

1 Towards sustainable development

The aim of this chapter is to introduce the concepts of globalization and sustainable development, indicating the complex and often contested nature of various debates, actions and practices that have occurred in recent years. The significance of some key international agreements will be discussed, as will the criticisms and comments they have stimulated. Sustainable development has emerged through political and environmental struggles, through a business, citizen and governmental engagement with the complexity of contemporary ecological and other problems, and a vast array of perspectives, values and interests that have been applied in seeking to understand and deal with them. The chapter ends with the suggestion that sustainable development is perhaps best understood as a ‘dialogue of values’ – a way of encouraging people to learn, to discover and to evaluate.

The road to sustainable development

Until the industrialization of Europe in the mid-eighteenth century, wood was the primary material used for fuel, construction, smelting and shipbuilding. World trade and the great navies relied on a ready and what some believed to be an inexhaustible supply of timber. However, these people were wrong. Although timber is a renewable resource, European nations were harvesting more trees than were being planted and nurtured to maturity. Governments in Britain, France and particularly Germany slowly recognized that such a rate of timber consumption was becoming unsustainable. As Ulrich Grober (2012: 88) writes in *Sustainability: A Cultural History*, a number of foresters and enlightened government ministers such as Johan Wolfgang von Goethe of Weimar, believed that ‘the true capacities of the forests’ should become the basis for their use and exploitation. The science of ecology, the concept of sustainability and the practice of sustainable development was emerging. Closely aligned to its sister concept, namely conservation, sustainability became a key term for a growing body of environmentalists in the new and the old worlds. For Aldo Leopold, an American citizen of German descent and a key figure in the environmental movement in the US in the first half of the twentieth century, land use was far more than an economic problem. It was a moral and ecological issue too. ‘A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise’, he wrote (Leopold, 1970: 262). Some years later in the mid-twentieth century, the publication of Rachel Carson’s (Carson, 2000) *Silent Spring* in 1962, which forensically, but with great emotion and sensitivity, analysed the devastating ecological impact chemical pesticides had on the American countryside, marked the beginning of what become known as Earth Politics and the modern environmental movement.

In Europe and America the 1960s and 1970s witnessed a growing concern that economic growth, development consumerism and related lifestyle demands were undermining the ecological balance, economic stability and security of the planet. These concerns were intensified with the publication of a single image, the lonely and luminous planet earth, taken by an astronaut from the Apollo Eight spacecraft in 1968, which revealed the beauty and fragility of the world as never seen before: *Earthrise* as seen from the moon. In 1972 a further image from the Apollo Project, *Blue Marble*, quickly became the most published image in history and an icon of, and for, the new sustainability advocates and the wider environmental movement. World-famous pressure groups were formed, such as Friends of the Earth and Greenpeace. A number of ecologically minded writers following in Rachel Carson's footsteps came to prominence such as Charles A. Reich who wrote *The Greening of America* (1970), Theodore Roszak and *The Making of a Counter Culture* (1969) and *Where the Wasteland Ends* (1972), and E.F. Schumacher's game-changing *Small is Beautiful* (1973). In 1966 Kenneth E. Boulding wrote 'The economics of the coming Spaceship Earth', in which he stated there were no unlimited reservoirs of anything and that humanity would have to recognize and find its place in a cyclical ecological system capable of continuous reproduction but which continually needed inputs of energy to maintain itself. In 1970 the first major environmental event to have any real social, public and cultural impact was held in the US. Thus, following an earlier discussion in the United Nations that there should be a global holiday, Earth Day drew attention to environmental degradation in a manner never seen before. In 1972 the editors of *The Ecologist* issued a call to action, writing, in *A Blueprint for Survival*:

The principal defect of the industrial way of life with its ethos of expansion is that it is not sustainable. Its termination within the lifetime of someone born today is inevitable – unless it continues to be sustained for a while longer by an entrenched minority at the cost of imposing great suffering on the rest of mankind.
(Goldsmith *et al.*, 1972: 15)

The same year, 1972, saw the publication of the landmark study *Limits to Growth* by a global think-tank known as the Club of Rome and the first serious international discussion of global environmental issues at the United Nations Conference on the Human Environment in Stockholm.

