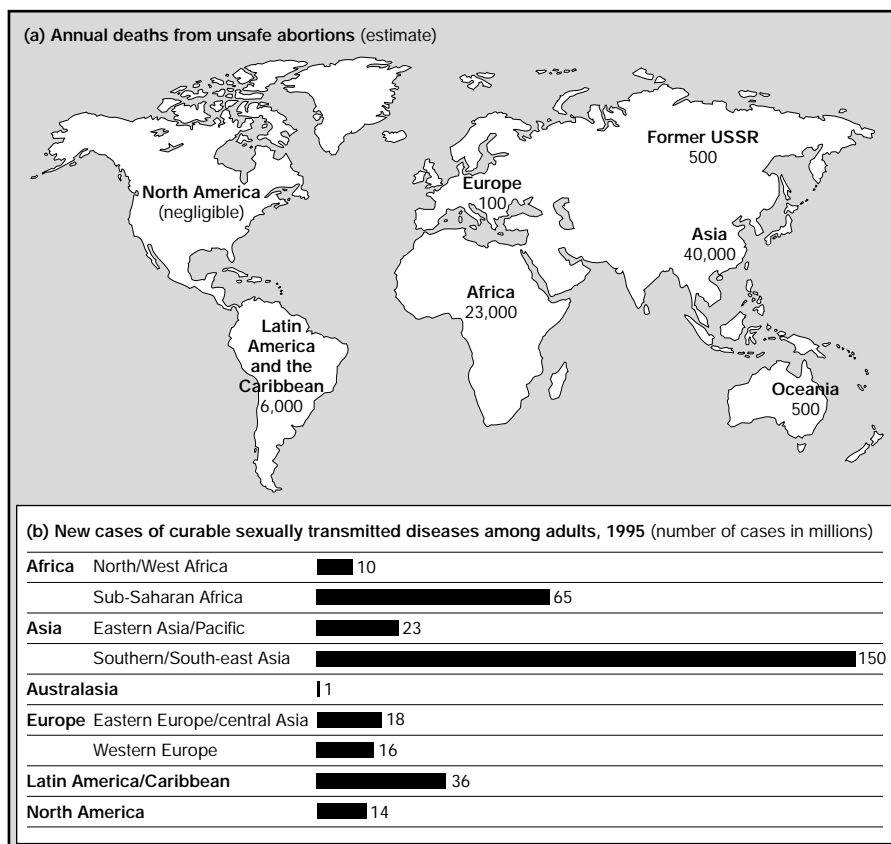Nevertheless, poor access to contraceptives and inadequate reproductive health care are the main worries of the UN. It estimates that 585,000 women – one every minute – die each year from causes related to pregnancy, such as curable sexually transmitted diseases which are left untreated (Figure 1); 200,000 of these deaths are related to the lack of, or failure of, contraceptive services. The UN believes that 75 million pregnancies each year, out of a total of 175 million, are unwanted, and result in 45 million abortions. In many developing countries abortion is still used as a 'family planning' method.

The effect of AIDS is increasing, especially in central Africa and southern Asia (Figure 2). In some central African countries AIDS has increased the death rate by as much as 25%. In 1996, 3.1 million people were infected with AIDS, and over 50% of them died of AIDS and HIV-related diseases. This total included 350,000 children under the age of 5 years.

