



Earth  
System  
Governance

# The Political Impact of the Sustainable Development Goals

## Transforming Governance Through Global Goals?

Edited by Frank Biermann, Thomas Hickmann,  
and Carole-Anne S nit



CAMBRIDGE



## THE POLITICAL IMPACT OF THE SUSTAINABLE DEVELOPMENT GOALS

Written by an international team of sixty-one experts and drawing on more than 3,000 scientific studies, this is the first comprehensive global assessment of the political impact of the Sustainable Development Goals, which were launched by the United Nations in 2015. It explores in detail the political steering effects of the Sustainable Development Goals on the UN system and the policies of countries in the Global North and Global South, on institutional integration and policy coherence, and on the ecological integrity and inclusiveness of sustainability policies worldwide. This book is a key resource for scholars, policymakers and activists concerned with the implementation of the Sustainable Development Goals, and those working in political science, international relations and environmental studies more broadly. It is one of a series of publications associated with the Earth System Governance Project. For more publications, see [www.cambridge.org/earth-system-governance](http://www.cambridge.org/earth-system-governance).

FRANK BIERMANN is a research professor of Global Sustainability Governance with the Copernicus Institute of Sustainable Development at Utrecht University and a widely cited scholar of global institutions and organizations in the sustainability domain. He pioneered the 'earth system governance' paradigm in global change research in 2005, and was founder and first chair of the Earth System Governance Project, a global transdisciplinary research network of sustainability scholars. He has authored or co-edited 18 books and published more than 200 articles and book chapters, along with more than 100 policy contributions.

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“This is a critical assessment of the political change required to deliver the universally agreed UN Sustainable Development Goals. I strongly advise everyone in political office to read this book. We are already two years into the decisive decade for humanity’s future on Earth, when we need to reach the safe and just landing zone defined by the SDGs. This agenda integrates people and planet, and requires transformative thinking and doing. Also in politics.”

*Johan Rockström, Director, Potsdam Institute for Climate Impact Research*

“This is a much needed book published at the mid-point to achieve the SDGs. We have been waiting for a book like this – an evidence-based and holistic assessment of the progress towards the SDGs from a global governance perspective. All stakeholders should learn from the authors on how we can achieve the SDGs.”

*Norichika Kanie, Professor, Graduate School of Media and Governance,  
Keio University*

“Knowing whether and how universal goal setting as exemplified by the UN’s SDGs is or isn’t creating transformative change towards global sustainability is important right now. An assessment of the question in 2030 will be interesting but too late. This study poses a timely and profound challenge to scholars and practitioners of global governance to identify what else, if anything, can and must be done in the time we have left to move societies towards positive action in securing the future we all agree we want.”

*Heide Hackmann, Inaugural Chief Executive Officer (2018 – 2022),  
International Science Council; Interim Director,  
Future Africa Institute, University of Pretoria*

“This comprehensive and rigorous assessment is essential reading for anyone seeking to ensure that the Decade of Action means something more than words. Agreeing on the SDGs was a major achievement of the international community in 2015 and the significance of this common vision only grows in turbulent times. To make the goals and principles have a real steering effect on the decisions societies make, it is now imperative to learn from the shortcomings identified in this study and find new ways to accelerate action. I hope this assessment sparks new ideas and new determination.”

*Åsa Persson, Research Director, Stockholm Environment Institute*

“Biermann, Hickmann and Sénit have led an extraordinary effort to take stock of all that we know and don’t know about the impact of the SDGs to date, this is a unique resource for researchers, practitioners and policy makers. It is particularly valuable coming at mid-point in implementation, with enough time left for course correction.”

*Sakiko Fukuda-Parr, Professor of International Affairs, The New School*



The **Earth System Governance Project** was established in 2009 as a core project of the International Human Dimensions Programme on Global Environmental Change. Since then, the Project has evolved into the largest social science research network in the area of sustainability and governance. The Earth System Governance Project explores political solutions and novel, more effective governance mechanisms to cope with the current transitions in the socio-ecological systems of our planet. The normative context of this research is sustainable development; earth system governance is not only a question of institutional effectiveness, but also of political legitimacy and social justice.

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# Preface

When we began to conceptualize this assessment in January 2020, we were unaware of the upcoming global pandemic. Shortly thereafter, COVID-19 hit the world, with devastating consequences particularly for poorer and disadvantaged groups and regions. The outbreak of the pandemic has laid bare the system failures, inequalities and disparities of our time and made one thing clear: nobody is safe until everyone is safe. Only through global cooperation and solidarity can we fight the virus.

The year 2020 also marked the launch of the United Nations Decade of Action to secure greater leadership and cooperation to deliver the Sustainable Development Goals. These 17 global goals are the core of the 2030 Agenda for Sustainable Development that the United Nations General Assembly adopted in September 2015. The goals are meant to offer a blueprint to prevent and mitigate the adverse effects of a global crisis like the spread of COVID-19. Poverty and hunger, inadequate health systems, inequality, gender gaps, limited access to water and sanitation, and insufficient social protection: these are the major factors why the pandemic could have such disruptive global effects. All this highlights the importance of the ambitions enshrined in the 2030 Agenda and the Sustainable Development Goals. But where do we stand with the 2030 Agenda? Or more precisely, have the 17 Sustainable Developments Goals led to major political and institutional changes after their adoption in 2015?

This is the guiding question this book is set to answer. Resulting from a collaborative and inclusive writing process, this book provides a broad evaluation of the scientific knowledge on the steering effects of the Sustainable Development Goals on key governance dimensions. The book is meant for governance researchers as a comprehensive assessment of the potential and pitfalls of 'governing through global goals' as a steering mechanism in world politics. It shall also provide evidence-based insights for practitioners and others concerned with the governance of sustainable development. The book identifies major research

gaps, and we hope that it will trigger new research in both Global North and Global South that builds on our work. As such, this work serves as a key reference for researchers and practitioners and lays a solid foundation for future studies on the Sustainable Development Goals and similar global policy initiatives.

The book has been written under COVID-19 restrictions, from a dispersed global network of home offices, and often in difficult personal circumstances. The assessment outline was first discussed in 2020 in a virtual meeting of the scientific steering group, held in conjunction with the International Research Symposium GLOBALGOALS2020 hosted online by Utrecht University. The meeting was followed by online discussions of the author teams responsible for the six main assessment chapters, often at late or early hours depending on the multiple time zones involved.

An assessment of this ambition is too large to be handled by one institution. The assessment has thus become a joint effort of a range of international research institutions, including the Copernicus Institute of Sustainable Development at Utrecht University, the Alex Ekwueme Federal University Ndufu Alike, the German Development Institute, the German Institute for International and Security Affairs, the Monash Sustainable Development Institute in Melbourne, the North-West University in South Africa, the Potsdam Institute for Climate Impact Research, the research and policy network Southern Voice, the Stockholm Environment Institute, the Sussex Sustainability Research Programme, and the University of Toronto. The GLOBALGOALS Project at Utrecht University, funded by an Advanced Grant of the European Research Council, has led the process and provided managerial and editorial support. The assessment has been endorsed and supported by the Earth System Governance Project, a global network of scholars studying governance and policy issues around transformations of planetary systems and global sustainability.

Without the commitment from all these institutions and colleagues, this assessment would not have been possible. Many thanks to all who took part in this journey. First and foremost, we wish to thank the lead and contributing authors for their dedication and commitment to this assessment and their patience during detailed rounds of revisions. We are also grateful for the insightful comments and critical remarks by three anonymous reviewers, whose feedback significantly improved the design and content of this book. Many thanks also to the supporting institutions and their funding agencies. Moreover, we are grateful for all participants of the GLOBALGOALS2020 conference who made that event a major success. The keynotes, paper presentations and discussions at GLOBALGOALS2020 spurred our planning and further motivated us to pursue this project in difficult times. Furthermore, we are indebted to Leonie Grob for her organizational talent, readiness to help and painstaking work on numerous

editorial tasks, and Blake Harvey for her editorial assistance in the final production stages. Last but not least, we are thankful to the staff of Cambridge University Press, especially to Emma Kiddle and Sarah Lambert, for providing invaluable support from the first draft proposal towards production of the book, and to Matthew Seal for carefully copyediting a book written by more than sixty authors from all over the world. The key findings of this assessment have appeared in synthesized form in *Nature Sustainability* in May 2022.

This book is meant to be an in-depth evaluation of where the Sustainable Development Goals stand today from an academic perspective. Clearly, we are not on track to achieve these ambitious goals by 2030. More efforts are needed to bring about the necessary transformations towards sustainable development. The Sustainable Development Goals had some positive effects on actors and institutions, and the first small steps for a better world have been taken. Yet the race is still long while time is running out.



# 1

## Assessing the Impact of Global Goals *Setting the Stage*

FRANK BIERMANN, THOMAS HICKMANN AND CAROLE-ANNE SÉNIT

In 2015, the United Nations General Assembly agreed on the 2030 Agenda for Sustainable Development to guide public policies and inspire societal actors to promote sustainable development worldwide. The core of this programme are 17 ‘Sustainable Development Goals’ with 169 more specific targets. Two years of intense intergovernmental negotiations at the United Nations headquarters in New York preceded the adoption of this agenda, which formally entered into force on 1 January 2016 (Chasek et al. 2016). The programmatic timespan is short: the goals and targets under the new agenda for sustainable development should be achieved by 2030. Some targets were to be reached even by 2020.

The ambition expressed in these Sustainable Development Goals is unprecedented. The goals and the overarching 2030 Agenda aim at nothing less than ‘Transforming Our World’ (UNGA 2015). The world’s governments are now committed – within less than a decade – to ending poverty and hunger, providing universal access to basic services such as healthcare, education, water and sanitation, housing and social protection; reducing inequality within and among countries and to ending all discriminations (including gender); protecting our natural environment; and promoting peaceful and inclusive societies.

These goals are not the first attempt at global governance by goal-setting. To start with, the Sustainable Development Goals were preceded by the Millennium Development Goals that were operational from 2001 to 2015. These earlier goals had helped galvanize some individual and collective action, and many actors, from governments to activists, felt that more ‘global governance through goals’, with a renewed set of broader and more ambitious targets, would further bolster sustainable development (Sachs 2012). In addition, the Sustainable Development Goals draw on a few other earlier experiences with global governance through goal-setting, such as the Plan of Action of the 1990 World Summit for Children or the first Development Decade that dates as far back as 1961 (Hickmann et al. 2020; Vijge et al. 2020). The Sustainable Development Goals are thus not entirely new as a mechanism

of global governance. What sets them apart, however, is that they are by far the most comprehensive and most detailed attempt by the United Nations to guide sustainable development policies – through 17 globally defined policy goals and 169 associated targets with 231 indicators (see e.g., Biermann, Kanie and Kim 2017; French and Kotz  2018; Kamau, Chasek and O’Connor 2018; Kanie and Biermann 2017).

The complex structure and broad scope of the Sustainable Development Goals make them unique and special, at least in five dimensions. First and possibly most importantly, the global goals are universal. Unlike the earlier Millennium Development Goals, which targeted only developing countries (and the least developed countries especially), now all countries are meant to implement the Sustainable Development Goals within their societies and through global cooperation, from the many small island developing countries in the Pacific to the United States or the members of the European Union. Also the wealthy countries in the North are now requested to deliver regular reports about their efforts ‘to develop’ towards a more sustainable future.

Second, the global goals cover all dimensions of sustainable development, including social, economic and environmental objectives (Bhattacharya, Khan and Salma 2014). The first set of goals relate to the earlier Millennium Development Goals: Goal 1, *End poverty in all its forms everywhere*; Goal 2, *End hunger, achieve food security and improved nutrition and promote sustainable agriculture*; Goal 3, *Ensure healthy lives and promote well-being for all at all ages*; and Goal 4, *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. Two goals target inequality and injustice: Goal 5, *Achieve gender equality and empower all women and girls*; and Goal 10, *Reduce inequality within and among countries*.

Five goals seek to advance living conditions more generally, often with emphasis on the needs of the poor: Goal 6, *Ensure availability and sustainable management of water and sanitation for all*; Goal 7, *Ensure access to affordable, reliable, sustainable and modern energy for all*; Goal 8, *Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all*; Goal 9, *Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*; and Goal 11, *Make cities and human settlements inclusive, safe, resilient and sustainable*. Goal 12 aims to *Ensure sustainable consumption and production patterns*.

Three goals centre on environmental concerns: Goal 13, *Take urgent action to combat climate change and its impacts*; Goal 14, *Conserve and sustainably use the oceans, seas and marine resources for sustainable development*; and Goal 15, *Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss*.



The two last goals, 16 and 17, address governance and implementation. Goal 16 is unique in its novel attention to limitations in political systems, calling upon governments to *Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels* (Biermann et al. 2017). Goal 17 is a programmatic call to institutionally and financially support the other 16 goals and to *Strengthen the means of implementation and revitalize the global partnership for sustainable development*, with provisions on finance, technology, capacity-building, trade, policy and institutional coherence, multi-stakeholder partnerships, along with objectives on data, monitoring and accountability.

In short, the Sustainable Development Goals are all-encompassing. Almost all human activities, and all traditional dimensions of sustainability, are covered in this vast catalogue (for the full text of the 17 goals, see [Annex 1](#)). This again makes the Sustainable Development Goals different from earlier goal-setting initiatives such as the Millennium Development Goals.

Third, the Sustainable Development Goals are novel in the way they have been formulated and agreed. The earlier Millennium Development Goals were a product of the administrative system of the United Nations. While governments gave guidance and later approval, the Millennium Development Goals had been drafted by international civil servants (Chasek et al. 2016). The negotiation of the Sustainable Development Goals in 2013–15, however, was different. This process was more inclusive with multiple venues for interventions of civil society and non-governmental organizations and inputs of over a million people through an online polling and commenting system. Even though these novel options for interventions by ‘stakeholders’ were less inclusive than it first seemed and many groups were still excluded (Sémit 2020; Sémit, Biermann and Kalfagianni 2017), the relative openness and transparency of the negotiations of the Sustainable Development Goals, despite all shortcomings, may have opened a new page in global diplomacy (Kamau, Chasek and O’Connor 2018; Rosche 2016).

A fourth novel feature is that the Sustainable Development Goals have been institutionally embedded at a higher political level than earlier goals in development policy, which were either linked to international agencies deemed most relevant or dealt with in the Economic and Social Council. For example, the Agenda 21 – the Programme of Action agreed at the 1992 United Nations Conference on Environment and Development – was evaluated and ‘governed’ through the Commission on Sustainable Development, a body that fell under the Economic and Social Council (Chasek 2000). This commission failed to attract decision-makers at the highest level or other key political actors. Over time it became an annual gathering of delegates from environment and development ministries with a motley mix of civil society organizations that added colour but

lacked influence. In 2012, the commission was terminated. In the run-up to the 2012 summit on sustainable development, some studies had argued for a stronger institutional body in the United Nations system, such as a high-level United Nations Council on Sustainable Development (Biermann et al. 2012). Eventually, governments indeed agreed on a new forum with ‘high-level’ representation, but only in a more informal and less authoritative setting than some civil society groups and experts had demanded. This new High-level Political Forum on Sustainable Development meets annually, predominantly to review progress towards national implementation and overall achievement of the Sustainable Development Goals (for an evaluation see [Chapter 2](#)).

Fifth and finally, the Sustainable Development Goals are more visible in public discourse and more central in the United Nations system than earlier initiatives. The Sustainable Development Goals have become the overall programmatic vision for the entire system of international organizations and programmes under the United Nations umbrella. Also at the national level, debates on Sustainable Development Goals abound in many countries and local communities.

Given this mixture of novelty, ambition and general excitement – at least among some government officials, international civil servants and activists – the following questions arise: do these 17 Sustainable Development Goals really help resolve the pressing challenges of poverty eradication, social justice and global environmental protection? Can global governance through goals be effective – and under which conditions? While the United Nations and some governments place great hopes on this strategy, there is still little scientific knowledge on whether such global goals can live up to the high expectations. Because the goals are to be achieved only by 2030, it is too early for a concluding assessment of their eventual success or failure. We can only conclusively have the definitive answer on whether the ambitions and hopes invested in the global goals will materialize after 2030 (conceptually see [Young 2017](#); [Young et al. 2017](#)).

Nonetheless, a first assessment of the effects of the Sustainable Development Goals as a governance mechanism is possible today. And it is urgently needed. Each day, crucial decisions are adopted in politics, local administrations, global corporations and civil society. Should there be indications that current policies for the Sustainable Development Goals do not promise their achievement by 2030, decision-makers in governments, civil society and the United Nations could still change course. Should we find that the goals lack any impact on political systems, corporations, civil society and individual daily decisions by citizens, there would still be time to develop alternative tools and political interventions. Should the goals, conversely, prove to be increasingly effective as a global steering mechanism, we could strengthen them even further.

In this context, the coming years are crucial. In June 2022, governments assemble in Stockholm for a conference that follows a line of sustainability summits of the past, from the 1972 Conference on the Human Environment in Stockholm to the 1992 United Nations Conference on Environment and Development in Rio de Janeiro (the ‘Earth Summit’), the 2002 World Summit on Sustainable Development in Johannesburg and the 2012 United Nations Conference on Sustainable Development in Rio de Janeiro. The 2022 Stockholm Conference marks ‘Stockholm plus 50’ and half a century of global environmental diplomacy. It also happens ‘30 years after Rio’ and ‘20 years after Johannesburg’, the two earlier key events that brought together environmental protection and global development under the banner of sustainable development. The 2022 conference is a first key moment to reassess political progress towards sustainability and the steering effects of the Sustainable Development Goals, followed by a major High-level Political Forum session in 2023. Should it become clear that the global goals lack effect, that they do not offer direction and that they are being largely ignored by governments, corporations, civil society and citizens, alternatives to these global goals must be on the global political agenda in 2022–3.

For that reason, research on the impact of the global goals has become one of the most dynamic research areas in sustainability science, and many studies on the Sustainable Development Goals have been published since 2015. A first international research symposium in June 2020 – the GLOBALGOALS2020 conference hosted by Utrecht University – featured more than a hundred scientific studies on the political effects of the Sustainable Development Goals, and more than a thousand scholars, practitioners and interested citizens joined the livestreams or watched the recordings of the presentations.

In this book we now offer the *first comprehensive scientific assessment* of the political effects of the Sustainable Development Goals on the route towards their target year of 2030.

### Assessing the Steering Effects of Global Goals

This book does not evaluate sustainability governance as such. We focus more narrowly on assessing the *political effects of global goal-setting as a governance mechanism*, with emphasis on the Sustainable Development Goals as the premier and most comprehensive global goal-setting effort to date. *Our leading question is whether, to what extent and how the Sustainable Developments Goals have brought about any behavioural change of political, economic or societal actors since 2015.*

At the core of our analysis is thus, first, the assessment of behavioural changes of *political actors*, ranging from international bureaucracies and treaty regimes to

national governments, regional authorities and local municipalities. Second, we review and evaluate literature on possible steering effects vis- -vis *economic actors*, such as corporations, partnerships and alliances of business actors. Third, we assess whether there are indications for steering effects on *societal actors*, such as civil society organizations and even individual citizens.

### ***Effectiveness as Behavioural Change because of Global Goals***

Given our focus on political effects of goal-setting we define effectiveness here not in the broadest sense, which would be the progressive attainment of the goals as measured by their targets and indicators. That is, we do not systematically assess whether the 17 Sustainable Development Goals are being achieved in terms of reductions in poverty, increases in renewable energy, reductions in harmful emissions, improvements in gender equality and so forth. Such analyses are done by several international organizations and research networks, and we do not seek to repeat their efforts.

Most such assessments offer a mildly pessimistic view. For example, the yearly report of the Secretary-General of the United Nations on progress towards the Sustainable Development Goals finds that progress has been reversed with the outbreak of the COVID-19 pandemic (United Nations 2021). While up until 2020 there was some progress regarding, for instance, declining global poverty (Goal 1), it is now estimated that the pandemic-related economic downturn has pushed an additional 119–124 million people into extreme poverty. Progress is still stalled or reversed regarding the rate of climate change (Goal 13), the rate of biodiversity loss (Goal 15) and increasing inequalities (Goal 10). A related assessment is the Global Sustainable Development Report, a quadrennial ‘assessment of assessments’ on sustainability by scientists who have been appointed for this task by the Secretary-General of the United Nations. The 2019 report warned that progress made in sustainability governance over the last two decades is in danger of being reversed through worsening social inequalities and potentially irreversible declines in our natural environment (Independent Group of Scientists appointed by the Secretary-General 2019). Beyond this, there are many other reports and assessments. One example, the reports by the Sustainable Development Solutions Network and the Bertelsmann Stiftung, rank countries by how they achieve the goals. In 2020, this group found that Asian countries had progressed the most since 2015 (Sachs et al. 2020). The most recent report from June 2021, however, showed the ‘first-ever reversal in progress since the [Sustainable Development Goals] were adopted’, largely due to increased poverty and unemployment related to the COVID-19 pandemic (International Institute for Sustainable Development 2021; see also Sachs et al. 2021).

These broader assessments of progress towards sustainability are without a doubt important. Yet, methodologically they skirt the question of causality, that is, whether progress that we observe is causally related to the 17 Sustainable Development Goals. To give an example: China has achieved in the 2000 to 2015 period several Millennium Development Goals owing to its rapid economic growth and broadening of social welfare. Many indicators related to child mortality, poverty and poor health in China have improved since 2000, and partially because of this development, statistically the poverty rate of the entire group of developing countries was halved between 1990 and 2010. However, few would argue that the Millennium Development Goals are *causally related* to the economic growth rates in China. In other words, China's economic growth cannot be understood as a *political steering effect* of the Millennium Development Goals. China's rapid progress towards achieving the Millennium Development Goals from 2000 to 2015 is a matter of correlation, not causation.

Therefore, to better understand the political steering effects of global goals we must engage in a more fine-grained analysis. This is what this assessment is designed to achieve. Our core concern is to explore whether and to what extent political, economic or societal actors *have changed their behaviour because of* the adoption of the Sustainable Development Goals in 2015.

To give an example of global governance: one could ask whether the International Labour Organization has changed its policies and programmes after 2015 because of the Sustainable Development Goals. Such a change would need to be identified over time, with the policies of the International Labour Organization being different before and after 2015. After 2015, the policies of the organization would need to be geared more towards some of the 17 Sustainable Development Goals than before, and this would need to be *because of the goals*. Only if such a policy change in the activities of the International Labour Organization after 2015 could be observed and causally linked to the Sustainable Development Goals, could we be able to speak with confidence of a *steering effect* of the global goals (for a first assessment, see Montesano et al. 2021).

As a second example from national governance: the Netherlands has created new institutional arrangements to implement the Sustainable Development Goals (Yunita et al. 2022). Among other measures, the Dutch government has appointed a national coordinator for the Sustainable Development Goals within its foreign office, with the mandate to represent the country in international debates and to support an integrated approach in Dutch policies and society towards the goals. The appointment of this national coordinator is undoubtedly a political steering effect of the goals that we can see in national politics. The subsequent analytical question then becomes, however, whether this appointment resulted in changes in the behaviour of other actors. Because only when further policies, programmes and

activities within the Dutch political system have changed after 2015 as a consequence of the activities of the national coordinator for the Sustainable Development Goals – and hence as a consequence of the adoption of the Sustainable Development Goals – could we speak of a broader *political steering effect* of the global goals.

### *Types of Steering Effects*

There can be countless and diverse changes in the policies, programmes and activities of political, economic and societal actors. In this book, we focus on the assessment of normative, institutional and broader discursive changes.

First, we assume that the Sustainable Development Goals might lead to *normative changes* when political, economic or societal actors adjust legislative and regulatory frameworks and policies in line with, and because of, the goals. This could be the adoption of their targets in national policy programmes, in sub-national policy goals of municipalities or in the accounting and self-reporting frameworks of multinational corporations. To ascertain steering effects of the Sustainable Development Goals, the normative frameworks of an organization or institution – rules set for others and rules and standards set for the organization – would have changed after 2015 and become better aligned with the Sustainable Development Goals. Explicit references to all or some of the goals in the new policy or regulatory framework would be a strong sign for the normative effect of the Sustainable Development Goals.

Second, we analyse whether the goals bring about *institutional changes*. Such institutional changes could include the creation of new departments, committees, offices or programmes linked to the achievement of the goals, or the realignment of institutional arrangements. The new national coordinator for the Sustainable Development Goals in the Netherlands, mentioned above, is a typical example (Yunita et al. 2022). Similar examples include newly created inter-ministerial coordination bodies within public administrations to implement the Sustainable Development Goals. While such an institutional realignment within political systems can be an indicator to suggest political effects of the global goals, one still needs to assess the eventual political impact of such alignment. Notably, one should entertain the alternative hypothesis of institutions and agencies engaging in only symbolic action or in the setting-up of decoy institutions (that is, pretending political action while avoiding it), or plain institutional ineffectiveness. And yet, observable institutional realignments in political systems because of the global goals are first indications that more profound changes because of the goals are at least conceivable.

Third, in addition to normative and institutional changes, Sustainable Development Goals could have *discursive effects*. The effects of the goals do not have to materialize only in institutions and programmes of public actors, such as international organizations, national governments or municipalities. In many places, the goals have also energized local citizens, civil society movements and initiatives in cities, districts or villages. Also here, whatever one can observe in changes towards sustainability *and* can relate back to inspiration by the Sustainable Development Goals, we identify in this book as a political steering effect of the global goals.

We might expect even broader discursive changes. The vision and ambition of the Sustainable Development Goals – for example in its strong support for the ending of hunger and the eradication of poverty – might bring about in the 2015–30 period a wider transformation in the way political actors understand the challenges ahead. Such discursive changes we might trace back in global and national political narratives, for example in public debates, policy platforms, or even newspapers and social media. Indications for the impact of the Sustainable Development Goals would be when terms prominently used in the Sustainable Development Goals and the 2030 Agenda for Sustainable Development – such as the phrase ‘leaving no one behind’ – could be identified in later policy documents or public narratives around the world.

In short, the political steering effects of the Sustainable Development Goals we might find in the core institutions of governments and international agencies, for instance by changing rules, standards, programmes and institutional arrangements or the creation of new institutions and programmes. We might expect such steering effects also in broader diffusions in civil society, in changes in global and national discourses, and in the slow trickling down of novel concepts and ideas from the 2015 United Nations General Assembly decision to the individual understandings and actions of citizens worldwide.

Importantly, steering effects might not always be positive in the sense of advancing sustainability. The use of the Sustainable Development Goals could be instrumental, symbolic or counter-productive (Bexell and Jönsson 2019; Mawdsley 2018). Corporations might for instance instrumentalize the goals to advance their credibility and increase market shares. Governments might announce new strategies to achieve the Sustainable Development Goals while not engaging in structural changes, policy reforms or budgetary reallocation. Non-governmental organizations could adopt the language of the Sustainable Development Goals to attract new funding without changing their policies and programmes. Our assessment hence takes a decisively *critical approach* towards the possible impact of the Sustainable Development Goals. Throughout our analysis we seek to separate real change from pure rhetoric claims.

### Assessment Process

This assessment brings together the body of knowledge among scholars and experts on the political steering effects of the Sustainable Development Goals, as it has been published since 2012. Most assessed research deals with the implementation period since 2015. Yet because the goals were negotiated between 2012 and 2015 and were at that time already prominent in policy circles, we have included evidence from the negotiation process as well.

Our assessment is a systematic meta-analysis of peer-reviewed academic literature and to a limited extent ‘grey literature’ that follows similar standards. The studies that we relied on include analyses of the impact of the Sustainable Development Goals over time; single or comparative case studies on individual goals or on specific countries; systematic assessments of expert opinions, for instance through broader surveys or series of systematic interviews; and a few quantitative data sets that provide information on the steering effects of the goals over time. All chapters draw on multiple sources of evidence and on evaluations of the largest possible bodies of literature that are available to date. They hence go beyond reliance on impressions by a few experts or practitioners.

Altogether, the author teams of the different chapters collected and considered over 3,000 scholarly studies. (This number entails some double counts of key sources that are relevant for more than one dimension of this assessment.) All studies were identified based on a comprehensive assessment of the academic literature through a keyword search with the reference software *Scopus*. The number of articles per topic varied greatly, which indicates current research trends and points to under-researched issues. The author teams first sorted scholarly studies according to their relevance and then analysed the most relevant works in-depth in smaller teams. The insights from this qualitative content research were complemented by findings from grey literature and from the authors’ own research and expertise when literature was scarce on a specific topic.

The breadth of the assessment required a large, diverse and inclusive group of social scientists and experts from universities and think-tanks, all with specialized expertise on the Sustainable Development Goals. Each of the six substantial chapters 2–7 is written by a team of scholars with special expertise in that area, led by some of the most prominent scholars and experts on the Sustainable Development Goals in collaboration with mid- and early-career scholars who specialize in this field. To the extent possible, all chapter author teams are balanced in terms of regions and gender.

### Assessment Areas

This assessment analyses the body of knowledge on the steering effects of the Sustainable Development Goals in six key areas that we now introduce and that



form the organizing principle for the following chapters 2–7. In each area, we have synthesized research and knowledge on the normative, institutional and discursive effects of the Sustainable Development Goals. Each chapter also charts new research directions to catalyse the transformative potential of the global goals in the decade of action to deliver the 2030 Agenda for Sustainable Development. Furthermore, each chapter provides insights into political reform needs that reach beyond 2030 and may point to a more ambitious and fundamental political reform agenda.

### *Global Governance*

First, the Sustainable Development Goals and the 2030 Agenda were expected to have a major impact on the United Nations system, which should reorient towards this agenda for the 2015 to 2030 period. All international organizations, programmes and agencies are formally committed to implementing the 17 goals and the broader 2030 Agenda. International conferences, treaty regimes and transnational partnerships and networks were called upon to refocus in the direction charted by the Sustainable Development Goals and their 169 targets. To provide for global oversight and guidance, governments created a new global forum, the High-level Political Forum on Sustainable Development, which meets annually to review the implementation of the global goals and the national reports that countries are requested to submit (Abbott and Bernstein 2015; Beisheim 2015; Bernstein 2017). In short, the Sustainable Development Goals were to launch a new era of ‘global partnership’ – as announced under Goal 17 – that would exceed the often weak global governance mechanisms of the past (Andonova 2017; Chasek and Wagner 2016; Kamau, Chasek and O’Connor 2018).

And yet, can we really see any changes in the system of international agencies and programmes after 2015? Have the Sustainable Development Goals reshaped the policies of international agencies? Do we see more cooperation among international bodies to work towards the implementation of the global goals? Or do we have to conclude that the United Nations system follows a business-as-usual approach, without any discernible impact of the global goals? How can the role of the High-level Political Forum on Sustainable Development be evaluated? Did the new forum live up to the high expectations raised in 2012 when it was set up to replace the weak Commission on Sustainable Development? These questions stand in the centre of [Chapter 2](#) of this assessment.

### *Implementation at Multiple Levels*

Second, the Sustainable Development Goals are expected to change domestic politics. They are supposed to be implemented by central governments and to

influence national legislation, strategies and policies. Local and regional authorities are expected to join the global effort and align policies and programmes with the Sustainable Development Goals and their targets. We should find the global goals reflected in the initiatives of cities, provinces and villages, from the town halls of municipalities to school boards, city planners, university councils and public utilities. Also the private sector – from global corporations to local business – is called upon to support the global goals and their sustainability agenda. Major business associations have taken part in formulating the global goals, and the central get-togethers of the business leaders – such as the World Economic Forum in Davos – are full of references to the goals. We should thus find steering effects of the goals in corporate programmes on social responsibility, but more importantly in investment decisions and internal policies, for example on inequalities and discrimination or in policies against corruption.

Finally, civil society organizations and eventually all citizens are expected to find inspiration in the Sustainable Development Goals. Environmentalists, unions, youth organizations, farmers' associations, political parties, along with students, universities, schools, sport clubs, faith-based organizations – all these local and transnational actors would need to rally around the 2030 Agenda. Substantial resources have been invested by international organizations, governments and local authorities into outreach and dissemination to bring home the message of the 2030 Agenda and the 17 goals. Colourful pictograms have been designed to turn the often-dry United Nations-legalese of the 2030 Agenda into a trendy checklist of societal goals that can inspire in the age of Twitter and Instagram.

And yet, have the Sustainable Development Goals been effective in achieving their aims in domestic governance? Have prime ministers, mayors, party and business leaders or school directors and governors responded to the call of the 2030 Agenda and changed their programmes, policies and strategies because of the global goals? Are there differences in domestic impact between the wealthy countries in North America, Europe, East Asia or Australia and the developing countries in Africa, Latin America or Asia? Are the Sustainable Development Goals more effective in some types of countries or are steering effects broadly similar?

Importantly and methodologically most challenging: how can we attribute positive changes and progress that we might observe 'on the ground' to the global agreement of the Sustainable Development Goals in 2015? Is there evidence that national or local actors, in the public or the private sphere, have changed their behaviour because of the global goals? In [Chapter 3](#) of this volume we evaluate research and evidence on these important questions.

### *Interlinkages, Integration and Coherence*

Third, there is little doubt about the tremendous complexity of the 2030 Agenda and the Sustainable Development Goals. The 169 more specific targets under these goals offer a mindboggling mix of aims and objectives, sometimes quantified, sometimes qualitative, in an incredibly broad range of areas. The global goals ask us to end hunger, transform our cities, reduce inequality, protect marine ecosystems, fight corruption, end discrimination, raise the living standards in least developed countries, reduce infant mortality and so on. There are complex interlinkages and interdependencies between the goals and the 169 targets. Optimizing and achieving one target might reduce progress on other targets (Le Blanc 2015; Liverman 2018; Lusseau and Mancini 2019; Nilsson et al. 2018; van Soest et al. 2019; Weitz et al. 2018). Trying to advance all 169 targets easily overchallenges actors. For that reason, some experts had argued during the negotiations of the goals for a more limited number of goals, such as ten, which some believed would be the maximum to keep public focus and engagement. One early intervention by Jeffrey Sachs (2012) even listed only four sustainable development goals. And yet, the complexity of the sustainability challenge, along with the negotiation dynamics in 2012–15, resulted in what we have today: a potpourri of 169 targets under 17 global goals.

Importantly, the goals were designed in a way that each would combine the three traditional ‘pillars’ of sustainable development, that is, economic growth, ecological protection, and social justice and well-being. The weight of each of these three ‘pillars’ differs per goal – there is more concern for the environment when it comes to Goal 14 (*Conserve and sustainably use the oceans, seas and marine resources for sustainable development*) and more concern for social justice when it comes to Goal 10 (*Reduce inequality within and among countries*). Yet at least in theory, no goal is only economic, social or environmental. This approach illustrates even more the challenge posed by the interlinkages and interdependencies of the 2030 Agenda for political and societal actors.

Given the lack of an ordering principle, some studies have expressed doubts that the goals would be effective (e.g., Allen, Metternicht and Wiedmann 2018). Some argued that

in the absence of such an overarching principle and vision, the impact of the Sustainable Development Goals on global governance will likely materialize primarily as spurring some further clustering or realignment of existing regimes and organizations within crowded policy domains. . . . [G]iven the nature of the challenge [. . .], the Sustainable Development Goals cannot be expected to generate major architectural reforms or new integrative practices that will significantly reduce the fragmentation of the global governance system at large.

(Underdal and Kim 2017: 254)

Such an outcome, however, would run counter to the broad ambition that governments expressed in the 2030 Agenda: that goals will add coherence and consistency, not complexity and confusion. The goals are supposed to better align the efforts of political and societal actors and to further the integration of governance instruments in support of the goals (Nilsson, Griggs and Visbeck 2016). Target 17.14 especially calls upon governments to ‘Enhance policy coherence for sustainable development’. And yet, is such integration of governance around the goals observable? Where do actors align their efforts, and where is this attributable to the global goals that were adopted in 2015? Even though the Sustainable Development Goals were designed to advance overall coherence in sustainability governance, often they still seem to operate in silos. But where are trade-offs between goals and targets? Where are instances and trends where actors prefer one goal over the other? Research into interlinkages between these goals is thus important to inform policy and provide evidence-based recommendations on how to resolve trade-offs, use synergies and accelerate progress across all 17 Sustainable Development Goals (e.g., Nilsson et al. 2018). We cover this important research in [Chapter 4](#).

### *Inclusiveness*

Fourth, the Sustainable Development Goals and the overarching 2030 Agenda for Sustainable Development emphasize the need to improve the life of the global poor. The goals include explicit commitments to the eradication of poverty (Goal 1), the ending of hunger (Goal 2) and the reduction of global and national inequalities (Goal 10). The protection of the poor and the most vulnerable also runs through other goals, from health to urban settlements, where special provisions address the needs of the poor and most vulnerable. A central part of the 2030 Agenda is the commitment that no one should be left behind. The ‘leave no one behind’ formula has become a very visible part in the development discourse after 2015, indicated by use of its bureaucratic acronym, ‘LNOB’ (Hathie 2020).

More inclusiveness is also the ambition for global governance more broadly, with the commitment to bring in, and advance the interests of, those countries that fared worst in economic globalization, especially the least developed countries, but also a few other partially overlapping categories of countries, such as the small island and landlocked developing countries (Biermann and S nit 2022). The least developed countries are mentioned twenty-seven times in the targets under the Sustainable Development Goals and thirty-eight times in the broader 2030 Agenda. Goal 10 explicitly calls for ‘achiev[ing] and sustain[ing] income growth of the bottom 40 per cent of the population at a rate higher than the national average’, to ‘promote the social, economic and political inclusion of all’, to ‘ensure

enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions' and to 'implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements'.

In short, global inclusiveness and the advancement of the interests of the poorest and most vulnerable are central in the 2030 Agenda and the 17 global goals. Yet, where can one observe a better inclusion and support of poor and vulnerable communities and, internationally, of the least developed countries? Did the promise of 2015 materialize in more inclusive policies and in curbing inequalities within and among countries? Research on this topic we evaluate in [Chapter 5](#).

### *Planetary Integrity*

Fifth, the claim behind the Sustainable Development Goals is that they help align social justice with the protection of life-supporting earth systems. In recent years, scientists have become louder in their warnings that the planetary system might be at the brink of collapse and transition to new states of operation. Johan Rockström, one of the prominent scholarly advocates, has even called for the declaration of a 'planetary emergency' (Rockström 2020). More concretely, 'tipping points' in the earth system have been suggested, and scientists have begun to quantify values for 'planetary boundaries' that need to be protected for the sake of the stability of the planetary system (Rockström et al. 2009; Steffen et al. 2015). For example, a value of 350 parts per million of carbon dioxide in the atmosphere has been suggested as the 'planetary boundary' of the climate system. However, these planetary boundaries do not consider the social and economic dimensions of sustainability and have therefore met much criticism (Biermann and Kim 2020).

When the Sustainable Development Goals were negotiated, they thus stood in an inherent tension with the idea of planetary boundaries and the question of the priority of either social or earth system concerns (Kotzé 2018). Proponents of the 'planetary boundary' concept had lobbied at the 2012 United Nations Conference on Sustainable Development for a reference to planetary boundaries in the conference outcomes. Some non-governmental organizations even submitted a Draft United Nations Declaration on Planetary Boundaries to the conference (Planetary Boundaries Initiative 2012; Fernández and Malwé 2018). However, the planetary boundaries concept found no entry into the 2030 Agenda. Developing countries in particular viewed them as insufficiently concerned with the social and economic development needs of the Global South.

The Sustainable Development Goals are the political compromise between these conflicting interests and concerns. The 17 goals are to integrate social justice,

economic development and the global protection of ecosystems, while the relationship of the goals remains non-hierarchical. Although one could read a prioritization in the decision to begin the list of Sustainable Development Goals with the commitments to end poverty (Goal 1) and hunger (Goal 2), it is evident from the 2030 Agenda that all goals are equal and to be achieved simultaneously. Some academics have advanced framings that would grant the more ecosystem-related goals 13–15 – climate, life on land and life under water – more prominence. Some argued that the Sustainable Development Goals should be hierarchically organized with priority to those that most closely relate to ‘staying within planetary boundaries’ (Costanza et al. 2015). One often-cited example is the ‘wedding cake’ model (Rockstr m and Sukhdev 2016). Yet overall, such attempts of hierarchizing the Sustainable Development Goals run counter to the integrated and inclusive approach advanced in the 2030 Agenda.

