1. Introduction to the *Handbook on the Governance of Sustainable Development*

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Sustainable development is the pathway to the future we want for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship and strengthen governance. (Ban Ki Moon, 2013)

The full realization of the Sustainable Development Goals and other internationally agreed development objectives strongly depends on a common understanding of the basic principles of effective governance for sustainable development. (Bouckaert et al., 2018)

**INTRODUCTION**

The *governance approaches* by which we might achieve *sustainable development* is an important agenda in global research, policy and action. This field spans many disciplines including politics, public policy, international relations, sociology, development studies, environmental science and human geography. It is, thus, a truly rich and interdisciplinary research and practice area. Both sustainable development and governance are rather nebulous concepts, which has led to multiple approaches in both the academic and policy worlds to try to theorise, conceptualise and operationalise their relationships. Moreover, the scholarly tradition is greatly shaped by the different aforementioned disciplinary and related interdisciplinary perspectives used to unpack sustainable development governance. While specific conceptual or theoretical perspectives and particular empirical concerns characterise the different disciplines, they feature overlaps and use similar methods to study the governance of sustainable development.

This book brings together a global authorship of experts within these fields to explore different dimensions of sustainable development governance. In so doing, it outlines key theoretical developments, core research topics and empirical findings related to sustainable development governance and scopes out the state of the art in the field.

**HISTORY OF SUSTAINABLE DEVELOPMENT**

Concerns around the human impact on the global environment became prominent in the 1960s, primarily on the basis of Malthusian concerns around the impact of global population growth on food and environmental security. The discourses were very
much based on a ‘limits to growth’ narrative with a primary focus on limited population growth, although with some notional acknowledgement that economic growth may also have its limits. These arguments are best epitomised in the Club of Rome Report in 1972 (Meadows et al., 1972), which was a landmark intervention that attracted global attention. Beyond concerns about population, other concerns about the impact of human activities on the environment emerged on the back of prominent publications such as Rachel Carson’s *Silent Spring* in 1962, which catalogued the impact of accumulation of the pesticide DDT in birds which could significantly weaken egg-shells, thus impacting on reproduction. During the late 1960s and into the 1970s concerns about the impacts of economic development on the environment began to become more established in international politics, with the notable establishment of the United Nations (UN) Environment Programme in 1972.

In the late 1970s, among other things, scientists started to become concerned about the impact of chlorofluorocarbons used in refrigerants and Styrofoam packaging on the stratospheric ozone layer which protects lifeforms from harmful UV solar radiation. On the back of these concerns, an international process began in the early 1980s, with the first UN international negotiations on ozone-depleting substances starting in 1982, culminating with the signing of the Montreal Protocol to ban the use of ozone-depleting substances in 1987. In the same year, the UN-sponsored report *Our Common Future* (commonly known as the Brundtland report named after the former Norwegian prime minister Gro Brundtland who chaired the committee) provided a landmark international policy statement on sustainability and shaped much of the subsequent policy discourse on sustainable development from the local to the international. The report was commissioned on concerns that economic growth was undermining the sustainability of the environment and sociality. It 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: chapter 2).

Crucially, therefore, *Our Common Future* established the link between economic development and environmental degradation and how this may undermine social well-being both in future and current generations. In so doing, it also outlined the goal of decoupling the link between economic growth and environmental destruction so that both economic and environmental prosperity could be achieved (the so-called ‘environmental Kuznets curve’) (Jordan, 2008). Moreover, *Our Common Future* started to spell out some of the implications for how we govern society in a more sustainable manner: ‘Those responsible for managing natural resources and protecting the environment are institutionally separated from those responsible for managing the economy. The real world of interlocked economic and ecological systems will not change; the policies and the institutions concerned must’ (WCED, 1987: 310). But beyond this broad implication, no actual blueprint for achieving sustainable development was provided for policy makers (Jordan, 2008).