South Asia, and India in particular, has the highest number of cases. However, the disease is spreading most rapidly in the former USSR. There the number of infections was almost non-existent a few years ago. Now AIDS and HIV is causing grave concern. Up to 70% of cases are among heterosexuals, and the majority of newly infected people are aged between 15 and 24 years.
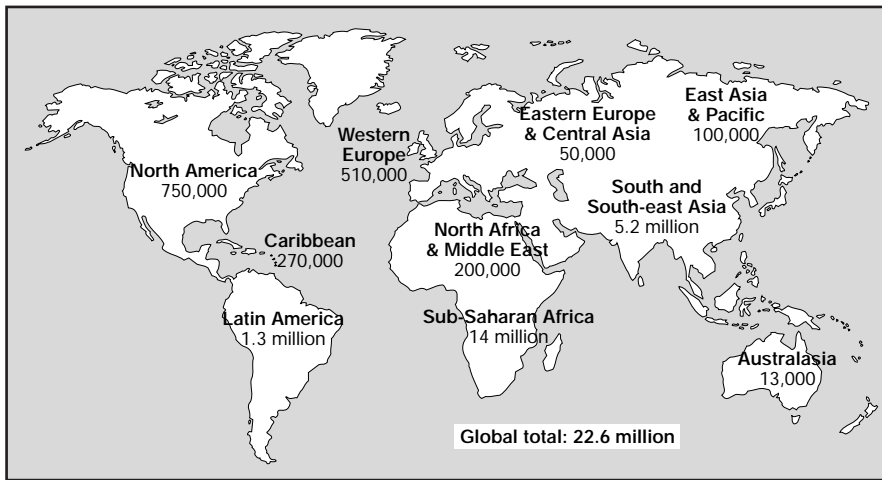
In developing countries, the

Figure 1: **World population: some causes of death**
Source: World Health Organisation

(a) **Annual deaths from unsafe abortions** (estimate)

- North America (negligible)
- Europe 100
- Former USSR 500
- Asia 40,000
- Africa 23,000
- Latin America and the Caribbean 6,000
- Oceania 500

(b) **New cases of curable sexually transmitted diseases among adults**, 1995 (number of cases in millions)

Region	Sub-region	Cases
Africa	North/West Africa	10
	Sub-Saharan Africa	65
Asia	Eastern Asia/Pacific	23
	Southern/South-east Asia	150
Australasia		1
Europe	Eastern Europe/central Asia	18
	Western Europe	16
Latin America/Caribbean		36
North America		14

Figure 2: **Number of people with the AIDS virus, 1996 (estimate)**
Source: United Nations

proportion of women under the age of 20 who have sexual relations before the age of 20 is decreasing. By contrast, in developed countries the number of girls under the age of 16 who are sexually active, is increasing. A UN report on AIDS says that ignorance and the lack of sex education are often to blame for unwanted pregnancies and increasing numbers of HIV infections. The report also states that 'sex education encourages ... higher levels of abstinence, later start of sexual activity, higher use of contraceptives, and fewer sexual partners'.

Population and resources

The term **carrying capacity** refers to the number of people that an environment can support. It is a very difficult concept to measure, but it is useful in the discussion of overpopulation, optimum population and underpopulation.

- **Underpopulation** occurs when there are not enough people to fully utilise resources. Good examples include Rwanda and Mozambique, where war has led to declining populations, and Colombia, where the harsh environment limits exploitation.

- **Optimum population** exists when the population fully utilises the resources of an area. It provides the highest standard of living given the resource availability. Optimum population is a balance between population density, resource availability and level of technology.

- **Overpopulation** occurs when

standards of living decline, and output of resources is reduced.

Ecological footprints (Figure 3) refer to the amount of resources used by a population. For example, on average each American citizen consumes a much larger amount of resources than a Dutch citizen, and a great deal more than an Indian citizen does. Thus population growth in a developing country might not be doing as much harm to the resource base as population growth in the most developed countries.

Ageing populations: the case of Japan

Japan is the classic example of a country that has an ageing population. For the government the dual problems of a declining workforce and an increasing dependent population are putting resources under great strain.

Figure 3: **Ecological footprints**

Moreover, Japan does not have many natural resources. Its land and waters are already overused. In a society that is notoriously expensive, the prospects of supporting large numbers of people for decades is disturbing – so much so that a few years ago the Japanese government investigated the possibilities of sending some of their elderly people overseas to places as far away as West Africa!

An ageing population is a major concern to governments for two main reasons:

1 they have to pay out more money to support elderly people, eg pensions, health care, free transport, etc

2 there are fewer workers to fill all the jobs – hence taxes on these workers may have to rise to support the services for the elderly.

Japan's population is shrinking as well as ageing. Results from 1996 show that the birth rate in 1995 of 9.6 births per 1,000 is the lowest since the Second World War. This figure compares with the 1950 high of 28.1. In the baby boom of 1970–73 the birth rate reached 19 per 1,000. This declined to 9.3 per 1,000 by 1993. In the next few years the birth rate is expected to drop very significantly. The total fertility rate (the average number of births per woman) reached an all-time low in 1995 of 1.42. This means that on average most women have fewer than 1.5 children.