The Club of Rome (Meadows *et al.*, 1972) report attempted to combine optimism concerning human potential to innovate and transcend environmental and demographic problems with a well-evidenced warning that if contemporary trends continued there would be dire economic and ecological consequences. Their global model was built specifically to investigate five major trends – accelerating industrialization, rapid population growth, widespread malnutrition, depletion of non-renewable resources and a deteriorating environment. The authors looked to the future too, posing some key questions: What do we want our world to be like? Can we continually keep expanding production and consumption? The answer was a clear No. Achieving a self-imposed limitation to growth would require considerable effort, however. It would involve learning to do many things in new ways. It would tax the ingenuity, the flexibility, willpower, moral sense and self-discipline of the human race. Bringing a deliberate, controlled end to growth would be a tremendous challenge, not easily

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met. Would the final result be worth it? What would humanity gain by such a transition, and what would it lose? Thirty years later, three of the authors published an update (Meadows *et al.*, 2005). They reviewed the debates and criticisms, analysed new evidence, amended their position but firmly and clearly demonstrated that their theory of necessary limits to growth still remained vital and significant.

Concurrent with the work of the Club of Rome, the General Assembly of the IUCN (World Conservation Union), a body established in the wake of the Second World War, met in New Delhi. With the newly formed WWF (World Wildlife Fund, later renamed World Wide Fund for Nature) the IUCN was concerned to develop new strategic thinking for animal and habitat conservation and human well-being. The concept 'quality of life' became the centrepiece for IUCN thinking and policy development intelligently linking cultural diversity with ecological or biodiversity. In 1980, the IUCN published its *World Conservation Strategy* and so launched into the global public sphere the seemingly new concept, and potential future practice, of sustainable development. Humanity's relationship with the biosphere, the Strategy states, will continue to deteriorate until a new international economic order and a new environmental ethic is established. Prefiguring the more famous Brundtland Declaration of seven years later, the IUCN carefully defined its terms:

Development is defined here as: the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life. For development to be sustainable it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long term as well as the short term advantages and disadvantages of alternative actions.

(IUCN, 1980: 2)

Conservation is defined here as the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of the future. Thus conservation is positive, embracing preservation, maintenance, sustainable utilization, restoration and enhancement of the natural environment. Living resource conservation is specifically concerned with plants, animals and micro-organisms, and with those non-living elements of the environment on which they depend. Living resources have two important properties, the combination of which distinguishes them from non-living resources: they are renewable if conserved and they are destructible if not.

In 1980 the Brandt Commission published its *North-South: A Programme for Survival*, placing the responsibility for human survival firmly in the political arena at a time when leaders seemed more concerned with Cold War ideological posturing than addressing pressing issues of global poverty, social inequality, justice, self-determination, human rights and the depletion of natural resources. The Commission did not redefine development, but duly noted:

One must avoid the persistent confusion of growth with development, and we strongly emphasize that the prime objective of development is to lead to self-fulfillment and creative partnership in the use of a nation's productive forces and its full human potential.

(Brandt, 1980: 23)

In other words, development strategy should not be predicated upon ever expanding economic growth or GDP. The whole world should not use as its model for future prosperity what has occurred in the West. The standard of life is not the same as the quality of life. Development should focus on enhancing the latter, should be more about well-being than the relentless accumulation of material products, and each region with its own ecological and cultural heritage should be able to chart its own distinct and distinctive path. In many ways the Brandt Commission Report echoed the work of the International Foundation for Development Alternatives (IFDA) which published, also in 1980, Dossier No.17, *Building Blocks for Alternative Development Strategies*, stating:

The development *problematique* can thus be defined in an objective way: the society, its economy and polity, ought to be organized in such a manner as to maximize, for the individual and the whole, the opportunities for self-fulfillment. Developing, as the etymology suggests, means removing the husk – that is overcoming domination; liberating; unfolding. Development is the unfolding of people's individual and social imagination in defining goals, inventing means and ways to approach them, learning to identify and satisfy socially legitimate needs. . . . To develop is to be, or to become. Not to have.

