PART I

Overview and Context

1 | *Sustainability: exploring the processes and outcomes of governance*

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Process and outcome: an introduction

The concept of sustainable development commands wide, almost universal, support. The idea of sustaining human development resonates with strongly held convictions in every society about the present and the future. It does so, in large part, because as individuals we tend to be instinctively averse to losing anything. Indeed, social scientists tell us that most people are much more averse to losing than they are open to the possibility of gaining. Hence we do not wish, either collectively or individually, to lose what we already have in our environment and society. But ever since the principle of sustainable development was first articulated (for example in *Our Common Future* by the Brundtland Commission in 1987), promoting human wellbeing while simultaneously conserving the natural environment has proven to be highly elusive.

In fact, the more that society has sought to develop more sustainably, the more it has come to realise the immensity of the change it implies for human societies. Sustainable development – or sustainability (we regard the two as being synonymous) – challenges us to understand the nature of the natural resources on which we ultimately depend. But it also challenges us to articulate and act on the values that are inherent in our relationship with nature. We meet both these challenges through the institutions that allow collective action in governing the environment and our relationship to it. Both the processes and outcomes of these relationships are critical.

The very acute feeling, powerfully expressed in the *Report of the World Summit on Sustainable Development* (United Nations, 2002) and the *Millennium Ecosystem Assessment* (2005), that things have got worse – not better – in the two decades since the Brundtland Commission, has re-strengthened the demand for systems of governance that are capable of putting society on a more sustainable track.

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Sometimes the demand is for more 'sustainable governance' (ECFESD, 2000); sometimes, it is for 'governance for sustainable development' (Ayre and Callway, 2005; Newig *et al.*, 2008). Others have called for 'reflexive governance for sustainable development' (Voss *et al.*, 2006). And still others have promoted grand ambitions such as 'earth system governance' (Biermann, 2007) or 'global environmental governance' (Speth and Haas, 2006). But the sentiment underlying all these usages remains the same: governance matters and will continue to matter enormously if there is to be any realistic prospect of an orderly transition to sustainability.

Sustainability is elusive because of the nature of global economic forces and the uneven distribution of political power. The world is in thrall to the carbon economy as never before, driving unprecedented environmental change through the consumption of resources and water and the degradation of land. The carbon economy and the location of the effectively dwindling stocks of oil also continue to drive geopolitical instability. The power of states and governments has been harnessed to promote capitalism through trade blocs and agreements and through capturing influence over oil and other resources. While Harvey argues that governments and capitalism often exercise their logic of power to different ends, it is clear that the 'new imperialism' (Harvey, 2003), focused on influence over resources such as oil, is antithetical to sustainability. Governing sustainability may be a distinct and radical opposing force to this imperialist logic. (But it is, however, easy to be despondent when sustainability often appears to be a sideshow.)

There is no mystery about sustainability. At its core, sustainability is a state whereby what is to be sustained – i.e. human development – is genuinely sustainable in the long term. Sustainability is therefore an outcome with universal appeal. The issue becomes more controversial when we ask: precisely what should be sustained? Environmental sustainability suggests sustaining aspects of the natural world, ecosystems, and natural and cultural heritage in a manner that means that they are sacrosanct or certainly that they take precedence over other material goals such as economic growth. It becomes even more controversial when we ask: how should these things be sustained? That is, how should the process of moving towards greater sustainability be governed?

In this book we refer to sustainability as a process of change in the way that society is organised. In particular, we are interested in how

human societies have sought to alter the myriad ways in which they exploit the world around them in line with the ecological principle of sustainability. The simultaneous desire for economic growth and environmental protection and social harmony has always lain at the heart of environmental politics and policy making. Brundtland tried hard to address the tensions between them by 'sending out the intuitively appealing message' that sustainability is possible (although far from easy) (Carter, 2007: 207–8).

Our Common Future succeeded incredibly well in popularising this particular interpretation of sustainability, creating a 'veritable industry of deciphering and advocating' in relation to its meaning and implementation (Kates *et al.*, 2005: 11). These discussions have helped to bring about and inform governmental conferences, the first held in Rio in 1992 and another in Johannesburg in 2002, which powerfully re-affirmed sustainable development as an overarching objective of human development.