Sociologists, economists and planners state that there will be a number of problems. These include:

- inadequate nursing facilities
- depletion of the labour force
- deterioration of the economy
- trade deficit
- migration of Japanese industry overseas.

Population changes in the UK

In recent years, there has been a very low rate of national population growth, due mainly to the decline in the birth rate. There has also been the movement of the 1960s 'baby
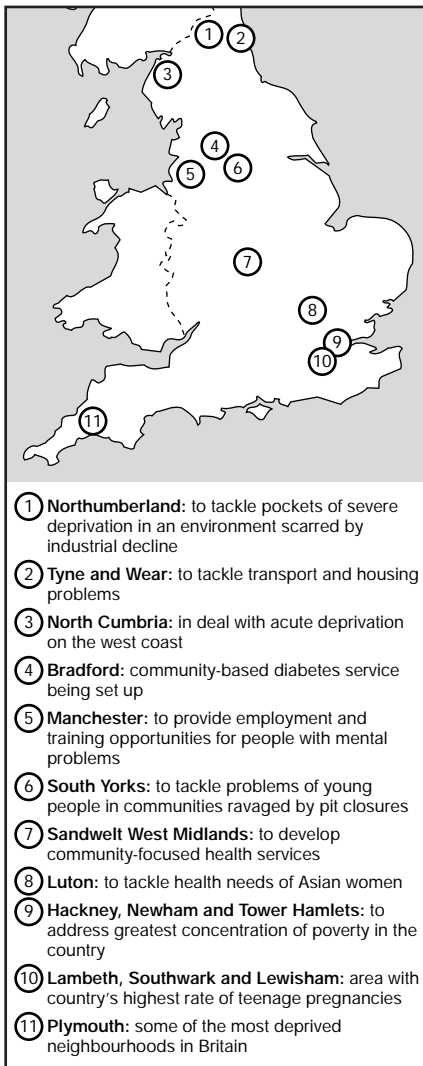
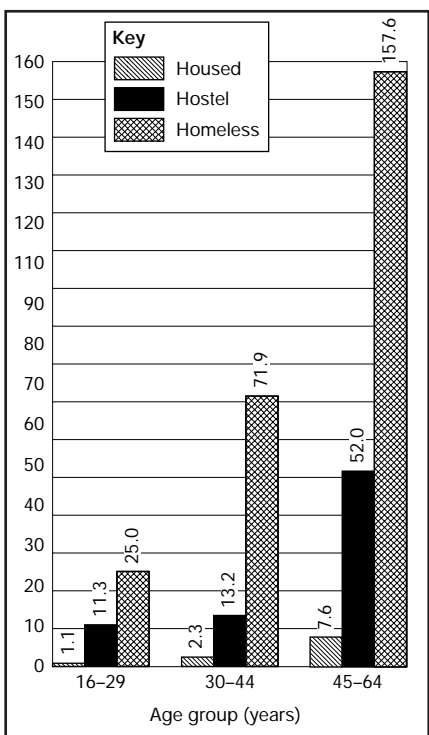Figure 4: **Areas of deprivation in England, and their needs**

1. **Northumberland:** to tackle pockets of severe deprivation in an environment scarred by industrial decline
2. **Tyne and Wear:** to tackle transport and housing problems
3. **North Cumbria:** in deal with acute deprivation on the west coast
4. **Bradford:** community-based diabetes service being set up
5. **Manchester:** to provide employment and training opportunities for people with mental problems
6. **South Yorks:** to tackle problems of young people in communities ravaged by pit closures
7. **Sandwelt West Midlands:** to develop community-focused health services
8. **Luton:** to tackle health needs of Asian women
9. **Hackney, Newham and Tower Hamlets:** to address greatest concentration of poverty in the country
10. **Lambeth, Southwark and Lewisham:** area with country's highest rate of teenage pregnancies
11. **Plymouth:** some of the most deprived neighbourhoods in Britain

Figure 5: **Chance of death among males (by age, out of 1,000)**

boom' through schooling age in the 1970s and on into higher education and the labour force in the 1980s.