(IFDA, 1980: 10)

Thus wealth and development took on a qualitative as well as a quantitative aspect. Material and spiritual poverty both need to be addressed. In 1983 work started on a major study by the World Commission on Environment and Development (WCED) that would firmly establish sustainable development as the most significant concept and practice of our time. In 1987 the results were published as *Our Common Future* (the Brundtland Report). More than half of the Commission were representatives from developing countries, ensuring that global environmental concerns would not overwhelm the desire to eradicate problems of human need and poverty. Unlike Brandt, Brundtland did offer a definition of *sustainable development*: 'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987: 43).

This definition is still commonly used, despite it attracting serious criticisms for suggesting that economic growth, industrial modernization and market imperatives should be key drivers and goals for all nations. Whereas the industrialized North seemed to be, and in many ways still is, concerned with environmental impacts, the issues confronting the majority South included poverty, health, income, agricultural sustainability, food security, educational opportunity and achievement, shelter, sanitation, desertification and armed conflict. Nevertheless, the Brundtland Report did tacitly recognize the internal contradictions within the concept when it stated:

[Sustainable development] contains within it two key concepts:

- 1 The concept of 'needs', in particular the essential needs of the world's poor, to which over-riding priority should be given.
- 2 The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

(WCED, 1987: 43)

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Although acknowledging that its analysis and recommendations were specifically rooted in the 1980s, *Our Common Future* concluded its outline of sustainable development by stating that its realization also required:

- a political system that secures effective citizen participation in decision-making;
- an economic system that is able to generate surpluses and technical knowledge on a self-reliant and sustained basis;
- a social system that provides for solutions for the tensions arising from disharmonious development;
- a production system that respects the obligations to preserve the ecological base for development;
- a technological system that can search continuously for new solutions;
- an international system that fosters sustainable patterns of trade and finance; and
- an administrative system that is flexible and has the capacity for self-correction.

(WCED, 1987: 65)

The 1992 Rio Earth Summit and after

Five years later, in 1992, the UN Conference on Environment and Development, the follow-up to Stockholm, was held in Rio de Janeiro. This meeting, known as the Earth Summit, produced a number of agreements, including the Rio Declaration on Environment and Development, the Framework Convention on Climate Change, the Convention on Biological Diversity, a non-binding Statement on Forest Principles, and the hugely cumbersome but nonetheless important agreement known as Agenda 21 (Grubb *et al.*, 1993).

The Convention on Biological Diversity (CBD) and the negotiations before and after the 1997 Kyoto Protocol on climate mitigation are two important examples of multilateral environmental agreements (MEAs). Maintaining biological diversity is key to maintaining the planet's overall health. Healthy ecosystems replenish natural resources, offering all creatures the dynamic equilibrium upon which life depends. If plant and animal species disappear, as they are doing at an unprecedented rate, then monocultures will emerge that are highly susceptible to disease, global warming and other damaging ecological change. Industrialized systems of agricultural production and other commercial activities are creating monocultures, and both governments and corporations officially recognize that such impacts must be mitigated and managed – biological diversity must be conserved, resources must be used more sustainably and the benefits from the planet's genetic resources shared (more) equitably. Following Rio, many national strategies have been based on these broad international agreements, although indigenous peoples and local communities have not always found their inputs accepted when the actual implementation processes are scrutinized closely. Trade and commercial imperatives have led to rather weak attachments to sustainable development. Probably most depressing have been the limited, tortuous and hesitant agreements around Kyoto – so far the only international, legally binding agreement on climate change. The parties involved agreed to a 5.2 per cent reduction by 2012 in greenhouse gas emissions relative to 1990 (8 per cent for the EU) and this was seen

by many, even in 1997, as painfully inadequate, not least because developing nations like China were not included. The conversion of specific sources of pollution into tradable commodities through emissions trading was also allowed with the biggest entitlements and benefits going to the worst polluters. The biggest per capita emitter of all, the US, refused to accept even this and it was not until 2002 that Russia and Canada ratified the Kyoto Protocol, finally bringing the treaty into effect in 2005. At the 2007 G8 summit in Germany, the American administration of George W. Bush did recognize the reality of human induced climate change but nonetheless still refused to endorse international action to significantly curb emissions. However, towards the end of 2007, the US hosted its own international conference on climate mitigation and reluctantly agreed to support, albeit unspecified, climate reduction targets at the United Nations sponsored climate conference held in Bali that December.