Despite widespread support, debates abound as to whether sustainability is a well-honed principle, a concept, a positive vision, a normative idea or a discursive construct (for example, Lele, 1991; Meadowcroft, 2000; Dryzek, 2005; Kates *et al.*, 2005). In this book, we do not aim to close this debate, were such a thing possible or desirable. Rather, we argue that sustainability has at least two important dimensions which are relevant to the way in which it is governed: the first is concerned with outcomes, the other with processes.

By *outcomes* we mean the overall quality or sustainability of human wellbeing and the ecosystems on which it ultimately depends. The way in which this line of thinking was developed in the Millennium Ecosystem Assessment – the four-year-long scientific appraisal of the condition of the world's ecosystems (Millennium Ecosystem Assessment, 2005) – is illuminating. In its all-encompassing framework, sustainability was seen to depend not only on the materials necessary for a good life, but also on good social relations and, implicitly, on the relationships between individuals and societies and their natural environment. Crucially, the way in which humans perceive, value, and experience environmental loss was seen to be just as important as the absolute scarcity of resources or the quality of human life.

This takes us directly to the second important dimension of sustainability: how the *process* through which we engage with our environment and the rest of society is shaped and directed – or

governed – in ways that determine the future of both. A process-centred dimension is intimately bound up with the whole notion of *governing*, namely those activities which make a 'purposeful effort to guide, steer, control, or manage sectors or facets of societies' (Kooiman, 1993: 2). The basic claim that process – and hence governance – matters, has received growing support right across the social sciences, in relation to issues as diverse as equity, vulnerability, social exclusion, wellbeing and happiness (Frey, 2001; Satterfield *et al.*, 2004; Layard, 2005). Simply using the natural world wisely and within limits is not sufficient to ensure individual or collective sustainability. If we ignore social marginalisation, vulnerability and the uneven distribution of benefits from human development, then we risk sowing the seeds of future conflict and witnessing the breakdown of collective responsibility. In other words, the processes of decision making directly affect the sustainability of their outcomes.

However, the claim that 'process matters' is likely to be an anathema to those who analyse sustainability from a more natural science or economic perspective, where the focus tends to be much more firmly on the objective identification and measurement of outcomes. For example, in the natural sciences, the most fundamental limits to human development are essentially seen to be biological and physical in nature; beyond these, any further decline is predicted to be catastrophic and potentially irreversible (e.g. Lenton *et al.*, 2008). Economists have tried to capture this thinking in notions such as critical natural capital and safe minimum standards.

But Bromley suggests that by focusing exclusively on physical or biological system characteristics, economists and natural scientists risk heading into a conceptual *cul de sac*. They need to recognise that there are in fact 'two realms: human interaction with nature and human interaction with others with respect to their interaction with nature' (Bromley, 2005: 201). In other words, the separation of humans from nature, and even the domination of nature inherent in many world views (White, 1967), ignores the immediacy and pervasiveness of social and ecological interactions. These distinctions between how society acts and how nature responds are both arbitrary and unhelpful (Berkes and Folke, 1998).

Governance is therefore intimately connected to the notion of sustainability, which in turn is 'a political concept, replete with governance questions' (Farrell *et al.*, 2005: 143). But what sorts of questions

might these be? Two in particular stand out. The first is deceptively simple but goes back to our distinction between process and outcome-centred approaches: what is sustainability? Brundtland was very careful to present it in only the most 'general terms' (WCED, 1987: 46), more as a set of guiding (and very often contradictory) sub-principles and values, than a fixed blueprint to be universally and uncritically applied in all contexts. Some have argued that this ambiguity represents the term's greatest weakness (e.g. Lele, 1991). But, for others, sustainability is not an 'objectively determinate quantity' (Stirling, 1999: 112): 'the creative tension between a few core principles and openness to re-interpretation and adaptation to different social and ecological contexts' provides it with the elasticity needed to remain enduringly relevant (Kates *et al*., 2005: 20).