Given the conflicting values, the question arises: to what extent did the goals help to navigate these dimensions? How is the vital concern of preserving the stability of planetary systems – what we describe here as ‘planetary integrity’ – reflected in the implementation of the Sustainable Development Goals? Did the goals advance planetary integrity in areas and policy fields that have only marginally been associated with ecological concerns? Where can we see change towards more planetary integrity in governance that can be attributed to the goals? Research insights on this topic will be evaluated in [Chapter 6](#).

### *Methods for Analysing Steering Effects of Global Goals*

The five core research areas of this assessment, taken together, reveal a final challenge: we are dealing with a compounding mix of novelty, complexity, uncertainty, urgency and, not least, global politics and diplomacy. The scholarly analysis of the steering effects of the goals needs to reflect such a multi-faceted nature of global goal-setting. This situation calls for novel approaches to scientific research, assessment and cooperation. Proposals for a new integrated, worldwide and transdisciplinary ‘sustainability science’ abound (e.g., Clark and Harley 2020), and studying the Sustainable Development Goals is now a prime example where this new generation of sustainability science is needed. Consequently, this assessment includes a chapter dedicated to epistemology and methodology. While [Chapters 2–6](#) evaluate *what we know* about the steering effects of global goals, [Chapter 7](#) discusses *how we can know* in the first place and identifies knowledge gaps and avenues for strengthening our methodological approaches and repertoire.

Given the complexity of the 2030 Agenda and the 17 global goals, this research area has attracted scholars who specialize in quantitative, data-driven work. Scholars have set up research programmes to study the interlinkages of goals and

targets through integrated assessment models (Collste, Pedercini and Cornell 2017; Van Soest et al. 2019). Originating in research on climate and oceans, such models have become more complex and also cover human activities. They are used to understand interlinkages among Sustainable Development Goals and their targets, and conversely, the goals offer a testing ground for elaborating and refining the models. Another data-driven approach to cope with the complexity of the Sustainable Development Goals is social network analysis, a method to show dynamic relations among large numbers of actors, programmes or policies. The GLOBALGOALS Project at Utrecht University, for instance, uses network analysis to map and analyse relations among international organizations and Sustainable Development Goals.

The complexity of the Sustainable Development Goals has also given rise to new approaches in the humanities and qualitative social sciences. Also here, some scholars turn to data-driven approaches, for example in the qualitative content analysis that Galvão, Cabral and Maurer (2020) used to track the influence of Sustainable Development Goals in texts from research projects and surveys of teachers, students and university staff in Brazilian universities. Others revert to qualitative, discursive and interpretative work to study broader questions, such as how the Sustainable Development Goals change perceptions and actions of decision-makers and societal influencers (e.g., Mert and Bäckstrand 2020). [Chapter 7](#) discusses these and many other methods in detail. We especially bring quantitative and qualitative work into the conversation, while keeping the space for both meta-approaches to improve and fine-tune their toolboxes.

### Organization of the Book

Taken together, this assessment reviews and evaluates the body of academic and policy literature on the steering effects of the Sustainable Development Goals.

The next chapter discusses the impact of the goals at the global level, for example whether the United Nations – notably the High-level Political Forum on Sustainable Development – provides multilateral leadership or plays an ‘orchestrating’ role, thereby also enhancing the global partnership for sustainable development and institutional or policy coherence at the global level ([Chapter 2 – Global Governance](#)). We then look into whether the Sustainable Development Goals have had any impact at the national and sub-national level, including governments, regional and local authorities, the private sector, civil society, covering developing and emerging economies, least developed countries and OECD countries ([Chapter 3 – Implementation at Multiple Levels](#)). Subsequently, we examine the interlinkages between the Sustainable Development Goals and the synergies and trade-offs across the goals and targets, along with studies on whether

Sustainable Development Goals have led to more institutional integration and policy coherence at national level (Chapter 4 – *Interlinkages, Integration and Coherence*). The following chapter reviews knowledge on whether the goals could bring about a better inclusion and support of poor and vulnerable communities within countries, and of the least developed countries internationally (Chapter 5 – *Inclusiveness*). Next, we evaluate scientific studies and policy reports on the question of whether the Sustainable Development Goals could advance planetary ecological integrity, that is, strengthen policies towards the preservation of global commons (for example, climate, biodiversity, marine environment and forests) in intergovernmental negotiations or national policy frameworks (Chapter 6 – *Planetary Integrity*). The subsequent chapter discusses how to measure overall progress on the achievement of the Sustainable Development Goals and how to explore their effects on institutional change, decision-making and the political discourse, thereby seeking to identify bridges between methodological camps (Chapter 7 – *Methods for Analysing Steering Effects of Global Goals*). Chapter 8 brings the key insights from the chapters together and provides the overarching conclusions of whether the Sustainable Development Goals have been a transformative force in global sustainability governance to date.

## References

- Abbott, K. W., & Bernstein, S. (2015). The High-level Political Forum on Sustainable Development: Orchestration by default and design. *Global Policy*, 6, 222–33.
- Allen, C., Metternicht, G., & Wiedmann, T. (2018). Initial progress in implementing the Sustainable Development Goals (SDGs): A review of evidence from countries. *Sustainability Science*, 13, 1453–67.
- Andonova, L. B. (2017). *Governance entrepreneurs: International organizations and the rise of global public–private partnerships*. Cambridge: Cambridge University Press.
- Beisheim, M. (2015). Follow-up and review of the post-2015 agenda. Contributing to effective implementation of the SDGs? *SEF Global Governance Spotlight*, Nr. 05/2015. Bonn: Stiftung Entwicklung und Frieden.
- Bernstein, S. (2017). The United Nations and the governance of Sustainable Development Goals. In N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 213–39). Cambridge, MA: MIT Press.
- Bexell, M., & J nsson, K. (2019). Country reporting on the Sustainable Development Goals: The politics of performance review at the global–national nexus. *Journal of Human Development and Capabilities*, 20, 403–17.
- Bhattacharya, D., Khan, T. I., & Salma, U. (2014). A commentary on the final outcome document of the Open Working Group on SDGs. *SAIS Review of International Affairs*, 34 (2), 165–77.
- Biermann, F., & Kim, R. E. (2020). The boundaries of the Planetary Boundary framework: A critical appraisal of approaches to define a ‘safe operating space’ for humanity. *Annual Review of Environment and Resources*, 45, 497–521.



- Biermann, F., & Sénit, C.-A. (2022). Decolonizing global sustainability governance. Unpublished manuscript. Utrecht: Utrecht University.
- Biermann, F., Kanie, N., & Kim, R. E. (2017). Global governance by goal-setting. The novel approach of the UN Sustainable Development Goals. *Current Opinion in Environmental Sustainability*, 26–27, 26–31.
- Biermann, F., Abbott, K., Andresen, S., Bäckstrand, K., Bernstein, S., Betsill, M. M., . . . Zondervan, R. (2012). Navigating the Anthropocene. Improving earth system governance. *Science*, 335, 1306–7.
- Biermann, F., Stevens, C., Bernstein, S., Gupta, A., Kanie, N., Nilsson, M., & Scobie, M. (2017). Global goal setting for improving national governance and policy. In N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 75–97). Cambridge, MA: The MIT Press.
- Chasek, P. S. (2000). The UN Commission on Sustainable Development: The first five years. In P. S. Chasek (ed.), *The global environment in the twenty-first century: Prospects for international cooperation* (pp. 378–98). New York, NY: United Nations University Press.
- Chasek, P. S., & Wagner, L. M. (2016). Breaking the mold: A new type of multilateral sustainable development negotiation. *International Environmental Agreements: Politics, Law, and Economics*, 16, 397–413.
- Chasek, P. S., Wagner, L. M., Leone, F., Lebada, A.-M., & Risse, N. (2016). Getting to 2030: Negotiating the Post-2015 Sustainable Development Agenda. *Review of European, Comparative and International Environmental Law*, 25, 5–14.
- Clark, W. C., & Harley, A. G. (2020). Sustainability science: Towards a synthesis. *Annual Review of Environment and Resources*, 45, 331–86.
- Collste, D., Pedercini, M., & Cornell, S. E. (2017). Policy coherence to achieve the SDGs: Using integrated simulation models to assess effective policies. *Sustainability Science*, 12, 921–31.
- Costanza, R., McGlade, J., Lovins, H., & Kubiszewski, I. (2015). An overarching goal for the UN Sustainable Development Goals. *Solutions*, 5 (4), 13–16.
- Elder, M., & Højberg Olsen, S. (2019). The design of environmental priorities in the SDGs. *Global Policy*, 10, 70–82.
- Fernández, E. F., & Malwé, C. (2018). The emergence of the ‘planetary boundaries’ concept in international environmental law: A proposal for a framework convention. *Review of European, Comparative & International Environmental Law*, 28, 48–56.
- French, D., & Kotzé, L. J. (eds.) (2018). *Sustainable Development Goals: Law, theory and implementation*. Cheltenham: Edward Elgar Publishing.
- Gehre Galvão, T., Cabral, R., & Maurer, L. (2020). Brazilian university network on the 2030 Agenda: Challenges and opportunities on territorialising the SDGs in Brazil. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Hathie, I. (2020). *Leave no one behind: A cross-country synthesis*. In *Southern Voice, Global state of the SDGs report: Three layers of critical action* (pp. 67–91). Southern Voice.
- Hickmann, T., Biermann, F., Spinazzola, M., Ballard, C., Bogers, M., Forestier, O., . . . Yunita, A. (2020). Global governance through goal-setting: Learning from a meta-analysis on the effects of the Millennium Development Goals. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Independent Group of Scientists appointed by the Secretary-General (2019). *Global Sustainable Development Report: The future is now – science for achieving sustainable development*. New York, NY: United Nations.

- International Institute for Sustainable Development (2021). *SDSN releases 2021 Findings on National, Global Performance towards SDGs*. Available at: <https://sdg.iisd.org/news/sdsn-releases-2021-findings-on-national-global-performance-towards-sdgs/>. Accessed: 22 June 2021.
- Kamau, M., Chasek, P., & O'Connor, D. (2018). *Transforming multilateral diplomacy: The inside story of the Sustainable Development Goals*. London: Routledge.
- Kanie, N., & Biermann, F. (eds.) (2017). *Governing through goals: Sustainable Development Goals as governance innovation*. Cambridge, MA: The MIT Press.
- Kanie, N., Bernstein, S., Biermann, F., & Haas, P. M. (2017). Introduction: Global governance through goal setting. In N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 1–27). Cambridge, MA: The MIT Press.
- Kotz , L. J. (2018). The Sustainable Development Goals: An existential critique alongside three new-millennial analytical paradigms. In D. French, & L. J. Kotz  (eds.), *Sustainable Development Goals: Law, theory and implementation* (pp. 41–65). Cheltenham: Edward Elgar Publishing.
- Le Blanc, D. (2015). Towards integration at last? The Sustainable Development Goals as a network of targets. *Sustainable Development*, 23, 176–87.
- Liverman, D. M. (2018). Geographic perspectives on development goals: Constructive engagements and critical perspectives on the MDGs and the SDGs. *Dialogues in Human Geography*, 8, 168–85.
- Lusseau, D., & Mancini, F. (2019). Income-based variation in Sustainable Development Goal interaction networks. *Nature Sustainability*, 2, 242–7.
- Mawdsley, E. (2018). 'From billions to trillions': Financing the SDGs in a world 'beyond aid'. *Dialogues in Human Geography*, 8, 191–5.
- Mert, A., & B ckstrand, K. (2020). Discursive sources of de/legitimation in governance through goals: Partnerships for Agenda 2030 and the SDGs. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Montesano, F., Biermann, F., Kalfagianni, A., & Vijge, M. J. (2021). Can the Sustainable Development Goals green international organisations? Sustainability integration in the International Labour Organisation. *Journal of Environmental Policy and Planning* Available at: <https://doi.org/10.1080/1523908X.2021.1976123>.
- Nilsson, M., Griggs, D., & Visbeck, M. (2016). Policy: Map the interactions between Sustainable Development Goals. *Nature*, 534, 320–2.
- Nilsson, M., Chisholm, E., Griggs, D., Howden-Chapman, P., McCollum, D., Messerli, P., . . . Stafford-Smith, M. (2018). Mapping interactions between the Sustainable Development Goals: Lessons learned and ways forward. *Sustainability Science*, 13, 1489–1503.
- Planetary Boundaries Initiative (2012). *Draft United Nations Declaration on Planetary Boundaries*. Available at: <http://planetaryboundariesinitiative.org/about-2/declarations/draftonpb/>. Accessed: 22 November 2020.
- Rockstr m, J. (2020). Why we need to declare a global climate emergency now. *Financial Times Special Report Investing in Nature*, 28 July.
- Rockstr m, J., & Sukhdev, P. (2016). *How food connects all the SDGs*. Available at: [www.stockholmresilience.org/research/research-news/2016-06-14-how-food-connects-all-the-sdgs.html](http://www.stockholmresilience.org/research/research-news/2016-06-14-how-food-connects-all-the-sdgs.html). Accessed: 2 September 2020.
- Rockstr m, J., Steffen, W., Noone, K., Persson,  ., Chapin, F. S., Lambin, E. F., Lenton, T. M., Scheffer, M., Folke, C., . . . Schellnhuber, H. J. (2009). A safe operating space for humanity. *Nature*, 461 (7263), 472–5.

- Rosche, D. (2016). Agenda 2030 and the Sustainable Development Goals: Gender equality at last? *An Oxfam Perspective. Gender and Development*, 24 (11), 111–26.
- Sachs, J. (2012). From Millennium Development Goals to Sustainable Development Goals. *The Lancet*, 379, 2206–11.
- Sachs, J., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. (2021). *Sustainable Development Report 2021. The Decade of Action for the Sustainable Development Goals*. Cambridge: Cambridge University Press.
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. (2020). *The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020*. Cambridge: Cambridge University Press.
- Sénit, C.-A. (2020). Leaving no one behind? The influence of civil society participation on the Sustainable Development Goals. *Environment and Planning C: Politics and Space*, 38, 693–712.
- Sénit, C.-A., Biermann, F., & Kalfagianni, A. (2017). The representativeness of global deliberation: A critical assessment of civil society consultations for sustainable development. *Global Policy*, 8, 62–72.
- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Biggs, R., Carpenter, S. R., de Vries, W., & de Wit, C. A. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347, 1259855.
- Underdal, A., & Kim, R. E. (2017). The Sustainable Development Goals and multilateral agreements. In N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 241–58). Cambridge, MA: MIT Press.
- UNGA [United Nations General Assembly] (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1.
- United Nations (2021). *Progress towards the Sustainable Development Goals. Report of the Secretary-General*. New York, NY: United Nations.
- Van Soest, H. L., van Vuuren, D. P., Hilaire, J., Minx, J. C., Harmsen, J. H. M., Krey, V., . . . Luderer, G. (2019). Analysing interactions among Sustainable Development Goals with integrated assessment models. *Global Transitions*, 1, 210–25.
- Vijge, M. J., Biermann, F., Kim, R. E., Bogers, M., van Driel, M., Montesano, F. S., . . . Kanie, N. (2020). Governance through global goals. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance: Institutional complexity and structural transformation* (pp. 254–74). Cambridge: Cambridge University Press.
- Weitz, N., Carlsen, H., Nilsson, M., & Skånberg, K. (2018). Towards systemic and contextual priority setting for implementing the 2030 Agenda. *Sustainability Science*, 13, 531–48.
- Young, O. R. (2017). Conceptualization: Goal setting as a strategy for earth system governance. In: N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 31–51). Cambridge, MA: MIT Press.
- Young, O. R., Underdal, A., Kanie, N., & Kim, R. E. (2017). Goal setting in the Anthropocene: The ultimate challenge of planetary stewardship. In N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 53–74). Cambridge, MA: MIT Press.
- Yunita, A., Biermann, F., Kim, R. E., & Vijge, M. J. (2022). The (anti-) politics of policy coherence for sustainable development in the Netherlands: Logic, method, effects. *Geoforum*, 128, 92–102.

## 2

# Global Governance

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Many observers expected the Sustainable Development Goals to strengthen the institutional architecture of global sustainability governance within the United Nations system and beyond. This ambition was already part of the negotiations of the goals. Here, the United Nations General Assembly had created an ‘open working group’ of only 30 countries, driven by fears that negotiations with universal participation would not lead to an agreement. However, when over 70 countries wanted to join this group, the United Nations found an innovative way to accommodate them by sharing the 30 seats among ‘duos’ and ‘trios’ of countries. In another innovation, the open working group first went through a ‘stocktaking’ process to create a common understanding of the issues and to create legitimacy among governments and stakeholders (Chasek and Wagner 2016; Dodds, Donoghue and Roesch 2016; Kamau, Chasek and O’Connor 2018). However, some studies criticized these negotiations for being ‘unpolitical’ and brushing over conflicts (Rivera 2017; Thérien and Pouliot 2020).

The academic literature has characterized the 2030 Agenda as ‘governing through goals’ (Kanie and Biermann 2017: ix). Typical features include a goal-setting process that aims to be broadly inclusive; the non-legally binding nature of the goals; reliance on weak institutional arrangements to promote and implement the goals; and extensive leeway for states or other actors and institutions in responding to the goals (Biermann, Kanie and Kim 2017; Vijge et al. 2020: 256). Some studies argued that goal-setting can be impactful and that the Sustainable Development Goals encapsulate ‘seeds for transformation’ (Stevens and Kanie 2016). Yet, global governance through goals remains a contested strategy (Kanie et al. 2017: 6; Young 2017: 38). Legal scholars emphasize that goals that are aspirational need additional mechanisms to reach beyond the fragmented and compartmentalized system of international law (Kim 2016: 17). In principle, such mechanisms can be found in the other parts of the 2030 Agenda, especially in the sections on the means of implementation and on the follow-up and review.

In this chapter we assess to what extent the literature identifies major changes in global governance – that is, the system of international agencies, programmes and other global actors and institutions – following the launch of the Sustainable Development Goals in 2015. We first discuss the range of expectations for global governance arrangements for the goals, considering their stated objectives. We then assess the early performance of governance arrangements in terms of shifts in policy and practice. We focus here on changes within the United Nations system and its interactions with other international institutions and actors since the launch of the goals.

### **Conceptualization and Methods**

In line with the approach of this overall assessment, our study of the goals' impacts on global governance aims at evaluating their steering effects. While the scholarly literature offers several definitions of global governance, most focus on authoritative and purposeful 'steering', making this a good starting point to evaluate whether the goals have constituted or underpinned governance (Bernstein 2011; Rosenau 1995). In practice, steering here means that an organization, actor or institution, individually or collectively, has adjusted its behaviour, policies, programmes or practices by explicitly adopting the goals or by pursuing objectives defined by the goals.

### *Aspirations and Expectations*

Our analysis begins by identifying the governance aspirations mentioned in the 2030 Agenda (which includes the Sustainable Development Goals) (Finnemore and Jurkovich 2020) and the expectations raised by scholars and experts, government representatives, stakeholders, and other engaged groups. Based on official documents and early literature from the negotiations and launch period from 2011 to 2017, we identify four areas of aspirational or expected steering effects (see also Bowen et al. 2017): that the 2030 Agenda and the goals would, first, enhance multilateral leadership and guidance; second, improve system-wide coherence and coordination of global sustainable development policies; third, strengthen the global partnership and the means of implementation; and fourth, strengthen the global level follow-up and review for peer-learning and accountability to citizens. We now outline in more detail these aspirations and expectations, which will be our points of reference for the assessment of the actual steering effects of the goals that follows.

**Enhancing Global Political Leadership and Guidance?** After the 2012 United Nations Conference on Sustainable Development, governments mandated the

newly established High-level Political Forum on Sustainable Development to provide ‘leadership, guidance and recommendations’ for sustainable development (UNGA 2013a). While governments gave the forum this far-reaching mandate, its formal status and resources remained limited (Abbott and Bernstein 2015). Some studies argued that the High-level Political Forum would face shortcomings similar to, or be even weaker than, the institution that it replaced, the United Nations Commission on Sustainable Development (Strandenaes 2016), or even cautioned that the forum could end up being an ‘empty institution’ devoid of any influence (Dimitrov 2020: 636). It is widely accepted that despite some early accomplishments, the Commission on Sustainable Development had many shortcomings, such as an inability to attract ministers from economic or social sectors; a rigid sectoral-based agenda that prevented it from addressing new issues; and a weak review mechanism (UNGA 2013b). The mandate of the High-level Political Forum aimed to address these weaknesses. Governments also decided to strengthen the forum by having it meet annually under the auspices of the Economic and Social Council and every four years under the auspices of the General Assembly.

Some studies argued that the High-level Political Forum could potentially serve as an ‘orchestrator’ for the 2030 Agenda and the Sustainable Development Goals (see also Chapters 1 and 8 of this book). Contingent upon its focality and legitimacy, the forum could employ a soft and indirect governance strategy by enlisting third-party actors as intermediaries (Abbott and Bernstein 2015; Bernstein 2013, 2017). While debate persisted on the extent to which the weak institutional arrangements would affect the High-level Political Forum’s leadership, experts agreed that orchestration would continue to be challenging given the broad array of actors and institutions called upon to implement the 2030 Agenda.

**Improving System-Wide Coherence?** The 2030 Agenda and the Sustainable Development Goals renewed the call for greater coordination and coherence by highlighting the need for a more integrated agenda across the economic, social and environmental dimensions of sustainable development (Le Blanc 2015). Overcoming institutional competition and turf battles has been a persistent challenge within and beyond the United Nations system (Mueller 2010). The literature describes global sustainability governance as a patchwork of international institutions that vary in their character (organizations, regimes and implicit norms), their constituencies (public and private), scope (minilateral to multilateral), and subject matter, from specific policy fields to universal concerns (Biermann et al. 2009: 16). The 2030 Agenda emphasizes the need for system-wide coherence and coordination in global governance in several contexts. It mentions policy and institutional coherence as ‘systemic issues’, captured for example in target 17.14, to ‘enhance policy coherence for sustainable development’ (UNGA 2015b: 27). It also identifies one of the roles of the High-level Political Forum as promoting

system-wide coherence and coordination of sustainable development policies, working with the General Assembly, the Economic and Social Council, and other bodies and processes (UNGA 2015b: paragraph 82) (for institutional integration at the national level, see Chapter 4 of this book).

Potential positive effects noted in some studies include institutional integration (Vijge et al. 2020: 268), the creation of overarching and cross-cutting norms, the institutionalization of the Sustainable Development Goals in soft law instruments, influence on the development of rules and (legal) enforcement (Kanie et al. 2017: 6–8), and the potential to decrease norm conflicts (Vijge et al. 2020: 266). Other studies, however, questioned how far the goals could change the fragmentation of global governance (Kim 2016). This concern has led some studies to call for approaching sectoral issues from a nexus perspective, which could be facilitated by the High-level Political Forum as an integrative global steering body (Boas, Biermann and Kanie 2016).

**Building a Global Partnership?** It was clear that global governance for the Sustainable Development Goals would need to reflect countries' diverse capacities, capabilities and starting positions for implementing the 2030 Agenda. In addition, international rules on finance, trade and technology affect countries differently, leading to asymmetries and inequalities (Ocampo and Gómez-Arteaga 2016). Building on the earlier Millennium Development Goal 8, the 2030 Agenda aspires to revitalize a 'Global Partnership' and define means of implementation. Differences over the nature and scope of development cooperation and the sources of the necessary funding hampered agreement on the key elements of the 'Global Partnership'. Many developing countries advocated for a partnership between developing and industrialized countries, with industrialized countries taking the lead in providing the means of implementation. In addition, developing countries suggested necessary reforms to systemic global issues, for example new or reformed financial, tax, trade and investment architectures (Fukuda-Parr and Muchhala 2020: 7–8). Developing countries also reinforced their demands for greater democratization of global economic governance through increasing the voice and vote of developing countries in international financial institutions.

Many industrialized countries, however, did not see a strong necessity for major institutional reforms. Instead, they emphasized the need to expand domestic sources of financing, increase the role of the private sector, and call on emerging economies in the Global South to shoulder more responsibilities. Their understanding of the 'Global Partnership' went beyond governments and encompassed a wider range of actors, including the explicit endorsement of multi-stakeholder partnerships (Thérien and Pouliot 2020). In addition to official development assistance, developed countries expected financing for the Sustainable Development Goals to include philanthropy, remittances, South–South flows

and other official assistance, along with foreign direct investment, resources and investments of all types – including both public and private and both national and international financing.

The 2030 Agenda captures these conflicting aspirations in Sustainable Development Goal 17, as a stand-alone goal, and in the targets on means of implementation contained in the other goals. The Addis Ababa Action Agenda, adopted in 2015 at the Third International Conference on Financing for Development, also addresses the ‘means of implementation’ for the 2030 Agenda (UNGA 2015a). It is expected that national and international aid and development actors play a significant role and that official development assistance increases. However, aid became less important in the overall mix of domestic and international, as well as public and private, flows to fund the Agenda’s implementation, with the exception of aid to least developed countries, small island states or highly indebted countries with limited access to other sources of finance. The Agenda also envisages changes in policy areas such as finance, technology, trade or data, monitoring and accountability (UNGA 2015b).

While underlining the importance of national implementation, the 2030 Agenda singles out several international institutions. Below, we focus on steering effects on the United Nations development system. Suggesting a need to make it ‘fit’ for sustainable development, the 2030 Agenda stresses the ‘important role and comparative advantage’ of a reformed United Nations system for supporting the achievement of the Sustainable Development Goals (UNGA 2015b: paragraph 46). For this, the United Nations development entities were also expected to do better in terms of leadership and coherence. Several studies expected multilateral development organizations to play a crucial role in implementing the 2030 Agenda, especially as ‘leaders of the new “global partnership”’ (Kharas and Biau 2015: 12) that could innovate within the development community and build bridges to the private sector (Bhattacharya et al. 2018). In the vision of the 2030 Agenda, multilateral development organizations could coordinate among multiple development actors, support a more coherent approach and provide public goods such as data. The United Nations development system was expected to change its role from funding (that is, mobilizing grants to implement United Nations projects) to financing (that is, bringing together funding flows for a common result) (Bailey 2017). The United Nations was also expected to function as an orchestrator, brokering collective action to support sustainable development in networks of actors whose primary role is not necessarily related to either sustainable development or international cooperation (Paulo and Klingebiel 2016). For all these roles, multilateral organizations would need to complete internal reforms and adapt to changing demands (Browne and Weiss 2014; OECD 2015).



**Improving Global Follow-Up and Review?** Even before the United Nations adopted the 2030 Agenda, several studies offered recommendations on the follow-up and review of the Sustainable Development Goals, based on the assessment of strengths and weaknesses of the existing review mechanisms (Beisheim 2014, 2015; Espey, Walecik and Kühner 2015; Halle and Wolfe 2015). In the end, the United Nations established a voluntary review mechanism, comprising thematic reviews and Voluntary National Reviews, the latter based on national processes (UNGA 2015b: paragraph 74–90). The follow-up and review process aspired to be ‘robust, voluntary, effective, participatory, transparent and integrated [to] help countries to maximize and track progress in implementing’ the Sustainable Development Goals (UNGA 2015b: paragraph 72). Governments decided that the High-level Political Forum should have a ‘central role in overseeing a network of follow-up and review processes at the global level’ (UNGA 2015b: paragraph 82). Some negotiators of the 2030 Agenda strongly contested establishing these follow-up and review procedures (Beisheim 2014; Dodds, Donoghue and Roesch 2016; Kamau, Chasek and O’Connor 2018). As a result of many governments resisting more ‘prescriptive’ reviews, the review procedures ended up being designed to promote merely voluntary peer-learning.

Some governments also contested the role of civil society in the reviews. Some studies viewed the 2012–2015 negotiations of the Sustainable Development Goals as the most recent phase in a long-term trend towards increased civil society participation in global governance (Fox and Stoett 2016). Others, however, were more sceptical of the potential of civil society consultations to democratize global governance (Sénit, Biermann and Kalfagianni 2017). The aspirational goal of ‘leaving no one behind’ fostered some expectations for the inclusion of civil society in monitoring and reviewing the global implementation of the Sustainable Development Goals (Strandenaes 2014). Indeed, the 2030 Agenda states that the follow-up and review mechanism ‘should be open, inclusive, participatory and transparent for all people and will support the reporting by all relevant stakeholders’ (UNGA 2015b: paragraph 74d) to ‘ensure that no one is left behind’ (UNGA 2015b: paragraph 72) and ‘promote accountability to our citizens’ (UNGA 2015b: paragraph 73).

### *Methods*

We take these four aspirations and expectations as our points of reference for assessing what the academic and expert literature concludes about the steering effects of the Sustainable Development Goals in global governance. Our core question, in line with the objectives stated in [Chapter 1](#), is: Did political, economic

or societal actors in global governance change their behaviour because of the Sustainable Development Goals? Following the framework in [Chapter 1](#), we are especially interested in causal pathways that the literature identifies, specifically through normative changes (including adjustments in legislative and regulatory frameworks and policies), institutional changes (including financial incentives and budgets), or discursive changes (including novel concepts and narratives). We limit the scope of our analysis to what the literature says about steering effects at the global level, including horizontal effects across institutional arrangements or governance complexes. While our focus is on the steering effects of Sustainable Development Goals on global governance, these effects must translate into changes and better implementation at other levels to have an impact (see [Chapter 3](#)).

Our assessment is based on a comprehensive analysis of academic and expert studies on the impact of the goals on global governance. We identified academic literature published since 2015 from the Scopus database, using a search string that combined keywords such as ‘Sustainable Development Goal\*’ and ‘steer\* or governance’ and ‘global’.<sup>1</sup> This search resulted in a total of 470 publications. To obtain more specific results, we added keywords for the four types of aspirational or expected steering effects outlined above. After scanning all titles, keywords and abstracts, we identified 90 articles as potentially relevant for our chapter. We then complemented the Scopus search with other relevant publications, including grey literature, found through either a snowball approach or drawing on our own expertise. Altogether, we read and analysed 142 articles and papers that discuss steering effects of the goals on global governance.

In view of the research questions of this assessment, we note that the number of studies with relevant findings is still limited. The few analyses that have been published in academic journals focus on general theory development, the evaluation of single policies or on normative assessments. Other studies of the institutional changes remain largely descriptive. More analysis is hence needed. In the conclusion to this chapter we discuss areas for future research in more detail.

### **Research Findings and Practical Insights**

When the United Nations General Assembly adopted the 2030 Agenda in 2015, the United Nations had already started to align its work with the Sustainable Development Goals. The speed and range of this uptake is impressive, as documented in an annual survey, the ‘United Nations System Sustainable Development Goal Implementation online database’ (see also Office of Internal Oversight Services [2019](#); UNDESA [2020](#)). Harrington ([2019](#)) claims that ‘three genres of global governance mechanisms [have] changed and adapted to

incorporate and achieve the Sustainable Development Goals': first, those created for the goals themselves; second, economic mechanisms; and third, global environmental governance. Building on these initial findings, we now assess the literature that focuses on the High-level Political Forum on Sustainable Development; the United Nations development system; and global environmental governance. Our focus in each analysis is the four aspirations and expectations for the Sustainable Development Goals outlined above.

### *The High-level Political Forum*

The High-level Political Forum started to review progress towards the Sustainable Development Goals immediately after their launch. The fact that the High-level Political Forum became the 'home' of the Sustainable Development Goals in the United Nations system is itself an institutional steering effect of the 2030 Agenda. The High-level Political Forum attracts a wide range of participants, including high-level representatives from governments, the United Nations system and stakeholder groups. A 2019 survey found that 78 per cent of respondents agree that the High-level Political Forum has brought together participants with diverse backgrounds (UNDESA 2019a). The literature views the High-level Political Forum as a focal meeting place with a high degree of convening power (Adams 2019; Beisheim 2020a; Hege, Chabason and Barchiche 2020).

**Enhancing Global Political Leadership and Guidance?** Most studies concur that the *formal* leadership and guidance emanating from the High-level Political Forum during its first four-year cycle is limited (Beisheim 2018; Beisheim and Bernstein 2020b; Hege, Chabason and Barchiche 2020; UNDESA 2019b, 2019c). An often-mentioned example is that the outcome document – the pre-negotiated ministerial declarations that are supposed to be adopted at the end of each annual High-level Political Forum – fails to reflect discussions held at the meeting. The document merely reiterates general commitments and challenges without offering much political guidance or measures for follow-up (Beisheim 2018). Studies highlight a significant gap between mandate and expectations, on the one hand, and the forum's actual performance on leadership and guidance, on the other. This gap is notable, given that 83 per cent of respondents to a United Nations Department of Economic and Social Affairs survey expect the High-level Political Forum ministerial declaration to deliver in this regard (UNDESA 2019a).

Academic studies offer several reasons for this lack of formal leadership. First, the launch of the High-level Political Forum coincided with a period of increasing strain on, and declining commitment to, multilateralism (Hooghe, Lenz and Marks 2019; Morse and Keohane 2014). This is mirrored in many conflicts and an underlying unresolved normative dissent about the forum's mandate and

format (Beisheim 2020b). Hege (2018) suggests these general trends have manifested specifically in the inability of the High-level Political Forum since 2018 to adopt the negotiated ministerial declaration by consensus. In 2020 the COVID-19 pandemic also had an impact on the forum, further diminishing its political leadership. As meetings of the Economic and Social Council were held virtually, governments refrained from voting online. The draft declaration could thus not be adopted through a majority vote. Yet, the United Nations Secretary-General continues to call for an ‘inclusive and networked multilateralism’. For this, policy papers advocate strengthening the High-level Political Forum and turning it into a relevant network node (Beisheim and Fritzsche 2021) or – as a more far-reaching reform option – a powerful Sustainable Development Council (Wieczorek-Zeul et al. 2021, also Biermann 2014).

Second, some studies indicate an unresolved conflict about the status of the High-level Political Forum. The forum could be seen as either the main United Nations forum on sustainable development that has universal membership and, if not takes, at least prepares vital decisions; or it could be seen as a mere platform for informal exchange (Adams 2019; Beisheim 2018, 2020a; Beisheim and Bernstein 2020a). Behind this difference is the deeper divide of governments on the relationship between the High-level Political Forum and the Economic and Social Council, which some member states see as the main United Nations body responsible for follow-up and review (Beisheim 2020a, 2021; Strandenaes 2016).

Third, some studies have argued that the United Nations Department of Economic and Social Affairs, which provides the secretariat for the High-level Political Forum, lacks resources and autonomy to support a more robust leadership role for the High-level Political Forum and also shows administrative inefficiencies (Janus and Weinlich 2018; Office of Internal Oversight Services 2020; Widerberg and van Laerhoven 2014).

The literature thus suggests that the High-level Political Forum has fallen victim to these conflicts, shortcomings and, most significantly, lack of political will by governments to remove structural barriers to transformative change (see also Fuchs, Hayden and Kalfagianni 2020).

**Improving System-Wide Coherence?** The gap between aspirations and performance is also large regarding system-wide coherence. At the High-level Political Forum, speakers increasingly highlight interlinkages between the Sustainable Development Goals. The recommendations of the 2019 Global Sustainable Development Report have supported this shift in discourse. This report offers a detailed framework for supporting coherence and addressing the synergies and trade-offs by identifying six entry points: human well-being and capabilities; sustainable and just economies; food systems and nutrition patterns; energy decarbonization and universal access; urban and peri-urban development; and

global environmental commons. In addition, the 2019 Global Sustainable Development Report lists four levers for transformative change: governance; economy and finance; individual and collective action; and science and technology (Independent Group of Scientists appointed by the Secretary-General 2019).

Yet, some studies criticize the High-level Political Forum's annual focus on a subset of Sustainable Development Goals as too siloed (Amanuma et al. 2019) – despite having an overarching theme chosen for each meeting. Nevertheless, the thematic reviews still lag behind their potential to provide evidence-based analyses on interlinkages and cross-cutting issues, trade-offs and synergies, and gaps (Beisheim and Bernstein 2020a). Above all, several studies find that the High-level Political Forum has failed to promote or produce tangible outputs to achieve policy coherence (Beisheim 2020a; Brimont and Hege 2018; Monkelbaan 2019; UNDESA 2019a). Part of the literature has focused on how to improve policy coherence between the Sustainable Development Goals and the Paris climate agreement (Janetschek et al. 2020) or the human rights obligations of governments (Danish Institute for Human Rights 2020; Feiring and König-Reis 2020).

Studies on institutional interplay underline that the joint monitoring of individual goals can help with developing shared normative understandings, even though this is limited by structural factors, and legitimacy struggles continue (Addey 2021; Breitmeier et al. 2021). Some of the forum's reviews can build on existing comprehensive processes, for example for the review of Goal 6 on the joint monitoring of several United Nations agencies on water and sanitation (Beisheim 2018). Preparing for other reviews, however, the United Nations Department of Economic and Social Affairs had to set up entirely new coordination processes, for example with ten international organizations for the review of Goal 16 (Fritzsche 2020). The forum's meetings and review processes have also been criticized for not engaging with other processes, such as the Bretton Woods institutions or human rights reviews (De Burca 2019).

Beyond the forum's work, some studies identify substantial efforts to align the United Nations' work with the Sustainable Development Goals (Kapucu and Beaudet 2020; Office of Internal Oversight Services 2019). Another analysis, however, finds that the impact of the Sustainable Development Goals on interagency cooperation has been limited to merely providing a cross-cutting visual and rhetorical tool (Schnitzler, Seifert and Tataje 2020).

**Building a Global Partnership?** Each year, the High-level Political Forum features sessions to review Goal 17 on the Global Partnership, the results of the Financing for Development Forum and the Science, Technology and Innovation Forum, and the situation of countries in special situations such as least developed countries or small island developing states. Some studies find, however, that these sessions do not provide much added value beyond the two original forums

(Dano 2019; Obenland 2019). Likewise, countries rarely report on their financing strategies in their Voluntary National Reviews, resulting in limited peer-learning (Committee for Development Policy 2020; Hege, Chabason and Barchiche 2020). Accordingly, some studies argue that the follow-up and review system of the High-level Political Forum delivers neither on mutual accountability between donor and developing countries nor on business accountability (Adams 2019; Ocampo and Gómez-Arteaga 2016).

According to its mandate, the High-level Political Forum also aspires to offer a ‘platform for partnerships’. To showcase multi-stakeholder partnerships during the High-level Political Forum, the United Nations Department of Economic and Social Affairs has launched the ‘PX – Partnership Exchange’ and the ‘Partnerships for SDGs online platform’, a global database for self-registering initiatives. Yet, both efforts constitute only a weak ‘meta-governance’ for multi-stakeholder partnerships for Sustainable Development Goals (Beisheim and Simon 2018). While over 5,000 partnerships and voluntary commitments are registered on the platform, some studies question whether such voluntary bottom-up frameworks will deliver the type of multi-stakeholder partnerships required for true transformations (Beisheim and Ellersiek 2017, 2018; Horan 2019). A case in point is the small number of progress reports in the global registry (174 at the time of writing, with another 1,052 being expected but late and 3,556 more than two years overdue) (see also Bäckstrand, Koliev and Mert forthcoming). As regards causality, Breitmeier et al. (2021) found that in global food governance one partnership – the Sustainable Food Systems Programme – implemented changes *because of* new mobilization of knowledge around the Sustainable Development Goals.

In 2019, the United Nations launched a ‘2030 Agenda Partnership Accelerator’, which aims to scale up partnering and have transformational impact. Moreover, leading up to the 2019 ‘SDG Summit’ (that is, the quadrennial High-level Political Forum under the auspices of the United Nations General Assembly), the United Nations launched a new platform for ‘SDG Acceleration Actions’. Future research will need to follow the impact of these new initiatives while also engaging with new analytical approaches (Transformative Partnerships 2030, Sondermann and Ulbert 2021).

**Improving Global Follow-Up and Review?** The Sustainable Development Goals have strongly shaped the work of the United Nations with data. An Inter-Agency and Expert Group on SDG Indicators developed a global indicator framework, adopted in 2017. The Statistical Commission is working to refine the framework, and a whole array of processes has been initiated in support of this work. Building on this framework, the Secretary-General and the Statistical Commission issue annual reports that review progress towards the goals and targets and inform the High-level Political Forum. Studies lament that this data-driven monitoring

approach is technocratic and ignores politics, specifically attention to power and structural inequalities (Bexell and Jönsson 2019; Fisher and Fukuda-Parr 2019; Fukuda-Parr and McNeill 2019). The academic literature discusses several additional measurement and data issues, which are addressed in detail in [Chapter 7](#).