Issues of climate change, global poverty, economic inequality and water shortage also highlight the significance of gender in sustainable development. Although much NGO attention has focused inevitably on the appalling inequalities and hardships many women experience, gender issues cannot be separated from wider social, cultural or environmental concerns, which sometimes seems to be the case. The Women's Environment and Development Organization (WEDO) has campaigned vigorously to combat the intergovernmental blindness to the gender implications of environmental policy and actions. Global climate change negotiations, including the Kyoto Protocol and the reports of the United Nations' Intergovernmental Panel on Climate Change (IPCC), concentrate almost exclusively on reducing greenhouse gas emissions, largely ignoring the wider social and gender impacts. By 2007, only:

four out of the fourteen National Adaptation Plans of Action that have been submitted to the global climate change convention specifically mention the importance of gender equality. The MDGs set out global benchmarks on gender equality, poverty eradication and environmental sustainability, although national reports have so far neglected to seriously address the linkages between these areas.

(WEDO, 2007: 3)

A United Nations Environment Programme (UNEP, 2006) survey, 'Gender mainstreaming among environment ministries', discovered that just two countries involved in climate change activities had incorporated a gender perspective. However, as well as arguing that women often suffer disproportionately from unsustainable development, UNEP frequently promotes women as important agents for community empowerment, social leadership and positive change. As the World Conservation Union has shown (IUCN, 2007), communities often cope more effectively during natural disasters when women play a leadership role in early warning systems and post-disaster reconstruction than when they do not. The IUCN also notes that women's local knowledge and skills offer tangible benefits such as the Inuit women of Northern Canada having a deep understanding of weather conditions because of their traditional responsibility for evaluating hunting conditions. When a drought occurs in the small islands of Micronesia, local women who have a sound knowledge of island hydrology find potable water by digging new wells. WEDO (2007: 3) adds that women tend to share information related to community well-being, choose less polluting energy sources and adapt more easily to environmental changes when their families' 'survival is at stake'.

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The forty chapters of Agenda 21 offer an action plan for sustainable development, integrating environmental with social and economic concerns, and articulating a participatory, community-based approach to a variety of issues, including population control, transparency, partnership working, equity and justice, and placing market principles within a regulatory framework. Local Agenda 21 (LA21), its local realization, was and remains not legally binding, although by the end of 2000 many countries, including the UK, had policies and frameworks for sustainable development at local and regional levels, with municipal governments in many countries taking a strong lead. In those, particularly Scandinavian countries where local government has a considerable degree of autonomy to raise income locally and regulate environmental matters, LA21 has been most successful. However, throughout the world, even though local government priorities and powers may differ, global structures of economic, financial and political power, which include support for the neoliberal free-trade system, have compromised attempts to fashion sustainable development from the bottom up. The local cannot be disassociated or disconnected from the global, conceptually or practically. Nonetheless, the LA21 process continued with, from 2002, Local Agenda 21 turning into Local Action 21. In 2004 the Aalborg Commitments (CEMR/ICLEI, 2004) was published, showing many local authorities within the European Union to be firmly embracing the need for urban sustainability and good governance.

Rio was, despite all the compromises and shortfalls, a significant achievement, which over the years, has gained in stature and authority, not least, and somewhat paradoxically, because of the reluctance of the US to accept sustainable development policies, its frequent refusal to recognize the importance of the precautionary principle as a guide to environmental law, the necessity of reaching global agreements on cutting greenhouse gas emissions and its continuing support for neoliberal economic globalization. Also, again somewhat paradoxically, the fact that the Rio Declaration was seriously criticized by many radical green groups made its achievement all the more valuable and symbolic. For instance, *The Ecologist* magazine published a sharp critique, *Whose Common Future?* (*The Ecologist*, 1993), in which the Editor, Edward Goldsmith, noted that the real question is not how the environment should be managed, but *who* should manage it and in *whose* interest. We may share one planet, but we do so in an unequal and frequently unjust way. In addition, poverty is not the absence of a Western lifestyle and neither is it the cause of environmental degradation, rather it is a consequence. Globalized neoliberal economics and free trade will destroy cultural and biological diversity, not conserve it. Pollution and other externalities are caused, not cured, by modernization and development, and global environmental management, technology transfer and World Bank-financed infrastructure projects (for example, US\$50 billion for 500 dams in 92 developing countries) reinforce the economic and political hegemony of the developed nations, notably the US, the big corporations and international financial agencies (Baker, 2006), while leading to further environmental and social problems. There is much evidence to support these assertions. After serious protests and much adverse publicity, in part due to the relentless campaigning of the Booker Prize-winning novelist Arundhati Roy, the World Bank reviewed its commitment to the highly controversial Narmada Dams project in Gujarat and Madhya Pradesh in India, admitting that it was likely that one million people would be adversely affected through displacement and/or loss of livelihood by the project. The Bank withdrew its support but, as will be seen in [Chapter 6](#), this was not the end of the story.