*Our Common Future* led to a flurry of activity domestically and internationally in the late 1980s and into the 1990s to try to operationalise sustainable development. In the late 1980s national governments started to develop a series of environmental
action plans (Jordan and Lenschow, 2008). Internationally, the 1992 Rio Earth Summit established Agenda 21, an initiative to develop sustainable development strategies in authorities at all levels. This led to sustainable development strategies either replacing or complementing environmental strategies in many nations, so that by 2003 around a third of all countries had some kind of strategy in place (Swanson et al., 2004). Alongside these developments, increasing concerns about anthropogenic climate change became more prominent, leading to the UN setting up the Framework Convention on Climate Change in 1992 in which 154 countries signed up to reduce climate change-inducing greenhouse gas emissions. This process led to the signing of the Kyoto Protocol on climate change which committed leading developed economies (so called annex 1 countries) to greenhouse gas reductions. The rationale of sustainable development was at the core of these developments, because economic growth predicated upon burning high-carbon fossil fuels such as oil, gas and coal was responsible for the problems, and thus there was a need to decouple economic growth from damage to the climate. Moreover, issues of justice and equity were increasingly at the forefront in discussions about who should make the biggest cuts to emissions, impacts on the poorest nations and the rights of future generations.

The 2000s witnessed a period where the explicit pursuit of sustainable development as a single object tended to be less prominent. There were instead continuing efforts to tackle global climate change and the evolution of a number of new initiatives focusing on other critical environmental concerns. Whilst these drew on some of the core principles of sustainable development, they were more focused on specific issues and built upon and developed the underlying foundations. Crucial among these was the Millennium Ecosystem Assessment (MEA) in 2005 which conducted a broad survey of the state of the Earth’s biodiversity and found that globally species extinctions were far higher than the normal background rate of extinction and that, worryingly, this was accelerating. The MEA was a strong proponent of the Ecosystem Approach, which sought more integrated approaches to ecological decision making and built upon sustainable development principles by not only recognising that economic development has tended to undermine the environment and by extension human well-being, but also made a strong case around the importance of healthy ecosystems to economic well-being because of the services provided by ecosystems to economic and social systems, e.g. soil development for food production. Similar principles have also been enshrined in international treaties such as the Convention on Biological Diversity (see Chapter 4 on the historical development of the convention). These approaches also incorporated ideas such as valuing the service provided by nature so that the true value of ecosystems could be better incorporated into decision making. The MEA was followed by national-level assessments, such as the United Kingdom’s (UK) National Ecosystems Assessment from 2011 onwards. The 2008 financial crisis and resulting financial fallout led to the promotion of another approach to more sustainable policy making in the form of a Green New Deal. The Green New Deal sought an approach to recover from the fallout of the financial crisis by public investment in green technologies and jobs, thus again attempting to decouple economic growth from environment destruction while also creating...
employment opportunities in new technologies and economies (Bina and Camara, 2011). The momentum for the Green New Deal soon ran out of steam as economies started to recover and business-as-usual economics prevailed (Russel and Benson, 2014). However, following the recent Covid-19 epidemic, the clamour for a Green New Deal has again materialised with pressure from the left of the Democratic Party in the United States, slogans such as ‘Build Back Better’ in the UK and the European Union’s €1.8 trillion investment in a green recovery plan as part of its Green New Deal Strategy. Moreover, international climate processes have continued during this period, especially with negotiations to replace the Kyoto Protocol which was only initially designed to be in place until 2012. Notably, the largest emitter of greenhouse gases at the time, the United States, failed to ratify the agreement, which massively undermined the effectiveness of the treaty. Moreover, while many countries who ratified the agreement met their Kyoto targets, greenhouse gas emissions continued to rise as it was only the most developed countries that were required to make cuts; rapidly growing economies like China, Brazil and India were not required to make cuts as they were poorer with less developed economies. Following difficulties in agreeing a replacement for the Kyoto Protocol it was extended beyond 2012 until the signing of the Paris Accord in 2015 in which all countries agreed to sign up for national emissions targets with the aim of avoiding dangerous climate change.