Overall, the institutional arrangements for the follow-up and review of implementation through the High-level Political Forum remain weak, confirming early criticisms that the 2030 Agenda had a vague and state-centric conception of accountability in terms of ‘what agents are held accountable, for what and to whom’ (Bexell and Jönsson 2017, 27; Donald and Way 2016). As early as 2016, several governments had opposed strengthening the follow-up and review framework for the Sustainable Development Goals (Beisheim 2016; see UNGA 2016). Now studies criticize the quality of both the cross-cutting thematic reviews and the reviews of individual goals (Beisheim 2018; Fritzsche 2020; Hege, Chabason and Barchiche 2020). National reporting is entirely voluntary. Nevertheless, 176 countries reported so far, some multiple times. In 2016, contestation led governments to limit agreement on ‘voluntary reporting guidelines’ of the United Nations Secretary-General to being a ‘suggested tool’ in preparing for the Voluntary National Reviews (UNGA 2016: paragraph 9; see also Beisheim 2018). The literature attributes the large variation in the quality of these reviews to this lack of mandatory reporting rules, reluctance to address problems and gaps, and the failure to highlight commitments for truly transformative action (Beisheim 2018; Hege, Chabason and Barchiche 2020; Kindornay and Gendron 2020; Partners for Review 2019, 2020; Persson, Weitz and Nilsson 2016). While some studies suggest that synergies between reporting mechanisms should be strengthened, for example by linking the forum’s Voluntary National Reviews to the Human Rights Council’s Universal Periodic Reviews (Feiring and König-Reis 2020), governments could not agree on such a mandate. Nevertheless, one study highlights that the United Nations human rights mechanisms increasingly engage with specific targets of Sustainable Development Goals in their reviews, even though this practice appears uneven (Jensen 2019). Other studies find that countries’ reports tend to prioritize those Sustainable Development Goals that are already part of their national development plans (Forestier and Kim 2020). Research also indicates that the Voluntary National Review processes mainly promote international and horizontal accountability (Bexell and Jönsson 2019), while the development of national, hierarchical accountability would require stronger national processes (Karlsson-Vinkhuyzen, Dahl and Persson 2018) (see [Chapter 3](#) of this book).

The High-level Political Forum provides space for interactive debate but its format is not geared towards collecting and documenting recommendations by the speakers. Some studies criticize the limited opportunity for interventions by non-state actors and marginalized groups and view informal events in parallel to the

High-level Political Forum more positively (Beisheim 2018; Grzywnowicz 2020; Sarwar and Nicolai 2018). The so-called Voluntary National Reviews Labs (that is, informal in-depth discussions of those reviews organized by the United Nations Department of Economic and Social Affairs), the many side events, and the growing number of special events are all seen as places for more open and honest discussion about successes and failures (Amanuma et al. 2019; Beisheim 2020a; Beisheim and Bernstein 2020a). Accordingly, experts acknowledge that the High-level Political Forum has offered space for peer-learning and exchanging best practices – but whether this affects the implementation of the goals remains unclear.

An interesting new development is the growing number of ‘Voluntary Local Reviews’. Since 2017, the High-level Political Forum has featured regular special events on local and regional government action, with mainly cities presenting (Dellas et al. 2018; Ortiz-Moya et al. 2020). Parliaments have also become active at the High-level Political Forum, for example through a Parliamentary Forum organized by the Inter-Parliamentary Union (Inter-Parliamentary Union 2020). The existing academic literature, however, focuses on the role of parliaments at the national level (Bexell and Jönsson 2020; Vrieze and Fitsilis 2020).

In sum, the literature finds mostly institutional steering effects of the 2030 Agenda and the Sustainable Development Goals, particularly the creation of the High-level Political Forum and related institutional innovations, including its convening power, peer-learning opportunities and review functions. The High-level Political Forum has become a focal point for promoting the Sustainable Development Goals throughout the United Nations system, supported by the United Nations Department of Economic and Social Affairs. However, the leadership, authority and capacity of the forum have remained limited, as has its role in enhancing institutional interplay. The value of the forum lies mainly in informal leadership and guidance, for example through peer-learning.

In terms of discourse, the literature suggests that some principles, such as coherence and ‘leave no one behind’, have resonated through meetings and activities of the High-level Political Forum and throughout the United Nations system as a result of its relationship to the Economic and Social Council and the United Nations General Assembly. Yet despite the promotion of these discourses and the informal guidance, there is little evidence in the literature that the High-level Political Forum has effectively produced formal normative outputs to foster policy coherence or directly influence the rest of the United Nations system in that regard.

### *United Nations Development System*

Discussions about how the United Nations development system would need to change to accommodate the requirements of the Sustainable Development Goals



began well before the adoption of the 2030 Agenda. The United Nations development system consist of 36 United Nations entities that differ in mandates and governance structures, mostly rely on voluntary funding and possesses weak centralized decision-making. From 2014 on, the Economic and Social Council held a series of dialogues to discuss the repositioning of the United Nations development system. Yet, no decisions towards substantial reforms were made. Several studies attributed this lack of change to the traditional conflict between industrialized and developing countries that prevents governments from delegating further authority to the United Nations (Baumann 2017; Dongxiao, Ruipeng and Lei 2018).

Nonetheless, the United Nations General Assembly firmly established the 2030 Agenda as the overall objective for the whole system, and in May 2018, the Assembly took a series of decisions to better align the United Nations development system's capacities and resources to the 2030 Agenda. Several studies see the 2030 Agenda as the main rationale for these reforms, although some studies also note many pre-2015 grievances that these reforms also aim to address (Browne and Weiss 2021; Dongxiao, Ruipeng and Lei 2018; Reddy 2018). While a few internal studies describe and assess reform efforts, along with a few external, more policy-oriented studies, overall we note a lack of scholarly assessments and especially more theory-led research. The limitations in scholarship suggest the need for more work beyond internal assessments to more generally determine whether changes to the operations of United Nations entities took place because of the Sustainable Development Goals.

**Enhancing Global Political Leadership and Guidance?** The United Nations General Assembly directed the United Nations development system to propagate global norms and standards, especially the 2030 Agenda. Yet to do so requires not only advocacy but also to incorporate the Sustainable Development Goals in all their operations. The literature highlights ways in which the goals have guided multilateral institutions to align policies. Some studies observe that multilateral development organizations have formally translated the 2030 Agenda into their work programmes, reshaped their policies and operational strategies, created tools to monitor this alignment, and use the 2030 Agenda and Sustainable Development Goals, their targets and some indicators in country strategies (OECD 2018: 152–67). United Nations entities are described as leading here; most United Nations development strategies at the country-level use the Sustainable Development Goals as a global results framework (OECD and UNDP 2019: 99). As part of the reforms, the United Nations development system as a whole formulates a system-wide strategic document that outlines its collective approach to the 2030 Agenda, defines its roles and commits to principles such as 'leave no one behind' and national ownership (United Nations Sustainable Development Group 2019). An internal

assessment shows, however, that the scope and intensity of change varies across the United Nations (Office of Internal Oversight Services 2019).

The 2030 Agenda has also been translated into policy tools. This process, however, has not yet been analysed in more detail. An interesting yet under-researched instrument for advancing the implementation of the 2030 Agenda is the 2016 ‘Mainstreaming, Acceleration and Policy Support’ framework. This framework seeks to orient the technical assistance by United Nations entities in support of the national implementation of the Sustainable Development Goals. It aims to guide the translation of the goals into national and sub-national plans, budgets and actions, raise public awareness, and establish practices for monitoring and reporting (UNDP 2019). While the framework has been used widely, it is yet to be assessed from a scholarly perspective.

In terms of leadership, the United Nations has strengthened the role of its Resident Coordinators, who now represent the United Nations Secretary-General in a developing country. The coordinator is accountable to the government for the United Nations’ collective support of the goals and expected to act as an impartial convenor and, where possible, orchestrator.

Yet, while internal reports highlight good progress in implementing reforms, it is questionable whether these reforms will fundamentally alter the work of United Nations entities regarding strong multilateral leadership and guidance. Studies highlight structural impediments and point out that limited funding and the lack of robust mandates hamper a shift of United Nations development entities towards providing more integrated policy advice (Hendra and Baumann 2020; OECD 2020). United Nations development entities have also failed to take the principle of universality seriously. The system has paid little attention to measures that support high-income countries in their sustainable development efforts internally or in their development policies (Weinlich and Baumann 2018).

The unclear steering effects of the goals on United Nations development entities might be in line with a broader pattern. A growing number of studies detail the difficulties for the 2030 Agenda to initiate change: Many lament that development finance at a scale that they deem necessary has not been provided (Barua 2020; Kharas 2019). Moreover, the institutional and instrumental overhaul of national and international development actors called for by the universal, integrated and indivisible ambition of the 2030 Agenda, has failed to materialize. Kloke-Lesch (2021: 147), for instance, argues that ‘development cooperation actors have responded to the 2030 Agenda mainly by adopting its terminology and using it as a reinforced narrative underpinning and incrementally broadening their pre-existing business models’.

The literature discusses several reasons for this limited influence. First, it is argued that the commitments regarding Goal 17, and the ‘means of implementation’

more generally, mostly only reaffirm existing commitments and are too vague. The negotiated text makes it difficult to unambiguously identify what concrete changes are needed owing to soft formulations, static indicators and missing data baselines (Berensmann et al. 2015). Second, without any specific guidance on the quality of development cooperation or a universal framework to assess their contributions, development organizations can easily align themselves with the goals rhetorically or in policy pronouncements (Pérez-Pineda and Wehrmann 2021; Rudolph 2017), while the allocation of official development assistance remains motivated by short-term strategic interests of economic and political opportunities, not by the priorities of the goals (Mawdsley et al. 2018). Third, some studies argue that the 2030 Agenda does not clearly attribute responsibilities for implementing the goals (Bexell and Jönsson 2017; Cooper and French 2018; Spangenberg 2017). Fourth, new development organizations led by Southern actors increased existing coordination challenges within the heterogeneous system of international development cooperation, which was exacerbated by the unresolved conflict between countries from the Global South and Global North on what development cooperation means and who bears which responsibilities. All these factors together have created coordination challenges when it comes to implementing the Sustainable Development Goals (Chaturverdi et al. 2021).

**Improving System-Wide Coherence?** A key aim of ongoing reforms of the United Nations development system is to strengthen cooperation and coordination among the entities and translate their activities into more coherent support at scale for countries' efforts to implement the goals. This effort includes attempts to overcome the divisions between the activities of the United Nations in peace and security, humanitarian aid, human rights, and sustainable development (Ivanova 2021; Samarasinghe 2021). Measures have included increasing the authority of the Resident Coordinators; enlarging systemic support structures and delinking them from the United Nations Development Programme to make them more independent; and new cooperation mechanisms to better integrate the Regional Economic Commissions with the regional structures of the United Nations (Connolly and Mincieli 2019; Connolly and Roesch 2020; Surasky et al. 2020). The narrative was adjusted to support greater coherence as well. The United Nations Development Assistance Framework – the programmatic umbrella for all United Nations activities in a developing country – was renamed the United Nations Sustainable Development Cooperation Framework. New detailed guidance on how to formulate such a framework both in terms of process and substance is meant to ensure that the United Nations development assistance follows an integrated and multidimensional programming approach based on the goals and principles such as 'leave no one behind'.

However, several studies indicate a mixed impact of these efforts and persisting obstacles to reaching greater coherence. Some articles argue that the reforms, if

fully implemented, would make the United Nations development system a strong partner in pushing for a transformation towards sustainable development (Hendra and Fitzgerald 2021). Others warn of high transaction costs of coordination in a loose system (Sohn and Choi 2019). While overall cautious not to rule out improvements regarding system-wide coherence, still others claim that the reforms have inbuilt limitations, in particular with regard to the governance and funding of the system (Weinlich et al. 2022). As Golding (2021: 231) puts it: ‘the inherent constraints of a 75-year-old, fragmented United Nations system, with a long history of building silos and branding, mean that the single biggest challenge remains the alignment of goals, resources, activities, evaluations and reporting back to member states, to donors, and ultimately to taxpayers’. Systemic and structural changes underway are mostly restricted to areas under the purview of the United Nations Secretary-General. They fall short of tackling fragmentation more forcefully, for instance by merging entities or creating a sustainable development board as an overarching governing body (Helgason 2016). The United Nations development system’s central authority remains weak, as do mechanisms to ensure coordination between the pillars, from peace and security to human rights and the environment (Gruener and Hammergren 2021; Samarasinghe 2021).

There is a consensus in the literature that the funding patterns at the United Nations are a strong driver for fragmentation: The long-term trend of earmarked funding means that United Nations entities with overlapping mandates compete for scarce resources, both in developing countries as well as globally (Baumann and Weinlich 2021). The reforms address the issue in the ‘Funding Compact’ where governments pledge to provide more and better quality funding in return for better accountability, effectiveness and efficiency on the part of the United Nations development system (Weinlich and Jenks 2019). Whether these voluntary commitments will lead to a more appropriately balanced mix of resources needs to be closely studied. Determining the impact of such reforms is especially important since the increasingly earmarked nature of multilateral funding is frequently found to be an impediment to multilateral organizations fully delivering on their potential to implement the 2030 Agenda (Baumann, Lundsgaarde and Weinlich 2020; OECD 2020). Earmarked funding promotes a piecemeal approach that limits flexibility and the ability to target funds where recipients believe they are needed most, and it generally restricts the ability to develop integrated approaches to support transformations (Weinlich et al. 2020). Since donor organizations use the power of their purse to direct activities of multilateral organizations instead of seeking multilateral consensus, earmarked funding also undermines global governance and the legitimacy of multilateral organizations (Barder, Ritchie and Rogerson 2019; Graham 2017; Michaelowa 2017).

**Building a Global Partnership?** As part of the reforms following the adoption of the Sustainable Development Goals, the United Nations has started to assist governments in mobilizing and accessing new funding sources. Activities range from establishing green finance products and other pooled funds that are open to contributions from the private sector, to supporting governments in devising so called integrated national financing frameworks (Dag Hammarskjöld Foundation and United Nations Multi-Partner Trust Fund Office 2018: 112–34). The United Nations also engages in analytical and advocacy work to align the financial system with the 2030 Agenda (UNEP 2018). The United Nations Secretary-General, for instance, has founded the ‘Global Investors for Sustainable Development’ alliance to enhance the impact of private investment on sustainable development. There is little scholarly literature that takes stock of these efforts or assesses their effects, although the annual reports of the Dag Hammarskjöld Foundation and the United Nations Multi-Partner Trust Fund Office (2020) have showcased several initiatives. There is more interest in multilateral financial organizations and the challenges and potential dangers of using public funds for mobilizing private sector capital (Elder, Shigemoto and King 2018; King, Elder and Shigemoto 2018; Mawdsley 2018; Walker, Pekmezovic and Walker 2019). Some studies assess the United Nations development system’s mixed record in attracting funding for their own activities from the private sector and embarking on partnerships with for-profit companies and philanthropies (Biermann et al. 2020). Some studies, while still underlining the need for increased resources, also raise concerns about the absence of rigorous oversight in line with the United Nations core norms and human rights standards (Adams 2021; Seitz and Martens 2017).

**Improving Global Follow-Up and Review?** Many entities of the United Nations development system engage in monitoring global progress by acting as ‘custodian agencies’ for indicators under the Sustainable Development Goals (van Driel et al. 2021; Young 2017). As one study describes, since governments do not automatically provide the necessary funding for these tasks, some indicators initially were unclaimed by any entity, while for others, there was competition (Kapto 2019). The United Nations development system also works towards improving data and data collection on indicators in developing countries and strengthening national statistical capacity. Closer cooperation on data, especially on vulnerable groups, is part of the reforms. Some articles describe successful United Nations efforts to harmonize and establish global data standards, adopted in April 2020, that allow individual entities and the development system as a whole to report its activities against specific goals (Dag Hammarskjöld Foundation and United Nations Multi-Partner Trust Fund Office 2019). One study has highlighted

that the reforms strengthened lines of accountability between governments and the United Nations development system (Golding 2021).

In sum, the literature finds a variety of steering effects of the 2030 Agenda and the Sustainable Development Goals. The United Nations General Assembly prominently anchored the 2030 Agenda as the main purpose of the United Nations development system in its resolutions that provided system-wide guidance and authorized the reform, thereby initiating normative change. Multifaceted institutional changes can also be observed as part of the reform. While the 2030 Agenda provided the key rationale for the reform, many of these changes are seen in the literature as attempts to overcome earlier and longstanding fragmentation problems. While some changes are far-reaching in terms of how the United Nations development system collaborates, they did not include more fundamental steps such as the merger of entities.

The overall impact of the institutional changes also depends on whether governments are able and willing to send coherent signals in the governing bodies and change their funding practices. The literature describes many discursive changes, and the 2030 Agenda offers a new narrative for United Nations agencies towards a more collective approach. Yet it remains questionable how deep these discursive changes go and whether they will override organizational and financial incentives that still drive the system apart and push it towards small-scale interventions instead of integrated approaches at scale.

### ***Global Environmental Governance***

Global environmental governance is known to be institutionally fragmented and lacking a central institution such as the International Labour Organization or the World Health Organization in their fields. More than a thousand international environmental treaties create a complex global regulatory framework, each one with their own conferences of the parties as their primary governing body. This institutional fragmentation of global environmental governance has been discussed in the literature since the 1970s, with reform proposals ranging from better interaction management and the clustering of environmental treaties to the creation of a powerful world environment organization (Biermann and Bauer 2005).

To catalyse and better coordinate environmental activities in the United Nations system, in 1972 governments created the United Nations Environment Programme. The programme is meant 'to be the leading global environmental authority that sets the global environmental agenda, that promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and that serves as an authoritative advocate for the global environment' (UNEP 1997: 55). Its overall political impact has been limited, however, and many

other actors, notably the conferences of the parties to the major environmental treaties, still dominate the development of global environmental governance.

The 2012 United Nations Conference on Sustainable Development sought to improve global environmental governance (UNGA 2012). Among other reforms, governments agreed to upgrade the Governing Council of the United Nations Environment Programme, which had only 58 members, to a more ambitious United Nations Environment Assembly with universal membership. Some scholars expressed hope that the 2030 Agenda and the Sustainable Development Goals, agreed three years later, could serve as collective 'headlines' for better connecting the many multilateral environmental agreements (Biermann, Kanie and Kim 2017). The record indicates, however, a more limited impact.

**Enhancing Global Political Leadership and Guidance?** The key body to provide leadership to implement the Sustainable Development Goals is the High-level Political Forum, discussed above. As for the United Nations Environment Programme, some studies indicate that its influence might have become more limited since the adoption of the Sustainable Development Goals, partially because of the integrated nature of the 17 goals and the now wider set of actors, institutions and norms that engage with environmental concerns (Elder and Olsen 2019; McInerney 2017). Others observe a further division of policy concerns in the three components of atmosphere, land and water, as they are distinctly covered in Goal 13 on climate change, Goal 14 on life below water and Goal 15 on life on land (Scholtz and Barnard 2018). Some studies indicate that the United Nations Environment Programme has been unable to fully use the potential of the new United Nations Environment Assembly, now with universal membership, to steer the global environmental agenda in support of the Sustainable Development Goals. Formally, the Assembly is committed to the 2030 Agenda and communicates its messages to the High-level Political Forum (McInerney 2017: 17; Urho et al. 2019: 29). Yet, the Assembly has also become more political. Governments have become more interested in the Assembly, as indicated by an increase of 21 per cent in the number of delegations attending between 2010 and 2017 (Urho et al. 2019: 23). Governments have also assumed more responsibility for introducing resolutions and the number of resolutions has increased; both developments have reduced the role of the secretariat. Consequently, many resolutions are often less aligned with the programme of work of the United Nations Environment Programme, which has raised confusion about ownership and follow-up, including about which Sustainable Development Goals are relevant (Urho et al. 2019: 25). Some studies conclude that the United Nations Environment Programme still faces hurdles to being an anchor institution for the global environment and to steer collective action for the 2030 Agenda (Ivanova 2020a; 2020b: 347).

**Improving System-Wide Coherence?** Environmental governance has been described as one of the most fragmented domains of global governance (Biermann 2014; Zelli and van Asselt 2013). The Sustainable Development Goals here seem to have had a largely discursive impact. For example, the Environment Management Group, through which the United Nations Environment Programme seeks to coordinate with 51 multilateral bodies, has now included the 2030 Agenda in its terms of reference and adopted in 2016 a system-wide framework of strategies on environmental issues. The Sustainable Development Goals seem to have inspired the Environment Management Group to move beyond its thematically driven approach, as it now aims to converge agency strategies and strengthen capacity to support the integration of the environment in the implementation of the goals (McInerney 2017: 5; Urho et al. 2019: 43). Starting in 2017, the Environment Management Group organized a series of Nexus Dialogues on thematic and institutional interlinkages between environmental issues, frameworks and agendas in the context of the Sustainable Development Goals. Yet, following the United Nations' own assessment, the group's functioning is 'limited in effectiveness and scope' (UNGA 2018: paragraph 81).

Some institutional effects can be found, even though many reforms follow a longer trajectory of increased interaction management and are not a direct effect of the global goals. Many multilateral environmental agreements have taken decisions to strengthen synergies and cooperation through shared approaches and operational tools. An example is the mapping of biodiversity-related conventions to the Aichi Biodiversity Targets in 2016 (Azizi, Biermann and Kim 2019: 460). Some environmental treaties used the Sustainable Development Goals to justify linkages with other sustainability issues and refer to the goals as higher-order priorities. Yet, operational difficulties remain because of diverse memberships and objectives and the often-limited integration between the objectives of multilateral environmental agreements and the Sustainable Development Goals and their targets. For example, Dauvergne (2018) concludes that despite Goal 14 on oceans, global governance of marine plastic pollution remains highly uneven, without strong regulation with binding targets and timelines. Harrould-Kolieb (2020) argues that Goal 14.3, *Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels*, lacks the specificity required to have effect and requires a much stronger governance framework.

The United Nations Environment Programme could play a role in facilitating coherence among international environmental treaties as it aims to focus more strongly on cross-cutting areas in its programmatic cooperation with treaties within and across their thematic clusters. This includes more connections with 'non-environmental' development objectives, such as human rights, gender equality,



economic growth and employment (UNEP 2020). Yet the relationship of the United Nations Environment Programme with the hundreds of conferences of the parties to multilateral environmental agreements is still vague; decision-making seems often to continue to operate in silos without an overall strategy or mechanism for cooperation to facilitate system-wide coherence (Chasek and Downie 2021: 302; Urho et al. 2019: 85). The Sustainable Development Goals do not seem to have structurally transformed these global institutional architectures.

**Building a ‘Global Partnership’?** In terms of global partnership, envisioned by the 2030 Agenda and the Sustainable Development Goals, no transformative effects are reported in the literature. Funding for environmental programmes has not substantially increased. Many changes in collaboration among countries that have occurred follow the trajectory of international environmental treaties that make up the texture of global environmental governance, but have not been directly motivated by the Sustainable Development Goals. For example, the climate convention processes have continued without clear added impact of the Sustainable Development Goal 13, *Take urgent action to combat climate change and its impacts*.

**Improving the Global Follow-Up and Review?** The United Nations Environment Programme is supposed to provide a central narrative on the environmental dimension of sustainable development for the annual reports that inform the High-level Political Forum, partially because of its role as a ‘custodian’ in the United Nations system for 26 environment-related indicators that do not fall under a multilateral environmental agreement. Indeed, there are some efforts to increase information management, for example in two web portals (McInerney 2017: 3; Urho et al. 2019: 12). A ‘World Environment Situation Room’ is intended to provide a global digital environmental platform underpinned by economic and social data, drawing on private and citizen science (UNEP 2020: 7). These datasets aim to track progress on multilateral environmental agreements (UNEP 2020: 30). However, environmental data remain a weak area in implementation of the Sustainable Development Goals, with only about 40 per cent country-level data coverage for the 93 environment-related indicators (Campbell et al. 2020: 446).

The 2012 United Nations Conference on Sustainable Development also called upon the United Nations Environment Programme to ‘ensure active participation of relevant stakeholders’ (UNGA 2012: paragraph 88). This focus has led to an interpretation of ‘partnership’ that is more consistent with a focus on broadening the range of actors or multi-stakeholder partnerships than on financing or structural reforms. Changes include more flexibility in accrediting civil society organizations, which led to an increase of 80 per cent in accredited organizations between 2013 and 2018, from 272 to 490 (Urho et al. 2019). Participation in the United Nations Environment Assembly has also increased over time, from 1,200 in the

first assembly to 4,450 in the third assembly. However, civil society actors and the private sector are still rather disconnected from decision-making (Urho et al. 2019: 64). In its 2022–2025 Medium-Term Strategy, the United Nations Environment Programme has restated its ambition to increase partnerships, including South–South, North–South and triangular cooperation, as well as cooperation with civil society and science, especially regarding data collection (Campbell et al. 2020; UNEP 2020).

In sum, the literature shows some adjustments in global environmental governance because of the Sustainable Development Goals, yet with only mixed results. Most changes are discursive, with international organizations, programmes and treaty bodies adopting the language of the Sustainable Development Goals and the 2030 Agenda. The leadership of the High-level Political Forum is also limited in global environmental governance, and the leadership role of the United Nations Environment Programme has not been structurally transformed. The alignment of multilateral environmental agreements has not been drastically affected by the Sustainable Development Goals (see also Chapter 6). The Nexus Dialogues, however, suggest that the Environment Management Group can inspire a more integrated approach, which could be related back to the broader vision of the 2030 Agenda.

As in other areas, so too in global environmental governance is it difficult to analytically separate the steering effects of the Sustainable Development Goals from the broader changes initiated since 2016. Many conferences of the parties to the hundreds of environmental treaties have continued their policy development, with more or less success; yet the impact of the global goals on these treaty bodies remains doubtful and is unlikely to be transformative. Institutional effects related to the Sustainable Development Goals concern data collection, indicator development and the Nexus Dialogues.

Importantly, the relationship between global environmental governance and the Sustainable Development Goals is in many instances bidirectional, that is, the global goals themselves reflect decisions and processes that centre on other institutions. Goal 13, *Take urgent action to combat climate change and its impacts*, is not much more than a reference to the climate convention and related processes, without adding new ambitions or different targets. In a footnote to Goal 13, the 2030 Agenda explicitly ‘acknowledge[s] that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change’. Bidirectionality is less visible for Goal 14 on oceans and Goal 15 on life on land. But also here, some targets refer to standards from other policy processes or organizations, such as the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology.

Finally, we need to conclude also that this area is in need of more research, especially of large-scale comparative assessments of the extent to which norms, standards and decisions by international environmental treaty bodies have been affected by the Sustainable Development Goals beyond mere discursive recognition.

### Conclusions and Future Directions

We started this chapter by first identifying four aspirations and expectations for the steering effects of the Sustainable Development Goals at the global level: enhancing global political leadership and guidance; improving system-wide coherence; building a global partnership; and improving global follow-up and review. We examined what the literature says on the degree to which these expectations were met in the operations and performance of the United Nations' work on the Sustainable Development Goals in three areas: the High-level Political Forum on Sustainable Development; the United Nations development system; and global environmental governance. Here we review the main findings, focusing on whether the literature identified normative, institutional, or discursive changes in line with the four aspirations in each of the three governance arrangements assessed.

Looking across the three arenas, overall we conclude that there is a broad consensus in the literature that the Sustainable Development Goals have had some effects on global governance through their widespread adoption as normative references in policy and programme pronouncements, through establishing new institutions and changing existing institutions, and in a changed discourse within global institutions that now addresses the global challenges targeted by the Sustainable Development Goals. United Nations entities have aligned their work with the Sustainable Development Goals. Moreover, the commitments and principles in the 2030 Agenda, the agreement over the means of implementation, and the framework for a follow-up and review helped to advance alignment processes in the United Nations system.

At the same time, however, the literature does not show compelling evidence or confidence that the Sustainable Development Goals have had any transformative impact on broadening or changing the mandates, practices or resource allocation of international organizations and institutions. While the underpinning governance principles of the Sustainable Development Goals – such as universality, coherence, integration and 'leaving no one behind' – have changed the discourse in multilateral institutions, there is limited evidence of whether these discursive changes have transformed the practice of global sustainable development governance.

In terms of institutional changes, the creation of the High-level Political Forum in 2013 and its reviews of the Sustainable Development Goals from 2016 onwards

is evidence of institutional reform in both anticipation of and response to the Sustainable Development Goals. Yet, the leadership and guidance required for actual steering towards substantial transformations has not materialized. The most blatant manifestation of this absence is the outcome documents of the High-level Political Forum, which lack any specific guidance or action plans and do not even reflect the discussions in the forum. Moreover, given the expectations of servicing the 2030 Agenda, the responsible divisions of the United Nations secretariat suffer from weak mandates and limited resources. While the literature identifies several reasons for these weaknesses, the lack of political will among governments is likely to top the list, which reflects wider problems in the multilateral system and also impacted the 2021 negotiations on the review of the forum.

Conversely, the High-level Political Forum provides a platform for peer-learning among governments, especially by providing opportunities for interaction with, and among, non-state, local and regional actors. The literature documents a high level of buy-in and participation in follow-up and review, but also notes a need to enhance the quality of these processes, making them more inclusive, coherent, evaluative, action-oriented and geared to inform future decision- and policy-making. The academic literature has not yet systematically addressed whether and how this peer-learning has led to transformative normative (legislative or policy) changes, at global, national or local levels. More research is needed on the development and uptake of best practices. The 247 presentations of Voluntary National Reviews until 2021 could be seen as an excellent source of data for larger and more systematic empirical analyses of the steering effects of the Sustainable Development Goals through these global reviews. Moreover, there is hardly any research that identifies *causal* links between processes and changes.

The United Nations development system more broadly also shows evidence, according to the literature, of incorporating the 2030 Agenda and Sustainable Development Goals discursively in policy pronouncements that translate into institutional and normative changes in how entities support and engage in monitoring the goals, and plan and evaluate their activities. However, many of those reforms and policy initiatives are congruent with broader and longer-term changes in development cooperation, for instance towards greater coherence and the inclusion of the private sector: they cannot be attributed solely to the goals, even though the 2030 Agenda has provided an additional impetus for change. This holds particularly for the wide-ranging reforms initiated in 2018 to strengthen what the United Nations development system can collectively contribute to implementing the Sustainable Development Goals. While the literature assesses the reforms as being extensive, it also concludes that they fall short of more fundamental changes (for example, organizational mergers, embracing universality, bridging thematic pillars, or devising new funding structures). This might in the end limit their impact and the role that the United Nations development system can play in

pushing for transformations towards sustainable development. Overall, more research is needed to better understand the scope of changes in the United Nations development system and their impact.

In global environmental governance, the United Nations Environment Programme sees itself as the primary forum for promoting implementation of the environmental dimension of sustainable development. Yet, its leadership has thus far been limited, which some studies attribute to the politicized nature of its decision-making body, the United Nations Environment Assembly. Universal membership and increased participation by civil society and the private sector may have the potential to build a broader global partnership for implementation, but this has not yet expanded to decision-making. The highly polycentric nature of global environmental governance, including the United Nations Environment Programme and the myriad multilateral environmental agreements, continues to limit institutional changes and system-wide coherence.

Taken together, the 2030 Agenda has been heralded as a call for transformation of policy-making and practice of multilateral institutions. Yet there are few academic studies on how international organizations have changed in response. While experts observe institutional and discursive changes that seem aligned with the 2030 Agenda, there is not much scholarly discussion on whether those changes were *caused* by the agenda or the goals or merely reflect trends already underway. Moreover, while the literature frequently refers to the Sustainable Development Goals as catalysts for reform, it also highlights that the observable changes are not transformational – even though the 2030 Agenda carries the title ‘Transforming our World’. Accordingly, many studies see a mismatch between aspirations and outcomes in global governance. Reforms have been modest, and changes have been largely found only in discourses with limited practical effects.

At the same time, assessing the degree of transformation depends on one’s expectations for change in relation to other processes: for example, compared to the Millennium Development Goals, institutional changes have been more extensive and rapid. Also, seven years since 2015 is only a short period for major reforms in global governance to take effect. Further empirical work is needed to study the degree to which United Nations member states will authorize and support agencies to further adjust their mandates and organizational structures. Similarly, such work will need to assess movement toward an integrated approach that stands at the heart of the Sustainable Development Goals by increasing cooperation and coordination with other parts of the United Nations system, and fostering collaboration more broadly with a wide range of actors expected to work with, and within, these entities. Studies should focus on the conflicts and politics that are connected to this. It would be important, for example, to study changes in the role of the major groups and other stakeholders or the role of science in these United Nations processes. More work is also needed to better understand the requirements

and conditions under which the United Nations can better position itself to successfully orchestrate partnerships and voluntary initiatives on the global goals.

In short, systematic, theory-informed empirical analyses are now needed for deeper insights about the steering effects of the Sustainable Development Goals on global governance.

### Note

- 1 Search string (TITLE-ABS-KEY ( ( “sustainable development goal\*” OR “SDG\*” ) AND ( steer\* OR governance ) AND ( global OR international OR “united AND nations” OR “un” ) AND (LIMIT-TO ( PUBYEAR , 2021 ) OR LIMIT-TO ( PUBYEAR, 2020 ) OR LIMIT TO (PUBYEAR, 2019 ) OR LIMIT TO ( PUBYEAR 2018 ) OR LIMIT-TO ( PUBYEAR, 2017 ) OR LIMIT-TO ( PUBYEAR, 2016 ) OR LIMIT-TO ( PUBYEAR, 2015 ) ).

### References

- Abbott, K. W., & Bernstein, S. (2015). The High-level Political Forum on Sustainable Development: Orchestration by default and design. *Global Policy*, 6, 222–33.
- Adams, B. (2019). Democratic global governance: If it doesn't challenge power it isn't democratic. In B. Adams, C. A. Billorou, R. Bissio, C. Y. Ling, K. Donald, J. Martens & S. Prato (eds.), *Reshaping governance for sustainability: Transforming institutions – shifting power – strengthening rights. Global Civil Society Report on the 2030 Agenda and the SDGs* (pp. 35–47). Beirut/Bonn/Ferney-Voltaire/Montevideo/New York/Penang/Rome/Suva: Reflection Group on the 2030 Agenda for Sustainable Development.
- Adams, B. (2021). Private finance and partnerships at the UN. In S. Browne, & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 165–83). London: Routledge.
- Addey, C. (2021). Passports to the Global South, UN flags, favourite experts: Understanding the interplay between UNESCO and the OECD within the SDG4 context. *Globalisation, Societies and Education*. Available at: <https://doi.org/10.1080/14767724.2020.1862643>.
- Amanuma, N., Koike, H., Zusman, E., Hengesbaugh, M., Fujjino, J., & Sussman, D. D. (2019). *Assessing the HLPF four years on: Enhancing integration, linking processes and strengthening political leadership*. Available at: <https://sdg.iisd.org/commentary/guest-articles/assessing-the-hlpf-four-years-on-enhancing-integration-linking-processes-and-strengthening-political-leadership/>. Accessed: 8 October 2020.
- Azizi, D., Biermann, F., & Kim, R. E. (2019). Policy integration for sustainable development through multilateral environmental agreements: An empirical analysis, 2007–2016. *Global Governance: A Review of Multilateralism and International Organizations*, 25, 445–75.
- Bäckstrand, K., Koliev, F. & Mert, A. (forthcoming). Institutional Capacity, Inclusion, and Transparency in SDG Partnerships for Agenda 2030: A Preliminary Assessment. In: E. Murphy, Banerjee, A. & Walsh, P. (eds.), *Partnerships and Sustainable Development Goals*. New York: Springer Nature.
- Bailey, R. (2017). From funding to financing – beginning the journey. In Dag Hammarskjöld Foundation & United Nations Multi-Partner Trust Fund Office (eds.), *Financing the UN Development System: Pathways to reposition for Agenda 2030* (pp. 48–51). Uppsala: Dag Hammarskjöld Foundation.

- Barder, O., Ritchie, E., & Rogerson, A. (2019). 'Contractors or collectives?' Earmarked funding of multilaterals, donor needs, and institutional integrity: The World Bank as a case study. *Policy Paper*, No. 153. Washington, DC: Centre for Global Development.
- Barua, S. (2020). Financing sustainable development goals: A review of challenges and mitigation strategies. *Business Strategy & Development*, 3, 277–93.
- Baumann, M.-O. (2017). Forever North–South? The political challenges of reforming the UN development system. *Third World Quarterly*, 39, 626–41.
- Baumann, M.-O., & Weinlich, S. (2021). Funding the UN: Support or constraint? In S. Browne, & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 151–64). London: Routledge.
- Baumann, M.-O., Lundsgaarde, E., & Weinlich, S. (2020). *Earmarked funding for multi-lateral development cooperation: Asset and impediment*. Briefing Paper, No. 16/2020. Bonn: German Development Institute.
- Beisheim, M. (2014). The Future HLPF Review: Criteria and ideas for its institutional design. *Working Paper*, No. 01/2014. Berlin: German Institute for International and Security Affairs.
- Beisheim, M. (2015). Reviewing the post-2015 Sustainable Development Goals and partnerships: A proposal for a multi-level review at the High-level Political Forum. *Research Paper*, No. 01/2015. Berlin: German Institute for International and Security Affairs.
- Beisheim, M. (2016). Follow-up and review: Developing the institutional framework for implementing and reviewing the Sustainable Development Goals and partnerships. *Working Paper*, No. 02/2016. Berlin: German Institute for International and Security Affairs.
- Beisheim, M. (2018). UN reforms for the 2030 Agenda: Are the HLPF's working methods and practices 'fit for purpose'? *Research Paper*, No. 09/2018. Berlin: German Institute for International and Security Affairs.
- Beisheim, M. (2020a). Reviewing the HLPF's 'format and organizational aspects': What's being discussed? *Working Paper*, No. 01/2020. Berlin: German Institute for International and Security Affairs.
- Beisheim, M. (2020b). United Nations reforms for the 2030 Agenda: The review of the High-level Political Forum on Sustainable Development. Paper presented at the 2020 SDGs Research Symposium GlobalGoals2020, 9–11 June, Utrecht University.
- Beisheim, M. (2021). Conflicts in UN Reform Negotiations: Insights into and from the Review of the High-level Political Forum on Sustainable Development. Research Paper, No. 09/2021. Berlin: German Institute for International and Security Affairs.
- Beisheim, M., & Bernstein, S. (2020a). *Matching the HLPF's ambition to performance: Prospects for the Review*. Available at: <https://sdg.iisd.org/commentary/guest-articles/matching-the-hlpfs-ambition-to-performance-prospects-for-the-review/>. Accessed: 7 October 2020.
- Beisheim, M., & Bernstein, S. (2020b). The High-level Political Forum Review 2020: An opportunity to fulfill the HLPF's mandate. In Friends of Governance for Sustainable Developments (eds.), *Governance for Sustainable Development, Volume 4: Challenges and Opportunities for Implementing the 2030 Agenda for Sustainable Development* (pp. 138–46). New World Frontiers Publications.
- Beisheim, M., & Ellersiek, A. (2017). Partnerships for the 2030 Agenda for Sustainable Development: Transformative, inclusive and accountable? *Research Paper*, No. 14/2017. Berlin: German Institute for International and Security Affairs.
- Beisheim, M., & Ellersiek, A. (2018). Towards quality partnerships for the SDGs. *Annual Review of Social Partnerships*, 2018 (13), 70–3.
- Beisheim, M., & Fritzsche, F. (2021). *Networked multilateralism: ECOSOC and HLPF Reviews as window of opportunity*. Available at: <http://sdg.iisd.org/commentary/guest-articles/networked-multilateralism-ecosoc-and-hlpf-reviews-as-window-of-opportunity/>. Accessed: 29 March 2021.