Ten years after Rio, in 2002, the Johannesburg Summit reviewed the decade's progress. The tensions apparent in 1992 remained, with the ideas and values of market liberals and institutionalists still dominating. Although the final Declaration noted that global disparities in wealth and environmental degradation now risk becoming entrenched and that, unless the world acts in a manner that fundamentally changes the lives of the poor, these people may lose confidence in democratic systems of government, seeing their representatives as nothing more than sounding brass or tinkling cymbals, as stated in Paragraph 15 of the 2002 Johannesburg Declaration on Sustainable Development (UN, 2002a). Little was said about financing international development, although in the same year, at an International Conference on Finance for Development in Monterrey, north-east Mexico, a consensus was reached on financing sustainable development, fostering health and education, providing shelter, eradicating poverty and sustaining economic growth. The role of trade and overseas development aid, the importance of debt reduction and good governance in the developing world, and the mobilization of national economic resources and external investment were directly addressed. Economic crises underscore the importance of effective social safety nets (UN, 2002b).

For many anti-globalization protestors who had earlier demonstrated against the extension of the free trade rules of the WTO in Seattle, the Johannesburg Summit was also a disappointment, despite a few positive advances. Economic insecurity was recognized as affecting human well-being, and globalization itself was recognized as a new challenge for those advocating sustainable development. And, despite all the criticisms, disappointments and missed opportunities, the intense diplomatic activities did achieve a number of important things, not least a recognition that sustainable development at a global level has led to, and requires, policies, procedures and principles supporting intergovernmental cooperation and a global civil society that will check, monitor, promote and campaign for change in the face of official reluctance, indifference or denial, and some acute crises in the global economy.

Thus the first fifteen years of the twenty-first century has seen economic and financial crises and limited progress with regard to sustainable development. In December 2009 a major climate conference was convened in Copenhagen to decide the successor to Kyoto, but no legally binding treaty emerged from the tortuous negotiations that were frequently deadlocked. China, India and the United States were each in turn blamed for the conference failure by politicians from other nations, international NGOs and media commentators. However, delegates did agree that global warming should not exceed two degrees centigrade but set no actual targets for cutting emissions. As Benito Muller (2010: ii) of the Oxford Institute for Energy Studies wrote, the real culprits were not the negotiators at Copenhagen but '*a lack of political will and leadership*' during the months leading up to the Conference to engage in real negotiations'. However, over the next few years talks continued at Cancun, Durban, Bangkok, Bonn and in November–December 2012 in Doha, Qatar. A number of documents were produced at Doha, collectively known as The Doha Climate Gateway, which extended the Kyoto protocol to 2020 but limited the scope of global carbon emissions to 15 per cent because Japan, Russia, Canada and the US did not participate and because China, India and Brazil were classified as developing nations at Kyoto and are consequently not subject to these emissions reduction targets. Climate campaigners and others reviewing these negotiations have frequently expressed their exasperation and frustration. In 2011 Kevin Anderson

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and Alice Bows published a paper for the Royal Society in the UK warning that there was ‘no chance’ of keeping global warming below 2°C and in any case recent studies relating to the impacts associated with such a rise have been revised upwards from ‘dangerous’ to ‘extremely dangerous’. Consequently, Anderson and Bows write: ‘with tentative signs of global emissions returning to their earlier levels of growth, [the year] 2010 represents a political tipping point’ (2011: 41).