THE MEANING OF SUSTAINABLE DEVELOPMENT

As shown in this volume, as the concept of sustainable development has gained traction it has developed in terms of understanding what it means and how it can be promoted. Our Common Future set out the landmark definition of sustainable development and was quite clear about the problematic dimensions of unsustainable development. It also promoted key broad concepts around sustainability such as the interconnectedness of the local to the global, and between different sectors of society and the economy and different environments (as seen in many of today’s environmental and human equity problems) and this requires governing approaches that integrate different levels of decision making (see below and Chapter 9). Another strong aspect of sustainability is the need for partnership and collaboration between the public sector, the private sector, the third sector and citizens, the logic being that sustainable solutions need to encompass all areas of society in an inclusive manner (Glass and Newig, 2019; see Chapter 12).

Science and knowledge play key roles in terms of underpinning sustainable development. These are especially important because of the epistemic uncertainty related to environmental problems (Dunlop, 2014) and the complex interactions between social, economic and environmental systems. This makes understanding the root causes of unsustainable outcomes difficult. Science for sustainability in this context not only requires transdisciplinary and interdisciplinary insights to understand the interactions between complex environmental, social and economic systems, but also requires a conception of science that moves beyond instrumental understandings
where scientists produce and interpret knowledge for policy makers and society to act on (Jordan and Russel, 2014). Indeed, such conceptualisations fail to account for the aforementioned complexity and associated epistemological uncertainty. Instead, it is argued that a more recursive and collaborative approach is needed for sustainability science where scientists and stakeholders co-create knowledge to identify and understand problems and find solutions.

Critically, though, conceptualisations of what sustainable development actually means remain quite ambiguous. On the positive side, this ambiguity leads to a malleability of the concept which allows a wide range of actors to be able to broadly get behind the concept (Dunlop and Russel, 2012). Conversely, on the negative side too much conceptual ambiguity or ‘stretching’ (Sartori, 1970) can lead to a lack of clarity and to meaninglessness. Conceptual stretching runs the risk of the appropriation of ideas by bad-faith actors. And indeed, ‘sustainable’ has been argued by some to have become an empty buzzword to provide a green veneer to destructive initiatives (Helm, 2000). For instance, in the UK, which was widely seen as an early pioneer in implementing sustainable development (Russel, 2007), a parliamentary committee observed that the government was ‘indiscriminately us[ing] it in formulations such as Sustainable Transport, Sustainable Communities and Sustainable Growth’ which are primarily socio-economic concepts (EAC, 2004: para. 2). Moreover, understandings of what sustainable development actually means is very much linked to different world views – it can become a deeply individually subjective notion. Simply, this relates to where implementing sustainable development entails giving principled priority to the environment (see Lafferty and Hovden, 2003), or whether there are inevitable trade-offs that have to be made; at times, non-environmental considerations prevail. Much of this debate hinges on underlying beliefs over whether there are limits to growth related to environmental capacity in a world of finite resources (often coined strong sustainability), or whether environmental functions can be substituted by technological advances on the back of economic development or enhanced social resilience (so-called weak sustainability). Many of the proposed solutions to sustainable development that are actually pursued by governments around the world such as the Green New Deal or policy integration (see Chapter 9) are based on the weaker notion of sustainability with trade-offs and win-wins with little recognition that there may be limits to growth (Baker, 2016). These are often orientated around the concepts and ideas of Ecological Modernisation (Mol and Spaargaren, 2000) whereby sustainability solutions are argued to be best solved through the innovation provided by market competition and associated economic growth. Other approaches such as the circular economy have started to gain increased prominence in the literature and parts of civil society (Hobson and Lynch, 2016) based on the premise that sustainability can only be achieved through imposing limits on economic growth within planetary boundaries (Raworth, 2017); or using human well-being indices and measures instead of economic growth as proxies for the success of societies and polities (Bache and Scott, 2018).
SUSTAINABLE DEVELOPMENT AND GOVERNANCE