- Beisheim, M., & Simon, N. (2018). Multistakeholder partnerships for the SDGs: Actors' views on UN metagovernance. *Global Governance*, 24, 497–515.
- Berensmann, K., Brandi, C., Janus, H., Keijzer, N., & Weinlich, S. (2015). Strengthen the means of implementation and revitalise the global partnership for sustainable development. In M. Loewe & N. Rippin (eds.), *Translating an ambitious vision into global transformation: The 2030 Agenda for Sustainable Development* (pp. 101–10). *Discussion Paper*, No. 7/2015. Bonn: German Development Institute.
- Bernstein, S. (2011). Legitimacy in intergovernmental and non-state global governance. *Review of International Political Economy*, 18, 17–51.
- Bernstein, S. (2013). *The role and place of the High-level Political Forum in strengthening the global institutional framework for sustainable development*. Available at: <https://sustainabledevelopment.un.org/content/documents/2331Bernstein%20study%20on%20HLPF.pdf>. Accessed: 10 June 2021.
- Bernstein, S. (2017). The United Nations and the governance of Sustainable Development Goals. In N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 213–40). Cambridge, MA: The MIT Press.
- Bexell, M., & Jönsson, K. (2017). Responsibility and the United Nations' Sustainable Development Goals. *Forum for Development Studies*, 44, 13–29.
- Bexell, M., & Jönsson, K. (2019). Country reporting on the Sustainable Development Goals: The politics of performance review at the global–national nexus. *Journal of Human Development and Capabilities*, 20, 403–17.
- Bexell, M., & Jönsson, K. (2020). Realizing the 2030 Agenda for sustainable development – engaging national parliaments? *Policy Studies*. Available at: <https://doi.org/10.1080/01442872.2020.1803255>
- Bhattacharya, A., Kharas, H., Plant, M., & Prizzon, A. (2018). The new global agenda and the future of the multilateral development bank system. *International Organisations Research Journal*, 13 (2), 101–24.
- Biermann, F. (2014). *Earth system governance: World politics in the Anthropocene*. Cambridge, MA: MIT Press.
- Biermann, F., & Bauer, S. (eds.) (2005). *A world environment organization. Solution or threat for effective international environmental governance?* Aldershot: Ashgate.
- Biermann, F., Kanie, N., & Kim, R. E. (2017). Global governance by goal-setting: The novel approach of the UN Sustainable Development Goals. *Current Opinion in Environmental Sustainability*, 26–27, 26–31.
- Biermann, F., Pattberg, P., van Asselt, H., & Zelli, F. (2009). The fragmentation of global governance architectures: A framework for analysis. *Global Environmental Politics*, 9 (4), 14–40.
- Biermann, F., van Driel, M., Vijge, M. J., & Peek, T. (2020). Governance fragmentation. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance* (pp. 158–79). Cambridge: Cambridge University Press.
- Boas, I., Biermann, F., & Kanie, N. (2016). Cross-sectoral strategies in global sustainability governance: Towards a nexus approach. *International Environmental Agreements: Politics, Law and Economics*, 16, 449–64.
- Bowen, K. J., Cradock-Henry, N. A., Koch, F., Patterson, J., Häyhä, T., Vogt, J., & Barbi, F. (2017). Implementing the 'Sustainable Development Goals': Towards addressing three key governance challenges – collective action, trade-offs, and accountability. *Current Opinion in Environmental Sustainability*, 26–27, 90–6.
- Breitmeier, H., Schwindenhammer, S., Checa, A., Manderbach, J., & Tanzer, M. (2021). Aligned sustainability understandings? Global inter-institutional arrangements and the implementation of SDG 2. *Politics and Governance*, 9 (1), 141–51.



- Brimont, L., & Hege, E. (2018). *A High-level Political Forum with added value is necessary for SDG coherence*. Available at: [www.iddri.org/en/publications-and-events/blog-post/high-level-political-forum-added-value-necessary-sdg-coherence](http://www.iddri.org/en/publications-and-events/blog-post/high-level-political-forum-added-value-necessary-sdg-coherence). Accessed: 10 June 2021.
- Browne, S., & Weiss, T. G. (eds.) (2014). *Post-2015 UN development: Making change happen?* London: Routledge.
- Browne, S., & Weiss, T. G. (2021). The UN Development System: Origins, structure, status. In S. Browne, & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 9–31). London: Routledge.
- Campbell, J., Neuner, J., See, L., Fritz, S., Fraisl, D., Espey, J., & Kim, A. (2020). The role of combining national official statistics with global monitoring to close the data gaps in the environmental SDGs. *Statistical Journal of the IAOS*, 36, 443–53.
- Chasek, P. S., & Downie, D. Leonard (2021). *Global environmental politics*. London: Routledge.
- Chasek, P. S., & Wagner, L. M. (2016). Breaking the mold: A new type of multilateral sustainable development negotiation. *International Environmental Agreements: Politics, Law and Economics*, 16, 397–413.
- Chaturverdi, S., Heiner, J., Klingebiel, S., Li, X., de Mello e Souza, A., Sidiropoulos, E., & Wehrmann, D. (2021). Development cooperation in the context of contested global governance. In S. Chaturverdi, S. Klingebiel, E. Sidiropoulos, X. Li, H. Janus, A. de Mello e Souza, & D. Wehrmann (eds.), *The Palgrave handbook of development cooperation for achieving the 2030 Agenda: Contested collaboration* (pp. 1–24). London: Palgrave Macmillan.
- Committee for Development Policy (2020). Voluntary National Reviews Reports: What do they (not) reveal? *Background Paper*, No. 50. New York, NY: United Nations Department of Economic and Social Affairs.
- Connolly, L., & Mincieli, L. (2019). *Sustaining peace in Liberia: New reforms, new opportunities?* New York/Vienna/Manama: International Peace Institute.
- Connolly, L., & Roesch, J. L. (2020). *Unpacking the UN's development system reform*. New York/Vienna/Manama: International Peace Institute.
- Cooper, N., & French, D. (2018). SDG 17: Partnerships for the goals – cooperation within the context of a voluntarist framework. In D. French & L. J. Kotzé (eds.), *Sustainable Development Goals: Law, theory and implementation* (pp. 271–304). Cheltenham: Edward Elgar Publishing.
- Dag Hammarskjöld Foundation & United Nations Multi-Partner Trust Fund Office (eds.) (2018). *Financing the UN development system: Opening doors*. Fourth annual report.
- Dag Hammarskjöld Foundation & United Nations Multi-Partner Trust Fund Office (eds.) (2019). *Financing the UN development system: Time for hard choices*. Fifth annual report.
- Dag Hammarskjöld Foundation & United Nations Multi-Partner Trust Fund Office (eds.) (2020). *Financing the UN development system: Time to walk the talk*. Sixth annual report.
- Danish Institute for Human Rights (2020). *The human rights guide to the Sustainable Development Goals*. Available at: <https://sdg.humanrights.dk/en>. Accessed: 14 October 2020.
- Dano, N. (2019). Can the Technology Facilitation Mechanism help deliver the SDGs in the era of rapid technological change? In B. Adams, C. A. Billorou, R. Bissio, C. Y. Ling, K. Donald, J. Martens, & S. Prato (eds.), *Reshaping governance for sustainability: Transforming institutions – shifting power – strengthening rights*. *Global Civil Society Report on the 2030 Agenda and the SDGs* (pp. 186–9).
- Dauvergne, P. (2018). Why is the global governance of plastic failing the oceans? *Global Environmental Change*, 51, 22–31.

- De Burca, D. (2019). *Where to for HLPF review process?* Available at: <https://sdg.iisd.org/commentary/guest-articles/where-to-for-hlpf-review-process/>. Accessed: 14 October 2020.
- Dellas, E., Carius, A., Beisheim, M., Parnell, S., & Messner, D. (2018). *Local and regional governments in the follow-up and review of global sustainability agendas*. Berlin/Brussels: adelphi/Cities Alliance.
- Dimitrov, R. S. (2020). Empty institutions in global environmental politics. *International Studies Review*, 22, 626–50.
- Dodds, F., Donoghue, D., & Roesch, J. Leiva (2016). *Negotiating the Sustainable Development Goals: A transformational agenda for an insecure world*. London: Routledge.
- Donald, K., & Way, S.-A. (2016). Accountability for the Sustainable Development Goals: A lost opportunity? *Ethics and International Affairs*, 30, 201–13.
- Dongxiao, C., Ruipeng, M., & Lei, X. (2018). Reforming the UN development system: Impetus, agenda and Chinese proposals. *China Quarterly of International Strategic Studies*, 4, 193–212.
- Elder, M., & Olsen, S. H. (2019). The design of environmental priorities in the SDGs. *Global Policy*, 10 (S1), 70–82.
- Elder, M., Shigemoto, A., & King, P. (2018). Transforming finance and investment for the SDGs. In M. Elder, & P. King (eds.), *Realising the transformative potential of the SDGs* (pp. 127–50). Hayama: Institute for Global Environmental Studies.
- Espey, J., Walecik, K., & Kühner, M. (2015). *Follow-up and review of the SDGs: Fulfilling our commitments*. Working Paper. New York, NY: Sustainable Development Solutions Network.
- Feiring, B., & König-Reis, S. (2020). Leveraging human rights mechanisms to improve SDG follow-up and review. *Making the HLPF more inclusive*, No. 2. Uppsala: Dag Hammarskjöld Foundation.
- Finnemore, M., & Jurkovich, M. (2020). The politics of aspiration. *International Studies Quarterly*, 64, 759–69.
- Fisher, A., & Fukuda-Parr, S. (2019). Introduction – data, knowledge, politics and localizing the SDGs. *Journal of Human Development and Capabilities*, 20, 375–85.
- Forestier, O., & Kim, R. E. (2020). Cherry-picking the Sustainable Development Goals: Goal prioritization by national governments and implications for global governance. *Sustainable Development*, 28, 1269–78.
- Fox, O., & Stoett, P. (2016). Citizen participation in the UN Sustainable Development Goals consultation process: Toward global democratic governance? *Global Governance: A Review of Multilateralism and International Organizations*, 22, 555–73.
- Fritzsche, F. (2020). The High-level Political Forum on Sustainable Development: An orchestrator? Unpublished manuscript. Potsdam: University of Potsdam.
- Fuchs, D., Hayden, A., & Kalfagianni, A. (2020). Conclusion: Global sustainability governance – really? In A. Kalfagianni, D. Fuchs & A. Hayden (eds.), *Routledge handbook of global sustainability governance* (pp. 372–9). London, UK: Routledge.
- Fukuda-Parr, S., & McNeill, D. (2019). Knowledge and politics in setting and measuring the SDGs: Introduction to Special Issue. *Global Policy*, 10 (S1), 5–15.
- Fukuda-Parr, S., & Muchhala, B. (2020). The Southern origins of Sustainable Development Goals: Ideas, actors, aspirations. *World Development*, 126, 104706.
- Golding, R. (2021). UN Accountability: From frameworks to evidence and results. In S. Browne, & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 221–34). London: Routledge.

- Graham, E. R. (2017). Follow the money: How trends in financing are changing governance at international organizations. *Global Policy*, 8, 15–25.
- Gruener, S., & Hammergren, H. (2021). Sustaining peace and the 2030 Development Agenda. In S. Browne, & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 96–108). London: Routledge.
- Grzywnowicz, M. (2020). 'Leaving No One Behind': How to make the High-level Political Forum transformative. *Making the HLPF more inclusive*, No. 1. Uppsala: Dag Hammarskjöld Foundation.
- Halle, M., & Wolfe, R. (2015). *Architecture for review and follow-up of the SDGs: Options for the High-level Political Forum*. Briefing Note. Winnipeg: International Institute for Sustainable Development.
- Harrington, A. R. (2019). Global governance and the Sustainable Development Goals. In S. Dalby, S. Horton, R. Mahon, & D. Thomaz (eds.), *Achieving the Sustainable Development Goals: Global governance challenges* (pp. 240–54). London: Routledge.
- Harrould-Kolieb, E. R. (2020). The UN Convention on the Law of the Sea: A governing framework for ocean acidification? *Review of European, Comparative and International Environmental Law*, 29, 257–70.
- Hege, E. (2018). *High-level Political Forum 2018: Unsatisfying results*. Available at: [www.iddri.org/en/publications-and-events/blog-post/high-level-political-forum-2018-unsatisfying-results](http://www.iddri.org/en/publications-and-events/blog-post/high-level-political-forum-2018-unsatisfying-results). Accessed: 10 June 2021.
- Hege, E., Chabason, L., & Barchiche, D. (2020). Review of the High-level Political Forum: Towards a pivotal institution coordinating the Decade of Action and Delivery. *Policy Brief*, No. 2/2020. Paris: Institute for Sustainable Development and International Relations.
- Helgason, K. S. (2016). The 2030 Agenda for Sustainable Development: Recharging multilateral cooperation for the post-2015 era. *Global Policy*, 7, 431–40.
- Hendra, J., & Baumann, M.-O. (2020). *Towards more policy advice: Maximizing the UN's assets to build back better*. Briefing Paper, No. 24/2020. Bonn: German Development Institute.
- Hendra, J., & Fitzgerald, I. (2021). Change in the UN development system: Theory and practice. In S. Browne & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 249–62). London: Routledge.
- Hooghe, L., Lenz, T., & Marks, G. (2019). Contested world order: The delegitimation of international governance. *The Review of International Organizations*, 14, 731–43.
- Horan, D. (2019). A new approach to partnerships for SDG transformations. *Sustainability*, 11, 4947.
- Independent Group of Scientists appointed by the Secretary-General (2019). *Global Sustainable Development Report: The future is now: Science for achieving sustainable development*. New York, NY: United Nations.
- Inter-Parliamentary Union (2020). *Parliamentary Forum on the occasion of the UN High-level Political Forum on Sustainable Development (virtual meeting)*. Available at: [www.ipu.org/event/parliamentary-forum-occasion-un-high-level-political-forum-sustainable-development-virtual-meeting](http://www.ipu.org/event/parliamentary-forum-occasion-un-high-level-political-forum-sustainable-development-virtual-meeting). Accessed: 10 June 2021.
- Ivanova, M. (2020a). Coloring the UN Environment Programme. *Global Governance*, 26, 307–24.
- Ivanova, M. (2020b). Fighting fire with a thermometer? Environmental efforts of the United Nations. *Ethics and International Affairs*, 34, 339–49.
- Ivanova, M. (2021). Environment and development in the UN. In S. Browne & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 56–87). London: Routledge.

- Janetschek, H., Brandi, C., Dzebo, A., & Hackmann, B. (2020). The 2030 Agenda and the Paris Agreement: Voluntary contributions towards thematic policy coherence. *Climate Policy*, 20, 430–42.
- Janus, H., & Weinlich, S. (2018). *A mountain worth climbing: Reforming the UN Department of Economic and Social Affairs*. Briefing Paper, No. 20/2018. Bonn: German Development Institute.
- Jensen, S. L. B. (2019). *UN human rights mechanisms proving effective SDGs monitor*. Available at: [www.openglobalrights.org/un-human-rights-mechanisms-proving-effective-sdgs-monitor/](http://www.openglobalrights.org/un-human-rights-mechanisms-proving-effective-sdgs-monitor/). Accessed: 10 June 2021.
- Kamau, M., Chasek, P., & O'Connor, D. (2018). *Transforming multilateral diplomacy: The inside story of the Sustainable Development Goals*. London: Routledge.
- Kanie, N., & Biermann, F. (eds.) (2017). *Governing through goals: Sustainable Development Goals as governance innovation*. Cambridge, MA: The MIT Press.
- Kanie, N., Bernstein, S., Biermann, F., & Haas, P. M. (2017). Introduction: Global governance through goal setting. In N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 1–28). Cambridge, MA: The MIT Press.
- Kapto, S. (2019). Layers of politics and power struggles in the SDG indicators process. *Global Policy*, 10 (S1), 134–6.
- Kapucu, N., & Beaudet, S. (2020). Network governance for collective action in implementing United Nations Sustainable Development Goals. *Administrative Sciences*, 10, 100.
- Karlsson-Vinkhuyzen, S., Dahl, A. L., & Persson, Å. (2018). The emerging accountability regimes for the Sustainable Development Goals and policy integration: Friend or foe? *Environment and Planning C: Politics and Space*, 36, 1371–90.
- Kharas, H. (2019). International financing of the Sustainable Development Goals. In Dag Hammarskjöld Foundation and United Nations Multi-Partner Trust Fund Office (eds.), *Financing the UN Development System: Time for hard choices* (pp. 71–3). Uppsala: Dag Hammarskjöld Foundation & UN MPTF Office.
- Kharas, H., & Biau, J. (2015). Preface: The role of multilateral organisations in achieving the Sustainable Development Goals. In OECD (ed.), *Multilateral aid 2015: Better partnerships for a post-2015 world* (pp. 11–13). Paris: OECD Publishing.
- Kim, R. E. (2016). The nexus between international law and the Sustainable Development Goals. *Review of European, Comparative & International Environmental Law*, 25, 15–26.
- Kindornay, S., & Gendron, R. (2020). *Progressing National SDGs Implementation: An independent assessment of the Voluntary National Review reports submitted to the United Nations High-level Political Forum on Sustainable Development in 2019*. Ottawa: Canadian Council for International Cooperation.
- King, P., Elder, M., & Shigemoto, A. (2018). Business and SDGs: Raising the level of ambition. In M. Elder & P. King (eds.), *Realising the transformative potential of the SDGs* (pp. 107–26). Hayama: Institute for Global Environmental Studies.
- Kloke-Lesch, A. (2021). The untapped functions of international cooperation in the age of sustainable development. In S. Chaturverdi, S. Klingebiel, E. Sidiropoulos, X. Li, H. Janus, A. de Mello e Souza, & D. Wehrmann (eds.), *The Palgrave handbook of development cooperation for achieving the 2030 Agenda: Contested collaboration* (pp. 127–63). London: Palgrave Macmillan.
- Le Blanc, D. (2015). Towards integration at last? The Sustainable Development Goals as a network of targets. *Sustainable Development*, 23, 176–87.

- Mawdsley, E. (2018). 'From billions to trillions': Financing the SDGs in a world 'beyond aid'. *Dialogues in Human Geography*, 8, 191–5.
- Mawdsley, E., Murray, W. E., Overton, J., Scheyvens, R., & Banks, G. (2018). Exporting stimulus and 'shared prosperity': Reinventing foreign aid for a retroliberal era. *Development Policy Review*, 36, O25–O43.
- McInerney, T. F. (2017). *UNEP, international environmental governance, and the 2030 Sustainable Development Agenda*. Available at: [www.unep.org/resources/publication/unep-international-environmental-governance-and-2030-sustainable-development](http://www.unep.org/resources/publication/unep-international-environmental-governance-and-2030-sustainable-development). Accessed: 10 June 2021.
- Michaelowa, K. (2017). Resourcing international organisations: So what? *Global Policy*, 8, 113–23.
- Monkelbaan, J. (2019). *Governance for the Sustainable Development Goals: Exploring an integrative framework of theories, tools and competencies*. Singapore: Springer International Publishing.
- Morse, J. C., & Keohane, R. O. (2014). Contested multilateralism. *The Review of International Organizations*, 9, 385–412.
- Mueller, J. (2010). *Explaining international organizations: United Nations system coordination: The challenge of working together*. Available at: <http://journal-iostudies.org/sites/default/files/2020-01/JIOS1013.pdf>. Accessed: 10 June 2021.
- Obenland, W. (2019). *Überprüfung der Umsetzungsmittel für die Agenda 2030: Ansätze für eine bessere Verzahnung von HLPF und FfD-Forum. Briefing*. Bonn: Global Policy Forum.
- Ocampo, J. A., & Gómez-Arteaga, N. (2016). Accountability in international governance and the 2030 development agenda. *Global Policy*, 7, 305–14.
- OECD [Organisation for Economic Cooperation and Development] (2015). *Multilateral aid for 2015: Better partnerships for a post-2015 world*. Paris: OECD Publishing.
- OECD [Organisation for Economic Cooperation and Development] (2018). *Multilateral development finance: Towards a new pact on multilateralism to achieve the 2030 agenda together*. Paris: OECD Publishing.
- OECD [Organisation for Economic Cooperation and Development] (2020). *Multilateral development finance 2020*. Paris: OECD Publishing.
- OECD [Organisation for Economic Cooperation and Development] & UNDP [United Nations Development Programme] (2019). *Making development co-operation more effective: Progress report*. Paris: OECD Publishing.
- Office of Internal Oversight Services (2019). *Evaluation of United Nations entities' preparedness, policy coherence, and early results associated with their support to Sustainable Development Goals*. New York, NY: United Nations.
- Office of Internal Oversight Services (2020). *Evaluation of the United Nations Department of Economic and Social Affairs (UNDESA)*. New York, NY: United Nations.
- Ortiz-Moya, F., Koike, H., Ota, J., Kataoka, Y., & Fujino, J. (2020). *State of the Voluntary Local Reviews: Local action for global impact in achieving the SDGs*. Hayama: Institute for Global Environmental Strategies.
- Partners for Review (2019). *Voluntary National Reviews submitted to the 2019 High-level Political Forum on Sustainable Development: A comparative analysis*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit.
- Partners for Review (2020). *SDG review as an engine for action: Promising practices from around the world*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit.
- Paulo, S., & Klingebiel, S. (2016). *New approaches to development cooperation in middle income countries: Brokering collective action for global sustainable development*. Discussion Paper, No. 8/2016. Bonn: German Development Institute.

- Pérez-Pineda, J. A., & Wehrmann, D. (2021). Partnerships with the private sector: Success factors and levels of engagement in development cooperation. In S. Chaturverdi, S. Klingebiel, E. Sidiropoulos, X. Li, H. Janus, A. de Mello e Souza, & D. Wehrmann (eds.), *The Palgrave handbook of development cooperation for achieving the 2030 Agenda: Contested collaboration* (pp. 649–70). London: Palgrave Macmillan.
- Persson, Å., Weitz, N., & Nilsson, M. (2016). Follow-up and review of the Sustainable Development Goals: Alignment vs. internalization. *Review of European, Comparative & International Environmental Law*, 25, 59–68.
- Reddy, S. G. (2018). The UN's development function: Time for renewal. *Development*, 61, 108–14.
- Rivera, M. (2017). Entpolitisierung im Konsens: Ein kritischer Blick auf die Entstehung der SDG. In P. Lepenies & E. Sondermann (eds.), *Globale politische Ziele: Bestandsaufnahme und Ausblick des Post-2015 Prozesses* (pp. 219–46). Baden-Baden: Nomos Verlagsgesellschaft.
- Rosenau, J. N. (1995). Governance in the twenty-first century. *Global Governance: A Review of Multilateralism and International Organizations*, 1, 13–43.
- Rudolph, A. (2017). *The concept of SDG-sensitive development cooperation: Implication for OECD–DAC members*. Discussion Paper, 1/2017. Bonn: German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE).
- Samarasinghe, N. (2021). Human rights and sustainable development: Together at last? In S. Browne & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 80–95). London: Routledge.
- Sarwar, M. B., & Nicolai, S. (2018). What do analysis of Voluntary National Reviews for Sustainable Development Goals tell us about leaving no one behind? *Briefing Note*. London: Overseas Development Institute.
- Schnitzler, T., Seifert, M., & Tataje, C. (2020). Achieving sustainable partnership in the United Nations in the framework of the Sustainable Development Goals. *International Journal of Sustainable Development*, 24, 28–49.
- Scholtz, W., & Barnard, M. (2018). The environment and the Sustainable Development Goals: 'we are on a road no nowhere'. In D. French & L. J. Kotzé (eds.), *Sustainable development goals: Law, theory and implementation* (pp. 222–49). Cheltenham: Edward Elgar Publishing.
- Seitz, K., & Martens, J. (2017). Philanthrolateralism: Private funding and corporate influence in the United Nations. *Global Policy*, 8, 46–50.
- Sénit, C.-A., Biermann, F., & Kalfagianni, A. (2017). The representativeness of global deliberation: A critical assessment of civil society consultations for sustainable development. *Global Policy*, 8, 62–72.
- Sohn, H.-S., & Choi, H. Y. (2019). The reform of the UN development system and its implications for multilateral aid channels. *Journal of International Development Studies*, 28 (3), 49–63.
- Sondermann, E., & Ulbert, C. (2021). Transformation through 'meaningful' partnership? SDG 17 as metagovernance norm and its global health implementation. *Politics and Governance*, 9 (1), 152–63.
- Spangenberg, J. H. (2017). Hot air or comprehensive progress? A critical assessment of the SDGs. *Sustainable Development*, 25, 311–21.
- Stevens, C., & Kanie, N. (2016). The transformative potential of the Sustainable Development Goals (SDGs). *International Environmental Agreements: Politics, Law and Economics*, 16, 393–6.
- Strandenaes, J.-G. (2014). *Participatory democracy: HLPF laying the basis for sustainable development governance in the 21st century: Modalities for major groups, non-governmental organisations and other stakeholders engagement with the High-level*

- Political Forum on Sustainable Development*. Available at: <https://sustainabledevelopment.un.org/content/documents/3682The%20High%20Level%20Political%20Forum,%20major%20groups%20and%20modalities.pdf>. Accessed 10 June 2021.
- Strandenaes, J.-G. (2016). *The beginning of a new future: The world of HLPF and the 2030 Global Agenda on Sustainable Development*. Available at: <https://stakeholderforum.org/2020/07/13/the-beginning-of-a-new-future-the-world-of-hlpf-and-the-2030-global-agenda-on-sustainable-development/>. Accessed 10 June 2021.
- Surasky, J., Londoño, P., Bachmann, G., & Glennie, J. (2020). *Why member states should support the UN regional reform*. Bogotá: CEPEL.
- Thérien, J.-P., & Pouliot, V. (2020). Global governance as patchwork: The making of the Sustainable Development Goals. *Review of International Political Economy*, 27, 612–36.
- UNDESA [United Nations Department of Economic and Social Affairs] (2019a). *Comprehensive HLPF Survey Results: Evaluation of the HLPF after 4 years*. Available at: [https://sustainabledevelopment.un.org/content/documents/24802Comprehensive\\_HLPF\\_Survey\\_Results\\_FINAL.pdf](https://sustainabledevelopment.un.org/content/documents/24802Comprehensive_HLPF_Survey_Results_FINAL.pdf). Accessed: 8 October 2020.
- UNDESA [United Nations Department of Economic and Social Affairs] (2019b). *Expert Group Meeting: Lessons learned from the first cycle of the High-level Political Forum on Sustainable Development (HLPF)*. New York, 6–7 May 2019. Available at: [https://sustainabledevelopment.un.org/content/documents/23135Summary\\_of\\_EGM\\_on\\_HLPF\\_review\\_FINAL.pdf](https://sustainabledevelopment.un.org/content/documents/23135Summary_of_EGM_on_HLPF_review_FINAL.pdf). Accessed: 8 October 2020.
- UNDESA [United Nations Department of Economic and Social Affairs] (2019c). *Expert Group Meeting: The Way Forward – Strengthening ECOSOC and the High-level Political Forum on Sustainable Development*. New York, 3–4 December 2019. Available at: [https://sustainabledevelopment.un.org/content/documents/25424Summary\\_of\\_EGM\\_on\\_HLPF\\_Review\\_34\\_December.pdf](https://sustainabledevelopment.un.org/content/documents/25424Summary_of_EGM_on_HLPF_Review_34_December.pdf). Accessed: 8 October 2020.
- UNDESA [United Nations Department of Economic and Social Affairs] (2020). *UN System SDG Implementation Database*. Available at: <https://sustainabledevelopment.un.org/content/unsurvey/index.html>. Accessed: 16 November 2020.
- UNDP [United Nations Development Programme] (2019). *Summary of findings from SDG mainstreaming, acceleration, and policy support mission reports*. Istanbul: UNDP.
- UNEP [United Nations Environment Programme] (1997). *Nairobi Declaration on the Role and Mandate of the United Nations Environment Programme*. UNEP/GC/DEC/19/1.
- UNEP [United Nations Environment Programme] (2018). *UNEP Inquiry – Making Waves: Aligning the financial system with sustainable development*. Geneva: UNEP.
- UNEP [United Nations Environment Programme] (2020). *UNEP Medium-Term Strategy 2022–2025 and Programme of Work and Budget for 2022–2023*. UNEP/SC/2020/1/2.
- UNGA [United Nations General Assembly] (2012). *The future we want*. UN Doc. A/RES/66/288.
- UNGA [United Nations General Assembly] (2013a). *Format and organizational aspects of the High-level Political Forum on Sustainable Development*. UN Doc. A/RES/67/290.
- UNGA [United Nations General Assembly] (2013b). *Lessons learned from the Commission on Sustainable Development: Report of the Secretary-General*. UN Doc. A/67/757.
- UNGA [United Nations General Assembly] (2015a). *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*. UN Doc. A/RES/69/313.
- UNGA [United Nations General Assembly] (2015b). *Transforming our world: The 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1.

- UNGA [United Nations General Assembly] (2016). *Follow-up and review of the 2030 Agenda for Sustainable Development at the global level*. UN Doc. A/RES/70/299.
- UNGA [United Nations General Assembly] (2018). *Gaps in international environmental law and environment-related instruments: Towards a global pact for the environment – Report of the Secretary-General*. UN Doc. A/73/419\*.
- United Nations Sustainable Development Group (2019). *United Nations Sustainable Development Cooperation Framework Guidance*. Available at: <https://unsdg.un.org/resources/united-nations-sustainable-development-cooperation-framework-guidance>. Accessed: 10 June 2021.
- Urho, N., Ivanova, M., Dubrova, A., & Escobar-Pemberthy, N. (2019). *International environmental governance: Accomplishments and way forward*. Copenhagen: Nordic Council of Ministers.
- Van Driel, M., Biermann, F., Vijge, M. J., & Kim, R. E. (2021). Custodians of sustainable development: Fragmentation and coordination in the context of the Sustainable Development Goals. Unpublished manuscript.
- Vijge, M. J., Biermann, F., Kim, R. E., Bogers, M., van Driel, M., Montesano, F. S. et al. (2020). Governance through global goals. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance* (pp. 254–74). Cambridge: Cambridge University Press.
- Vrieze, F. de, & Fitsilis, F. (2020). Applying post-legislative scrutiny to the analysis of legislation and SDGs in South and Southeast Asia. *Journal of Southeast Asian Human Rights*, 4, 1–22.
- Walker, J., Pekmezovic, A., & Walker, G. (eds.) (2019). *Sustainable Development Goals: Harnessing business to achieve the SDGs through finance, technology and law reform*. Chichester: Wiley.
- Weinlich, S., & Baumann, M.-O. (2018). *Unfinished business: An appraisal of the Latest UNDS Reform Resolution*. Briefing Paper, No. 13/2018. Bonn: German Development Institute.
- Weinlich, S., & Jenks, B. (2019). Current and future pathways for UN system-wide finance. In Dag Hammarskjöld Foundation & United Nations Multi-Partner Trust Fund Office (eds.), *Financing the UN development system: Time for hard choices* (pp. 119–23).
- Weinlich, S., Baumann, M.-O., Lundsgaarde, E., & Wolff, P. (2020). Earmarking in the multilateral development system: Many shades of grey. *Studies*, No. 101/2020. Bonn: German Development Institute.
- Weinlich, S., Baumann, M.-O., Cassens-Sasse M., Hadank-Rauch R., Leibbrandt, F., Pardey, M., Simon, M., & Strey, A. (2022) New rules, same practice? Analysing UN Development System reform effects at the country level. Discussion Paper 3/ 2022. Bonn: German Development Institute.
- Widerberg, O., & van Laerhoven, F. (2014). Measuring the autonomous influence of an international bureaucracy: The Division for Sustainable Development. *International Environmental Agreements: Politics, Law and Economics*, 14, 303–27.
- Wieczorek-Zeul, H., Weinlich, S., Scholz, I., Maier, L., Füllkrug-Weitzel, C., & Beisheim, M. (2021). *We need to upgrade the United Nations: Towards a more effective Sustainable Development Governance*. Available at: <http://sdg.iisd.org/commentary/guest-articles/we-need-to-upgrade-the-united-nations-towards-a-more-effective-sustainable-development-governance/>. Accessed: 30 March 2021.
- Young, O. (2017). Conceptualization: Goal setting as a strategy for earth system governance. In N. Kanie & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 31–52). Cambridge, MA: The MIT Press.
- Zelli, F., & van Asselt, H. (2013). Introduction: The institutional fragmentation of global environmental governance: Causes, consequences and responses. *Global Environmental Politics*, 13 (3), 1–13.



# 3

## Implementation at Multiple Levels

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In 2015, the United Nations agreed upon the 2030 Agenda for Sustainable Development, which laid the foundation for an ambitious global programme for societal transformation with 17 Sustainable Development Goals. Yet, according to reports by think-tanks, civil society organizations and the United Nations, only modest progress has been made towards goal implementation (Sachs et al. 2020). One challenge is that implementation of the Sustainable Development Goals remains the responsibility of governments, even though the United Nations offers some guidelines (e.g. UNDP 2017). Each country has to implement the goals based on its own context and circumstances. So far, we know little about the actual impact of the Sustainable Development Goals in national and sub-national sociopolitical systems. There is no comprehensive assessment of where and how the implementation of the goals has brought any observable changes, and we know little about what stalls or unlocks such progress.

In this chapter, thus, we systematically take stock of the first seven years of implementation of the Sustainable Development Goals and of the steering effects that the goals had *within countries*. We focus on national governments, sub-national authorities, the corporate sector and civil society, hence complementing [Chapter 2](#), which studied steering effects of the Sustainable Development Goals on global governance. We first introduce a conceptual framework for exploring the knowledge base on implementation of the Sustainable Development Goals, which we see also as a broader contribution for future policy and research. We then present the main insights from our analysis and its policy implications before we draw broader conclusions.

### Conceptualization and Methods

Our analysis draws on a systematic review of the literature that was published between 2015 and 2020. In view of long publication processes, we also

occasionally included articles with a release year of 2021. We took 2015 as a starting point, which allowed us to include all publications since the beginning of the actual implementation of the Sustainable Development Goals in national settings. We evaluated mainly peer-reviewed scholarly articles, but also took policy studies from think-tanks and research institutes, and reports and statements from intergovernmental bodies and non-governmental organizations into account.

In the social sciences, systematically reviewing literature is increasingly used to identify and synthesize research findings, identify gaps and propose topics for future research (Petticrew and Roberts 2006). Systematic reviews are particularly useful for addressing a research question dealt with in complex and large bodies of literature across disciplines or topic areas. There are many approaches to systematically reviewing (scholarly) literature (Grant and Booth 2009). Some rest in positivist traditions, mirroring approaches originally developed in medical studies to aggregate evidence, often through quantitative methodologies. Others are embedded in interpretivist research paradigms that critically assess and interpret insights, often through qualitative approaches and with a view to contribute to conceptual development. Unlike traditional literature reviews, systematic reviews are guided by clear and transparent procedures of what was included and excluded and how the body of literature was analysed and interpreted.

Our systematic review was conducted as follows. First, we decided on the types of actors to be studied. Although national governments are primarily responsible for implementing the Sustainable Development Goals, we adopted a broader approach and included also data on sub-national authorities at the regional (federal states, provinces, regions) and local levels (cities, municipalities), along with corporate actors, such as individual businesses or business associations, and civil society, including non-governmental organizations and community groups. While not all these actors are equally involved in implementing the goals, achieving them will be impossible if only national governments change policies and procedures. There are also many examples where cities or businesses have endorsed the Sustainable Development Goals and framed their strategies or policies around them and the 2030 Agenda.

Second, we classified the possible steering effects of the Sustainable Development Goals, expanding here on the framework provided in [Chapter 1](#) of this book. We conceptualize and operationalize steering effects of the Sustainable Development Goals on implementation across multiple levels of governance as changes in institutional, discursive, relational and resource effects. We also expected to find studies on cases where the Sustainable Development Goals had no or limited effects. Institutional effects we define as changes in rules and institutional arrangements in support of the goals, such as new rules, regulations,

strategic plans, formal standards or social norms. Hence, institutional effects in this chapter also includes the normative effects as distinguished in [Chapter 1](#). Discursive effects are references to the Sustainable Development Goals, for instance, in organizational narratives, policy discourses and external communications. Relational effects we understand as changes in relations between actors such as new partnerships to deliver on the goals or contestation among actors around their implementation. Resource effects we describe as changes in resource allocation to address the goals such as changes in budgets, investments or human resources.

This framework allowed us to compare steering effects of the Sustainable Development Goals across multiple types and levels of governance to guide our systematic review. Yet, we did not use the framework as a rigid tool or a tick-box exercise. Instead, we used it in a flexible way and as a common analytical lens for the critical review of the literature, while allowing for interpretations and comparative analysis. Interpretations of authors mattered as well, and we have written our analyses not slavishly following our operationalization but rather in a narrative form that allowed us to zoom in on the most important findings and to highlight the specific character of the changes that we observed. Conceptual flexibility was also important because the literature may portray links or even contradictions among effects. Particularly regarding relational and institutional effects, more than one actor may be involved. In sum, our systematic review allowed for some interpretation, that is, the analysts and their expertise became an active instrument in the evaluation (Stake 2010).

We identified the primary data by a search-string search from the Scopus database (as of 9 October 2020). The search string combined keywords for the Sustainable Development Goals, governance and types of actors. This search resulted in

- 119 studies that referred to the steering or governance of the Sustainable Development Goals in national governments;<sup>1</sup>
- 363 studies that referred to the steering or governance of the goals in sub-national authorities;<sup>2</sup>
- 125 studies that referred to the steering or governance of the goals in business;<sup>3</sup>
- 81 studies that referred to the steering or governance of the goals in civil society.<sup>4</sup>

Based on this data set, we undertook an initial analysis in three steps. First, author teams analysed the relevance of articles by scanning their title, keywords and abstract (or if in doubt, introduction and conclusion) to decide whether to include them for more detailed reading. We excluded papers that do not substantially engage with the implementation of the Sustainable Development Goals, such as

purely conceptual or theoretical studies, but kept non-empirical studies that convincingly argued for steering effects through other sound methodological steps. We also filtered out articles that did not address the type of actor that was the topic of the analysis and articles that were inaccessible. This resulted in a final set of 165 articles, consisting of 47 articles from the national governments search string, 40 from the sub-national authorities search string, 50 from the corporate actors search string and 28 from the civil society search string for inclusion in the full analysis.<sup>5</sup> We then evaluated the remaining studies in detail, using the common understanding of the four types of steering effects mentioned above as our analytical lens.<sup>6</sup> By this means, we gained a systematic overview of all relevant studies on different types of steering effects of the Sustainable Development Goals on implementation in the academic literature.

The following third step was to analyse and interpret this raw material. In addition to the insights from the 165 articles that were thoroughly reviewed, we have drawn here on a few additional references (mostly from the grey literature) based on our own expertise (all cited in the reference list). Our interpretation was informed by five guiding questions: What kind of steering effects are most prominent, and why? Which ones are lacking or underdeveloped? Which leading examples of implementation are reported? How and why are they successful? Which critiques are raised in the literature and why?

The four written analyses and interpretations were shared with and further discussed by all authors to contrast findings and identify recurring issues, gaps or observations, and are the basis of the following section.

A limitation of our analysis is the time factor. Research in academic journals and other outlets is, at the time of publication, often dated by one or two years due to long processes of review, revisions and copyediting. In a field as dynamic as sustainability and the Sustainable Development Goals, we are likely to underreport developments that might have manifested in the latest years before publication of this book. Overall, this potentially leads to a bias that could be overly critical of the steering effects of the Sustainable Development Goals. A second limitation is language bias, inasmuch as we review only academic literature in the English language. While English is the leading language in the academic debate, especially among those journals that rank highest in terms of citations and impact, we have not included research in other languages such as Chinese, Russian, Arabic, Spanish, French and Portuguese.

### **Research Findings and Practical Insights**

We now present in detail four accounts of the steering effects of the Sustainable Development Goals since 2015. We start the discussion with the effects on

national governments across the world, followed by analyses on sub-national authorities, corporate actors and civil society.

### *Steering Effects in National Governments*

As the formal signatories of the 2030 Agenda, national governments carry the primary responsibility for implementing the Sustainable Development Goals. Moreover, they have the largest capacities for realizing the goals. But do they also deliver?

To start with, several studies generally point to a lack of steering effects of the Sustainable Development Goals at national levels as of 2020. This finding runs through all types of categories and applies for both OECD and non-OECD countries. As for the Global South, for instance, one study found that the government of Bangladesh has failed to incorporate the Sustainable Development Goals that relate to equity and social justice at the policy level and that ruling political elites promoted their own self-interest, ignoring the Sustainable Development Goals in the case of the ready-made garment industry (Khan and Milne 2019). This situation, the authors argue, was the result of the non-binding character of the Sustainable Development Goals and the lack of national and international compliance arrangements. Likewise, a study on water governance in Mexico concluded that despite the government's formal commitment to the Sustainable Development Goals, any changes in water governance can better be explained by domestic events and windows of opportunity than by any motivating impact of global goals (Breuer and Oswald Spring 2020).