Ten years further on and despite the high expectations, there were many disappointments with the Rio+20 conference too. Although progress since the first Earth Summit in 1992 was carefully evaluated, commemorated and celebrated, there were no new agreements or targets in 2012 but plenty of ‘reaffirmations’ and ‘recognitions’ in the final published document *The Future We Want* (United Nations, 2012: para 19 [p. 4]). Indeed, the clear admission expressed in the statement ‘we emphasize the need to make progress in implementing previous commitments’ indicates both why and how so many delegates felt so deflated with the conference outcomes. Much of the debate was polarized around the meaning of the ‘green economy’, which for many seemed to coalesce around the desire for green energy technologies rather than defining the need for a new economic paradigm that favoured social equity and quality of life above economic growth. UNEP, for example, clearly advocated and advocates a series of policy prescriptions characterized by the key principles of ecological modernization, the low carbon economy and eco-efficiency. At a moment when the global economy was experiencing considerable stress as a result of the serial failures of finance capitalism, the Rio+20 vision for the future was hesitant, modest and accommodative:

In this regard, we consider green economy in the context of sustainable development and poverty eradication as one of the important tools available for achieving sustainable development and that it could provide options for policy making but should not be a rigid set of rules. We emphasize that it should contribute to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth’s ecosystems.

(United Nations, 2012: para. 56 [p. 9])

No wonder, then, that the defensive concept of ‘resilience’ seemed to hold centre stage, being referred to on thirteen separate occasions in the summit’s outcomes document (Blewitt and Tilbury, 2013). Having said that, if progress was made at Rio in 2012 it was in acting on the recognition that no single assessment matrix for sustainable development had been previously devised and accepted. Thus it was decided that an immediate task for the future was to fashion a set of sustainable development goals (SDGs), which in effect would supersede the Millennium Development Goals (MDGs) formulated at the turn of the century (see p. 31 for a discussion on MDGs). These goals would be action orientated, concise, easy to communicate, limited in number, aspirational, global in nature and universally applicable to all countries. In January 2013 a thirty-member working group of the UN was tasked to devise a proposal on the SDGs, which would then be integrated into the UN’s post-2015 development agenda. An IIED (International Institute for Environment and Development Policy Paper published in March 2013 (Geoghegan, 2013) outlined a number of possible principles and approaches to help the process move forward.