The implementation and transformation of the ideas of sustainable development into practice is a critical challenge at global, national and local scales (Baker, 2016). In particular, transforming the good ideas and intentions of the sustainable development framework into national policy has proven especially challenging (Meadowcroft, 2007). Crucially, sustainable development entails significant changes in the way we organise society and behave as citizens (e.g. Lehtonen, 2004; Baker, 2016). In many if not all cases, the national policies for facilitating sustainable development misalign with existing policy frameworks which prioritise consumerism and development activities that are unsustainable. Others have argued that, in fact, it is the inherent breadth, cross-disciplinarity and conceptual nebulousness of sustainable development as a concept (as per Sartori, 1970) that hinders state and citizen transitions towards more sustainable lifestyles and decisions (Fergus and Rowney, 2005; Reid and Schwab, 2006). The transition to sustainable development within states and societies is as much an issue for hearts and minds as it is for policy and statute. The big ideas inherent within sustainable development are intrinsically disruptive to the economic, social and environmental status quo in many (if not all) states. And the transition towards sustainable development as an operational modality for states and societies is simply too broad and nebulous, it requires too many actors and approaches to implement; it instead needs to rely on a wider suite of tools and levers for change. Increasingly it is understood that whilst states, governments and policies have important roles to play in the societal transitions towards it, there is instead a need for a far wider coalition of societal actors and interests to lead the transition to sustainable development trajectories.

The need for a wider coalition of actors to lead disruptive change across cultures, economies and entrenched interests in delivering sustainable development is captured in the notion of ‘governance’ which plays into ideas about the structures and mobilisation of power. In general, the use of governance as a term to describe the transition in citizens and states towards sustainable development is emblematic of a wider societal phenomenon witnessed in recent decades; that increasingly plural and collaborative approaches to the exercise of power are needed in increasingly complex and cross-disciplinary policy areas (Duit and Galaz, 2008). In seeking to define what we mean by governance, simplistically, we can differentiate between government/governing and governance (Palumbo and Bellamy, 2010). Whereas government and governing implies a hierarchical command-and-control exercise of state power to achieve stated ends, governance implies a diffuse, networked and collaborative exercise of power across a multiplicity of actors towards shared ends. Inherent within discussions about governance versus governing are questions about the nature and exercise of power (as per Bachrach and Baratz, 1962), and whether power is overtly and covertly owned and exercised. Some view discussions about governance versus governing in terms of the instruments and levers of hard versus soft power (Nye, 1990) and others as a function of social relationships.
The governance modality of exercising power is the response to issue areas that are too complex, broad and cross-disciplinary for state institutional assemblages to address on their own. Governance as a form of exercising power towards given ends is not necessarily a contemporary phenomenon, and the governance modality has always been a function of the state. However, there are compelling arguments that governance has been an increasingly observed approach to meeting complex issue areas (e.g. Duit and Galaz, 2008). The rise in complexity in the business of governing is often perceived as a symptom of the globalised modern world with attendant risks and uncertainties that defy relatively simplistic governing and government (Rosa et al., 2013), and for the increased prevalence of the governance modality for addressing and delivering change in complex situations.

Governance is, much like sustainable development itself, a concept with many definitions and interpretations (Jordan, 2008; Baker, 2016). This breadth of conception leads to and is indeed predicated upon discourse, contestation and the discursive creation of meaning. And whilst these are in many ways an epistemological function of interpretivist social science, it also has potential drawbacks in conceptual stretching (Sartori, 1970) and appropriation of ideas and meanings (Moore, 1989), a point ably made by Helm (2000) when discussing the appropriation of the concept of ‘sustainability’ by economics-orientated interests throughout the 1990s. Meanings and definitions of governance are varied and contested. Some view governance in terms of top-down versus bottom-up power orientation (e.g. Jones, 2012; Eckerberg et al., 2015) and others see it more in terms of the actions necessary to steer and guide the realm of public affairs (Pierre, 2000; Baker, 2016).