However, there is also evidence of some steering effects of the Sustainable Development Goals in several countries.

### *Institutional Effects*

In some countries, the Sustainable Development Goals seem to have had some institutional effects. For instance, a review of institutional arrangements for the Sustainable Development Goals in Latin America shows that out of sixteen countries surveyed, ten had created new institutional arrangements, such as commissions or councils, for coordinating the Sustainable Development Goals. Six had designated an existing institution to coordinate the implementation (Beneke de Sanfeliú et al. 2020). Ghana has set up a complex arrangement that includes a high-level ministerial committee, a technical Sustainable Development Goals implementation coordination committee and a platform of civil society organizations on the goals (Kasirye, Ntale and Venugopal 2020: 32).

China has incorporated the Sustainable Development Goals into its medium- and long-term development strategies, for instance by referring to the 2030 Agenda in its 13th Five-Year Plan and by detailed plans of governmental departments

(Kuhn 2018; Wang, Yuan and Lu 2020). In 2016, the Chinese government released a comprehensive National Plan on the implementation of the 2030 Agenda and promised to establish an inter-agency mechanism to monitor progress on the goals and conduct regular implementation reviews (Kuhn 2018). In addition, China uses innovation-driven demonstration zones for implementing the Sustainable Development Goals. In early 2020, it had identified six cities as pilot zones, with each having its own focus (Wang, Yuan and Lu 2020). Yet some studies have also criticized the Chinese approach as ‘coercive environmentalism’ (Li and Shapiro 2020).

Important factors that shape such institutional steering effects of the Sustainable Development Goals seem to be effective democratic institutions, participation, reflexivity and policy coherence, each of which can influence how the Sustainable Development Goals are implemented at national level (Monkelbaan 2019). Yet in 2015, these areas were not fully developed in forty-one high- and upper middle-income countries (Glass and Newig 2019). We have identified especially four challenges when it comes to institutional effects of the goals.

First, evidence suggests that newly (re)configured institutional arrangements are often shaped by existing political and institutional dispositions and capabilities (Morita, Okitasari and Masuda 2020; Tosun and Leininger 2017). In other words, there is a propensity to translate and integrate the Sustainable Development Goals in a way that supports older priorities (Bexell and Jönsson 2020; Horn and Grugel 2018; Jönsson and Bexell 2021). In the Netherlands, for example, while some institutional arrangements have been retrofitted for the Sustainable Development Goals, there is little substantive change in policy (Yunita *et al.* 2022). In Poland, the government has adopted strategies that present the country’s approach to the 2030 Agenda and resulting priorities in its Strategy for Responsible Development in 2017, with an emphasis on growing residents’ incomes, alongside increasing cohesion across social, economic, environmental and territorial dimensions (Raszkowski and Bartniczak 2019). Also in China, goals that represent core political issues on the domestic agenda – such as poverty eradication and biodiversity protection – are likely to receive more attention compared to others that are less prioritized (China Council on Environmental Cooperation and Development 2020; Kuhn 2018). A review of Voluntary National Reviews finds that certain goals receive more attention in national policies than others, suggesting cherry-picking and limited steering capacity of the Sustainable Development Goals (Forestier and Kim 2020).

Second, when the Sustainable Development Goals figure more prominently in policy, they often reflect a tendency to focus on specific goals instead of policy interlinkages and trade-offs (for example in Ethiopia or Turkey) (Tosun and Leininger 2017). In other cases, the goals are considered more explicitly from an inter- and multi-sectoral perspective (for example in Benin, Colombia and Switzerland) (Tosun and Leininger 2017). In New Zealand, even though the

Sendai Framework, the Sustainable Development Goals and the Paris climate agreement are all aligned at the legislative level, there is a need for better coherence in implementation (Sunders et al. 2020).

Third, in cases where Sustainable Development Goals are seemingly having an institutional effect, it remains unclear if those effects are only caused by the Sustainable Development Goals. In Indonesia, government policy and corporate sector sustainability farming are aligned with the Sustainable Development Goals in their efforts to address the economic, social and environmental problems within the palm oil industry (Jupesta et al. 2020). Yet, these initiatives in Indonesia would most likely exist without the Sustainable Development Goals, because the palm oil industry is also responding to the Paris climate agreement (in trying to reduce greenhouse gas emissions from uncontrolled forest fires) and to the poverty reduction and social sustainability focus of the earlier Millennium Development Goals.

Fourth, institutional effects on national governments have been reported to be directed largely towards their international development cooperation policies. Many high-income countries have added the Sustainable Development Goals as an important objective for such policies. For instance, an analysis of Australia's implementation of the goals emphasizes a need for stronger leadership by the Australian government, revealing that the integration of the Sustainable Development Goals is considered mainly in the context of international development aid (as opposed to a core issue for domestically focused policy) (Brolan, McEwan and Hill 2019). In Pakistan, on the contrary, the parliament has adopted the Sustainable Development Goals as part of the national development agenda. However, implementation will depend here on the political will of the government, considering a low baseline starting point and a lack of indicator data to monitor implementation (Asad 2019).

All this suggests a multi-directional – rather than a linear – process, whereby the Sustainable Development Goals influence and are influenced by domestic contexts, priorities and political dispositions.

### *Discursive Effects*

Regarding discursive effects, we also observe that domestic implementation of the goals are contingent on the ways in which the Sustainable Development Goals are translated across contexts. One study observes that the goals discursively serve, rather than set, domestic agendas (Horn and Grugel 2018). Others note a discursive shift towards inclusive and sustainable development in certain policies in some countries (De Jong and Vijge 2021). For example, Fukuda-Parr and Hegstad (2018) find that the principle of 'leaving no one behind' is interpreted by many governments as requiring a focus on extremely poor, marginalized and vulnerable groups (for similar findings, see [Chapter 5](#) in this volume). It thereby diverts

attention from broader policies to reshape structural social inequalities related to the distribution of income and wealth.

The Sustainable Development Goals seem to also enable governments to discursively engage in new ways with the corporate sector, for instance in influencing how they report on sustainability-related activities. Nevertheless, this influence does not go as far as shaping those activities from their inception more fundamentally, as the case study by Pineda-Escobar (2019) on corporate sustainability reporting in Colombia revealed. Similarly, Florini and Pauli (2018) argue that the goals have become a 'shared language' across the public and the corporate sector, reaching out beyond development policy actors. Corporations are attracted to the Sustainable Development Goals because several targets are formulated in a way that helps to identify opportunities for improved business models that might, but not necessarily, contribute to the public good. We return to the business sector below.

Some studies show how both analysts and governments use the Sustainable Development Goals as a measuring stick or aspirational national policy target to which policy implementation can be compared. For instance, Zulbainami and colleagues report a gap in Indonesia's national fisheries policy between regulation and implementation in conservation, monitoring and use of fisheries, especially regarding an imbalance between Goal 14 and local fisheries management (Zulbainami, Indrawan and Khumaera 2020). A study on the Swedish government's reporting to the High-level Political Forum shows strong discursive effects, at least at the global stage. The Swedish government on several occasions proclaimed itself to be a champion for the Sustainable Development Goals. While positively received at a global stage, this discursive claiming of a leadership position, however, was politically more contested within Sweden (Bexell and Jönsson 2019). The government of Ghana has also publicly declared itself to be a role-model for the Sustainable Development Goals (Bexell and Jönsson 2020). This suggests that the Voluntary National Reviews of governments have become showcases in front of a global audience, although it does not necessarily mean that the Sustainable Development Goals have substantial steering effects on national policies.

### *Relational Effects*

As for the relational dimension of the goals, the effects of the multi-stakeholder processes that relate to the Sustainable Development Goals remain influenced by how, when and from whom participation is solicited (Jönsson and Bexell 2021). Many citizens do not directly engage with the Sustainable Development Goals or remain unaware of the goals (Jönsson and Bexell 2021). Also, parliamentary engagement with the Sustainable Development Goals remains weak or unsystematic even though the goals are increasingly referenced in policy and budgetary



processes (Bexell and Jönsson 2020). The extent to which the Sustainable Development Goals bring greater inclusiveness is largely determined by the institutional and relational cultures of the domestic political contexts in which implementation takes place (Siegel and Bastos Lima 2020). A case study of Brazil, Paraguay and Uruguay suggests that the 2030 Agenda may help foster inclusiveness as much as it may entrench marginalization, especially when without formal channels for local participation in implementation (see Chapter 5 in this book). The importance of stakeholder participation in the implementation process can also be acknowledged in more authoritarian countries. For example, the Chinese government mentions ‘civil society’ in its national implementation plan, although the term has also been criticized domestically (Kuhn 2018). Some Chinese researchers suggested the development of mechanisms for stakeholder involvement, such as citizen groups, for implementing the Sustainable Development Goals (Wang, Yuan and Lu 2020). However, this proposal has not yet gained traction in China.

These observations point to the need to go beyond identifying who is collaborating with whom, to assessing the changing nature of relations between multiple stakeholders. For example, understanding changing relations between government and corporate actors in financing the Sustainable Development Goals can tease out the political intent behind institutional, discursive, relational and resource effects of goal implementation (Gabor 2021; Mawdsley 2018). In the case of Australia, a government-initiated parliamentary inquiry asked for stakeholder input into national policy-making on the global goals. The publicly available stakeholder responses enabled insight into different views on the roads towards implementation and showed the commitment of stakeholders (Brolan, McEwan and Hill 2019). Haywood and colleagues (2019) point out that many relationships between actors to address the Sustainable Development Goals have already existed in South Africa, hinting that relational effects reinforce the status quo; but it remains unclear if the Sustainable Development Goals have more transformative relational effects.

### *Resource Effects*

The evidence is mixed as to whether the launch of the Sustainable Development Goals had any resource effects, such as on the allocation of public resources by governments. In some cases, financing of Sustainable Development Goals and technical assistance can entrench institutional fragmentation in the public sector in developing countries, because government departments compete for funding that at best ignores local synergies across the Sustainable Development Goals or at worst replicates work completed in other projects (Scobie 2019). In an early analysis of India’s strategy to combat non-communicable diseases, Mondal and van Belle (2018) found that despite strong endorsement of the Sustainable Development

Goals by the government of India, its health expenditures were still very low in international comparison.

The Scopus search did not deliver articles that focused on public budgeting for Sustainable Development Goals by finance ministries. Hege, Brimont and Pagnon (2019) note that national budgeting for the Sustainable Development Goals is still in its infancy. For its part, while increasingly integrating references to the Sustainable Development Goals in the national budget, the Swedish government has made clear that work towards the Sustainable Development Goals will take place within existing structures and not generate any new resources (Bexell and Jönsson 2019). In 2021, the German government stated the same in its revised national strategy for sustainable development (Federal Government of Germany 2021). Regarding China, research indicates that funds allocated by the central government from 2013 to 2018 for poverty alleviation increased from 39.4 to 106.1 billion Yuan. Yet, it is not known (and unlikely) to which extent this budget increase has been motivated by Goal 1 (Wang, Yuan and Lu 2020).

In sum, the literature indicates that when it comes to national governments, the steering effects of the global goals are institutional and discursive, while relational and resource effects are rare. Moreover, often these effects have been influenced strongly by earlier dispositions. Effects can hence not be related to the Sustainable Development Goals directly or linearly, even though it remains methodologically challenging to study a lack of effects by means of a systematic literature review.

### *Steering Effects in Sub-national Authorities*

Sub-national authorities – such as states, provinces, regions, cities, councils and municipalities – are particularly relevant for the transformation to sustainability, as they are close to the problems and often have important competencies and capacities. Yet, research on the implementation of the Sustainable Development Goals at this level is still nascent. The extent to which the lack of empirical studies reflects a lack of implementation can only be speculated. The time-lag between the adoption of the Sustainable Development Goals by the United Nations and their implementation might be even stronger at the sub-national level than the national level. Lack of leadership from national governments might further limit implementation activities by sub-national authorities (Björkdahl and Somun-Krupalija 2020; Valencia et al. 2019).

Most research focuses on cities, while sub-national provinces and regions are less studied. This reflects a tendency in earlier sustainability governance research but may also relate to the existence of Goal 11, which addresses cities directly. Most of the literature deals with the implementation of individual goals, especially

Goals 6 and 11. Fewer studies address multiple Sustainable Development Goals, and only a few, more conceptual studies address the implementation of the 2030 Agenda and the Sustainable Development Goals as a whole. Again, this could be related to the time-lag in publishing academic research. Several initiatives have been set up to enable an integrated approach to localizing the Sustainable Development Goals such as the OECD Roundtable of Cities and Regions for the Sustainable Development Goals (OECD 2020a).

Rather than providing empirical evidence of the actual implementation of Sustainable Development Goals ‘on the ground’, a significant portion of the literature looks into how the Sustainable Development Goals *could* be implemented. Some authors address governance challenges related to the implementation of particular Sustainable Development Goals or the 2030 Agenda in general (Herrera 2019 on challenges in relation to Goal 6; Nhamo et al. 2020 on challenges related to the water–energy–food nexus; Patel et al. 2017 on the feasibility of Goal 11 implementation; Bornemann and Christen 2021 on the 2030 Agenda). Others discuss the potential contributions of governance conditions and approaches to realizing the 2030 Agenda at the sub-national level.<sup>7</sup> While this strand of literature does not show the steering effects of the Sustainable Development Goals, it illustrates more generally that their implementation is not isolated but interacts with other policies and governance contexts.

With the aim of informing goal implementation, some studies draw on experiences with earlier policy frameworks such as the Millennium Development Goals or the Local Agenda 21 (MacDonald et al. 2018; Westphal, Franceschini and Setti 2018). Other studies take the 2030 Agenda more broadly as an opportunity to explore the possibilities and limitations of local and regional sustainability governance, both in general and regarding specific issues (Alberti and Senese 2020; Attolico and Smaldone 2020; Boex et al. 2020; Fenton and Gustafsson 2017; Hickmann 2021; Kharrazi, Qin and Zhang 2016; Pla-Julián and Guevara 2020).

There are indications that the Sustainable Development Goals are becoming de facto relevant reference points for the actions of sub-national governments. Sometimes, regional and local authorities even seem to be more progressive than their national governments in trying to meet the global goals. Below we elaborate on the effects identified in the literature.

### *Institutional Effects*

Regarding institutional effects, several studies point to adjustments or innovations in sub-national governance that go hand in hand with the appearance of the Sustainable Development Goals on the policy agenda. However, it is not always clear to what extent these changes were directly induced by the Sustainable Development Goals. Ahmed and Araral (2019), for instance, found improvements

in the quality of water governance in Indian states after the promulgation of the Sustainable Development Goals by the federal government. But they are themselves reluctant to attribute a direct causal effect to the Sustainable Development Goals. Similarly, Björkdahl and Somun-Krupalija (2020), in a study on gender mainstreaming in municipalities in Bosnia and Herzegovina, attribute to Goal 5 (gender equality) the potential to create institutional change in the form of new coordination and monitoring mechanisms, yet without actually observing such change. Representative of other case-based reports on institutional innovation, Alberti and Senese (2020) refer to Singapore's attempts to break down administrative silos in urban planning through the establishment of a central and holistically oriented Urban Redevelopment Authority. But here, too, it remains open whether this institutional reform is driven by the Sustainable Development Goals.

Only a few studies link institutional changes directly to the implementation of the Sustainable Development Goals. Mostly, these institutional changes serve cross-sectoral and participative coordination mechanisms. Valencia and others (2019), for example, report on the city of Malmö in Sweden, which has formed an administrative sustainability unit to facilitate cross-sectoral collaboration and to firmly establish the 2030 Agenda as the main pillar for all municipal agendas. There are also sub-municipal initiatives, such as the 2030 Agenda-based Declaration of Intent for Local Sustainability Efforts in a neighbourhood in Malmö. In the context of goal implementation, other cities have also introduced coordination mechanisms to manage project activities across sectoral boundaries and to create opportunities for interaction among actors (Ofei-Manu *et al.* 2018). In an experimental setting for the implementation of the city-related Goal 11 in Cape Town, Patel and colleagues (2017) point to the creation of new mechanisms for inter-departmental engagement that enabled learning across sectors. The experimental space also enabled the project team to lay the foundation for an institutionalized indicator process. In a case study of the metropolitan area of Granada in Spain, Poza-Vilches and colleagues (2020) refer to a monitoring commission that was established as a platform for robust stakeholder participation in implementing the global goals, which has resulted in creation of a peri-urban park and a mobility plan.

In addition to the development of concrete governance arrangements, some studies also point to the legitimizing effect of the Sustainable Development Goals. For example, Poza-Vilches and colleagues (2020) note a perceived ethical and political commitment by city governments to consider the Sustainable Development Goals in municipal action programmes. The Sustainable Development Goals also appear to have been used to add another layer of legitimacy to policies adopted prior to the 2030 Agenda (Horn and Grugel 2018). While this practice of

ex-post legitimation has been described and criticized earlier, research has also shown that global norms such as the Sustainable Development Goals, once they have found their way into government action, can lead to a self-binding mechanism (Meadowcroft 2007).

### *Discursive Effects*

Only Horn and Grugel (2018: 74) explicitly refer to ‘discursive roles’ of the Sustainable Development Goals on a sub-national level. They analyse how the language of the 2030 Agenda (for example, the premise to ‘leave no one behind’) has entered policy documents in sub-national governance. They show here how the government of Ecuador and the government of the capital city Quito come to different, politically charged interpretations of the 2030 Agenda and the Sustainable Development Goals, and deliberately use these different interpretations for political demarcation and profiling. This indicates that the goals do attract political attention – a resource that is in short supply, as known from the history of sustainability politics.

Other studies point to a similar function of the 2030 Agenda in terms of framing problems, goals and means of policy-making. Fattibene et al. (2020), for instance, address the Sustainable Development Goals as a new conceptual and normative reference for food waste governance in European cities. While in most cases the goals are not significantly discussed, the Milan Food Strategy refers to the Sustainable Development Goals in much detail and extensively. The authors explain this with reference to the well-developed administrative structures of food policy in that region. There are also many examples of urban planning policies that are framed along the Sustainable Development Goals, for example in Bristol, Buenos Aires, Kitakyushu City, Los Angeles, New York, Santana de Parnaíba, Seoul, Shimokawa Town and Toyama City (Alberti and Senese 2020). Poza-Vilches et al. (2020) describe how the people of Granada created a vision of the community’s environmental and social situation in a participatory setting, which gave a basis for developing strategies based on the 2030 Agenda.

### *Relational Effects*

In line with the participation principle in the 2030 Agenda, the literature suggests that realizing the transformational potential of the Sustainable Development Goals requires inclusion of and cooperation between societal stakeholders and public actors at the sub-national level (Almeida 2019; Valencia et al. 2019). There is evidence that the implementation of the Sustainable Development Goals is indeed conducive to such collaborative governance in some cases. For instance, Ofei-Manu et al. (2018) point out how the cities of Bristol (United Kingdom), Kitakyushu (Japan) and Tongyeong (Republic of Korea) used the Sustainable

Development Goals to bring together and engage societal stakeholders from different sectors. The Sustainable Development Goals also seem to enable collaboration with communities working on other related policies and plans (Björkdahl and Somun-Krupalija 2020; Scobie 2019). In Cape Town, for example, the implementation of the Sustainable Development Goals was coordinated with the resilience strategy to find synergies and trade-offs (Valencia et al. 2019).

In addition to enabling collaboration, several studies confirm previously known relational effects from the collaborative design and application of indicators (Almeida 2019). Indicators can serve to bring stakeholders together and enable mutual alignment of their positions. For example, Salmoral and others (2020) report how an inclusive stakeholder mapping exercise in Arequipa, Peru helped to relate perspectives and perceptions of stakeholders on local issues and create a desire for mutual understanding. Hansson, Arfvidsson and Simon (2019) find confirmation of the function of goal indicators to promote discursive exchange on contested meanings of sustainability. By bringing together actors with different perspectives, indicators for Sustainable Development Goals can also be interpreted as nuclei of collaborative governance. Apart from these integrative effects, however, the Sustainable Development Goals can, by contrast, also have disintegrative relational effects. As Horn and Grugel (2018) indicate, the goals may serve as references for sharpening and delimiting the positions of political parties. These instrumental political interpretations are made possible by the generic character of the Sustainable Development Goals.

### *Resource Effects*

The literature discusses resource effects mainly as a dearth of resources, such as a lack of finance, data, time and political support for implementing the goals (Ahmed and Araral 2019; Das, Sharma and Babu 2018; Patel et al. 2017; Valencia et al. 2019). Beyond these well-known resource scarcities in implementing sustainability, there is only weak evidence of potential resource effects. Valencia et al. (2019) describe the ambition of a new sustainability unit in the Swedish city of Malmö to support the city council in planning and implementing all municipal initiatives and programmes, and to work towards integrating the 2030 Agenda as cornerstone of the city's overarching budgeting. In China, government funding at the provincial or lower levels for poverty reduction also increased significantly since 2015 (Wang, Yuan and Lu 2020).

In addition to this still weak evidence of actual resource effects, Hansson and colleagues (2019) speculate, based on experience with the implementation of the Millennium Development Goals, that indicators can help mobilize resources and political will (also Almeida 2019). This is supported by Horn and Grugel (2018), who show that the Sustainable Development Goals also serve as a strategic

opportunity for policy-makers to advance their policy agendas. However, as Valencia and others (2019) note regarding Goal 11, indicators must be relevant, acceptable and practicable to encourage authorities to invest in urban sustainability transitions.

Considering the evidence, we conclude that the sub-national steering effects of the Sustainable Development Goals are rather weak, with institutional and discursive effects being most dominant. Some authors discuss this lack of impact of the global goals. For example, Fattibene and others (2020: 12) write with reference to urban food waste governance that the goals 'are not yet mainstreamed as a policy governance framework'. While the timeframe of only seven years since the adoption of the 2030 Agenda is a factor, the interpretive openness and lack of institutional leadership from the top are identified as possible explanations as well (Valencia et al. 2019). However, that steering effects of the global goals have not been extensively researched cannot sufficiently prove their absence: more studies on the impact of the goals on sub-national governance are hence needed.

### *Steering Effects in the Corporate Sector*

The corporate sector operates across levels from the global to the local scale. Unlike the Millennium Development Goals, the Sustainable Development Goals envision a role for the corporate sector as key stakeholders and financiers, and they include corporations, industry, banks, business associations and so forth in their ambition (Adams 2017; Mawdsley 2018; Rendtorff 2019; Sharma and Soederberg 2020). Some studies suggest that the enthusiasm of companies to integrate and institutionalize the Sustainable Development Goals has much to do with their prior involvement in shaping the goals during the negotiations from 2012 to 2015 (Scheyvens and Hughes 2019; Sharma and Soederberg 2020). This involvement led to more public–private relations, the development of other financing strategies and changes in institutional practices, particularly in terms of financing, investments and provision of incentives (Mawdsley 2018). While the corporate sector has thus a relatively strong role in the 2030 Agenda, the steering effects of the Sustainable Development Goals on corporate behaviour remain mixed.

In general terms, there is now an increased engagement of the corporate sector in sustainable development, for example through public–private partnerships, Corporate Social Responsibility programmes, impact-investing, venture capital, stock exchanges aligned with the Sustainable Development Goals, and direct lending to national governments through bonds (Bull and McNeill 2019, Consolandi et al. 2020; Hestad 2021; Liaw et al. 2017). While the emergence and expansion of this engagement are shaped by factors that go beyond the

Sustainable Development Goals, many of these corporate initiatives are now linked to the global goals.

### *Discursive Effects*

Many corporate actors, including institutional investors and corporations, increasingly use the Sustainable Development Goals to frame their strategies, guide their operation and manage social, economic and environmental impacts locally, nationally and internationally (Banik and Lin 2019; Cho et al. 2020; Consolandi et al. 2020). Recent studies point to the ways in which the goals encourage awareness of environmental, social and governance issues (Lee 2020); promote the development of sustainable finance and investments (Denny 2018; Lee 2020); inform environmental safeguarding policies (De Silva Lokuwaduge, Smark and Mir 2020); shape corporate directives, including for non-financial disclosures on sustainability risks (Adams 2017; Pizzi, Rosati and Venturelli 2020); and align standards for public policy projects with the goals (Hancock, Ralph and Ali 2018).

Some corporate actors view the Sustainable Development Goals as a lens or shared framework through which to communicate with stakeholders. In van den Broek's (2020) study of how corporations link their work to the Sustainable Development Goals, she discovered that several brands use the Sustainable Development Goals as a framework to reinvent their organization's public identity as a socially and environmentally responsible one. Most companies, especially the large ones, use the Sustainable Development Goals to establish their reputation and accountability through corporate self-reporting on how they contribute to the Sustainable Development Goals (ElAlfy, Darwish and Weber 2020). Some corporate actors view the Sustainable Development Goals as particularly useful for responding to increasing societal pressure, for instance from investors and employees, for more sustainability by corporations (ElAlfy, Darwish and Weber 2020; Florini and Pauli 2018). As such, the Sustainable Development Goals are increasingly visible in corporate reporting and communications (Banik and Lin 2019; Ioannou and Serafeim (2017)). According to a 2019 report by PricewaterhouseCoopers, 72 per cent of over a thousand companies across 31 countries that were surveyed referred in some way to the Sustainable Development Goals in their reporting, indicating how their practices align with at least some of the goals (Scott and McGill 2019). Within this reporting, corporate actors have developed narratives to encourage and justify their involvement in implementing the global goals, pointing to the commercial risks and opportunities that the goals present (Florini and Pauli 2018; Scott and McGill 2019). In this framing, the Sustainable Development Goals are both an ethical and a commercial priority (Florini and Pauli 2018). Corporate reporting has also been helpful in creating a shared



identification of what matters between the corporation and stakeholders (Banik and Lin 2019). In some cases, the goals have also broadened corporate actors' understanding of sustainable development beyond environment and international development, for instance by thinking about human capital as part of sustainable development (Purcell, Henriksen and Spengler 2019).

### *Relational Effects*

Corporate sector engagement with the global goals through, for example, new forms of public–private partnerships and greater involvement in policy processes are redefining the discourse on how sustainable development can, or should, be pursued and by whom. Public–private partnerships and corporate investment are foregrounded and appeal to traditional development actors as they view the corporate sector as necessary 'to unlock' resources for the Sustainable Development Goals (Florini and Pauli 2018). To enable corporate actors to play such 'resourcing roles' in goal implementation, however, public policies and institutions are emerging with an attempt to 'de-risk' corporate investment, premised on the discourse that corporate engagement with 'development goals could only be achieved through the management of risks' (Sharma and Soederberg 2020: 828). Indeed, much discussion on financing the goals coalesces around minimizing risks for investors 'to unlock' resources for implementing the goals. At the same time, considerations of the 'risks to borrowers in the context of deepening financialization – whether individuals, municipal authorities or countries – are almost entirely absent' (Mawdsley 2018: 194).

In terms of corporate engagement in the policy process, there is some optimism that this would bring in more investment that yields win–win outcomes for multiple objectives, such as in health investments (Krech et al. 2018). Other studies, however, observe that corporate involvement in global health policy can undermine efforts to regulate key determinants of health when there are high commercial interests at stake (Lauber et al. 2020).

### *Institutional and Resource Effects*

The evidence is mixed when it comes to institutional and resource effects, that is, whether the goals reshape norms, institutional priorities and resource commitments to sustainability. On the one hand, linked to growing pressures to contribute to sustainable development, more and more corporate actors – including banks, asset managers and investors – are becoming more transparent in investments and in disclosing how they use their funds (UN Global Compact 2019). Evidence of more than two thousand studies since the 1970s shows a positive relation between the financial performance of companies and the importance they attach to environmental and social governance, which may explain the rise of interest of corporate actors in the Sustainable Development Goals (Friede, Busch and

Bassen 2015). Reports of almost five hundred institutions that are divesting from fossil fuels further demonstrate this shift (Adams 2017; Krech 2018). Other reports on investments in projects that are in line with the Sustainable Development Goals show that corporate actors are more open to innovative financing and investments that contribute to loans for environmental, social and governance (Krech 2018; Lee 2020; Liaw *et al.* 2017). Moreover, more corporate actors are now involved in infrastructure financing and urban development, which are investments traditionally done by multilateral public institutions (Consolandi *et al.* 2020). These shifts in the use of resources have been argued rendering ‘businesses (. . .) as responsible for sustainability as governments and other actors are’ (Rendtorff 2019: 517).

On the other hand, commitments and investments to sustainable development – including those related to zero-deforestation, emission reduction, non-financial disclosures and corporate social responsibility – are not new (Adams 2017; Cho *et al.* 2020; Consolandi *et al.* 2020; Petrescu *et al.* 2020; Sankaran, Müller and Drouin 2020). Nor is there clear evidence to show how such changes influence sustainable development outcomes. There is, for example, no standardized monitoring mechanism among corporate actors that can measure how such changes contribute to goal implementation (Lee 2020).

Furthermore, there is increasing evidence that corporate actors, similar to what we observed with national governments, engage in ‘SDG washing’, whereby they reframe their existing priorities as novel contributions to the Sustainable Development Goals (Bebbington and Unerman 2018: 10; see also Banik and Lin 2019). Several studies demonstrate that corporate actors have reframed their practices and portfolios in the areas of corporate social responsibility and environmental, social and governance by now using the language of the Sustainable Development Goals without changing their business practices (Bull and Miklian 2019; Consolandi *et al.* 2020; Pizzi, Rosati and Venturelli 2020; World Business Council for Sustainable Development 2019). Furthermore, corporate actors often have a selective focus on only those goals that reflect their priorities (Pizzi, Rosati and Venturelli 2020). Bull and Miklian (2019: 454) suggest that the Sustainable Development Goals have ‘transformed corporate discourses but have had a much weaker impact upon corporate practices’. Some studies suggest that corporate actors leverage these rhetorical nods to the global goals as a means of legitimation, without fundamentally changing business practices that often run contrary to the achievement of the Sustainable Development Goals (ElAlfy, Darwish and Weber 2020; Siegel and Bastos Lima 2020).

To conclude, direct steering effects of the Sustainable Development Goals are predominantly present in the discursive and relational domains. Evidence for

institutional and relational effects is more mixed, and observed adjustments in corporate behaviour are arguably more selective. They may be attributed to strong signals either from markets, reporting requirements from supervisory boards and shareholders (linking environmental, social and governance issues with corporate financial performance) or from regulations (risk reporting, carbon pricing, true cost accounting standards).

### *Steering Effects in Civil Society*

The 2030 Agenda expects civil society to play a crucial role in three key areas: influencing agenda-setting and policy processes; localizing the Sustainable Development Goals and mobilizing people's participation in their implementation; and monitoring implementation to ensure the accountability of key public and corporate actors in achieving the goals. Depending on the scope and focus of the organization, those roles can be played at all levels of implementation (global, national, sub-national or local) and in all sectors.

### *Discursive and Institutional Effects*

The literature on civil society and the Sustainable Development Goals shows a two-way relationship: on the one hand, studies highlight contributions by civil society to goal implementation and monitoring; on the other hand, they document the opportunities and challenges that the introduction of this framework represents for civil society. Furthermore, studies stress that civil society itself is neither cohesive nor homogeneous and instead constitutes a diverse array of actors and interests with contending visions and positions (Delabre, Alexander and Rodrigues 2019). Consequently, there may not be a clear consensus about which strategies and development pathways should be pursued even if there is broad agreement about the goals and targets.

The literature also points to another discursive effect, which relates to the reframing of what is considered civil society through a growing involvement in the implementation of the Sustainable Development Goals of non-state actors beyond conventional definitions of civil society. An important case here are universities and research institutes which, in addition to transferring scientific knowledge to society (Callisto et al. 2019), can serve as non-political platforms that promote dialogue and partnerships (Díaz and Potvin 2020; Francis, Henriksson and Stewart 2020). Straddling the corporate sector and civil society, cooperatives are also recognized in the literature as relevant for achieving the Sustainable Development Goals (Mazur and Zimnoch 2017).

*Relational Effects*

In terms of relational effects, many studies recognize civil society as an important partner in the design, implementation and monitoring of progress on the Sustainable Development Goals (Fowler and Biekart 2020; Melo 2018; Peral 2017). For example, studies by van Haren and colleagues (2019), Bowen and colleagues (2017) and Bridgewater, Régnier and Cruz García (2015) highlight the vital role civil society organizations play in mobilizing people's participation and bringing the voices of those on the frontlines of poverty, inequality and vulnerability into 2030 Agenda processes, thus helping to meet the agenda's overall ambition to 'leave no one behind' (Sénit 2020). In this sense, they are also critical to achieving Goal 16, the promotion of just, peaceful and inclusive societies. This role is manifested, for instance, by integrating emerging issues in the political agenda, such as the role of women in migration (Holliday, Hennebry and Gammage 2019) or the recognition of gender diversity (Hennebry, Hari and Piper 2019).

Some studies point to relational challenges of partnerships and the involvement of civil society in the 2030 Agenda. One is a lack of diversity in the types of civil society organizations that are engaged (Banks, Hulme and Edwards 2015; Fowler and Biekart 2020). Aid-oriented organizations, which are typically urban, often international or based in donor countries, have an advantage (Hossain et al. 2019). Opportunities for other civil society organizations to play a role remain irregular, unpredictable and limited in scope and influence. A related relational challenge observed in several studies is that in many countries, governments decide which civil society organizations participate in the implementation of the global goals and often limit access to information or foreign funding (Arhin 2016; Banks, Hulme and Edwards 2015; Hossain et al. 2019; Siegel and Bastos Lima 2020).

A less discussed reason for challenges of civil society participation is that information about Sustainable Development Goals and financing for sustainable development tend to be concentrated in urban centres (Fowler and Biekart 2020). Important information on the goals does not seem to trickle down to local administrations or to civil society organizations in remote areas (van Haren et al. 2019). Consequently, country-level goal implementation and monitoring often leave out local or grassroot organizations that could be powerful change agents, such as cooperatives or village associations. The unique knowledge, expertise and social connections of such organizations remains underutilized (Cisneros 2019).

Such relational challenges are reinforced by an increased reliance on new communication technologies and 'big data' in implementing the Sustainable Development Goals, which may have significant implications for the involvement of civil society. New forms of participation based on such information and

communication technologies can create an illusion of increased global participation (Gellers 2016; Sénit, Kalfagianni and Biermann 2016). However, a more detailed analysis of the accessibility of these technologies shows that representativeness and legitimacy are as limited as with the old methods (Sénit, Biermann and Kalfagianni 2017). Finally, as big data is increasingly used to define indicators and monitor progress, civil society will face new challenges such as data privacy and the technification and complexity of monitoring.

Nevertheless, where relational conditions allow for it, civil society organizations have been shown to adopt a key role in transformative governance configurations in areas such as food systems (Siegel and Bastos Lima 2020); education (Daly et al. 2020; McCormick 2016); water (Hussein, Menga and Greco 2018; van Leeuwen et al. 2019); urban planning (Pemán-Gavín 2019); housing (Wakely 2020); and health (Mondal and Van Belle 2018). The multi-level, multi-actor, multi-sector character of the Sustainable Development Goals has the potential to promote innovative public policy approaches giving a prominent role to civil society (Carneiro and Battistella 2019; Salim and Drenth 2020). The literature reveals many experiments with new forms of governance for delivering specific Sustainable Development Goals, sometimes building on frameworks also applied elsewhere, such as the Policy Coherence for Development Approach (Koff, Challenger and Portillo 2020), Transformative Partners Approach (Al Sabbagh and Copeland 2019), co-regulation experiences (Bentsen, Larsen and Stupak 2019), smart cities (Salim and Drenth 2020), regulatory experimentation (Bauknecht et al. 2020), ecosystem approach (Bridgewater, Régnier and Cruz García 2015) or 'co-labs' (Francis, Henriksson and Stewart 2020).

### *Resource Effects*

There is limited evidence of resource effects of the goals in civil society, including whether funders of civil society organizations expect these organizations increasingly to contribute to the goals. Doinjashvili, Méral and Andriamahefazafy (2020) suggest that working from a goals-oriented perspective can help share innovative tools and approaches between sectors of civil society. For example, the Conservation Trust Funds are used only in the environmental sector but could help mobilize resources for the entire 2030 Agenda.

Overall, the review suggests caution regarding any major steering effects of the Sustainable Development Goals in civil society. Spaces for civil society participation are central to the 2030 Agenda but are not new. Such spaces have multiplied since the 1992 Earth Summit in intergovernmental bodies and in national and sub-national processes (Alsaeedi et al. 2019). Negative examples of the instrumentalization of civil society participation are many and well documented (Hossain et al. 2019). Nevertheless, participatory engagements

related to the global goals are still at times uncritically accepted as a remedy for an assumed democratic ‘deficit’ or ‘recession’ (Diamond 2015). Often, however, they are only used to ‘discipline’ those groups into manageable subjects through processes that close down alternatives and drive consensus towards a common strategy, ‘professionalize’ civil society representatives and control their access to the corridors of power (Corson *et al.* 2015) or ‘capture’ their leadership by incumbent powers (Poppe and Wolff 2017). Consequently, the emphasis on inclusion does not necessarily entail that a wider range of perspectives are considered.

In sum, steering effects of the Sustainable Development Goals in terms of empowerment and engagement of civil society organizations are rare and limited. Without further efforts to ensure real access and accountability for most civil society organizations, there is a danger that powerful state and corporate actors choose to partner with certain preferred or already known civil society organizations over others as a sign of supposed adherence to the entire 2030 Agenda (for example, Siegel and Bastos Lima 2020).

### Conclusions and Future Directions

The review has focused on four types of actors across multiple levels: national governments, sub-national authorities, corporations and civil society. The literature shows that all these types of actors are engaged – to differing extents – in implementing the Sustainable Development Goals. Overall, the stronger involvement of actors beyond national governments could generate a more multi-level, multi-actor, multi-agenda and multi-sector approach to implementing the Sustainable Development Goals. We studied steering effects as changes in four dimensions: institutional, discursive, relational and resource effects.

Discursive and relational effects seem interlinked across actors and levels. The review indicates that changes in discourse towards a commitment to the 2030 Agenda are important in signalling this to other actors and to differentiate from other actors that are not committed. Signalling commitment thus seems to be a first step to enable new types of relationships among the actors reviewed in this chapter. When national governments lead these engagements, however, they become gatekeepers that select who is invited to participate. In these cases, other actors have limited influence over important questions such as who participates, how, where and when. On the other hand, engagements led by other actors (for example local governments) seem to be more inclusive and innovative. There is, however, large variation across national governments. Moreover, we caution that too often, civil society participation and empowerment is routinely promoted as a silver bullet, while not acknowledging the plurality and diverse interests and agendas that exist in this group.

We observed institutional effects mainly in the public sector. Many governments seem to be committed to the Sustainable Development Goals, and some adjust administrative units or create formal coordinating arrangements. However, such new institutions often seem to reproduce existing structures and priorities. Many institutions are also not bound by the Sustainable Development Goals as a package but focus on selective implementation, often of goals and targets that were on their agenda already. In sub-national governance, we note that new institutional arrangements are also adopted to support wider participation of other actors.

We rarely observed resource effects. Especially for governments in the Global South with limited fiscal space it is often difficult to reallocate national budgets. The involvement of the corporate sector has been portrayed as a way to solve this problem. However, without public regulation and incentive structures it is unclear how more resources from the corporate sector could be devoted to the 2030 Agenda. In fact, evidence suggests that the corporate sector requires strategies to de-risk their investments if they are to engage. Yet this is not possible for all goals and may result in selective engagement of the corporate sector in less risky and more profitable goals.

To summarize, discursive effects of implementing the Sustainable Development Goals at multiple levels are more dominant, while resource effects are observed the least. The presence of relational and institutional effects varies across actors and geographies. Across all actors, however, relationship building is an important motivation for actors to engage with the Sustainable Development Goals. While there is no doubt in the literature that governments are key to goal implementation, many studies expect that the Sustainable Development Goals will also be achieved through new types of partnerships. To do so, however, actors would first need to establish relationships and trust to collaborate. But even with new partnerships, the voluntary nature of the framework makes it easy for incumbent actors to implement the Sustainable Development Goals only in ways that benefit their interests.

Overall, the limited evidence is inconclusive about whether the Sustainable Development Goals have sufficient steering effects across multiple levels to foster transformational change.

