11 – Population – the great multiplier

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The size of the human population is central to all thinking about sustainability, though for a variety of reasons it is often ignored. The global population grows by 72 million a year and will continue at that rate for 30 to 40 years. On present projections, Australia's population in 2050 will be 27 million and the world population about 8 or 9 billion. Yet in 2004 the Earth is believed already to be 25 per cent over the limit of its regenerative and absorptive capacity. Each of the topics considered in this book is profoundly dependent on the size of the human population. There is an urgent need for both national and global population policies that take into account that the total impact of a population is equal to the average impact per capita multiplied by the number of people. Increasing population increases our impact.

Population is often overlooked in the sustainability debate. Yet it affects all the issues in the preceding chapters: water, health, land use, energy, peace, economic systems, climate, work and transport. It is the great multiplier.

Until the advent of agriculture population numbers were kept low by the local availability of food, the spread of disease and risks associated with the hunter–gatherer lifestyle (such as large carnivores). Human impact on the biosphere was minimal except where they contributed to the extinction of large mammals and birds on some continents and islands (Flannery 2001). Then with the development of agriculture, the human population grew. Subsistence agriculture had a carrying capacity – though at a higher level – defined as the number of people that could be fed by peasant farmers using manual labour, horse or oxen-ploughs, animal and human dung, and by hand-weeding of crops (Stanton 2003). Sometimes subsistence agriculture