The second governance-related question is: how is sustainability put into effect? Sustainability will not just happen in a natural or pre-ordained manner. It needs to be carefully thought about, deliberated over, and eventually implemented. These processes of deliberation, argumentation and discussion are constitutive of governance. Brundtland was generally agnostic about whether sustainability should be pursued through hierarchical, market or more networked modes of governance; it considered this to be just the kind of question that particular communities and jurisdictions should work out for themselves.

But clearly the choice of which governing mode or instrument to apply will never be entirely open or value-free, given that existing governance systems are themselves deeply implicated in unsustainable patterns of development. Similarly, systems of governance are in a state of unprecedented flux, for all sorts of reasons associated with processes of economic globalisation, urbanisation and demographic change, mass communication and the challenges of new technologies (Young *et al*., 2006). Any attempt, therefore, to select a particular instrument or mode for a particular sustainability-related task is fraught with difficulty.

The remainder of this chapter seeks to explore the role that governance plays in how society addresses these two questions. The next section explores the meaning of sustainability in a little more detail, identifies its most critical sub-principles and values, and discusses what they imply for their governance. The third section examines what is meant by governance, a term which has enjoyed

enormous attention right across the social sciences as well as in wider society, but which is not always used consistently or in an empirically informed way. To clarify this situation, we set out three different interpretations – theoretical, empirical and normative – and explain how they connect back to the distinction we have drawn between sustainable development processes and outcomes. The fourth section explores the relationship between governance and sustainable development, both empirically and conceptually, and the final section draws together the main themes of our argument in the context of the remainder of this book.

What is sustainable development?

The Brundtland Commission popularised the term sustainable development, but did not coin it. It first rose to prominence in the 1980 *World Conservation Strategy* but its roots go much further back. What Brundtland did was re-launch it in a way that substantially broadened its appeal. It did so by demonstrating how sustainability is a common challenge for both the countries of the industrialised North and the less affluent South. The title – *Our Common Future* – was deliberately chosen to emphasise that the world was suffering from common and interlinked problems, namely chronic poverty in the South and mounting social and environmental concerns in the North. Instead of talking about trade-offs between the three pillars of sustainable development – society, the economy and the environment – after Brundtland, the search intensified for synergies between them.

In 1987, Brundtland famously defined sustainable development as: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987: 43). But the definition also emphasised the centrality of two further key concepts:

- the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of the technology and social organization on the environment's ability to meet present and future needs (WCED, 1987: 43)

It is pointless searching for a precise definition of sustainability. To do so would be counter-productive because, as Hajer (1995: 14) has

argued, the coalition for sustainability would quickly dissolve if it was ever defined more precisely than this. It is striking that none of the chapters in this book go that far beyond the baseline definition quoted above. In this book we explore how the term is used by actors operating in different contexts to realise their objectives (see also Dryzek, 2005: 146–7), this being the essence of Brundtland's own interpretation of sustainable development. For Kates *et al.* (2005), this malleability:

allows it to remain an open, dynamic and evolving idea that can be adapted to fit ... very different situations and contexts across space and time ... its openness to interpretation enables participants at multiple levels ... within and across activity sectors ... to redefine and re-interpret its meaning to fit their own situation.

This process of redefinition and interpretation is, as the chapters of this volume reveal, mostly concerned not with pinning down the exact meaning of sustainability *per se*, but with exploring the interplay between different *sub-principles* of sustainable development in different decision-making situations. These include the following: inter- and intra-generational equity; poverty alleviation; public participation in decision making; technological and environmental limits to growth; environmental policy integration, etc. This list was subsequently extended and further elaborated in a number of internationally endorsed documents, including the Rio Declaration and, of course, Agenda 21.

Of these, the notion of limits has always remained centre stage. The idea that, globally, we are living beyond our means was first popularised by the *Limits to Growth* report in 1972. Meadows *et al.* (1972) predicted that global ecological constraints in the form of resource availability and pollution loading would have a significant constraining effect on human development in the twenty-first century. The notion of carrying capacity has, of course, always had a central place in conservation biology, being a central feature of Hardin's (1968) treatise entitled 'The tragedy of the commons', in which he showed how open-access resources tend to be depleted beyond their carrying capacity.