So, whilst the term governance is as contested as the term sustainable development, this handbook does not take a position on the exact definitions of governance as it pertains to sustainable development. Much like Baker (2016) and others (e.g. Jordan, 2008) it recognises that governance, whether in terms of tools for steering and directing public affairs or as the modality for the exercise of power, has been and continues to be a critical element in the actualisation of sustainable development across scales and places globally. Instead of ascribing firm definitions to these terms it recognises that different authors will approach governance in slightly different ways and employ different meanings that reflect disciplines, places, polities, arguments and intellectual traditions; and that adopting strict positivist definitions would be exclusionary to our central endeavour of seeking to understand the global plurality and proliferation of efforts and approaches to implementing sustainable development in practice.

Exploring and understanding the proliferation of governance forms for enabling sustainable development is a critical endeavour in charting the progress of the global sustainability agenda. Moreover, these cases offer fascinating and insightful vantage points with broader appeal to understanding how complex contemporary socio-ecological agendas can be pursued in practice. Whether it be new initiatives and policies for nature-based solutions to climate and ecological crises, the mass re-naturing of national geographies, balancing the increasingly complex needs of intergenerational climate justice or delivering the Green New Deal, the insights into the contemporary global mosaic of governance for sustainable development poten-
Handbook on the governance of sustainable development

...tially tells us a great deal about how we can address the associated challenges of the near future.

OVERVIEW OF THE HANDBOOK

This handbook proceeds as follows. Part I engages with a series of critical issues in the governance of sustainable development; Part II builds on these by introducing and exploring some of the more common broad-based approaches to governance. Part III then explores a number of cases from the global proliferation of governance approaches. We do not claim to cover the full breath of sustainable development governance literature and approaches, which are and ever evolving. Instead we provide a snapshot of some key issues, approaches and case studies of how sustainable development governance has been applied in practice in different settings across the globe.

Part I: Key Issues

The chapters in Part I explore the critical issues related to sustainable development and the governance challenges they present. This begins in Chapter 2 with Camilla Adelle and Koen Dekeyser’s exploration and analysis of food security as a globally critical sustainable development challenge. This is a cross-cutting and wide-ranging exploration that unpacks some of the key governance challenges and potential solutions to the global issue of food system fragilities. This is followed in Chapter 3 by Helle Ørsted Nielsen, who introduces and explores the global climate crisis as one of the central challenges facing the transition towards sustainable development. In Chapter 4, Nick Kirsop-Taylor introduces the connected challenge of declining global biological diversity and makes the case for ascribing this as the *holocene extinction*. Nick adopts a historical institutionalist account of the evolution of the UN Convention on Biological Diversity to chart the global trajectory of prevailing governance approaches that have, thus far, unsuccessfully managed biodiversity and sustainable development. In Chapter 5, Yanhong Liu introduces and explores the subject of trade and globalisation as a critical environment of sustainable development – replete with its own unique governance challenges and dynamics. After a thorough comparative introduction, Yanhong introduces us to the emerging issue of the area of de-globalisation as a force with significant near-future implications on the governance of sustainable development. Questions of trade and globalisation move naturally into considerations about inequality, and in Chapter 6 Harlan Koff introduces and explores questions of poverty and inequality as they relate to the governance challenges for achieving sustainable development. Harlan employs the policy coherence framework through the case of Mexico to illuminate the challenges of reconciling the different, and at times competing, UN Sustainable Development Goals.

The challenges to the governance of sustainable development across all global environments are then explored, starting in Chapter 7 within marine environments...
through a contribution from Riku Varjopuro and Mikael Hildén. Mikael and Riku argue that, fundamentally, current national and international governance approaches do not properly or adequately account for the multiplicity of development uses for marine environments. They conclude by arguing for softer and more coordinated polycentric-style approaches to the governance of marine environments. We stick with issues pertaining to water in Chapter 8 by Oliver Fritsch, where we explore the challenges of governance for the sustainable development and management of terrestrial aquatic environments. Oliver introduces the suite of policy instrument types utilised in this challenge area before using the notion of policy integration to analyse the interaction between global water management paradigms and the sustainable development discourse.