A pessimistic interpretation of our findings would suggest that the 2030 Agenda does not change much beyond confirming and reproducing earlier agendas and priorities. At best, the goals would then legitimate existing engagements and actions towards sustainable development and only enable or amplify actions that would have occurred anyway regardless of the goals. At worst, implementation of the goals is used for 'rainbow washing' practices that do not address sustainable development in an integrative and transformative way. One could also argue,

however, that the Sustainable Development Goals set very high expectations on actors, and that many are genuinely interested in implementing the goals. We hence might see a phenomenon of ‘fake it till you make it’, where actors at first pretend action with some superficial changes while they slowly work out which real reforms are needed and how to implement them.

Future research on the impact of the Sustainable Development Goals is thus needed for a more nuanced understanding of each effect. Particularly, there seems to be an overlap between institutional and relational effects when new institutions increase participation. One should also explore the extent to which actors learn in the process how to implement innovative policies and to build new types of relationships.

In conclusion, the Sustainable Development Goals in their current form are not transformative in and of themselves. Rather, as a mere blueprint of goals and targets often without a clear articulation of what transformations should look like, the 2030 Agenda and the global goals are often used for reporting purposes at best. They rarely provide a strong incentive to drive the more fundamental changes and systematic transformations that are called for (Independent Group of Scientists appointed by the Secretary-General 2019; Sachs *et al.* 2019). Although the 2030 Agenda provides a useful framework for the breadth of sustainable development challenges, the extent to which the Sustainable Development Goals can become agents of change depends on much broader transformations of social and economic structures.

### Notes

- 1 Search strings TITLE-ABS-KEY ( ('sustainable development goal\*' OR 'SDG\*') AND (steer\* OR governance) AND ( national OR federal) AND government\* ) AND (LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017 ) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR, 2015) ).
- 2 Search strings TITLE-ABS-KEY ( ('sustainable development goal\*' OR 'SDG\*') AND (steer\* OR governance) AND ('sub-national' OR sub-national OR 'sub national' OR city OR cities\* OR municipalit\* OR state\* OR province\* ) AND (LIMIT-TO (PUBYEAR, 2021 ) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019 ) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) ).
- 3 Search strings TITLE-ABS-KEY ( ('sustainable development goal\*' OR 'SDG\*') AND (steer\* OR governance) AND (business\* OR firm\* OR corporation\* ) AND (LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) ).
- 4 TITLE-ABS-KEY ( ('sustainable development goal\*' OR 'SDG\*') AND (steer\* OR governance) AND ('civil society' OR 'civil societies' OR ngo\* ) AND (LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017 ) OR LIMIT-TO (PUBYEAR, 2016 ) OR LIMIT-TO (PUBYEAR, 2015) ).



- 5 If individual articles discuss steering effects on more than one actor, they were passed on for analysis between author teams.
- 6 The assessment teams for each actor category used either a colour-coding scheme for marking parts of the paper that are concerned with each of the effects, or software programmes such as MAXQDA and NVIVO, or copying parts of a paper into a separate document, organizing it into the conceptual categories.
- 7 For example, ElMassah and Mohieldin (2020) focus on the potential of digitalization policies, Galli et al. (2020) on the urban ecological footprint approach, Guzman (2020) on a methodology for developing indicators, Holloway (2017) on strategic urban planning, Kutty et al. (2020) on smart cities, Maes et al. (2019) on urban ecosystem management, Nhamo et al. (2020) on nexus governance, while Nshimbi (2019) considers the role of river basin organizations and integrated water resources management. Patel et al. (2017) look at urban experiments, Pultrone (2021) at performance-based planning, and Shand (2018) at the role of efficacy for realizing sustainable urban development. Ukeje et al. (2020) study the implications of public service recruitment practices for achieving the goals, Wendling et al. (2018) examine nature-based solutions, and Yang et al. (2020) explore the role of baseline scenarios in supporting decisions to achieve the Sustainable Development Goals in urban development.

## References

- Adams, C. A. (2017). Conceptualising the contemporary corporate value creation process. *Accounting, Auditing and Accountability Journal*, 30, 906–31.
- Ahmed, M., & Araral, E. (2019). Water governance in India: Evidence on water law, policy, and administration from eight Indian states. *Water*, 11, 2071.
- Al Sabbagh, S., & Copeland, E. (2019). Partnering for sustainable development: Case study of a 10-year donor–recipient partnership. *Development in Practice*, 29, 651–61.
- Alberti, A., & Senese, M. (2020). Developing capacities for inclusive and innovative urban governance. In S. Cheema (ed.), *Governance for urban services: Access, participation, accountability, and transparency* (pp. 107–26). Singapore: Springer International Publishing.
- Almeida, A. C. L. (2019). Multi actor multi criteria analysis (MAMCA) as a tool to build indicators and localize Sustainable Development Goal 11 in Brazilian municipalities. *Heliyon*, 5, e02128.
- Alsaeedi, B., De Sas Kropiwnicki-Gruber, Z., Gendron, R., & Kindornay, S. (2019). *Transformative action to realize the 2030 Agenda through effective coalitions: Good practice in 2030 Agenda implementation series*. Vancouver/Ottawa: Council for International Cooperation and Canadian Council for International Co-operation.
- Arhin, A. (2016). Advancing post-2015 SDGs in a changing development landscape: Challenges of NGOs in Ghana. *Development in Practice*, 26, 555–68.
- Asad, Sahar. (2019). SDGs in Pakistan: An analysis. In N. M. Khemka & S. Kumar (eds.), *Social development and the SDGs in South Asia* (pp. 92–110). Abingdon/New York, NY: Routledge.
- Attolico, A., & Smaldone, R. (2020). The #weResilient strategy for downscaling local resilience and sustainable development: The Potenza province and municipalities of Potenza and Pignola case. *Disaster Prevention and Management*, 29, 793–810.
- Banik, D., & Lin, K. (2019). Business and morals: Corporate strategies for sustainable development in China. *Business and Politics*, 21, 514–39.
- Banks, N., Hulme, D., & Edwards, M. (2015). NGOs, states, and donors revisited: Still too close for comfort? *World Development*, 66, 707–18.
- Bauknecht, D., Bischoff, T. S., Bizer, K., Führ, M., Gailhofer, P., Heyen, D. A., Proeger, T., & von der Leyen, K. (2020). Exploring the pathways: Regulatory experiments for

- sustainable development: An interdisciplinary approach. *Journal of Governance and Regulation*, 3, 49–71.
- Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: An enabling role for accounting research. *Accounting, Auditing & Accountability Journal*, 31, 2–24.
- Beneke de Sanfeliu, M., Milan, S., Rodríguez, A., & De Trigueros, M. (2020). The implementation process of the SDGs: Latin America regional survey. *Occasional Paper Series*, No. 68/2019. Southern Voice.
- Bentsen, N. S., Larsen, S., & Stupak, I. (2019). Sustainability governance of the Danish bioeconomy: The case of bioenergy and biomaterials from agriculture. *Energy, Sustainability and Society*, 9, 40.
- Bexell, M., & Jönsson, K. (2019). Country reporting on the SDGs: The politics of performance review at the global–national nexus. *Journal of Human Development and Capabilities*, 20, 403–17.
- Bexell, M., & Jönsson, K. (2020). Realizing the 2030 Agenda for Sustainable Development: Engaging national parliaments? *Policy Studies*. Available at: <https://doi.org/10.1080/01442872.2020.1803255>.
- Björkdahl, A., & Somun-Krupalija, L. (2020). Gender equality and local governance: Global norms and local practices. In S. Cheema (ed.), *Governance for urban services: Access, participation, accountability and transparency* (pp. 107–26). Singapore: Springer International Publishing.
- Boex, J., Malik, A. A., Brookins, D., Edwards, B., & Zaidi, H. (2020). *The political economy of urban governance in Asian cities: Delivering water, sanitation and solid waste management services*. Singapore: Springer International Publishing.
- Bornemann, B., & Christen, M. (2021). A new generation of sustainability governance: Potentials for 2030 Agenda implementation in Swiss cantons. *Politics and Governance*, 9 (1), 187–99.
- Bowen, K., Cradock-Henry, N., Koch, F., Patterson, J., Häyhä, T., Vogt, J., & Barbi, F. (2017). Implementing the ‘SDGs’: Towards addressing three key governance challenges – Collective action, trade-offs, and accountability. *Environmental Sustainability*, 26–27, 90–6.
- Breuer, A., & Oswald Spring, U. (2020). The 2030 Agenda as agenda setting event for water governance? Evidence from the Cuautla River Basin in Morelos and Mexico. *Water*, 12, 314.
- Bridgewater, P., Régnier, M., & Cruz García, R. (2015). Implementing SDG 15: Can large-scale public programs help deliver biodiversity conservation, restoration and management, while assisting human development? *Natural Resources Forum*, 39, 214–23.
- Brolan, C., McEwan, C., & Hill, P. (2019). Australia’s overseas development aid commitment to health through the SDGs: A multi-stakeholder perspective. *Globalization and Health*, 15, 66.
- Bull, B., & McNeill, D. (2019). From market multilateralism to governance by goal setting: SDGs and the changing role of partnerships in the new global order. *Business and Politics*, 21, 464–86.
- Bull, B., & Miklian, J. (2019). Towards global business engagement with development goals? Multilateral institutions and the SDGs in a changing global capitalism. *Business and Politics*, 21, 445–63.
- Callisto, M., Solar, R., Silveira, F. A. O., Saito, V. S., Hughes, R. M., Fernandes, G. W., . . . Alves, C. B. M. (2019). A Humboldtian approach to mountain conservation and freshwater ecosystem services. *Frontiers in Environmental Science*, 7, 195.

- Carneiro, L. P., & Battistella, L. R. (2019). Two innovative Brazilian programs relating to road safety prevention: A case study. *Sao Paulo Medical Journal*, 137 (suppl.), 2–7.
- China Council on Environmental Cooperation and Development (2020). Green BRI and 2030 Agenda for Sustainable Development. *Special Policy Study Report*, September 2020. CCIECD.
- Cho, C. H., Bohr, K., Choi, T. J., Partridge, K., Shah, J. M., & Swierszcz, A. (2020). Advancing sustainability reporting in Canada: 2019 report on progress. *Accounting Perspectives*, 19, 181–204.
- Cisneros, P. (2019). What makes collaborative water governance partnerships resilient to policy change? A comparative study of two cases in Ecuador. *Ecology and Society*, 24, 29.
- Consolandi, C., Phadke, H., Hawley, J., & Eccles, R. G. (2020). Material ESG outcomes and SDG externalities: Evaluating the health care sector's contribution to the SDGs. *Organization and Environment*, 33, 511–33.
- Corson, C., Brady, B., Zuber, A., Lord, J., & Kim, A. (2015). The right to resist: Disciplining civil society at Rio+20. *Journal of Peasant Studies*, 42, 859–78.
- Daly, A., Parker, S., Sherpa, S., & Regmi, U. (2020). Federalisation and education in Nepal: Contemporary reflections on working through change. *Education 3-13*, 48, 163–73.
- Das, M., Sharma, A., & Babu, S. C. (2018). Pathways from agriculture-to-nutrition in India: Implications for sustainable development goals. *Food Security*, 10, 1561–76.
- Delabre, I., Alexander, A., & Rodrigues, C. (2019). Strategies for tropical forest protection and sustainable supply chains: Challenges and opportunities for alignment with the UN SDGs. *Sustainability Science*, 15, 1637–51.
- Denny, D. M. T. (2018). Human rights and market access [Direitos humanos e acesso ao mercado]. *Revista de Direito Internacional*, 15, 202–20.
- De Jong, E., & Vijge, M. J. (2021). From Millennium to Sustainable Development Goals: Evolving discourses and their reflection in policy coherence for development. *Earth System Governance*, 7, 1000087.
- De Silva Lokuwaduge, C., Smark, C., & Mir, M. (2020). SDGs and businesses as active change agents. *Australasian Accounting, Business and Finance Journal*, 14 (3), 1–5.
- Diamond, L. (2015). Facing up to the democratic recession. *Journal of Democracy*, 26, 141–55.
- Díaz, L., & Potvin, A. (2020). EDS Integrated Approach for Sustainability (EDS-IA): Campus as a living laboratory experience. In W. L. Filho et al. (eds.), *Universities as living labs for sustainable development* (pp. 283–300). Cham: Springer International Publishing.
- Doinjashvili, P., Méral, P., & Andriamahefazafy, F. (2020). Sustaining protected areas through conservation trust funds: A review. *International Journal of Sustainable Development and World Ecology*, 28, 193–202.
- ElAlfy, A., Darwish, K., & Weber, F. (2020). Corporations and sustainable development goals communication on social media: Corporate social responsibility or just another buzzword? *Sustainable Development*, 28, 1418–30.
- ElMassah, S., & Mohieldin, M. (2020). Digital transformation and localizing the Sustainable Development Goals (SDGs). *Ecological Economics*, 169, 106490.
- Fattibene, D., Recanati, F., Dembska, K., & Antonelli, M. (2020). Urban food waste: A framework to analyse policies and initiatives. *Resources*, 9, 99.
- Federal Government of Germany (ed.) (2021). *Deutsche Nachhaltigkeitsstrategie. Weiterentwicklung 2021*. Berlin: Die Bundesregierung.

- Fenton, P., & Gustafsson, S. (2017). Moving from high-level words to local action: Governance for urban sustainability in municipalities. *Environmental Sustainability*, 26–27, 129–33.
- Florini, A., & Pauli, M. (2018). Collaborative governance for the SDGs. *Asia and the Pacific Policy Studies*, 5, 583–98.
- Forestier, O., & Kim, R. E. (2020). Cherry-picking the Sustainable Development Goals: Goal prioritization by national governments and implications for global governance. *Sustainable Development*, 28, 1269–78.
- Fowler, A., & Biekart, K. (2020). *Activating civic space for sustainable development: Helping and hindering factors for effective CSO engagement in the SDGs: Synthesis report*. International Institute of Social Studies.
- Francis, J., Henriksson, K., & Stewart, A. J. (2020). Collaborating for transformation: Applying the Co-Laboratorio approach to bridge research, pedagogy and practice. *Canadian Journal of Development Studies / Revue canadienne d'études du développement*. Available at: <https://doi.org/10.1080/02255189.2020.1797650>.
- Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5, 210–33.
- Fukuda-Parr, S., & Hegstad, T. S. (2018). 'Leaving no one behind' as a site of contestation and reinterpretation. *CDP Background Paper*, No. 47. ST/ESA/2018/CDP/47. New York, NY: UNDESA.
- Gabor, D. (2021). The Wall Street consensus. *Development and Change*, 52, 429–59.
- Galli, A., Iha, K., Moreno Pires, S., Mancini, M. S., Alves, A., Zokai, G., . . . Wackernagel, M. (2020). Assessing the ecological footprint and biocapacity of Portuguese cities: Critical results for environmental awareness and local management. *Cities*, 96, 102442.
- Gellers, J. C. (2016). Crowdsourcing SDGs from global civil society. In R. A. Matthew, C. Harron, K. Goodrich, B. Maharrami & E. Nizkorodov (eds.), *World scientific reference on natural resources and environmental policy in the era of global change* (pp. 415–38). World Scientific Publishing.
- Glass, L.-M., & Newig, J. (2019). Governance for achieving the SDGs: How important are participation, policy coherence, reflexivity, adaptation and democratic institutions? *Earth System Governance*, 2, 100031.
- Grant, M., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information and Libraries Journal*, 26, 91–108.
- Guzman, P. (2020). Assessing the sustainable development of the historic urban landscape through local indicators: Lessons from a Mexican World Heritage City. *Journal of Cultural Heritage*, 46, 320–7.
- Hancock, L. N., Ralph, N., & Ali, S. H. (2018). Bolivia's lithium frontier: Can public private partnerships deliver a minerals boom for sustainable development? *Journal of Cleaner Production*, 178, 551–60.
- Hansson, S., Arfvidsson, H., & Simon, D. (2019). Governance for sustainable urban development: The double function of SDG indicators. *Area Development and Policy*, 4, 217–35.
- Haywood, L., Funke, N., Audouin, M., Musvoto, C., & Nahman, A. (2019). The SDGs in South Africa: Investigating the need for multi-stakeholder partnerships. *Development Southern Africa*, 36, 555–69.
- Hege, E., Brimont, L., & Pagnon, F. (2019). Sustainable development goals and indicators: Can they be tools to make national budgets more sustainable? *Public Sector Economics*, 43, 423–44.

- Hennebry, J., Hari, K.C., & Piper, N. (2019). Not without them: Realising the SDGs for women migrant workers. *Journal of Ethnic and Migration Studies*, 45, 2621–37.
- Herrera, V. (2019). Reconciling global aspirations and local realities: Challenges facing the Sustainable Development Goals for water and sanitation. *World Development*, 118, 106–17.
- Hestad, D. (2021). The evolution of private sector action in sustainable development. International Institute for Sustainable Development, *Earth Negotiations Bulletin*, Brief 12. Available online: [www.jstor.org/stable/pdf/resrep29276.pdf](http://www.jstor.org/stable/pdf/resrep29276.pdf).
- Hickmann, T. (2021). Locating cities and their governments in multi-level sustainability governance. *Politics and Governance*, 9 (1), 211–20.
- Holliday, J., Hennebry, J., & Gammage, S. (2019). Achieving the SDGs: Surfacing the role for a gender analytic of migration. *Journal of Ethnic and Migration Studies*, 45, 2551–65.
- Holloway, A. (2017). Localising global goals in Australia's global city: Sydney. *WIT Transactions on Ecology and the Environment*, 226, 181–91.
- Horn, P., & Grugel, J. (2018). The SDGs in middle-income countries: Setting or serving domestic development agendas? Evidence from Ecuador. *World Development*, 109, 73–84.
- Hossain, N., Khurana, N., Nazneen, S., Oosterom, M., Schröder, P., & Shankland, A. (2019). Development needs civil society: The implications of civic space for the SDGs. *Synthesis Report for ACT Alliance April/2019*. Geneva: ACT Alliance.
- Hussein, H., Menga, F., & Greco, F. (2018). Monitoring transboundary water cooperation in SDG 6.5.2: How a critical hydropolitics approach can spot inequitable outcomes. *Sustainability*, 10, 3640.
- Independent Group of Scientists appointed by the Secretary-General (2019). *Global Sustainable Development Report 2019: The future is now – science for achieving sustainable development*. New York, NY: United Nations.
- Ioannou, I., & Serafeim, G. (2017). *The consequences of mandatory corporate sustainability reporting*. Foxford Handbook of Corporate Social Responsibility, Oxford University Press.
- Jönsson, K., & Bexell, M. (2021). Localizing the SDGs: The case of Tanzania. *Development Policy Review*, 39, 181–96.
- Jupesta, J., Supriyanto, A. A., Martin, G., Piliang, J., Yang, S., Purnomo, A., . . . Caliman, J. P. (2020). Establishing multi-partnerships environmental governance in Indonesia: Case of Desa Makmur Perduli Api (Prosperous and Fire Free Village) Program. In V. Squires & M. Gaur (eds.), *Food security and land use change under conditions of climatic variability* (pp. 181–96). Cham: Springer VS.
- Kasirye, I., Ntale, A., & Venugopal, G. (2020). Implementation progress of the SDGs: Sub-Saharan Africa regional survey. *Occasional Paper Series*, No. 66. Southern Voice.
- Khan, M. A., & Milne, Grace (2019). Global governance, neoliberalism and national responses: The case of Bangladesh's ready-made garment (RMG) sector. *Development Policy Review*, 37, O230–O247.
- Kharrazi, A., Qin, H., & Zhang, Y. (2016). Urban big data and sustainable development goals: Challenges and opportunities. *Sustainability*, 8, 1293.
- Koff, H., Challenger, A., & Portillo, I. (2020). Guidelines for operationalizing Policy Coherence for Development (PCD) as a methodology for the design and implementation of sustainable development strategies. *Sustainability*, 12, 4055.
- Krech, R., Kickbusch, I., Franz, C., & Wells, N. (2018). Banking for health: The role of financial sector actors in investing in global health. *BMJ Global Health*, 3, e000597.

- Kuhn, B. M. (2018). China's commitment to the Sustainable Development Goals: An analysis of push and pull factors and implementation challenges. *Chinese Political Science Review*, 3, 359–88.
- Kutty, A. A., Abdella, G. M., Kucukvar, M., Onat, N. C., & Bulu, M. (2020). A system thinking approach for harmonizing smart and sustainable city initiatives with United Nations Sustainable Development Goals. *Sustainable Development*, 28, 1347–65.
- Lauber, K., Ralston, R., Mialon, M., Carriedo, A., & Gilmore, A. (2020). Non-communicable disease governance in the era of the SDGs: A qualitative analysis of food industry framing in WHO consultations. *Globalization and Health*, 16, 76.
- Lee, J. W. (2020). Green finance and SDGs: The case of China. *The Journal of Asian Finance, Economics and Business*, 7, 577–86.
- Li, Y., & Shapiro, J. (2020). *China goes green: Coercive environmentalism for a troubled planet*. Cambridge: Polity Press.
- Liaw, S. T., Marcelo, A., Narasimhan, P., Ashraf, M. M., & Ray, P. (2017). Global eHealth, social business and citizen engagement: A natural convergence? *Studies in Health Technology and Informatics*, 245, 773–7.
- MacDonald, A., Clarke, A., Huang, L., Roseland, M., & Seitanidi, M. M. (2018). Multi-stakeholder partnerships (SDG #17) as a means of achieving sustainable communities and cities (SDG #11). In W. Leal Filho (ed.), *Handbook of sustainability science and research* (pp. 193–209). Cham: Springer International Publishing.
- Maes, M. J. A., Jones, K. E., Toledano, M. B., & Milligan, B. (2019). Mapping synergies and trade-offs between urban ecosystems and the sustainable development goals. *Environmental Science and Policy*, 93, 181–8.
- Mawdsley, E. (2018). From billions to trillions: Financing the SDGs in a world 'beyond aid'. *Dialogues in Human Geography*, 8, 191–5.
- Mazur, B., & Zimnoch, K. (2017). CSR of cooperatives in the light of SDGs 2030 [CSR spółdzielni w świetle celów zrównoważonego rozwoju 2030]. *Prakseologia*, 159, 143–60.
- McCormick, A. (2016). Vanuatu education policy post-2015: 'Alternative', decolonising processes for 'development'. *International Education Journal*, 3, 16–19.
- Meadowcroft, J. (2007). National Sustainable Development strategies: Features, challenges and reflexivity. *European Environment*, 17, 152–63.
- Melo, A. (2018). *Collaborative efforts for sustainable development: Surveying the literature on multi-stakeholder initiatives to realize the SDGs*. The Hague: Task Team on CSO Development Effectiveness and Enabling Environment.
- Mondal, S., & Van Belle, S. (2018). India's NCD strategy in the SDG era: Are there early signs of a paradigm shift? *Globalization and Health*, 14, 39.
- Monkelbaan, J. (2019). Overview of governance theories that are relevant for the SDGs. In J. Monkelbaan (ed.), *Governance for the SDGs* (pp. 21–48). Singapore: Springer International Publishing.
- Morita, K., Okitasari, M., & Masuda, H. (2020). Analysis of national and local governance systems to achieve the SDGs: Case studies of Japan and Indonesia. *Sustainability Science*, 15, 179–202.
- Nhamo, L., Ndlela, B., Mpandeli, S., & Mabhaudhi, T. (2020). The water–energy–food nexus as an adaptation strategy for achieving sustainable livelihoods at a local level. *Sustainability*, 12, 1–16.
- Nshimbi, C. C. (2019). SDGs and decentralizing water management for transformation: Normative policy coherence for water security in SADC river basin organizations. *Physics and Chemistry of the Earth*, 111, 1–12.

- OECD [Organization for Economic Co-operation and Development] (2020). *A territorial approach to the Sustainable Development Goals: Synthesis report*. Paris: OECD Publishing.
- Ofei-Manu, P., Didham, R. J., Byun, W. J., Phillips, R., Dickella Gamaralalage, P. J., & Rees, S. (2018). How collaborative governance can facilitate quality learning for sustainability in cities: A comparative case study of Bristol, Kitakyushu and Tongyeong. *International Review of Education*, 64, 373–92.
- Patel, Z., Greyling, S., Simon, D., Arfvidsson, H., Moodley, N., Primo, N., & Wright, C. (2017). Local responses to global sustainability agendas: Learning from experimenting with the urban sustainable development goal in Cape Town. *Sustainability Science*, 12, 785–97.
- Pemán-Gavín, I. (2019). La agenda urbana en el marco europeo. Experiencias internacionales de políticas urbanas. *Ciudad y Territorio Estudios Territoriales*, 202, 701–22.
- Peral, L. (2017). Achieving more sustainable global governance: The case of the responsibility to protect. In J. Hartz-Karp & D. Marinova (eds.), *Methods for Sustainability Research* (pp. 157–170). Cheltenham: Edward Elgar Publishing.
- Petrescu, A. G., Florentina, R. B., Petrescu, M., Oncioiu, I. H., Türkes, M. C., & Capusneanu, S. (2020). Assessing the benefits of the sustainability reporting practices in the top Romanian companies. *Sustainability*, 12, 3470.
- Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social science: A practical guide*. Blackwell Publishing.
- Pineda-Escobar, M. A. (2019). Moving the 2030 Agenda forward: SDG implementation in Colombia. *Corporate Governance*, 19, 176–88.
- Pizzi, S., Rosati, F., & Venturelli, A. (2021). The determinants of business contribution to the 2030 Agenda: Introducing the SDG reporting score. *Business Strategy and the Environment*, 30, 404–21.
- Pla-Julián, I., & Guevara, S. (2020). Mainstreaming gender and sustainability jointly: A case study from a local government in Spain. *Local Environment*, 25, 258–71.
- Pope, A., & Wolff, J. (2017). The contested spaces of civil society in a plural world: Norm contestation in the debate about restrictions on international civil society support. *Contemporary Politics*, 23, 469–88.
- Poza-Vilches, M. F., Gutiérrez-Pérez, J., & Pozo-Llorente, M. T. (2020). Quality criteria to evaluate performance and scope of 2030 Agenda in metropolitan areas: Case study on strategic planning of environmental municipality management. *International Journal of Environmental Research and Public Health*, 17, 419.
- Pultrone, G. (2021). Performance-based planning for sustainable cities: Innovative approaches and practices in Italy. In C. Bevilacqua, F. Calabrò & L. Della Spina (eds.), *Conference Proceedings: New Metropolitan Perspectives NMP2020* (pp. 430–9). Cham: Springer International Publishing.
- Purcell, W. M., Henriksen, H., & Spengler, J. D. (2019). Universities as the engine of transformational sustainability toward delivering the SDGs. *International Journal of Sustainability in Higher Education*, 20, 1343–57.
- Raszkowski, A., & Bartniczak, B. (2019). On the road to sustainability: Implementation of the 2030 Agenda SDGs (SDGs) in Poland. *Sustainability*, 11, 366.
- Rendtorff, J. D. (2019). Sustainable Development Goals and progressive business models for economic transformation. *Local Economy*, 34, 510–24.
- Sachs, J., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., & Rockström, J. (2019). Six transformations to achieve the Sustainable Development Goals. *Nature Sustainability*, 2, 805–14.

- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. (2020). *The Sustainable Development Goals and Covid-19. Sustainable Development Report 2020*. Cambridge: Cambridge University Press.
- Salim, W., & Drenth, M. (2020). Local governance and access to urban services: Political and social inclusion in Indonesia. In S. Cheema (ed.), *Governance for urban services: Access, participation, accountability, and transparency* (pp. 153–83). Singapore: Springer Nature.
- Salmoral, G., Zegarra, E., Vázquez-Rowe, I., González, F., del Castillo, L., Saravia, G. R., ... Knox, J. W. (2020). Water-related challenges in nexus governance for sustainable development: Insights from the city of Arequipa, Peru. *Science of the Total Environment*, 747, 141114.
- Sankaran, S., Müller, R., & Drouin, N. (2020). Creating a ‘Sustainability Sublime’ to enable megaprojects to meet the United Nations SDGs. *Systems Research and Behavioral Science*, 37, 813–26.
- Scheyvens, R., & Hughes, E. (2019). Can tourism help to ‘end poverty in all its forms everywhere’? The challenge of tourism addressing SDG1. *Journal of Sustainable Tourism*, 27, 1061–79.
- Scobie, M. (2019). Sustainable development and climate change adaptation: Goal interlinkages and the case of SIDS. In C. Klöck & M. Fink (eds.), *Dealing with climate change on small islands: Towards effective and sustainable adaptation* (pp. 101–22). Göttingen: Universitätsverlag Göttingen.
- Scott, L., & McGill, A. (2019). *SDG Challenge 2019: Creating a strategy for a better world. How the Sustainable Development Goals can provide the framework for business to deliver progress on our global challenges*. London: PwC.
- Sénit, C. A. (2020). Leaving no one behind? The influence of civil society participation on the SDGs. *Environment and Planning C: Politics and Space*, 38, 693–712.
- Sénit, C. A., Biermann, F., & Kalfagianni, A. (2017). The representativeness of global deliberation: A critical assessment of civil society consultations for sustainable development. *Global Policy*, 8, 62–72.
- Sénit, C. A., Kalfagianni, A., & Biermann, F. (2016). Cyberdemocracy? Information and communication technologies in civil society consultations for sustainable development. *Global Governance*, 22, 533–54.
- Shand, W. (2018). Efficacy in action: Mobilising community participation for inclusive urban development. *Urban Forum*, 29, 109–26.
- Sharma, S., & Soederberg, S. (2020). Redesigning the business of development: The case of the World Economic Forum and global risk management. *Review of International Political Economy*, 27, 828–54.
- Siegel, K. M., & Bastos Lima, M. G. (2020). When international sustainability frameworks encounter domestic politics: The SDGs and agri-food governance in South America. *World Development*, 135, 105053.
- Stake, R. E. (2010). *Qualitative research: Studying how things work*. New York, NY: Guilford Press.
- Sunders, W., Kelly, S., Paisley, S., & Clarke, L. (2020). Progress toward implementing the Sendai Framework, the Paris Agreement and the SDGs: Policy from Aotearoa New Zealand. *International Journal of Disaster Risk Science*, 11, 190–205.
- Tosun, J., & Leininger, J. (2017). Governing the interlinkages between the SDGs: Approaches to attain policy integration. *Global Challenges*, 1, 1700036.
- Ukeje, I. O., Ndukwe, C., Emma, C., Ogbulu, U., & Onele, J. C. (2020). Public service recruitment practices and implications for sustainable development in Ebonyi State, Nigeria. *International Journal of Public Administration*, 43, 361–72.



- UN Global Compact (2019). *The decade to deliver: A call to business action. CEO study on sustainability 2019. UN Global Compact & Accenture Strategy*. Available at [www.unglobalcompact.org/library/5715](http://www.unglobalcompact.org/library/5715). Accessed: 21 March 2021.
- UNDP [United Nations Development Programme] (2017). Data for Implementation and Monitoring of the 2030 Agenda for Sustainable Development. *Guidance Note*. Available online: [www.undp.org/sites/g/files/zskgke326/files/publications/Guidance\\_Note\\_Data%20for%20SDGs.pdf](http://www.undp.org/sites/g/files/zskgke326/files/publications/Guidance_Note_Data%20for%20SDGs.pdf).
- Valencia, S. C., Simon, D., Croese, S., Nordqvist, J., Oloko, M., Sharma, T., . . . Versace, I. (2019). Adapting the Sustainable Development Goals and the new urban agenda to the city level: Initial reflections from a comparative research project. *International Journal of Urban Sustainable Development*, 11, 4–23.
- Van den Broek, O. (2020). Narrative fidelity: Making the UN Sustainable Development Goals fit. *Corporate Communication: An International Journal*, 26, 441–60.
- Van Haren, N., Fleiner, R., Liniger, H., & Harari, N. (2019). Contribution of community-based initiatives to the sustainable development goal of land degradation neutrality. *Environmental Science and Policy*, 94, 211–19.
- Van Leeuwen, K., Hofman, J., Driessen, P. P. J., & Frijns, J. (2019). The challenges of water management and governance in cities. *Water*, 11, 1180.
- Wakely, P. (2019). Partnership: A strategic paradigm for the production and management of affordable housing and sustainable urban development. *International Journal of Urban Sustainable Development*, 12, 119–25.
- Wang, Y., Yuan, J., & Lu, Y. (2020). Constructing demonstration zones to promote the implementation of Sustainable Development Goals. *Geography and Sustainability*, 1, 18–24.
- Wendling, L. A., Huovila, A., zu Castell-Rüdenhausen, M., Hukkalainen, M., & Airaksinen, M. (2018). Benchmarking nature-based solution and smart city assessment schemes against the Sustainable Development Goal indicator framework. *Frontiers in Environmental Science*, 6. Available at: <https://doi.org/10.3389/fenvs.2018.00069>.
- Westphal, M. F., Franceschini, M. C., & Setti, A. F. F. (2018). How can the healthy municipalities, cities and communities strategy advance the Sustainable Development Goals agenda? Lessons from Agenda 21 and the MDGs in Brazil. In U. M. Azeiteiro, M. Akerman, W. Leal Filho, A. F. F. Setti & L. L. Brandli (eds.), *Lifelong learning and education in healthy and sustainable cities* (pp. 265–82). Cham: Springer International Publishing.
- World Business Council for Sustainable Development. (2019). *Navigating the landscape: A path forward for sustainability reporting. Reporting Matters*. Geneva: WBCSD.
- Yang, Z., Yang, H., & Wang, H. (2020). Evaluating urban sustainability under different development pathways: A case study of the Beijing–Tianjin–Hebei region. *Sustainable Cities and Society*, 61, 102226.
- Yunita, A., Biermann, F., Kim, R. E., & Vijge, M. J. (2022). The (anti-) politics of policy coherence for sustainable development in the Netherlands: Logic, method, effects. *Geoforum*, 128, 92–102.
- Zulbainarni, N., Indrawan, D., & Khumaera, N.I. (2020). Is Indonesia's fisheries governance ready to achieve SDG's 14? The role of multi-stakeholder in fisheries policy. *IOP Conference Series: Earth and Environmental Science*, 420, 012035.

## 4

# Interlinkages, Integration and Coherence

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The 2030 Agenda for Sustainable Development represents a novel approach to global sustainability governance. It goes beyond the earlier Millennium Development Goals in that it envisions a global transformation for economic prosperity, human well-being and planetary health (UNGA 2015). The breadth of this agenda, however, creates novel challenges of policy interlinkages and goal integration. The 2030 Agenda emphasizes that ‘interlinkages and the integrated nature of the Sustainable Development Goals’ are crucial for its success (UNGA 2015: 2). Also, the 17 Sustainable Development Goals were officially designed as an ‘integrated and indivisible’ set, and every goal has to be met equally to attain sustainable development (UNGA 2015: 1). In short, integration is a leitmotif of the 2030 Agenda (Nilsson and Persson 2017).

The integrated nature of the goals, however, increases complexity in policy-making, because it implies that the implementation of the goals must consider the interactions among them. Progress or lack of progress with one goal will affect other goals, some positively and others negatively, creating synergies and trade-offs (Nilsson and Weitz 2019). Institutional integration and policy coherence hence become central in addressing normative conflicts, fragmentation and policy complexity across the goals. The challenge is embodied as part of Goal 17, which calls upon governments and other actors to enhance policy coordination and policy coherence for sustainable development (UNGA 2015: Targets 17.13–17.14).

Institutional integration and policy coherence have thus become central concerns in the implementation of the 2030 Agenda, in national and global governance. At the national level, most governments acknowledge the need to consider synergies and trade-offs in implementing the Sustainable Development Goals. At the global level, there is growing recognition that governments need better capacities, tools and resources to address the interlinkages, synergies and trade-offs between goals. Many international organizations have produced guidance documents and tools to support governments, including the United

Nations Development Group (UNDG 2017), the United Nations Department for Economic and Social Affairs (UNDESA 2021), the United Nations Development Programme (UNDP 2017a) and the Organization for Economic Co-operation and Development (OECD 2018). The interest in linkages between the global goals has led to more research on institutional integration and policy coherence for sustainable development. A key question is here whether the Sustainable Development Goals have had an integrative effect and can be shown to strengthen institutional integration and policy coherence since 2015.

At the global level, scholars have studied whether the goals foster institutional integration between United Nations agencies and other intergovernmental bodies. The highest UN body for the governance of Sustainable Development Goals – the High-level Political Forum on Sustainable Development – has received much attention here. While some authors highlight the potential of the forum to enhance integration, coordination and coherence across the United Nations system (Abbott and Bernstein 2015; Boas, Biermann and Kanie 2016), others argue that it has failed to act as a strong coordination body and lacks political leadership and guidance (Beisheim and Bernstein 2020). This literature on the effects of the goals on global institutional integration is reviewed in [Chapters 2 and 6](#) of this volume.

In this chapter, we focus on the national level and explore here the interlinkages, institutional integration and policy coherence in the context of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.<sup>1</sup> We first define institutional integration and policy coherence in the context of governance for sustainable development. We then review how perspectives on interlinkages between the global goals have shaped a new discourse, followed by an analysis of the steering effects of the Sustainable Development Goals on institutional integration and policy coherence. The conclusion reflects on our main findings, and points to further research avenues.

### **Conceptualization and Methods**

Institutional integration and policy coherence are rooted in practices of rational decision-making within public policy and public administration (Candel and Biesbroek 2016; Peters 1998). Since the 1980s, there has been widespread interest and political support for integrated policy-making, both within and beyond governance for sustainable development (Tosun and Lang 2017). For example, policy coordination and coherence were central in the study of peace and security, mainly between civil and military interventions (de Coning and Friis 2011). Likewise, in development cooperation, ‘policy coherence for development’ gained momentum in the early 2000s (OECD 2018). In environmental governance, ‘environmental policy integration’ became prominent in many jurisdictions in the

1990s, including in the European Union, which enshrined this concept in its foundational treaties (European Communities 1997).

Both institutional integration and policy coherence have been studied extensively, often with different terminology.

Institutional integration is a concept closely linked to notions of institutional interlinkages (Hickmann et al. 2020), institutional coordination (Zürn and Faude 2013), institutional interaction and interplay management (Oberthür and Stokke 2011; Stokke 2020), and intra- or inter-organizational mainstreaming (Runhaar et al. 2018) (for overviews of these concepts, see Visseren-Hamakers 2015, 2018). A key question here is how to deal with complexity in policy-making and how to foster a division of labour across levels and actors to achieve more effective regulatory frameworks. Institutional integration has been a central question especially in the study of international governance. Numerous studies have explored here links between international institutions under conditions of complexity and fragmentation (Biermann 2014; Biermann et al. 2009; Hickmann et al. 2020; Oberthür and Gehring 2006; Oberthür and Stokke 2011; van Asselt 2014; Young 1996; Zelli and van Asselt 2013). Depending on whether governance fragmentation is seen as desirable or not (see discussion in Biermann et al. 2009, 2020), studies have focused on how to deal with fragmentation (Ostrom 2010), how to ‘orchestrate’ it (Abbott and Snidal 2010) or how to ameliorate it through institutional integration. Institutional integration is often believed to result from enhanced coordination across agencies or the creation of new, sometimes overarching agencies that connect others, such as through an often-debated international agency for the environment (Kim et al. 2020).

Policy coherence is often studied at the national level. Related terms, with slightly varying meanings, are policy coordination (Peters 1998), environmental policy integration (Jordan and Lenschow 2010; Persson and Runhaar 2018) and environmental mainstreaming (Karlsson-Vinkhuyzen et al. 2017). Policy coherence also refers to the degree of consistency across different policies (Nilsson et al. 2012). Here we understand policy coherence as consistency across the policy cycle: setting and prioritizing objectives, policy instruments and implementation and monitoring, analysis and reporting on policy outcomes (Scobie 2016). For example, setting and prioritizing objectives should avoid unintended negative impacts on other sectors (Makkonen et al. 2015) or the international norms and goals to which a country has committed (Kalaba, Quinn and Dougill 2014).

Institutional integration and policy coherence are causally linked. Policy coherence needs collaborative institutions and mechanisms across scales, networks, departments, levels of authority and sectors. Hence, policy coherence often results from institutional integration, even though it can also happen without.

For both institutional integration and policy coherence, the involvement of stakeholders and local political actors in knowledge-sharing, learning and problem solving is often seen as important (Smith et al. 2014). In the following, however, we only focus on how governments seek to advance institutional integration and policy coherence.

