depletion of resources and to warn of the danger of exponential growth, to the ultimate destruction of a global environment fit for human occupation. The book has been described as mechanistic and non-scientific. It has also been criticized for overstating the case, therefore damaging the environmental or green cause. To some extent these criticisms have been addressed in *Beyond the Limits* (Meadows *et al*., 1992). *The Limits to Growth* did attempt, however, to study some aspects of the global environment holistically, concentrating on linkages and adopting a systems approach to environmental analysis, all being common features of a 'green method'.

THE 'SKEPTICAL ENVIRONMENTALIST'

The publication by Lomborg, in Danish, of his book, *Verdens Sande Tilstand* (1998) – later translated into English as *The Skeptical Environmentalist* (2001) – was a further landmark in the environmental debate. According to Lomborg's assessment, conditions on earth are generally improving for human welfare: furthermore, future prospects are not nearly as gloomy as environmental scientists predict. Those working in the field of sustainable development cannot ignore Lomborg's thought-provoking analysis, even though most reputable environmental scientists have rebutted his complacent view of the global environment (see Bongaarts, Holdren, Lovejoy and Schneidr in *Scientific American*, January, 2002). Like Meadows in his *Limits to Growth*, Lomborg may have overstated his case. Unfortunately, his thesis has given credence to the views of those advocating an environmental 'free for all', particularly those to the right of American politics (see 'Bush bending science to his political needs'; *Guardian*, 19th February, 2004).

POPULATION

An important contributory factor affecting the deterioration of the environment is population growth. According to Bongaarts (2002), Lomborg's assertion that the number of people on this planet is not 'the problem', is simply wrong. The population of the planet was approximately 0.5 billion in the mid-seventeenth century. It was then growing at approximately 0.3 per cent per annum, which represented a doubling of population every 250 years. By the beginning of the twentieth century, the population was 1.6 billion but growing at 0.5 per cent per annum, which corresponds to a doubling time of 140 years. In 1970, the global population was 3.6 billion, with a growth rate of 2.1 per cent per annum. Not only was the population growing exponentially but the rate of growth was increasing. From 1971 to 2000 the population grew to about 6 billion, but the growth rate fell to 1.5 per cent per annum. This change in population growth rate is a significant improvement and means a reduction in the rate at which total world population grows. The population growth rate is expected to fall further to about 0.8 per cent per annum by 2030. Despite this fall in population growth rate, the absolute growth will remain nearly as high as levels in the last decades of the twentieth century, simply because the population base rate keeps expanding: the global population is expected to be about

8 billion by 2030 and to reach about 10 billion by 2050.

These global figures mask details of unprecedented demographic change, which are highly significant for the impact they may have on the environment. The world's poorest nations of Africa, Asia and Latin America have rapidly growing and young populations, while in the wealthy nations of Europe, North America and Japan, population growth is zero or in some cases negative. By 2030, over 85 per cent of the world's population will live in these poorer nations of the developing world. Three-quarters of global population growth occurs in the urban centres of these poorer nations, and half of this increase is by natural growth within cities. This urban growth in, and rural-urban migration to, the cities of the poor 'South' is occurring in a context of far higher absolute population growth, at extremely low income levels, very little institutional and financial capacity, and few opportunities to expand into new frontiers, foreign or domestic. 'While urban poverty exists and is indeed growing in all cities of the world, it characterizes aspects of the rapidly growing cities of the developing countries. There, urban poverty disproportionately affects women and children; fuels ethnic and racial tensions; and condemns large sections, and sometimes the majority of urban dwellers to a downward spiral of marginalization, social and economic exclusion and unhealthy living environments' (United Nations, Habitat, 2001). Over 1 billion people live in absolute poverty, living on less than $1 per day. A total of 420 million people live in countries that no longer have enough cropland on which to grow their own food, and 500 million people live in regions prone to chronic drought: by 2025, this number is likely to be 2.4 to 3.5 billion people. Clearly, population pressures will induce migratory movements throughout the world, so that in Europe – including Britain – we can expect to see a continuing influx of economic migrants: some – but not all – in this country would see this immigration of young economically active people as essential to sustain our aging population (*Observer*, 25 January, 2004). Such population movements will not be without conflict.

'Poverty and environmental degradation are closely interrelated. While poverty results in environmental stress, the major cause of environmental deterioration is an unsustainable pattern of consumption and production, particularly in the industrialised countries, which aggravates poverty and imbalances' (UN, 1992b). The cause of the problem does not lie in the poor South, but in the 'over-consumption' in the rich North: over-consumption being a euphemism for the much shorter and more accurate word 'greed', as used by McHarg. Nevertheless, a reduction in population growth rates through education and family planning is of great importance in establishing a sustainable future for humankind: alone, however, it is insufficient. It is worth noting that one child born in Europe or the USA will use the same resources and be responsible for using the same energy and producing the same waste as perhaps thirty or forty born in less advantaged countries. The problems are 'increasingly international, global and potentially more life-threatening than in the past' (Pearce, 1989). Fifteen years on from the time when Pearce wrote those words, global conditions have, if anything, deteriorated. The development of a global environment of quality, in addition to the reduction in population growth in the