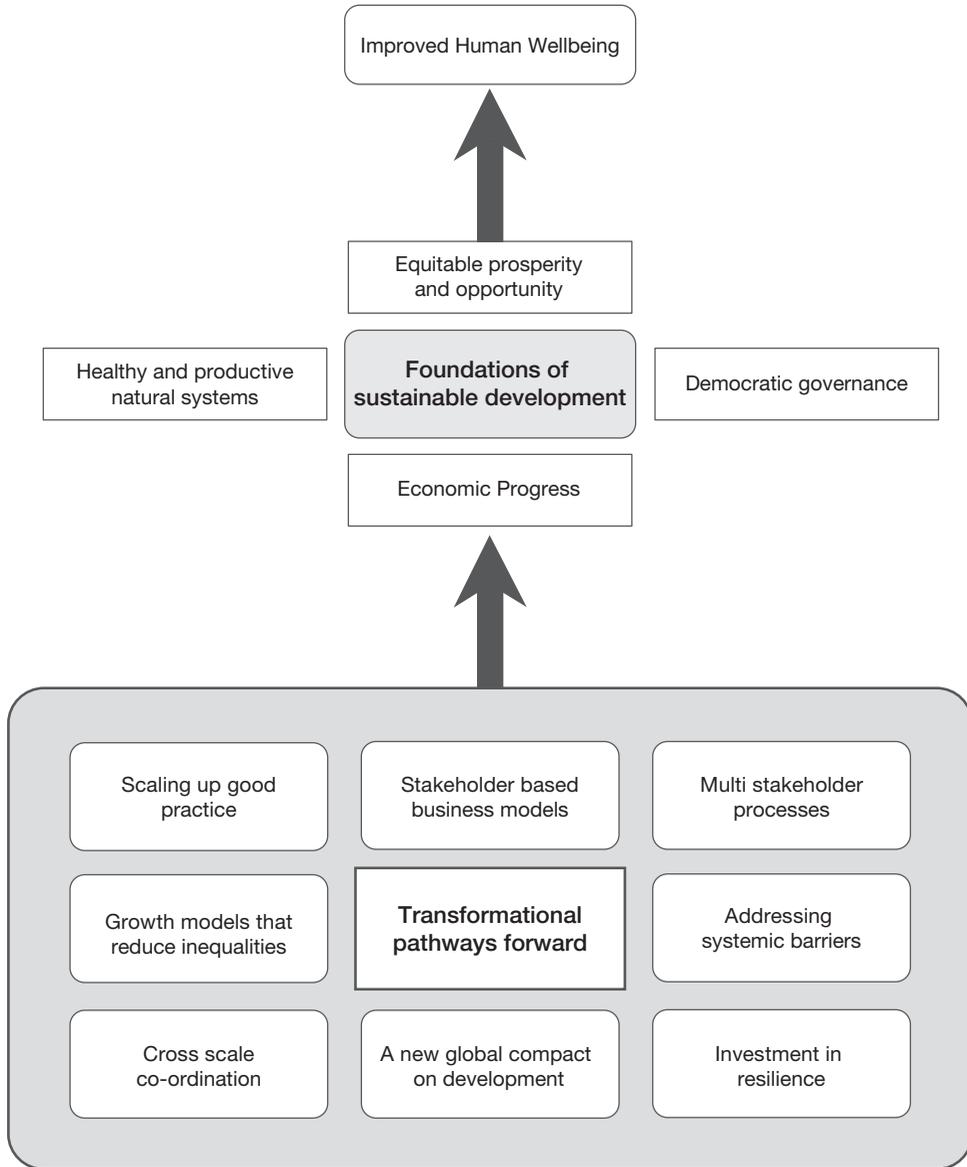


Figure 1.1 The foundations for the post-2015 sustainable development process
Source: Adapted from Geoghegan, 2013: 4.

Although there were some activist protests as well as internal disagreements among negotiators at Rio in 2012, there were little, if any, popular protests or street-based discontent with the outcomes in the world's major cities as the predominant concern for most people in the world was squarely with the economic. Financial austerity in Europe, the increase in global unemployment and in social inequality concentrated many people's minds on looking for genuine alternatives to the present order of things and ways of being. The Occupy movement and a renewed interest in alternative forms of political and economic organization did take to the streets in many of the world's global cities. As Indian activist and novelist Arundhati Roy said at the end of her 2003 *Confronting Empire* (Roy, 2003) speech at the World Social Forum in Porte Alegre, for a moment it seemed for some at least that just perhaps, 'Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing.' But it wasn't breathing at Rio in 2012.

Sustainable development and the question of spatial scale

Sustainable development is about protecting and conserving the planet's natural environment and promoting social equity and a degree of economic equality within and between nations. This can be conceptualized as a process of convergence so the question of spatial scale is a necessary element in any serious thinking and action, designed to make our world a better place. It is possible to conceive of scale in ecological and socio-political terms (Grainger, 2004):

Table 1.1 Ecological and socio-political scales (adapted from Grainger, 2004)

<i>Ecological scale</i>	<i>Socio-political scale</i>
Biosphere	World
Biome-type	Supranational regions
Biome	State
Landscape	Region
Ecosystem	Locality 1: city, town
Community	Locality 2: village, community, neighbourhood
Population	Household
Organism	

Institutions and organizations operate at many different levels. The United Nations and the World Bank are large international bodies operating on the global scale and through their various projects shape the lives of people in specific communities and households. These bodies may develop and implement policies, treaties and actions that affect all ecological scales. The European Union operates at a supranational level and the Environmental Protection Agency in the USA operates at a national level but its effects may be experienced far wider. And there are countless numbers of community groups, businesses, and formally or informally structured activist organizations that operate at the very smallest scales. National or neighbourhood campaigns to reduce, recycle or reuse will ultimately rely on individual households and citizens wanting to conduct themselves in a more sustainable manner. Complementing, and perhaps complicating, this further are the various 'capitals' dispersed across the planet on a variety of spatial scales. When we consider the possible conditions – strong, weak or very weak – it may become very difficult to see some