Britain's largest baby boom took place at the turn of the 19th/20th centuries, and this has manifested itself in the large number of people of a pensionable age in the 1960s and 1970s and the dramatic increase in the number of the very elderly (the 'old-old') in the 1980s.

The long-term trend towards a smaller average household size has accelerated over the last two decades for several reasons:

- a fall in the birth rate
- growth in the number of the elderly
- increase in the number of young adults
- a rising divorce rate.

Urban deprivation in the UK

Deprivation is an increasing and widespread problem in Britain (Figure 4). The homeless and the poorly housed are more likely to die early than at any time since the 1950s. Until recently, the death rate of men who are homeless or who live in hostels or bedsits had been vastly underestimated. The most common diseases found among the poor are TB, bronchitis and pneumonia. The homeless and hostel dwellers are up to 25 times more likely than the average citizen to die early, but they are unable to register with a general practitioner (GP) because they do not have an address. Hostel dwellers are seven times more likely to die than the average person. It is the magnitude of the difference that is so startling.

There are small pockets of deprivation within large urban areas. For example there are many wealthy suburbs in places such as Oxford, Brighton, Bath, Reading, Cheltenham, Gloucester, Worcester and Norwich, but the same places have a high average death rate (Figure 5). There is also a strong correlation in these areas with the location of homeless people, hostels and bedsits. The homeless are drawn to these areas because they can get
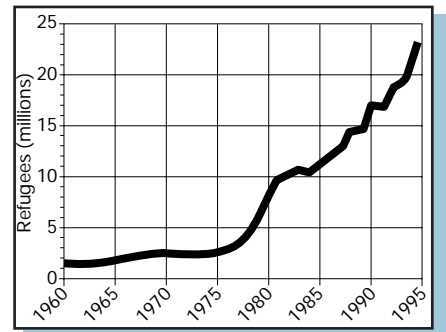

Figure 6: **The global rise in refugees**
Source: V. Bunce and A. Studd (1997) *The Developing World*, Hodder and Stoughton

more money by begging from the affluent.

- In the UK male 16–29 age group, the death rate is 1.1 per 1,000; among hostel dwellers it is 11.3 per 1,000; and among the homeless it is 25.0 per 1,000.

- In the UK male 30–44 age group, the death rate is 2.3 per 1,000; among hostel dwellers it is 13.2 per 1,000; and among the homeless 71.9 per 1,000.

- In the 45–64 age group the figures are 7.6, 52.0 and 157.6 per 1,000 respectively.

Forced migration – the refugee crisis

Refugees are people who are 'outside their own country, owing to a well-founded fear of persecution, for reasons of race, religion, nationality, membership of a particular social group or political opinion'. In 1994 there were over 23 million refugees (Figure 6). In many developed countries, refugees are distinguished from 'economic migrants'.

The number of refugees is increasing due to war, economic collapse and the loss of basic human rights. This increase exceeds national or international agencies' abilities to cope, and many host countries are becoming increasingly hostile to refugees.

The crisis in Kosovo led to a large number of Kosovans – nearly 50% of the population – being forced out of the country. Their destinations are shown in Figure 8 on page 4.

Activities

1 Explain why an ageing population is a major concern to governments.

2 (a) Using the data provided in Figure 7, draw a graph to show how Japan's population has increased since the mid-1700s.
(b) When was population growth most rapid?
(c) When did it slow down?
(d) What will happen to Japan's population after 2010?

3 What is a **refugee**? Compare the benefits and disadvantages that refugees bring with them.

4 Why is deprivation a feature of wealthy cities such as Oxford and Cheltenham?

5 In what ways are the homeless discriminated against?

6 Suggest contrasting reasons why death rate among the homeless is so high.

7 In which countries do most deaths from abortion occur?

8 Where in the world are most cases of sexually transmitted diseases?

9 Define the term **ecological footprint**. How does the ecological footprint differ between the USA and India? What are the implications of this for population growth?