We base our analysis on two types of sources. First, we identified relevant scholarly literature through the Scopus database, using a search string that combined three requirements: publications including any of the search terms ‘2030 Agenda’, ‘sustainable development goals’ and ‘SDG’ (including variations); publications focusing on the topics of integration and coherence, for which a combination of the terms ‘integration’, ‘coherence’, ‘trade-off’, ‘synergies’ and ‘interaction’ (including variations) apply; and publications with a declared policy or governance focus. This search resulted in 1,281 articles. We narrowed this sample to 93 by excluding: publications that refer to the 2030 Agenda or the Sustainable Development Goals only to frame the argument without making any substantive references; publications that have no clear connection to policy or governance, either conceptually or empirically; and publications that were not accessible for language or other reasons. We analysed the remaining articles, looking specifically at how they consider and frame interlinkages, and how they refer to institutional integration and policy coherence in relation to the 2030 Agenda or the Sustainable Development Goals.

To complement our review, we studied scholarly analyses of the Voluntary National Reviews that countries report to the High-level Political Forum on Sustainable Development. These Voluntary National Reviews inform on institutional arrangements and policy approaches and outline how countries pursue the Sustainable Development Goals and integrate them into legislation, policies, plans, budgets and programmes. We draw on analyses of Voluntary National Reviews from 2016 to February 2021 that have been published in peer-reviewed journals, using the search words ‘Voluntary National Reviews’, ‘Sustainable Development Goals’ and ‘SDGs’, combined with ‘policy integration’ and ‘policy coherence’ in Scopus, Web of Science and Google Scholar. In addition, we included grey literature, specifically reviews and discussion papers of Voluntary National Reviews published from 2016 to 2021 by the United Nations and other international organizations (Okitasari et al. 2019; Partners for Review 2017, 2018a, 2018b, 2018c, 2019a, 2019b, 2020; UNDESA 2016, 2017, 2018a, 2018b, 2019, 2020) and civil society coalitions (Cutter 2016; Kindornay 2018, 2019; Kindornay and Gendron 2020). To illustrate our findings from this review of the academic and grey literature, in the following section we use also a few examples from a range of countries.

## Research Findings and Practical Insights

We now analyse steering effects of Sustainable Development Goals in three respects. First, we assess how the Sustainable Development Goals lead to normative changes by focusing on their effects on the coherence among policies, legislation and regulations. Second, we assess institutional changes due to the goals, by focusing on their effects on institutional integration. Third, we assess discursive changes in how actors understand and describe the 2030 Agenda as an interlinked system.

### *Normative Effects*

We start with reviewing the state of knowledge on the impact of the Sustainable Development Goals on policy coherence, that is, the synergistic alignment of policies with the Sustainable Development Goals (as opposed to the integration of institutions that we discuss later). Overall, evidence on policy coherence induced by the Sustainable Development Goals is rare and weak. The focus of the literature is not on analysing whether and how the goals are implemented coherently, but on the development and validation of approaches and methods to support their coherent implementation (see Banerjee et al. 2019; Horan 2020; Janetschek et al. 2020; Nhamo et al. 2018).

In terms of the effects of the Sustainable Development Goals on policy coherence, many countries acknowledge in their Voluntary National Reviews the importance of policy coherence in the implementation of the Sustainable Development Goals (UNDESA 2017, 2020). Although the Voluntary National Reviews rarely inform on the effects of the goals on policy coherence (UNDESA 2020), evidence suggests that governments make some efforts to advance policy coherence. In their review of Voluntary National Reviews, for example, Allen, Metternicht and Wiedmann (2018) observe that 92 per cent of the 26 countries studied did some mapping and alignment of Sustainable Development Goals and targets in relation to their policies (see also Okitasari et al. 2019; UNDESA 2017). The authors also observed that about four-fifths of the studied countries had either put in place (27 per cent) or begun to establish (54 per cent) monitoring and review arrangements.

Despite this, by 2018, only 19 per cent of the countries had mainstreamed the Sustainable Development Goals in their national strategies or plans, while 46 per cent were in the process of doing so (Allen, Metternicht and Wiedmann 2018). A synthesis report of the Voluntary National Reviews in 2020 stated that many countries were still integrating the Sustainable Development Goals into their policies (UNDESA 2020). Cross-referencing between Sustainable Development

Goals and other global sustainability frameworks, such as the climate convention, is also a challenge for many countries (UNDESA 2019; Deutsche Gesellschaft für Internationale Zusammenarbeit and World Resources Institute 2018; Okitasari et al. 2019; Shawoo et al. 2020). For example, only few countries address trade-offs between climate policies and Sustainable Development Goals, and very few have mainstreamed their climate commitments in their national targets under the Sustainable Development Goals. Overall, planning and budget processes for the Sustainable Development Goals and climate action are most often not aligned (Deutsche Gesellschaft für Internationale Zusammenarbeit and World Resources Institute 2018). Budgeting processes in particular seem to lag behind: a report from the United Nations University found that fewer than 20 of the 99 Voluntary National Reviews (submitted by 2018) had indicated that the Sustainable Development Goals had been integrated in national budgeting (Okitasari et al. 2019; see also UNDESA 2020).

While all countries face challenges with the interlinkages among the Sustainable Development Goals, higher-income and lower-income countries differ in terms of the application of a coherent approach. Lower-income countries are generally least advanced (Allen, Metternicht and Wiedmann 2018; Okitasari et al. 2019). However, in both the Global North and South there are countries that successfully advance policy coherence for the goals, and these do not always fit general expectations. Germany, for example, is a relative latecomer in formulating its first national sustainability strategy (Bornemann 2014) but was one of the first countries to fully align its strategy with the goals. The Netherlands, in contrast, is traditionally a frontrunner in environmental planning but lacks a strategic vision on how to implement the goals. The goals have only once been mentioned in a political coalition agreement in the context of development cooperation (Yunita et al. 2022).

The efforts of countries to advance policy coherence centre on their national (sustainable) development strategies that they seek to align with the 2030 Agenda and the Sustainable Development Goals (Cutter 2016; Partners for Review 2017; UNDESA 2020). For example, Indonesia's implementation of the Sustainable Development Goals is based on the national development vision *Nawacita*. This vision is operationalized in the National Medium Term Development Plan, which covers most goals and targets relevant for the country. Another example is Ethiopia, where the Growth and Transformation Plan II is now the main national carrier of the Sustainable Development Goals (Partners for Review 2017).

Also in Sri Lanka, an overall vision and strategic path for sustainable development – aimed at 'balanced-inclusive-green-growth' and cutting across silos – was developed specifically targeting the 2030 Agenda. However, while this agenda was a government-sanctioned report, by the time it was completed those

that sanctioned it were no longer in power and there is no indication that these recommendations will be used. In Colombia, the government conducted an update of its National Development Plan to incorporate the Sustainable Development Goals with 92 targets; the country even approved the Sustainable Development Goals as law (Colombian National Planning Department 2018, 2019). Likewise, most Caribbean islands have, after substantial public consultation, aligned the Sustainable Development Goals with their national development agendas. St. Lucia aligned its Medium-Term Development Strategy of 2019–12 to all but three of the Sustainable Development Goals and to its six areas of national priority: agriculture, citizen security, education, health, infrastructure and tourism (Government of St. Lucia 2019: 10). Jamaica's 'ownership' of the 2030 Agenda began in 2014, with national consultations on the alignment of the country's development vision and strategy with the 2030 Agenda and the Sustainable Development Goals (Government of Jamaica 2018). These examples show that countries are actively trying to align the Sustainable Development Goals with their overall development visions, policies and planning, which could lead to more policy coherence at the national level.

Some analyses focus less on the 2030 Agenda as a whole than on the coherence of policies related to specific goals. Aftab et al. (2020), for example, report in their literature review how health-related Sustainable Development Goals are aligned with national development agendas. Specifically, they report about mechanisms of linking the implementation of the goals with budgetary processes. While in most countries financial allocation is ensured by incorporating the Sustainable Development Goals into funded development strategies and plans, the authors also report countries that reoriented their budgeting so that expenditures for Sustainable Development Goals become traceable to assess financial allocation. Examples include ministry budgets in Afghanistan that are aligned with the Sustainable Development Goals, the coding of the goals in budgets to track goal-related expenditures in Nepal, and the cross-matching of budgets and priorities to estimate goal-specific funds in Mexico (Aftab et al. 2020).

Research has addressed the enabling and hindering conditions for a coherent implementation of the Sustainable Development Goals. Although many countries explicitly recognize the interlinkages between Sustainable Development Goals and highlight synergies and trade-offs (such as, for instance, Cambodia, Ghana and the United Kingdom) (UNDESA 2019), most countries lack appropriate mechanisms to assess these (Allen, Metternicht and Wiedmann 2018) or to link their assessments to decision-making (Breuer, Leininger and Tosun 2019). Many policy interventions lack the analytic capacities to assess the scale of impact and find synergies and trade-offs. Allen, Metternicht and Wiedmann (2018) identify gaps regarding the application of integrated and systems-based approaches to the



implementation of the Sustainable Development Goals. Many countries lack adequate frameworks for prioritizing Sustainable Development Goals. Furthermore, only one-fifth of the 26 analysed countries applied nexus or clustering approaches; there was even less evidence of countries adopting qualitative or quantitative approaches to understand interlinkages between the Sustainable Development Goals (Allen, Metternicht and Wiedmann 2018).

The lack of coherence in Sustainable Development Goals implementation can also be attributed to a lack of financial resources. In the Caribbean, for example, there are deeper challenges to policy coherence such as limited fiscal space because of large national debt burdens and the lack of sustainable funding for development. External financial and environmental shocks further disrupt sustainable development policy and planning as unexpected natural disasters or global economic shocks quickly erode hard-earned progress (Scobie 2019a).

In addition to a lack of financial resources, lower-income countries face barriers such as high donor dependence, and lack of disaggregated and reliable data (Aftab et al. 2020). Mbanda and Fourie (2019) found that policy coherence around the Sustainable Development Goals in South Africa faces several challenges, including a lack of institutional structures, the development of skills and the (lack of) involvement of party politics. Horn and Grugel (2018) studied the implementation of the goals in Ecuador and point to political path dependencies and an instrumental interpretation of the goals that is motivated by power-related political calculations of competing political parties. Both factors undermine the integrated nature and ambition of the agenda. Forestier and Kim (2020) studied the prioritization of the Sustainable Development Goals in 19 countries and found that the capacity of dealing with the goals in an integrative manner is not only affected by national political factors and institutional arrangements, but also by international organizations and the external funding offers they provide, particularly in lower-income countries.

Overall, our analysis shows that the Sustainable Development Goals have some effects on policy coherence, especially by aligning national sustainable development visions, strategies and plans. However, significant barriers remain to further advance policy coherence, particularly regarding coherence among sectoral policies and in budgeting processes. Barriers are compounded in lower-income countries owing to lack of resources and capacities.

### *Institutional Effects*

We now discuss how Sustainable Development Goals affect institutional integration at national level. Overall, the literature indicates that only little empirical evidence exists on institutional integration in relation to the Sustainable

Development Goals, let alone on possible institutional integration effects of the goals. Considerable parts of the literature in this area are normative–prescriptive and focus on developing, justifying and validating approaches to improve institutional integration (Janetschek et al. 2020; Nhamo et al. 2018; Mbanda and Fourie 2020), instead of empirically studying the integration of institutional arrangements.

Apart from these prescriptive accounts, some studies report on institutional arrangements for implementing the 2030 Agenda and the Sustainable Development Goals; some explicitly refer to the integrative function of institutional arrangements. However, it is often unclear whether these arrangements, such as inter-ministerial coordination bodies, were established specifically to implement the Sustainable Development Goals or whether they existed beforehand. The review by Allen, Metternicht and Wiedmann (2018) of 26 countries, for example, shows that almost all countries had implemented initial steps for the establishment of institutional coordination mechanisms (96 per cent) or multi-stakeholder consultation processes (96 per cent), and many had monitoring arrangements for reporting on and follow-up to the goals (81 per cent). Countries often seem to build on existing institutional frameworks, such as those for the Millennium Development Goals (Okitasari et al. 2019; Partners for Review 2019a; UNDP 2017a; UNDESA 2017, 2018, 2020). This is backed by earlier studies of national sustainability governance that show that governments and public agencies developed similar integrative institutions as part of their sustainability strategies, suggesting that not all reported institutions have been created because of the 2030 Agenda (Cutter 2016). Accordingly, there seem to be strong institutional path dependencies in implementing the 2030 Agenda in which existing institutions are used to govern the Sustainable Development Goals (Tosun and Leininger 2017). On the one hand, this may cause siloed institutional structures to be unaffected by the goals and obstruct institutional integration. On the other hand, if goals are implemented through entirely new and potentially poorly institutionalized or integrated frameworks, this would also not necessarily advance their steering effects and institutional integration (Deutsche Gesellschaft für Internationale Zusammenarbeit and World Resources Institute 2018).

At the centre of many institutional arrangements for the implementation of the Sustainable Development Goals in governments are usually specific bodies that bear the main responsibility for and oversee the implementation process. The most common governmental agencies responsible for the Sustainable Development Goals are the offices of the head of government; planning ministries; finance, economy and development ministries; and ministries for environment and foreign affairs (Cutter 2016; Deutsche Gesellschaft für Internationale Zusammenarbeit and World Resources Institute 2018; Kindornay 2018; UNDESA 2019, 2020). Some

countries also have specific ministries for sustainable development (Deutsche Gesellschaft für Internationale Zusammenarbeit and World Resources Institute 2018). A considerable diversity of institutions can be identified, which come with different implications for institutional integration. In Germany, for example, the chief responsibility for implementing the Sustainable Development Goals lies with the Federal Chancellery (Scholz, Keijzer and Richerzhagen 2016; UNDESA 2016). Although sustainable development was dealt with by the Chancellery before the Sustainable Development Goals were launched, this centralization indicates that the broad and comprehensive integration approach of the 2030 Agenda is reflected in Germany's institutional arrangements (Bornemann 2014).

Most other higher-income countries have placed responsibility for the goals with the ministries of foreign affairs or environment in a more sectoral approach (Deutsche Gesellschaft für Internationale Zusammenarbeit and World Resources Institute 2018; Breuer, Leininger and Tosun 2019). The Netherlands for example have placed the responsibility for the goals with the Ministry of Foreign Affairs, hence putting the focus more on foreign than domestic policies (De Jong and Vijge 2021; Yunita et al. 2022). In Sweden, the location has shifted over time, from shared ownership between the Prime Minister's office, the Ministry of Finance and the Ministry for the Environment to shared ownership between the Ministry for Foreign Affairs and the Ministry for the Environment.

Many countries also rely on inter-departmental coordination mechanisms for allocating responsibility for implementing the goals to specific institutions. The Voluntary National Reviews of some countries stated that this is the first step towards implementing the Sustainable Development Goals (UNDESA 2019). While many countries show in their Voluntary National Reports at least some progress in strengthening their domestic institutional frameworks (UNDESA 2016, 2017, 2018, 2019, 2020), about half of the countries that submitted their Voluntary National Reports by 2018/19 claim to have created new cross-sectoral platforms for coordinating the Sustainable Development Goals across sectors and government levels (Okitasari et al. 2019; UNDESA 2018b), showing that the Sustainable Development Goals have at least some institutional effects. In Germany, for example, an inter-ministerial committee has been established at the highest government level, in addition to national advisory councils that provide recommendations on how to implement the Sustainable Development Goals in a holistic way (De Vries 2015). Bhutan's Gross National Happiness Commission is an example of an inter-sectoral coordinating body designed to foster horizontal coherence, integration and partnerships across government sectors (UNDP 2017b). In some countries, such as in the Caribbean, the Sustainable Development Goals have also been used as a catalyst to continue existing policies to improve inter-agency cooperation in national public administrative systems (Scobie 2019b).

Similarly, some countries – such as Bangladesh, Belgium and India – have mapped ministries and other government agencies based on their responsibilities to implement the Sustainable Development Goals. India even published the results of their mapping exercise to facilitate awareness and coordination among government agencies (UNDESA 2017). Likewise, in Sri Lanka, the former Ministry for Sustainable Development launched an institutional mapping focused on policy coherence to analyse how roles and responsibilities of governmental agencies – including 425 central agencies – relate with the Sustainable Development Goals (de Zoysa, Gunawardena and Gunawardena 2020).

Parliaments are often seen as critical for implementing Sustainable Development Goals through their oversight and legislative functions, including their budgetary rights (UNDESA 2017, 2018a, 2018b, 2019). Because parliaments cover all areas of decision-making, the engagement of parliaments can be an effective form of institutional integration. Most countries, however, have not yet fully engaged their parliaments in governing the global goals (UNDESA 2020), even though many organize briefings and dialogues with parliaments on the 2030 Agenda and the goals. Some also include members of parliament in their delegations to the High-level Political Forum (UNDESA 2018a, 2018b, 2020). Some parliaments have also adopted motions to monitor, review or foster progress on the implementation of the Sustainable Development Goals. In Finland, for example, motions adopted by the parliament require the government to use the Sustainable Development Goals as guiding principles and to link the goals to national policy frameworks (UNDESA 2020). In Sri Lanka, a Parliamentary Select Committee for Sustainable Development was in operation (2016–18) to strengthen the role of parliament and to work with line ministries to support the uptake of the Sustainable Development Goals, with support of the United Nations Development Programme (Parliament of Sri Lanka 2017).

Apart from these insights on institutional approaches to attain the 2030 Agenda as a whole, other studies look into efforts to promote institutional integration around specific Sustainable Development Goals, for example, coordinating bodies that bring together departments that work on one goal. Koide and Akenji (2017) surveyed national sustainable consumption and production policies, and concluded that governance here is not breaking traditional silos because of the absence of key ministries in coordination bodies. In contrast, Aftab et al. (2020, p. 8) find ‘that multisectoral structures with health at the centre [...] are evolving’. Yet, how effective these structures are and whether and under what conditions the health sector can successfully lead the multisectoral agenda remains unclear.

Overall, Breuer, Leininger and Tosun (2019) find that institutional integration for the Sustainable Development Goals is more likely to happen in high-income

countries, which more often involve two or more institutions – that is, multiple line ministries or the presidential office – in implementing the goals. Even in these countries, however, significant challenges to institutional integration remain. These include a lack of resources, lack of capacity among stakeholders, lack of a well-structured collaboration between state and non-state actors and the management of high stakeholder expectations (UNDESA 2017, 2018a). In Germany, for example, efforts for nation-wide institutional integration are impeded by the traditionally strong boundaries between line ministries or the departmental divide between German ministries. A key challenge for the German government is thus to create a shared ownership between the central leadership at the Chancellery with the responsibility of all line ministries. In the Netherlands, national institutional arrangements that have been established for the Sustainable Development Goals – such as the SDG coordinator and SDG focal points in each ministry – do not clarify on who should be coordinating with whom and which ministry is responsible for which goal, and they do not consider interactions between institutions that work on foreign and domestic policies (Yunita et al. 2022).

As another example, the institutionalization of the Sustainable Development Goals in Sri Lanka has been stymied by political volatility, fragmented institutions, wavering leadership and lack of a clear strategy. At the very onset of the Sustainable Development Goals in 2015, Sri Lanka had a new government in place that established a new Ministry of Sustainable Development to implement the Sustainable Development Goals. In 2018, however, there was a constitutional disruption to the legislature that led to changes in institutional structures, with presidential elections in 2019 changing these again. All of this had repercussions on how the goals were implemented in Sri Lanka (de Zoysa, Gunawardena and Gunawardena 2020).

Overall, the Sustainable Development Goals had some institutional effects in terms of the creation of new cross-sectoral coordination mechanisms, sometimes at the highest levels of government. In many countries, however, the effects of the Sustainable Development Goals on institutional integration are hampered by path dependencies related to countries' heavy reliance on existing institutional frameworks or their inability to overcome siloed structures.

### *Discursive Effects*

We now turn to discursive effects of the 2030 Agenda and the Sustainable Development Goals. In the practice and study of governance for sustainable development, environmental policy integration has been a central notion, focusing on how environmental goals are, or should be, mainstreamed and prioritized in non-environmental policies (Lafferty and Hovden 2003). The 2030 Agenda

departs from these earlier interpretations of integration: away from one-directional and selective environmental policy integration towards a comprehensive, reciprocal and complex integration in which all Sustainable Development Goals are equally important and can only be achieved together (Bornemann and Weiland 2021). The prioritization of single goals should be based on a functional logic that identifies priority goals as ‘leverage points’ for advancing the achievement of other goals (Allen, Metternicht and Wiedmann 2018; Kroll, Warchold and Pradhan 2019).

This interpretation has become prevalent in the academic discourse and literature. Various studies highlight the integrated nature of the Sustainable Development Goals and their targets, which implies that progress in one domain depends on, or has implications for, other domains (e.g., Allen, Metternicht and Wiedmann 2018; Boas, Biermann and Kanie 2016; Liu et al. 2018; Nerini et al. 2019; Nilsson et al. 2018). The interlinkages between Sustainable Development Goals often point to complex networks of relations in which potentially every goal and target is related to every other (e.g., Kroll, Warchold and Pradhan 2019; Nerini et al. 2019; Singh et al. 2018; Weitz et al. 2018). On the other hand, some studies also highlight the uneven linkages between the Sustainable Development Goals, with some goals having more and others fewer links (Le Blanc 2015).

In this debate, the interlinkages between the Sustainable Development Goals are typically framed in terms of ‘synergies’ (that is, positive interactions – when progress in one goal favours progress in another goal – also described as ‘co-benefits’) or ‘trade-offs’ (that is, negative interactions – when progress in one goal hinders or even reverses progress in another) (Pradhan et al. 2017). The overall finding in the literature is that most interlinkages between the Sustainable Development Goals and related targets are positive. This is revealed by empirical studies of the relations between goals and targets and their evolution (e.g., Allen, Metternicht and Wiedmann 2018; Kroll, Warchold and Pradhan 2019; Maes et al. 2019; Singh et al. 2018; Weitz et al. 2018).

The knowledge base on interlinkages and more integrated approaches for the implementation of the Sustainable Development Goals has grown, including through the development of approaches and tools to assess interlinkages between the goals. These approaches and tools cover qualitative and quantitative methodologies and combinations of both, and range from simple scoring tools (Nilsson, Griggs and Visbeck 2016) to elaborate integrated or systems modelling tools (e.g., Hutton et al. 2018; Pradhan et al. 2017; Kroll, Warchold and Pradhan 2019; for an overview of methodologies, see Bennich, Weitz and Carlsen 2020 as well as [Chapter 7](#) of this book).

The literature on interlinkages, and in particular on synergies, is gaining attention and also affects the public policy discourse. In general, we observe a change in how political actors, in particular governments, understand and describe

the 2030 Agenda, and a growing interest of governments in assessing interlinkages, trade-offs and synergies between the Sustainable Development Goals (Partners for Review 2020), with the aim to exploit synergies and cross-sectoral benefits and to reduce trade-offs (Bai et al. 2016; Boas, Biermann and Kanie 2016; Liu et al. 2018; Nerini et al. 2019; Nilsson et al. 2018), or even to turn trade-offs into synergies (Kroll, Warchold and Pradhan 2019; Scherer et al. 2018). By 2018, almost all countries reported on interlinkages in their Voluntary National Reports to the High-level Political Forum, referencing the three dimensions of sustainable development as well as interlinkages between Sustainable Development Goals (Partners for Review 2018c). However, there is much less consideration among governments for trade-offs than for synergies between Sustainable Development Goals (UNDESA 2020). In 2019 and 2020, the Voluntary National Reports provided almost no references to specific trade-offs between the goals (Partners for Review 2019b, 2020; Kindornay 2019; see also Kindornay and Gendron 2020).

In addition, the studies that we reviewed diverge in how they assess where integration is taking place. Some see the Sustainable Development Goals as ‘an enabler of integration’, and ‘a common benchmark against which development progress can be assessed’ (Le Blanc 2015: 180–2) – thus the focus is on *goal* integration (Biermann, Kanie and Kim 2017; Biermann et al. 2020). Others in contrast emphasize *contextual* integration during implementation (Allen, Metternicht and Wiedmann 2018; Bowen et al. 2017; Nilsson et al. 2018; Weitz et al. 2018). This means that goals and targets need to be adapted to and then integrated in their national and sub-national contexts. In the national implementation of the Sustainable Development Goals, not all countries specify interlinkages between goals for their context. Hence, they pursue a general approach to implementation, rather than a specific one that is adapted to the country’s context-specific interlinkages between Sustainable Development Goals (Tosun and Leininger 2017). Exceptions include Turkey, which conducted a comprehensive analysis of the synergies and trade-offs, including the nature and level of interlinkages between the Sustainable Development Goals based on Turkey’s context. This led to the identification of so-called ‘gravity centres’ with the highest number of linkages for implementation of Sustainable Development Goals (UNDESA 2019: 16).

Discourses around interlinkages in the 2030 Agenda are not only embodied in academic studies and policy reports, but also in software tools and online platforms. A family of online platforms and tools has emerged, such as the ‘SDG Interlinkages Analysis and Visualization Tool’ to show synergies and trade-offs between targets for Asian countries, based on correlations between national development indicators (IGES 2019), and the ‘KnowSDGs platform’, which is a web platform to provide tools and organize knowledge on policies, indicators,

methods and data to support the evidence-based implementation of the Sustainable Development Goals (European Commission 2019). The United Nations Environment Management Group launched a ‘Nexus Dialogues Visualization Tool’, in which experts assess interactions between Sustainable Development Goals related to global environmental issues (UNEMG 2019). The ‘Sustainable Development Goals Synergies’ tool of the Stockholm Environment Institute (2020) is designed to guide priority-setting and policy coherence among stakeholders, using cross-impact analysis and a scoring of interactions, as first popularized by the International Science Council (International Science Council 2017; Nilsson et al. 2016).

These tools all emphasize the role of evidence and knowledge as the basis for managing synergies and trade-offs between the goals. Context-specific data, assessment tools and methods are needed to help scientists and policy-makers in analysing goal interlinkages and formulating coherent policy approaches. Such a data-driven approach brings its own challenges, however, because the metrics and scales that are used around the world are difficult to combine and evaluate coherently (Allen, Metternicht and Wiedmann 2018).

Despite these challenges, the methodologies and tools that have been developed in the context of the Sustainable Development Goals – demonstrating their discursive effect – can now help countries to map and manage synergies and trade-offs between issues and advance institutional integration and policy coherence. Pilot uses have led to some institutional integration. For example, the ‘SDG Synergies’ tool has been officially adopted in Mongolia (Trimmer 2019). As these tools are used more and more across countries, the knowledge on interlinkages will grow and enable comparative studies to examine the steering effects of these tools – and hence the Sustainable Development Goals – in terms of normative and institutional changes.

### Conclusions and Future Directions

This chapter took as its starting point the 2030 Agenda’s premise, set out in the preamble of the declaration, that its success relies on an integrated approach with consideration to the interlinkages between the Sustainable Development Goals. In particular, we assessed here the state of knowledge about the steering effects of the goals in terms of more policy coherence (normative change), the extent to which the 2030 Agenda has led to institutional integration (institutional change), and widespread attention to interlinkages between the goals (discursive change).

We showed that the Sustainable Development Goals have generated a significant discourse on interlinkages and interactions, visible in academic and grey literatures and in new analytical tools and online platforms. We also observed



examples of measures to advance institutional integration by governments that bring their public administrative systems in line with the 2030 Agenda. This has happened, for example, through coordination by central agencies and through inter-departmental coordination bodies, and, more rarely, through giving parliaments and advisory councils an integrative oversight role.

Yet despite such steps towards institutional integration, policy coherence is still not in view, even though in many countries the goals have been incorporated into development strategies and action plans. This was to be expected due to an assumed sequential relation between the two: institutional integration processes normally need to run their course before policy coherence in outputs and decisions can be observed. However, there is a risk of weakening political interest, as the 2030 Agenda now reaches its mid-term in 2022. There is a risk that waiting for more coherent policies and decisions will continue as time drags.

There are important barriers to institutional integration and policy coherence in the institutional and political context of governments, and these barriers have not disappeared with the 2030 Agenda. Some barriers are deeply rooted in institutions, procedures and routines in the bureaucracy. Yet we have also found at times a lack of political interest from top levels of government and waning ownership of the 2030 Agenda in governments. This can be understood considering the difficulty of 'selling' the 2030 Agenda to the public as well as the issue-attention cycle of politics.

As for remaining knowledge gaps and further research avenues, we note that the conceptualization of interlinkages, integration and coherence and the general understanding of factors, drivers and barriers have been substantially advanced. These advancements have been pursued in academic literature, and many have informed policy and practice as well. However, empirical studies are still few and limited.

To understand better interlinkages, integrated approaches, quantitative modelling, statistics and stakeholder-driven approaches are all likely to make large contributions in the coming years. An unresolved issue is the degree of contextualization that is necessary to define interlinkages and the extent to which empirical relations are valid across contexts. Another important research area is how decision-support tools advance institutional integration and policy coherence for the Sustainable Development Goals.

Regarding institutional integration, the empirical knowledge base is growing but is still mainly found in the grey literature, such as reviews of the Voluntary National Reviews and other international policy reviews. Since such reviews are led by governments, they are not independent and unbiased. More academic research is needed with fine-grained empirical studies. Moving towards a generic classification for further empirical study, institutional integration can be seen as

new architectures or procedures for coordination in policy-making, between national agencies or parts of government. These include the positioning of Sustainable Development Goals in the centre of government or with ministries for finance; the anchoring of the goals in parliaments; the establishment of inter-departmental coordination mechanisms for the goals; and the allocation of roles across multiple agencies in implementation and reporting.

As for policy coherence, the knowledge base is more limited. Here the field suffers from a lack of conceptual clarity and empirical data. Countries and international organizations show some interest in the issue and how they could tackle it, but they are constrained by time lags and the difficulty in empirically studying coherence in terms of policy or development strategy. In future research, policy coherence could be studied as a consequence of integration and as alignment of goals, strategies, policies or implementation at the national level. This could include a focus on cross-references across policies in terms of objectives, mixes of policy instruments and budgets; the mainstreaming of Sustainable Development Goals in national sustainable development planning; or the visibility of the goals in policy bills and national budgets.

Overall, institutional integration and policy coherence are central in both the 2030 Agenda and the implementation of the Sustainable Development Goals by governments. Further research on the barriers to institutional integration and policy coherence, and the entrenched institutional structures and political interests that prevent integration and coherence, are needed to further advance in this area and coherently implement the 2030 Agenda.

### Note

- 1 For detailed discussions on policy coherence and the Sustainable Development Goals, see Bennich, Weitz and Carlsen 2020; Collste, Pedercini and Cornell 2017; Le Blanc 2015; Nilsson, Griggs and Visbeck 2016; Scobie 2019a; Stafford-Smith et al. 2017; Weitz et al. 2018.

### References

- Abbott, K. W., & Bernstein, S. (2015). The High-level Political Forum on Sustainable Development: Orchestration by default and design. *Global Policy*, 6, 222–33.
- Abbott, K. W., & Snidal, D. (2010). International regulation without international government: Improving IO performance through orchestration. *Review of International Organization*, 5, 315–44.
- Aftab, W., Siddiqui, F. J., Tasic, H., Perveen, S., Siddiqi, S., & Bhutta, Z. A. (2020). Implementation of health and health-related Sustainable Development Goals: Progress, challenges and opportunities: A systematic literature review. *BMJ Global Health*, 5, e002273.
- Allen, C., Metternicht, G., & Wiedmann, T. (2018). Initial progress in implementing the Sustainable Development Goals (SDGs): A review of evidence from countries. *Sustainability Science*, 13, 1453–67.

- Bai, X., Surveyer, A., Elmqvist, T., Gatzweiler, F., Güneralp, B., Parnell, S., . . . Webb, R. (2016). Defining and advancing a systems approach for sustainable cities. *Current Opinion in Environmental Sustainability*, 23, 69–78.
- Banerjee, O., Cicowiez, M., Horridge, M., & Vargas, R. (2019). Evaluating synergies and trade-offs in achieving the SDGs of zero hunger and clean water and sanitation: An application of the IEEM Platform to Guatemala. *Ecological Economics*, 161, 280–91.
- Beisheim, M., & Bernstein, S. (2020). The High-level Political Forum Review 2020: An opportunity to fulfill the HLPF's mandate. In Friends of Governance for Sustainable Developments (eds.), *Governance for sustainable development, volume 4: Challenges and opportunities for implementing the 2030 Agenda for Sustainable Development* (pp. 138–46). New World Frontiers Publications.
- Bennich, T., Weitz, N., & Carlsen, H. (2020). Deciphering the scientific literature on SDG interactions: A review and reading guide. *Science of the Total Environment*, 728, 138405.
- Biermann, F., Pattberg, P., van Asselt, H., & Zelli, F. (2009). The fragmentation of global governance architectures: A framework for analysis. *Global Environmental Politics*, 9 (4), 14–40.
- Biermann, F. (2014). *Earth system governance. World politics in the Anthropocene*. Cambridge, MA: MIT Press.
- Biermann, F., Kanie, N., & Kim, R. E. (2017). Global governance by goal setting: The novel approach of the UN Sustainable Development Goals. *Current Opinion in Environmental Sustainability*, 26–27, 26–31.
- Biermann, F., van Driel, M., Vijge, M. J., & Peek, T. (2020). Governance fragmentation. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance: Institutional complexity and structural transformation* (pp. 158–80). Cambridge: Cambridge University Press.
- Boas, I., Biermann, F., & Kanie, N. (2016). Cross-sectoral strategies in global sustainability governance: Towards a nexus approach. *International Environmental Agreements: Politics, Law and Economics*, 16, 449–464.
- Bornemann, B. (2014). *Policy-Integration und Nachhaltigkeit: Integrative Politik in der Nachhaltigkeitsstrategie der deutschen Bundesregierung* (2nd ed.). Wiesbaden: Springer VS.
- Bornemann, B., & Weiland, S. (2021). The UN 2030 Agenda and the quest for policy integration: A literature review. *Politics and Governance*, 9 (1), 96–107.
- Bowen, K. J., Cradock-Henry, N. A., Koch, F., Patterson, J., Häyhä, T., Vogt, J., & Barbi, F. (2017). Implementing the ‘Sustainable Development Goals’: Towards addressing three key governance challenges: Collective action, trade-offs, and accountability. *Current Opinion in Environmental Sustainability*, 26–27, 90–6.
- Breuer, A., Leininger, J., & Tosun, J. (2019). Integrated policymaking: Choosing an institutional design for implementing the Sustainable Development Goals (SDGs). *Discussion Paper*, No. 14/2019. Bonn: German Development Institute.
- Candel, J. J., & Biesbroek, R. (2016). Toward a processual understanding of policy integration. *Policy Sciences*, 49, 211–31.
- Collste, D., Pedercini, M., & Cornell, S. E. (2017). Policy coherence to achieve the SDGs: Using integrated simulation models to assess effective policies. *Sustainability Science*, 12, 921–31.
- Colombian National Planning Department (2018). *Estrategia Para La Implementación De Los Objetivos De Desarrollo Sostenible (ODS) En Colombia*. Documento Conpes 3918. Available at: <https://library.co/document/z3d1w77y-documento-conpes.html>. Accessed: 31 March 2021.

- Colombian National Planning Department (2019). *Plan Nacional de Desarrollo 2018–2022. Pacto por Colombia, pacto por la equidad. Ley 1955/2019*. Available at: <https://colaboracion.dnp.gov.co/CDT/Prensa/Ley1955-PlanNacionaldeDesarrollo-pacto-por-colombia-pacto-por-la-equidad.pdf>. Accessed: 2 July 2021.
- Cutter, A. (2016). *Progressing national SDG implementation: Experiences and recommendations from 2016*. London: Bond.
- De Coning, C., & Friis, K. (2011). Coherence and coordination: The limits of the comprehensive approach. *Journal of International Peacekeeping*, 15, 243–72.
- De Jong, E., & Vijge, M. J. (2021). From Millennium to Sustainable Development Goals: Evolving discourses and their reflection in policy coherence for development. *Earth System Governance*, 7, 1000087.
- De Vries, Michiel (2015). *The role of national sustainable development councils in Europe in implementing the UN's Sustainable Development Goals: Overview and conclusions*. Den Haag/Berlin/London: German Council for Sustainable Development (RNE) and EEAC.
- De Zoysa, U., Gunawardena, A., & Gunawardena, P. (2020). *Localising the transformation in the new normal: A domestic resource mobilization framework for Sustainable Development Goals in Sri Lanka*. Janathakhan (GTE) Ltd. and Centre for Environment and Development.
- Deutsche Gesellschaft für Internationale Zusammenarbeit & World Resources Institute (2018). *Connecting the dots: Elements for a joined-up implementation of the 2030 Agenda and Paris Agreement*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and World Resources Institute (WRI).
- European Commission (2019). *KnowSDGs platform*. Available at: <https://knowsdgs.jrc.ec.europa.eu>. Accessed: 12 September 2020.
- European Communities (1997). *Treaty of Amsterdam – Amending the Treaty on European Union, the treaties establishing the European Communities and certain related acts*. Luxembourg: Office for Official Publications of the European Communities.
- Forestier, O., & Kim, R. E. (2020). Cherry-picking the Sustainable Development Goals: Goal prioritization by national governments and implications for global governance. *Sustainable Development*, 28, 1269–78.
- Government of Jamaica (2018). *Jamaica Voluntary National Review Report on the Implementation of the 2030 Agenda for Sustainable Development June 2018*. Kingston, Jamaica: Planning Institute of Jamaica.
- Government of St. Lucia (2019). *Saint Lucia Voluntary National Review Report on the implementation of the 2030 Agenda for Sustainable Development July 2019*. Castries, St. Lucia: Ministry of Education, Gender, Innovation and Sustainable Development.
- Hickmann, T., Van Asselt, H., Oberthür, S., Sanderink, L., Widerberg, O., & Zelli, F. (2020). Institutional interlinkages. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance: Institutional complexity and structural transformation* (pp. 119–36). Cambridge: Cambridge University Press.
- Horan, D. (2020). National baselines for integrated implementation of an environmental Sustainable Development Goal assessed in a new integrated SDG index. *Sustainability*, 12, 6955.
- Horn, P., & Grugel, J. (2018). The SDGs in middle-income countries: Setting or serving domestic development agendas? Evidence from Ecuador. *World Development*, 109, 73–84.
- Hutton, C. W., Nicholls, R. J., Lázár, A. N., Chapman, A., Schaafsma, M., & Salehin, M. (2018). Potential tradeoffs between the sustainable development goals in coastal Bangladesh. *Sustainability*, 10, 1108.

- IGES (2019). *SDG Interlinkages Analysis & Visualisation Tool (V3.0)*. Available at: <https://sdginterlinkages.iges.jp>. Accessed: 12 September 2020.
- International Science Council (2017). *A Guide to SDG interactions: From science to implementation*. Paris: International Science Council.
- Janetschek, H., Brandi, C., Dzebo, A., & Hackmann, B. (2020). The 2030 Agenda and the Paris Agreement: Voluntary contributions towards thematic policy coherence. *Climate Policy*, 20, 430–42.
- Jordan, A., & Lenschow, A. (2010). Environmental policy integration: A state of the art review. *Environmental Policy and Governance*, 20 (3), 147–58.
- Kalaba, F. K., Quinn, C. H., & Dougill, A. J. (2014). Policy coherence and interplay between Zambia's forest, energy, agricultural and climate change policies and multi-lateral environmental agreements. *International Environmental Agreements: Politics, Law and Economics*, 14, 181–98.
- Karlsson-Vinkhuyzen, S., Kok, M. T. J., Visseren-Hamakers, I. J., & Termeer, C. J. A. M. (2017). Mainstreaming biodiversity in economic sectors: An analytical framework. *Biological Conservation*, 210, 145–56.
- Kim, R. E., Van Asselt, H., Kotzé, L. J., Vijge, M. J., & Biermann, F. (2020). Hierarchization. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance: Institutional complexity and structural transformation* (pp. 275–96). Cambridge: Cambridge University Press.
- Kindornay, S. (2018). *Progressing national SDGs implementation: An independent assessment of the Voluntary National Review reports submitted to the United Nations High-level Political Forum on Sustainable Development in 2017*. Ottawa: Canadian Council for International Co-operation.
- Kindornay, S. (2019). *Progressing national SDGs implementation: An independent assessment of the Voluntary National Review reports submitted to the United Nations High-level Political Forum on Sustainable Development in 2018*. Ottawa: Canadian Council for International Co-operation.
- Kindornay, S., & Gendron, R. (2020). *Progressing national SDG implementation: An independent assessment of the Voluntary National Review reports submitted to the United Nations High-level Political Forum on Sustainable Development in 2019*. Ottawa: Canadian Council for International Co-operation.
- Koide, R., & Akenji, L. (2017). Assessment of policy integration of sustainable consumption and production into national policies. *Resources*, 6, 48.
- Kroll, C., Warchold, A., & Pradhan, P. (2019). Sustainable Development Goals (SDGs): Are we successful in turning trade-offs into synergies? *Palgrave Communications*, 5, 140.
- Lafferty, W., & Hovden, E. (2003). Environmental policy integration: Towards an analytical framework. *Environmental Politics*, 12 (3), 1–22.
- Le Blanc, D. (2015). Towards integration at last? The Sustainable Development Goals as a network of targets. *Sustainable Development*, 23, 176–87.
- Liu, J., Hull, V., Godfray, H., Tilman, D., Gleick, P., Hoff, H., ... Li, S. (2018). Nexus approaches to global sustainable development. *Nature Sustainability*, 1, 466–76.
- Maes, M. J. A., Jones, K. E., Toledano, M. B., & Michigan, B. (2019). Mapping synergies and trade-offs between urban ecosystems and the sustainable development goals. *Environmental Science and Policy*, 93, 181–8.
- Makkonen, M., Huttunen, S., Primmer, E., Repo, A., & Hilden, M. (2015). Policy coherence in climate change mitigation: An ecosystem service approach to forests as carbon sinks and bioenergy sources. *Forest Policy and Economics*, 50, 153–62.