Part II: Governance Approaches

The chapters in Part II introduce and explore approaches towards governance that have been advocated and employed in global sustainable development contexts. In Chapter 9 Duncan Russel introduces us to the concept, challenges and opportunities of policy integration as a key governance approach to meeting the objectives of sustainable development. Integration as one approach is built upon by Michael Howlett in Chapter 10 who offers a comprehensive overview of the toolbox of instruments that policy makers and other societal actors might utilise in trying to achieve the aims of sustainable development. This includes a detailed overview of the many challenges to policy implementation in this sphere, and a concluding discussion about the importance of policy instrument selection. Relatedly, Chapter 11 by Jonas Schoenefeld, Mikael Hildén and Kai Schulze offers a detailed contemporary update on the state of the field of policy innovation as it relates to the governance of sustainable development. After identifying key approaches to policy innovations for sustainable development they critique and explore the challenges, before sketching out a series of avenues for future research in the field. Finally, in Chapter 12 Katarina Eckerberg and Therese Bjärstig introduce us to collaboration as a key approach to achieving sustainable development. In addition to offering a detailed overview of the state of the art in the collaboration research discourse, they construct a series of general enabling factors for successful collaborative governance approaches in meeting the complex objectives of sustainable development.

Part III: Case Studies

The chapters in Part III focus on accounts of sustainable development governance in action, with specific chapters focusing on different regions of the world, international organisations, business and social movements. This begins in Chapter 13 with Katharina Rietig, who introduces the broad sweep of global non-state organisations that play roles in the governance of sustainable development. Through a case study of the UN Framework Convention on Climate Change this chapter explores the limitations and challenges of global environmental governance towards sustainable
development and charts a course towards future mutual learning and collaboration between organisations for shared objectives. This handbook touches upon the seminal roles that environmental non-governmental organisations can play in the governance of sustainable development. In Chapter 14 Raul Pacheco-Vega charts their historical positionality in discourse and action towards meeting the sustainable development objectives. Using the Governance for Sustainable Development framework, Raul argues for the criticality of bottom-up, grassroots engagement with these organisations – a point he contextualises through three cases from Mexico. In Chapter 15 Tom Macagno introduces us to many of the complexities and conundrums of businesses in the governance of sustainable development. Tom argues that, ultimately, businesses can best make use of polycentric governance approaches in seeking to engage with and play roles in meeting sustainable development, illustrated through a series of global case studies. We then pivot towards a series of global place-based case studies starting in Chapter 16, where Ida Soltvedt Hvinden and Svein Vigeland Rottem introduce us to the Arctic Council’s sustainable development working group covering the interstate Arctic region. This chapter builds upon the issues and approaches outlined in Parts I and II by engaging with the challenges of interstate collaboration in meeting integrated sustainable development challenges. Following this, Andrea Lenschow and Jan Pollex introduce the quite different case of the European Union in Chapter 17 which presents a different forum and suite of governance challenges for interstate delivery of the sustainable development agenda. By exploring the European Union’s longitudinal engagement with the notion of sustainable development they evidence the conceptual challenges of sustainable development and the discursive nature of contested meaning making in the challenge area of sustainable development. A thoroughly different case and suite of governance challenges are next outlined in Chapter 18 by Carlos Lo Wing-Hung, Chenyang He, Xueyong Zhan and Pansy Hon Ying Li, who explore the evolutionary engagement with the notion of sustainable development by the People’s Republic of China. Carlos and colleagues offer a fascinating exploration of the relatively little-known role of environmental voluntary organisations in meeting the contested goals of sustainable development in China. The challenges and opportunities of operationalising sustainable development within states is continued from another perspective in Chapter 19 by Haley Anderson and Zachary Smith, who explore this issue in the case of the United States. Whilst drawing attention to the many contradictions and challenges implicit in the governance of sustainable development transitions they also highlight the key enabling role of regulations in catalysing change towards more sustainable governing approaches and outcomes. In a case study in Chapter 20, Charles Ogheneruonah Eghweree and Osaruonamen Daisy Iginovia outline the history and governing dynamics of sustainable development in Nigeria. This chapter draws particular attention to the challenges of institutionalising cross-sectoral institutional change towards sustainable development modalities and issues relating to policy making for sustainable development.
REFERENCES


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