1750	30 million
1868	30 million
1873	35 million
1926	60 million
1937	70 million
1967	100 million
2000	127 million
2010	130 million
2025	126 million
2050	112 million

Figure 7: **Population of Japan, 1750–2050**

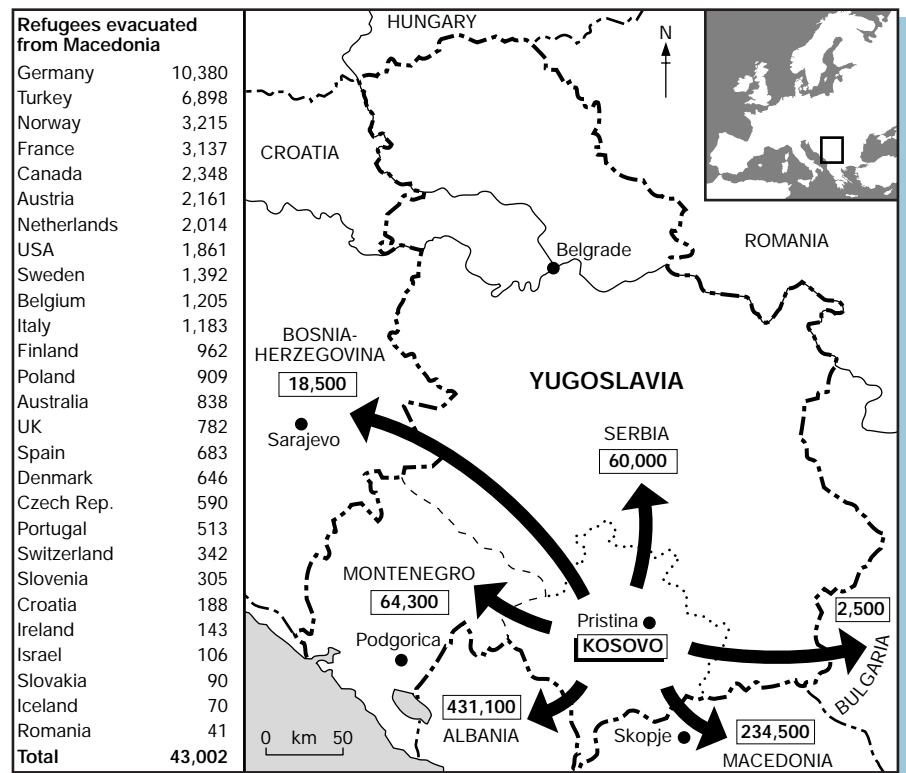| Refugees evacuated from Macedonia	
Germany	10,380
Turkey	6,898
Norway	3,215
France	3,137
Canada	2,348
Austria	2,161
Netherlands	2,014
USA	1,861
Sweden	1,392
Belgium	1,205
Italy	1,183
Finland	962
Poland	909
Australia	838
UK	782
Spain	683
Denmark	646
Czech Rep.	590
Portugal	513
Switzerland	342
Slovenia	305
Croatia	188
Ireland	143
Israel	106
Slovakia	90
Iceland	70
Romania	41
Total	**43,002**

Figure 8: **Forced migration from Kosovo, 1999**
Source: United Nations High Commission for Refugees (UNHCR)

10 (a) Figure 8 shows the destination of people forced out of Kosovo. Copy and complete the figure by plotting proportional flow lines to show the volume of refugees entering each country.
(b) Describe the pattern (distribution) of refugees as shown by your map.
(c) Suggest reasons why the UK received so few Kosovar refugees.

11 In groups, prepare a presentation on global population issues for a World Summit in the year 2000.
(a) Outline the main issues that must be tackled in both developing and developed countries.
(b) For each issue or problem, suggest possible strategies to reduce the problem. Your strategies can range from simple advice to major operations.
(c) Present your findings to the class, with each person in your group taking a turn to cover the points you have raised.

12 Study Figure 4.
(a) Describe the distribution of areas of deprivation as shown on the map.
(b) Which area does not fit the general pattern? Why not?

13 Contact your local planning office and try to speak to a planning officer. What are the main issues that planners are concerned with in your area concerning population (eg growth, resources, facilities, conflict)?