There are, of course, those who dispute the very idea that there are immutable limits to human development. These criticisms focus both on the scientific credibility of any attempt to measure limits, and on the ability of human ingenuity to overcome them if some types

of production and natural assets are substitutable for each other. But the technological route to sustainability is fraught with danger. In their update to *Limits*, Meadows *et al.* (2005) discuss the role of technological adaptations, suggesting that the more successfully society delays the constraining effect of limits through economic and social adaptations, the more likely it is to run into several at the same time.

The debate concerning limits has fundamentally changed in the period since the publication of *Our Common Future*. Concerns about resource scarcity have gradually given way to a greater understanding of the interdependencies between earth systems and the potential surprises and feedbacks caused by the tendency to use the environment as a sink. These have emerged as the focus of an emerging trans-discipline known as earth system science. The feedbacks and thresholds are manifest most clearly in relation to climate change at the global scale (Schellnhuber *et al.*, 2006), as well as in the emergence of new infectious diseases, land use and cover change, and a range of other unforeseen global changes leading to large-scale unsustainability and societal conflict. These types of disruption were also identified by Diamond (2004) in his much more social science account of the factors that triggered the collapse of ancient societies.

These sub-principles can, and often do, conflict sharply with one another, hence the need for systems of governance to arrive at co-ordinated policies. Indeed, systems of governance can and should be configured in ways that not only encourage and facilitate societal dialogue, but also transform attitudes and beliefs in ways that actively promote sustainability (Newig *et al.*, 2008; Voss *et al.*, 2006).

What is governance?

Governance is a term in good currency, but it is often used very loosely to refer to a host of what can in practice be very different things. The combination of conceptual vagueness and loose application has certainly boosted the term's popularity, but it has also raised questions about its utility (Kohler-Koch and Rittberger, 2006: 26). There are, we believe, three key points to understand about governance. Firstly, and most importantly, governance is not the same as governing. In the first section we explained that governing refers to those social activities which seek to 'guide, steer, control, or manage'

societies (Kooiman, 1993: 2). Governance, on the other hand, describes the patterns that emerge from the governing activities of diverse actors that can be observed in what is deemed acceptable norms of behaviour, and divergent institutional forms (Ostrom, 2005).

Second, governance is not the same as government: while government centres on the institutions and actions of the state, the term governance allows non-state actors such as businesses and non-governmental organisations (NGOs) to be brought into any analysis of societal steering (Lemos and Agrawal, 2006: 298). What encourages so many social scientists to use the term governance instead of government is its ability to 'cover the whole range of institutions and relationships involved in the process of governing' (Pierre and Peters, 2000: 1).

Third, governance is not tied to a particular period of time or geographical place: it is a concept that travels easily across these analytical categories. In fact, its lack of geographical specificity has allowed scholars to examine aspects of governance operating at totally different spatial scales – international, national and sub-national – or even across many scales (Bache and Flinders, 2004; Cash *et al*., 2006).

It is fair to say that at first, the literature on governance was 'eclectic and relatively disjointed' (Stoker, 1998: 18). But by the 2000s it had consolidated around two core meanings (Pierre and Peters, 2000: 24) – the first theoretical and analytical and the other more empirical. The conflation of these two has proven to be a constant source of confusion, as the term has been used both to describe different empirical phenomena *and* to explain why they occur. This is not surprising: many of the theories and analytical frameworks have themselves emerged out of, and been informed by, empirical observations. Nonetheless, it is perhaps more accurate to speak of three major governance discourses.

Discourse I: the empirical phenomenon of governance

Analysts have seized on the term governance to try and capture important phenomenological changes in the processes of governing. In particular, governance is now widely used as a shorthand phrase which encapsulates the changing form and function of the state in contemporary industrialised societies, specifically its diminishing size and its increasing tendency to deploy less coercive policy instruments.