- Mbanda, V., & Fourie, W. (2020). The 2030 Agenda and coherent national development policy: In dialogue with South African policymakers on policy coherence for Sustainable Development Goals. *Sustainable Development*, 28, 751–8.
- Nerini, F. F., Sovacool, B., Hughes, N., Cozzi, L., Cosgrave, E., Howells, M., ... & Milligan, B. (2019). Connecting climate action with other Sustainable Development Goals. *Nature Sustainability*, 2, 674–80.
- Nhamo, L., Ndelela, B., Nhemachena, C., Mabhaudhi, T., Mpandeli, S., & Matchaya, G. (2018). The water–energy–food nexus: Climate risks and opportunities in Southern Africa. *Water*, 10, 567.
- Nilsson, M., & Persson, Å. (2003). Framework for analysing environmental policy integration. *Journal of Environmental Policy & Planning*, 5, 333–59.
- Nilsson, M., & Persson, Å. (2017). Policy note: Lessons from environmental policy integration for the implementation of the 2030 Agenda. *Environmental Science and Policy*, 78, 36–9.
- Nilsson, M., & Weitz, N. (2019). Governing trade-offs and building coherence in policy-making for the 2030 Agenda. *Politics and Governance*, 7 (4), 254–63.
- Nilsson, M., Griggs, D., & Visbeck, M. (2016). Policy: Map the interactions between Sustainable Development Goals. *Nature*, 534, 320–2.
- Nilsson, M., Zamparutti, T., Petersen, J. E., Nykvist, B., Rudberg, P., & McGuinn, J. (2012). Understanding policy coherence: Analytical framework and examples of sector–environment policy interactions in the EU. *Environmental Policy and Governance*, 22, 395–423.
- Nilsson, M., Chisholm, E., Griggs, D., Howeden-Chapman, P., McCollum, D., Messerli, P. ... Stafford-Smith, M. (2018). Mapping interactions between the Sustainable Development Goals: Lessons learned and ways forward. *Sustainability Science*, 13, 1489–1503.
- Oberthür, S., & Gehring, T. (eds.) (2006). *Institutional interaction in global environmental governance: Synergy and conflict among international and EU policies*. Cambridge, MA: MIT Press.
- Oberthür, S., & Schram, O. S. (eds.) (2011). *Managing institutional complexity: Regime interplay and global environmental change*. Cambridge, MA: MIT Press.
- OECD [Organisation for Economic Co-operation and Development] (2018). *Policy coherence for sustainable development 2018. Toward sustainable and resilient societies*. Paris: OECD Publishing.
- Okitasari, M., Sunam, R., Mishra, R., Masuda, H., Morita, K., Takemoto, K., & Kanie, N. (2019). Governance and national implementation of the 2030 Agenda: Lessons from Voluntary National Reviews. *UNU–IAS Policy Brief*, No. 18/2019. Tokyo: United Nations University Institute for the Advanced Study of Sustainability.
- Ostrom, E. (2010). Beyond markets and states: Polycentric governance of complex economic systems. *The American Economic Review*, 100, 641–72.
- Partners for Review (2017). *Comparative analysis of 43 VNRs submitted to the HLPF 2017*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Partners for Review (2018a). *Tracking progress together: Emerging practices in national SDG review*. Bonn/Eschborn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Partners for Review (2018b). Discussion paper. *The whole of society approach: Levels of engagement and meaningful participation of different stakeholders in the review process of the 2030 Agenda*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

- Partners for Review (2018c). *Voluntary National Reviews submitted to the 2018 High-level Political Forum: A comparative analysis*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Partners for Review (2019a). Discussion paper. *The whole of government approach: Initial lessons concerning national coordinating structures for the 2030 Agenda and how review can improve their operation*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Partners for Review (2019b). *Voluntary National Reviews submitted to the 2019 High-level Political Forum for Sustainable Development: A comparative analysis*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Partners for Review (2020). *2020 Voluntary National Reviews: A snapshot of trends in SDG reporting*. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Parliament of Sri Lanka (2017). Interim report of the Select Committee of Parliament on the United Nations 2030 Agenda for Sustainable Development. *Parliamentary Series No. 226 of The Eighth Parliament of the Democratic Socialist Republic of Sri Lanka (First Session)*. Colombo: Government Publication Bureau.
- Persson, Å., & Runhaar, H. (2018). Conclusion: Drawing lessons for environmental policy integration and prospects for future research. *Environmental Science & Policy*, 85, 141–5.
- Peters, B. G. (1998). Managing horizontal government: The politics of coordination. *Public Administration*, 76, 295–311.
- Peters, B. G. (2015). *Pursuing horizontal management: The politics of public sector coordination*. Lawrence: University Press of Kansas.
- Pradhan, P., Costa, L., Rybski, D., Lucht, W., & Kropp, J. P. (2017). A systematic study of Sustainable Development Goal (SDG) interactions. *Earth's Future*, 5, 1169–79.
- Runhaar, H., Wilk, B., Persson, Å., Uittenbroek, C., & Wamsler, C. (2018). Mainstreaming climate adaptation: Taking stock about ‘what works’ from empirical research worldwide. *Regional Environmental Change*, 18, 1201–10.
- Scherer, L., Behrens, P., de Koning, A., Heijungs, R., Sprecher, B., & Tukker, A. (2018). Trade-offs between social and environmental Sustainable Development Goals. *Environmental Science & Policy*, 90, 65–72.
- Scholz, I., Keijzer, N., & Richerzhagen, C. (2016). Promoting the Sustainable Development Goals in Germany. *Discussion Paper*, No. 13/2016. Bonn: German Development Institute.
- Scobie, M. (2016). Policy coherence in climate governance in Caribbean Small Island Developing States. *Environmental Science & Policy*, 58, 16–28.
- Scobie, M. (2019a). SIDS and environmental governance in the Anthropocene. In M. Scobie (ed.), *Global environmental governance and small states: Architectures and agency in the Caribbean* (pp. 1–13). Cheltenham: Edward Elgar Publishing.
- Scobie, M. (2019b). Sustainable development and climate change adaptation: Goal interlinkages and the case of SIDS. In C. Klöck & M. Fink (eds.), *Dealing with climate change on small islands: Towards effective and sustainable adaptation* (pp. 101–22). Göttingen: Universitätsverlag Göttingen.
- Shawoo, Z., Dzebo, A., Hägele, R., Iacobuta, G., Chan, S., Muhoza, C., . . . Vijge, M. J. (2020). Increasing policy coherence between NDCs and SDGs: A national perspective. *SEI Discussion Brief*, No. March/2020. Stockholm: Stockholm Environment Institute.
- Singh, G. G., Cisneros-Montemayor, A. M., Swartz, W., Cheung, W., Guy, J. A., Kenny, T.-A., . . . Ota, Y. (2018) A rapid assessment of co-benefits and trade-offs among Sustainable Development Goals. *Marine Policy*, 93, 223–31.

- Smith, H. M., Blackstock, K. L., Wall, G., and Jeffrey, P. (2014). River basin management, development planning, and opportunities for debate around limits to growth. *Journal of Hydrology*, 519, 2624–31.
- Stafford-Smith, M., Griggs, D., Gaffney, O., Ullah, F., Reyers, B., Kanie, N., ... O'Connell, D. (2017). Integration: The key to implementing the Sustainable Development Goals. *Sustainability Science*, 12, 911–19.
- Stockholm Environment Institute (2020). *SDG Synergies Tool*. Available at: <https://tool.sdg-synergies.org/>. Accessed: 10 March 2021.
- Stokke, O. S. (2020). Interplay management. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance: Institutional complexity and structural transformation* (pp. 207–32). Cambridge: Cambridge University Press.
- Tosun, J., & Lang, A. (2017). Policy integration: Mapping the different concepts. *Policy Studies*, 38, 553–70.
- Tosun, J., & Leininger, J. (2017). Governing the interlinkages between the Sustainable Development Goals: Approaches to attain policy integration. *Global Challenges*, 1, 1700036.
- Trimmer, C. (2019). *Mongolia finds many ways to use SDG Synergies approach*. Available at: [www.sei.org/featured/sdg-synergies-mongolia/](http://www.sei.org/featured/sdg-synergies-mongolia/). Accessed: 31 March 2021.
- UNDESA [United Nations Department of Economic and Social Affairs] (2016). *Synthesis of Voluntary National Reviews 2016*. New York, NY: UNDESA Division for Sustainable Development.
- UNDESA [United Nations Department of Economic and Social Affairs] (2017). *2017 Voluntary National Reviews: Synthesis report*. New York, NY: UNDESA Division for Sustainable Development.
- UNDESA [United Nations Department of Economic and Social Affairs] (2018a). *2018 Voluntary National Reviews: Synthesis report*. New York, NY: UNDESA Division for Sustainable Development.
- UNDESA [United Nations Department of Economic and Social Affairs] (2018b). *Working together: Integration, institutions and the Sustainable Development Goals. World Public Sector Report 2018*. New York, NY: UNDESA Division for Public Administration and Development Management.
- UNDESA [United Nations Department of Economic and Social Affairs] (2019). *2019 Voluntary National Reviews: Synthesis report*. New York, NY: UNDESA Division for Sustainable Development.
- UNDESA [United Nations Department of Economic and Social Affairs] (2020). *2020 Voluntary National Reviews: Synthesis report*. New York, NY: UNDESA Division for Sustainable Development.
- UNDESA [United Nations Department of Economic and Social Affairs] (2021). *CEPA Strategy Guidance Note on Promotion of Policy Coherence*. New York, NY: UNDESA Division for Sustainable Development.
- UNDG [United Nations Development Group] (2017). *Mainstreaming the 2030 Agenda for Sustainable Development: Reference guide to UN country teams*. New York, NY: UNDG.
- UNDP [United Nations Development Programme] (2017a). *Institutional and coordination mechanisms: Guidance Note on Facilitating Integration and Coherence for SDG Implementation*. New York, NY: UNDP.
- UNDP [United Nations Development Programme] (2017b). *Rapid Integrated Assessment (RIA). To facilitate mainstreaming of the SDGs into national and local plans*. New York, NY: UNDP.
- UNEMG [United Nations Environment Management Group] (2019). *Nexus Dialogues Visualization Tool*. Available at: <https://embed.kumu.io/f29ef5c11bd23aa4bb17d5adec370161#overview/>. Accessed: 12 September 2020.



- UNGA [United Nations General Assembly] (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1.
- Van Asselt, H. (2014). *The fragmentation of global climate governance: Consequences and management of regime interactions*. New Horizons in Environmental and Energy Law series. Cheltenham: Edward Elgar Publishing.
- Visseren-Hamakers, I. J. (2015). Integrative environmental governance: Enhancing governance in the era of synergies. *Current Opinion in Environmental Sustainability*, 14, 136–43.
- Visseren-Hamakers, I. J. (2018). Integrative governance: The relationships between governance instruments taking center stage. *Environment and Planning C: Politics and Space*, 36, 1341–54.
- Weitz, N., Carlsen, H., Nilsson, M., & Skånberg, K. (2018). Towards systemic and contextual priority setting for implementing the 2030 Agenda. *Sustainability Science*, 13, 531–48.
- Young, O. R. (1996). Institutional linkages in international society: Polar perspectives. *Global Governance*, 2, 1–24.
- Yunita, A., Biermann, F., Kim, R. E., & Vijge, M. J. (2022). The (anti-) politics of policy coherence for sustainable development in the Netherlands: Logic, method, effects. *Geoforum*, 128, 92–102.
- Zelli, F., & van Asselt, H. (2013). Introduction: The institutional fragmentation of global environmental governance: Causes, consequences and responses. *Global Environmental Politics*, 13 (3), 1–13.
- Zürn, M., & Faude, B. (2013) Commentary: On fragmentation, differentiation and coordination. *Global Environmental Politics*, 13 (3), 119–30.

# 5

## Inclusiveness

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The 2030 Agenda emphasizes that no one should be left behind in its implementation and in policy alignment for the Sustainable Development Goals. Inclusiveness within and among countries is one of the most pronounced overarching aims of the 2030 Agenda. Yet have these aims been realized? To what extent has the pursuit of the Sustainable Development Goals led to more inclusiveness? We explore these questions in this chapter.

The 2030 Agenda needs to face a global economic system characterized by extreme inequalities. Some 735 million people live in extreme poverty on less than USD 1.90 a day (Oxfam 2020), and the world's billionaires alone have amassed more wealth than the poorest 4.6 billion people who make up 60 per cent of humankind. The COVID-19 pandemic might have pushed 119–124 million people back into poverty after prolonged unemployment or underemployment (United Nations 2021). Basic rights such as access to food, education or energy are often denied as well. In 2019, about 820 million people – more than 10 per cent of humanity – suffered from food and dietary deprivations. The World Food Programme estimates that another 130 million people may have fallen into this category because of the global pandemic (FAO 2020). Finally, the space for public participation in politics and respect for civil and political rights are shrinking progressively. In 2019, 40 per cent of the world's population lived in countries where freedoms of association, peaceful assembly and expression were violated (CIVICUS Monitor 2019). The COVID-19 pandemic has worsened the situation, and some civil society organizations claim that some governments used the pandemic to enforce more restrictions on civic freedoms (CIVICUS Monitor 2020). Even though the crisis caused by the pandemic is global, low- and middle-income countries have been hardest hit. About 82 per cent of the new poor will be in middle-income countries (World Bank 2020a).

With the deepening of these crises, concerns for inclusion, fairness and justice have gained saliency in political discourse (Biermann and Kalfagianni 2020;

Kashwan et al. 2020; Okereke 2007). In 2015, governments pledged to prioritize the poorest of the poor in their interventions, or, as the United Nations formulates it, ‘reach the furthest behind first’ (UNGA 2015: paragraph 4). In 2020, the United Nations Secretary-General António Guterres confirmed that the ‘2030 Agenda for Sustainable Development is designed to address the very fragilities and shortcomings that the pandemic has exposed’, such as poverty and exclusion (United Nations 2020). Many goals and targets of the 2030 Agenda focus on marginalized people and seek to increase inclusiveness and to foster justice, for instance by ensuring access to food (Goal 2), education (Goal 4), energy (Goal 7) or justice (Goal 16), by targeting vulnerable groups (Goal 5) and by adding a goal on reducing inequalities (Goal 10).

Yet, how and to what extent have the Sustainable Development Goals helped to achieve more inclusion and better support for poor and vulnerable groups within countries? And internationally, have the Sustainable Development Goals led to a fairer global economic system and given least developed countries a stronger voice in global governance?

These are the key questions we address in this chapter, which analyses the scholarly literature on the steering effects of the Sustainable Development Goals with a view to inclusiveness within and between countries. We first conceptualize inclusiveness and outline how it relates to concepts such as participation, equity, and democratic legitimacy. We then analyse the evidence in the literature on whether and under what conditions the Sustainable Development Goals have fostered inclusiveness at national and global levels. We assess progress on inclusiveness in different contexts and whether any variation in inclusiveness since 2015 can be attributed to normative, institutional or discursive steering effects of the goals.

### Conceptualization and Methods

At the 1995 World Summit for Social Development, governments defined an inclusive society as ‘“a society for all” in which every individual, each with rights and responsibilities, has an active role to play’. Such an inclusive society should develop mechanisms to enable diversity and social justice, accommodate the special needs of vulnerable and disadvantaged groups, and facilitate democratic participation (United Nations 1995: paragraph 66).

We focus in this chapter on different subjects of inclusiveness. First, we study inclusiveness in the national context. Inclusiveness is here mostly understood as intersectional. It varies with criteria of age, class, caste, (dis)ability, gender, indigeneity and race, as well as vulnerability to environmental shocks (Hathie 2019), climate change (Kajiser and Kronsell 2014) or conflicts (Leininger, Lüthmann and Sigman 2019; Semenenko, Halhash and Ivchenko 2019). Our focus

is on groups that have been explicitly mentioned in the 2030 Agenda as suffering from exclusion and inequalities, namely children and the youth, persons with disabilities, indigenous peoples, and migrants and refugees (UNGA 2015: paragraph 23).<sup>1</sup> We also focus on women and girls, who are addressed in Sustainable Development Goal 5, which seeks to ‘achieve gender equality and empower all women and girls’. Second, we study inclusiveness in global governance. Some argue here that the credibility of the many summits, agreements and institutions in global sustainability governance has been challenged by North–South inequities and conflicts dating back to the 1972 United Nations Conference on the Human Environment (Okereke 2020). We focus on the inclusiveness of global governance regarding the least developed countries, the 46 poorest countries that are home to 13 per cent of the world population and that the 2030 Agenda recognizes as particularly vulnerable (UNGA 2015: paragraph 22).

In scholarly literature, inclusiveness is defined broadly and in relation to other concepts, such as participation (Okereke and Agupusi 2015; Stiglitz 2002), democratic legitimacy (Bäckstrand 2006; Biermann and Gupta 2011; Scharpf 1997), inclusive development (Gupta and Vegelin 2016) and justice (Kalfagianni et al. 2020). Democratic legitimacy is generally understood as the extent to which citizens can influence the content of norms and agreements and hold decision-makers accountable; inclusiveness covers here a political dimension (Nanz and Steffek 2004). In the notion of ‘inclusive development’, the concept relates to human rights (Arts 2017), social–ecological issues (Gupta and Baud 2015) and political dimensions (Hickey 2013). Most definitions of inclusiveness concur that development must include the needs and demands of marginalized people, sectors and countries in all social, political and economic processes (Gupta, Pouw and Ros-Tonen 2015). Inclusive development is thus understood as requiring that burdens and benefits are equitably distributed across societal groups (Hickey, Sen and Bukenya 2015). The notion of inclusiveness also relates to theories of justice, where it is often seen as a pre-condition for a just society. In short, we understand inclusiveness as a normative concept that cuts across democratic legitimacy, participation, inclusive development and justice.

Building on these concepts, in this assessment we unpack inclusiveness along three dimensions: as a matter of *recognition* (all people are free from physical threats, have complete and equal political rights and their cultural traditions free from disparagement); *representation* (all can fully participate in decision-making); and *distribution* (opportunities and risks, burdens and responsibilities are fairly divided) (see Honneth 2001; Kalfagianni et al. 2020). In the first two dimensions, the central question is whether the Sustainable Development Goals have enabled a greater recognition and representation of vulnerable people in a country or, internationally, the redistribution of power to the least developed countries.

Regarding recognition, we ask whether the Sustainable Development Goals helped in providing equal rights and normative recognition to vulnerable societal groups or, internationally, to least developed countries. For representation, we ask whether institutions ensure the equal or equitable participation of vulnerable societal groups and least developed countries in policy and decision-making at national and global levels, respectively. As for distribution, the question is about resources and capabilities to participate in and achieve inclusive development. To assess distribution, we discuss the extent to which vulnerable groups and countries have an equitable share of resources and opportunities in society. At the national level, we explore income or other forms of inequality in access to basic rights. Internationally, we study the integration of the least developed countries into the global economy and whether the Sustainable Development Goals have favoured the economic capabilities of the least developed countries.

How can we attribute any of such variations in inclusiveness to the adoption of the goals? In the literature we look for steering effects of the Sustainable Development Goals that comprise normative, institutional and discursive changes. For normative changes, we look for new norms and policies towards the inclusiveness of vulnerable groups and, internationally, whether new decisions were taken to better include least developed countries in global governance. For institutional changes, we investigate the establishment or modification of departments, committees, offices, or programmes to promote inclusiveness or reduce power asymmetries and inequality. Finally, for discursive changes, we look for evidence that the principle of ‘leaving no one behind’, which is mentioned five times in the 2030 Agenda and has been mobilized in global discourses since then, can be traced back in national and global policy debates and documents since 2015.

Methodologically, our analysis draws on a systematic review of the academic peer-reviewed literature. Using the search engine *Scopus*, we cover all articles published between 2015 and 2020 in the social sciences subject area that contain in their titles, abstracts or keywords ‘Sustainable Development Goals’ (or ‘SDGs’); combined with ‘inclusiveness’, ‘inclusion’, ‘inequalities within countries’, ‘inequality between countries’ (or ‘among countries’), ‘leave no one behind’, ‘least developed countries’, ‘low-income countries’; or with vulnerable groups such as ‘disabled people’, ‘indigenous peoples’, ‘children and youth’, ‘women and girls’, and ‘migrants’ or ‘refugees’. Although articles published in 2015 and 2016 are unlikely to be based on empirical material collected after the adoption of the goals, we included them because their analyses of the negotiations on the Sustainable Development Goals and the 2030 Agenda allowed us to partly assess the steering effects of the formulation of the goals on the recognitional dimension of inclusiveness. Our search string yielded 793 results.<sup>2</sup>

Overall, we found that scholarship on the actual steering effects of the Sustainable Development Goals on inclusiveness at national and global level remains limited. After a careful reading of abstracts and exclusion of irrelevant articles, we ended up with a database of only 40 articles. Most of these articles addressed inclusiveness at the national or regional level and focused on specific vulnerable groups or on topics such as education, urbanization or jobs. As for international politics, we found scarce literature on inclusiveness with a focus on the least developed countries. Therefore, we added in our database grey literature, such as official reports from global institutions, leading think-tanks and governments, and insights from our own research. We now present the main findings of our review.

### **Research Findings and Practical Insights**

We discuss here our findings about the effects of the Sustainable Development Goals on inclusiveness, first regarding societies at national level and then global governance.

#### ***Steering Effects on Inclusiveness at National Level***

We now review the role of the Sustainable Development Goals in steering intersectional inclusiveness within countries. We focus on five vulnerable groups of people who are mentioned in the 2030 Agenda: women and girls; children and the youth; persons with disabilities; indigenous people; and migrants and refugees. We also study how civil society groups are included. We analyse how vulnerable people and civil society groups are recognized and represented within countries, and how resources and opportunities are distributed to these groups. We outline how the Sustainable Development Goals relate to this and examine the impacts that the goals have had in steering the inclusiveness of vulnerable and civil society groups from recognitional, representational and distributional standpoints.

**The Recognition of Vulnerable and Civil Society Groups.** The Sustainable Development Goals seek to advance the recognition of vulnerable groups in society, and vulnerable groups are often mentioned in the 2030 Agenda and in the goals and targets. Many studies found for instance that women and girls are more prominently recognized in the Sustainable Development Goals than in the Millennium Development Goals. Sustainable Development Goal 5 is a stand-alone goal that aims at achieving gender equality and empowering all women and girls, and the 2030 Agenda includes further commitments to end discrimination, eliminate violence, value unpaid care and domestic work, promote women's participation and leadership, and ensure access to reproductive health and rights.

The new stand-alone goal is a substantial improvement on Millennium Development Goal 3; by addressing major gender gaps such as violence against women and women unpaid work, some expected it to be transformative (Rosche 2016). Additionally, the 2030 Agenda made advancing women's rights a key tenet that cuts across all other goals, for instance on health and education, building here on commitments and norms set out in the Beijing Platform for Action and earlier landmark frameworks, including the Convention on the Elimination of all Forms of Discrimination Against Women (Azcona and Bhatt 2020; Fukuda-Parr 2016).

Similarly, the Sustainable Development Goals aim to strategically advance the recognition of children and the youth, and their inclusion in social, economic and ecological development. This is visible for example in the global goals relating to education (Goal 4), economic growth (Goal 8), cities and urban governance (Goal 11.7) and climate governance (Goal 13.b). The goals also recognize that persons with disabilities must not be left behind, and explicitly refer to 'persons with disabilities' or 'disability' 11 times, in sections related to decent work (Sustainable Development Goal 8.5), education (Sustainable Development Goal 4.5 and 4.a), and sustainable cities (Sustainable Development Goal 11.2 and 11.7) (Abualghaib et al. 2019). Yet despite the inclusion of persons with disabilities in the global development discourse, the lack of good quality, accurate and comparable disability data to monitor their protection and inclusion hampers the assessment of the steering effects of the goals for this group. Especially in developing countries, including persons with disabilities faces many obstacles, including the belief that persons with disabilities constitute a separate focus area rather than a cross-cutting issue, the assumption that the costs of inclusiveness are too high, and the lack of awareness of disability law and policy (Niewohner, Pierson and Meyers 2020).

While the 2030 Agenda has drawn attention to the inclusiveness of vulnerable groups, there is little evidence that the Sustainable Development Goals have fostered the development of new norms and policies to advance the recognition of vulnerable groups. Scholars indeed argue that many policy frameworks promoting the inclusiveness of these groups existed long before the adoption of the Sustainable Development Goals. Dhar (2018) points to the fact that prominent programmes to advance girls' and women's rights and dignity in India, such as *Beti Bachao Beti Padhao* and *Swachh Bharat*, were adopted before 2015, and that in the year after the Sustainable Development Goals were adopted, budgetary investments for women's development and empowerment in India were even lower than before. All in all, Dhar (2018) argues that the Sustainable Development Goals have merely been integrated into long-existing programmes for women's equality in India, without any significant additionality.

Regarding the inclusion of persons with disabilities, some studies emphasize the central role of the 2006 United Nations Convention on the Rights of Persons with

Disabilities in steering the adoption of domestic norms and policies favouring the inclusion of persons with disabilities (Abualghaib et al. 2019; Banks et al. 2020). As this convention is legally binding, it provides a stronger framework than the Sustainable Development Goals, which are voluntary. The additionality of the Sustainable Development Goals also remains difficult to determine with respect to the inclusion of migrants. Although the 2030 Agenda recognizes the contribution of migration to sustainable development and directs states, with Sustainable Development Goal 10.7, to be more inclusive towards migrants through ‘well-planned migration policies’ (UNGA 2015), many studies find that the targets and indicators related to migrants build on prior efforts of the International Organization for Migration and other institutions (IOM 2016: 21; UNDESA, IOM and OECD 2019; Pécoud 2020; Robinson 2020; UNDESA 2020). At best, the goals have helped to draw attention to migration and to crystalize emerging norms and data collection procedures such as the Migration Data Portal (IOM 2016).

Following the 2030 Agenda, also indigenous peoples should gain more recognition from governments. This is some progress compared to the Millennium Development Goals that did not mention indigenous peoples. The Sustainable Development Goals refer to indigenous peoples six times, in targets on small-scale agriculture and access to education, and the preamble to the 2030 Agenda encourages the empowerment and engagement of indigenous peoples in implementing and reviewing progress on the goals. But compared to other vulnerable groups, indigenous peoples still receive less attention, and many studies argue that indigenous perspectives on development and well-being are largely unrecognized in the 2030 Agenda and global goals (UNCDP 2020). Siegel and Bastos Lima (2020), for instance, show that some Latin American civil society organizations, often more attuned to indigenous values, have at times felt alienated by the mainstream framing of the Sustainable Development Goals. Indigenous philosophies, for example about the relationship between natural and human worlds, are not recognized in the Sustainable Development Goals, which jeopardizes how the achievement of some goals affect the maintenance of indigenous culture and livelihoods (Yap and Watene 2019).

Finally, despite the adoption of Goal 16 which aims to promote just, peaceful and inclusive societies, the recognition and liberty of civil society groups are still under threat in many countries. Only 4 per cent of the world population live in countries where fundamental rights of association, peaceful assembly and expression are fully respected (CIVICUS Monitor 2019). The Economist Intelligence Unit (2018) identifies only 19 ‘full democracies’ and 57 ‘flawed democracies’. The latter category of countries is home to 44.8 per cent of the world population and also includes some high-income countries. These countries are inclusive in the sense that they allow for free and fair elections, but are exclusive in



that they do not include everyone in the distribution of risks, burdens and responsibilities, often because of corruption or governance failure. In even weaker democracies, exclusion extends also to elections and basic checks on the abuse of power. In authoritarian regimes, exclusion continues to permeate in everyday governance, in shaping obligations, in the access to benefits and (for elites) in the sharing of burdens (Acemoglu and Robinson 2012, 2020; Fritz, Levy and Ort 2014). Some scholars even argue that certain targets – for example, Sustainable Development Goal 16.a, which aims to strengthen national institutions to prevent violence and combat terrorism and crime – may lead to counterproductive normative developments that would justify and legitimize restrictions on fundamental rights and freedoms. Weber (2017: 401) argues that Goal 16 ‘anticipates the consolidation of order and security operations in ways that could easily be used against [...] forms of contestation over development initiatives’. Others emphasize that the Sustainable Development Goals lack substantive normative claims about basic democratic rights (Winkler and Satterthwaite 2017) and that Goal 16.10 merely calls for ‘public access to information to protect fundamental freedoms’ (United Nations 2020). Over 127 states had well before 2015 adopted laws that ensure public access to information to protect fundamental freedoms (United Nations 2020). While after 2015 over further 27 states adopted such laws, this resulted often from years of earlier political processes. All this raises doubts about the influence of the Sustainable Development Goals in steering these normative developments.

**The Representation of Vulnerable and Civil Society Groups.** Despite the adoption of the Sustainable Development Goals and the large uptake of the leave no one behind principle in the policy discourse, vulnerable groups are still denied equal representation in national governance and policy-making. While formal exclusion (e.g., laws that deny women equal political or economic rights) has declined, women are still underrepresented in national politics. Studies from the grey literature find that only 25 per cent of the 35,127 seats of all parliaments in 153 countries are occupied by women (WEF 2020). And even when women are represented, such representation does not necessarily translate into influence and empowerment in a male-dominated society (Hogg 2009).

Similarly, it has been found that indigenous peoples are drastically underrepresented in the national and local implementation of the Sustainable Development Goals. In analysing 162 reports by governments on their progress in implementing the Sustainable Development Goals (submitted in 2016–18 in the Voluntary National Review database), Gilbert and Lennox (2019) found that indigenous peoples do not feature prominently and are mentioned only 16 times. Only two countries, Nepal and Malaysia, provided in their reports disaggregated data on indigenous peoples, which is considered essential for progress on the

national inclusion of indigenous peoples. Other countries vaguely refer in official consultations to the representation of indigenous peoples (Chile, Norway) or the empowerment of indigenous and local communities to have the right to give or withhold consent to proposed projects that may affect their lands (Malaysia). Overall, the Voluntary National Reviews by governments show a lack of representation of indigenous peoples in the local and national implementation of the Sustainable Development Goals. This reflects patterns of marginalization similar to what indigenous people are exposed to more generally and have been exposed to historically.

There is, however, some evidence of progress in the representation of other vulnerable groups. In some developing countries, the Sustainable Development Goals have steered normative developments towards the inclusion of persons with disabilities. For instance, the government of Ecuador used Sustainable Development Goal 10.2, which aims to ‘empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status’ (UNGA 2015), to prioritize and legitimize the emphasis on disability in welfare spending (Horn and Grugel 2018). In Iceland, the government has focused on inclusive cooperation in implementing the Sustainable Development Goals, in particular opening political space, for instance through the Icelandic Youth Council for the Sustainable Development Goals, in which children and the youth can express their voice in decision-making (Government of Iceland 2019). Also, in Serbia, the Sustainable Development Goals have been accepted as an integral part of the Youth 2030 and the National Youth Strategy (2015–2025), a platform for the inclusion of the youth and the expression of their views in implementing the 2030 Agenda (Government of Serbia 2019).

However, the Sustainable Development Goals have had far less influence than the 1989 Convention on the Rights of the Child and the 1990 African Charter and Welfare of the Child in producing law and policy reform or institutional outcomes that are inclusive to children. The inclusiveness of children and the youth is a right under both these legal frameworks. In many African countries (such as Angola, Ethiopia, Kenya, Mauritania, South Africa, Togo and Zimbabwe), the inclusion and participation of children is entrenched in constitutional, legislative and policy frames (African Child Policy Forum 2020). Therefore, the additional steering of the Sustainable Development Goals towards the representation of children and the youth in national governance and policy-making is still invisible in many developing countries.

Finally, there is some mixed evidence of the role of the Sustainable Development Goals in steering the development of new institutions for the representation of civil society groups in national governance. Brazil, for instance, is one of the few countries that created after 2015 a robust institutional framework

to coordinate the creation of national targets and indicators for the Sustainable Development Goals and to articulate domestic uptake of the goals, with substantive participation from non-state actors through a National Commission for the Sustainable Development Goals. However, the latter was dismantled after President Bolsonaro took office in 2019. In Uruguay, on the other hand, implementing the Sustainable Development Goals builds on existing participatory institutions and processes, including a nationwide consultation, which was only linked to the new goals after 2015. Domestic contexts have therefore been crucial, suggesting that the global goals have only limited potential to create or maintain inclusive institutions when inclusiveness norms and values are not already salient. Furthermore, in the case of Paraguay, there are risks that political elites use the global goals to overlay exclusive institutional settings and add legitimacy to entrenched marginalization (Siegel and Bastos Lima 2020). This reveals that the goals might also suffer elite capture and become counterproductive to inclusiveness.

**The Distribution of Resources and Opportunities to Vulnerable and Civil Society Groups.** One key finding is that despite the launch of the Sustainable Development Goals in 2015, resources and capabilities to participate in inclusive development are still unevenly distributed. In most societies, income inequalities have been increasing since the 1980s (Alvaredo et al. 2018), and the situation has not changed much since the adoption of the Sustainable Development Goals. Even though extreme poverty had dropped from 10 to 8.2 per cent between 2015 and 2020, it is still projected to be above 6 per cent by 2030 (United Nations 2020). Income inequality, inequalities of opportunities (for example access to education or decent jobs) and other forms of inequalities (for example in access to food, drinking water, health services, energy or justice) have for a long time led to exclusion in the Global South. Inequalities have also increased in the Global North, including in traditionally more equitable countries such as Finland, Sweden or France (Nolan et al. 2019).

There is some evidence that new norms and policies for better including vulnerable groups have been adopted after 2015. Regarding the inclusion of women, for instance, the European Union has developed a Gender Action Plan for 2016–2020 that is aligned with Goal 5 (Wahlen 2016). The government of Malaysia has introduced in partnership with the United Nations Development Programme a Gender Equality Seal Certification, which is aimed at equal opportunities and inclusive work environments for women (UNDP 2016). In some developing countries, the Sustainable Development Goals have strengthened inclusiveness regarding children and the youth in terms of distribution of resources and opportunities. For example, in Sierra Leone, Goal 4 on inclusive and quality education stands out as the government's premier developmental issue. Since

2018, Sierra Leone's budget for education through the Free Quality School Education programme has increased to over 21 per cent, pointing to a more equitable distribution of opportunities (Government of Sierra Leone 2019). However, the causal role of the Sustainable Development Goals in such progress is unclear. Some studies also argue that the lack of gender-specific indicators in the global monitoring of the goals hampers the study of their impact on the inclusiveness of women and girls (Azcona and Bhatt 2020).

There is considerable evidence, however, that the situation of marginalized groups in society has not improved with the adoption of the Sustainable Development Goals. For one, progress in advancing inclusiveness of children and the youth has been slow and despite the adoption of the goals in 2015, it is estimated that over 945 million children in developing countries remain out of reach of sustainable development policies (OHCHR 2020; UNICEF 2019). Regarding gender equality, many studies question whether the goals have had any effect. In most regions of the world, women still earn less than men, are more likely to be unemployed and to work in precarious conditions: worldwide, women only make 77 cents for every US dollar men earn (United Nations Women 2017). In addition, the disproportionate burden of household and care responsibilities on women still hampers their inclusiveness. Razavi (2016: 31), for instance, claims that the inclusion of the phrase 'as nationally appropriate' in some targets is likely to create 'a scapegoat for countries that fall behind in progress'. Other studies suggest that the lack of support from ruling elites that purposefully marginalize women or any disadvantaged group limits the steering effects of the goals (Stuart and Woodroffe 2016). Many gender-related studies argue that the Sustainable Development Goals will ultimately fail in achieving gender equality because they do not challenge the assumption that economic growth drives gender equality (Bidegain Ponte and Rodríguez Enríquez 2016; Esquivel 2016; Rai, Brown and Ruwanpura 2019). In fact, growth patterns have maintained gender and class inequalities: for example, Kim (2017) has shown that while South Korea has achieved remarkable economic and social development and has become member of the OECD, it ranked only 108 out of 153 on the Global Gender Gap Index.

While specific studies on the impact of the adoption of the Sustainable Development Goals on the inclusiveness of indigenous peoples are still lacking, it has been found that the situation of the 370 million indigenous peoples worldwide has not improved since 2015 (Mamo 2020). Indigenous peoples are among the poorest of the poor: they represent 5 per cent of the world's population but – by conventional standards – make up for 15 per cent of the world extreme poor and up to one third of the rural poor (Hall and Gandolfo 2016). A study by the World Bank of 85 per cent of the world's indigenous peoples found that in ten countries in Latin America, Asia and Africa, indigenous peoples were always poorer than the

non-indigenous population (Hall and Patrinos 2012). Many indigenous peoples live in non-monetary social settings where they seldom use money to meet their needs, and some therefore refuse to be categorized as 'poor'. Nonetheless, indigenous communities do often suffer from higher levels of deprivations, driven by geographical and political exclusion, historical oppression, insecure land and property rights, limited access to infrastructure and physical capital assets, heightened vulnerability to risk and climate change, and many health, education and other related socio-economic disparities. Numerous types of vulnerabilities were aggravated by the COVID-19 pandemic, from which indigenous people have often suffered disproportionately (Russo Lopes and Bastos Lima 2020).

The pandemic also deteriorated the situation of migrants and further revealed the distributive losses that disproportionately affect this group. Between March 2020 and February 2021, travel restrictions have increased the vulnerability of migrant workers. The pandemic has also impacted sectors with many migrant workers (e.g., tourism and catering, building industry) and has thrown migrants further into poverty, as they are often excluded from social support systems in their host countries. The travel restrictions have also threatened the remittance flows to developing countries, which have decreased by 40 per cent between 2019 and 2020 (United Nations 2020). Seven countries that accounted for 25 per cent of remittance outflows were among the countries with the highest number of COVID-19 cases (Migration Data Portal n.d.). One study estimated the impact of the pandemic on remittances at USD 978 billion between 2020 and 2021 (World Bank 2020b). Despite all the aim of the 2030 Agenda to ensure 'orderly, safe, and responsible' migration, in the face of a major global crisis, migrants are still left behind. These developments test the credibility of the Sustainable Development Goals in radically improving the conditions of migrants and refugees worldwide (Nurse 2018).

In sum, our analysis has shown that the Sustainable Development Goals have not significantly steered actors towards more inclusiveness beyond advancing the discursive recognition of specific vulnerable groups. Further studies on the inclusiveness of civil society tend to confirm these results. Discursively, the adoption of the Sustainable Development Goals in 2015 has raised the saliency of inclusiveness and inequality on national policy agendas, with more references to the principle of 'leaving no one behind' in policy discourses. Despite the Sustainable Development Goals, normative changes towards more inclusiveness are scarce. While countries refer to this principle in the voluntary national reviews they present to the High-level Political Forum, few countries report on policy strategies for putting this principle into practice (Cutter 2016; Canadian Council for International Co-operation 2018). According to Sakiko Fukuda-Parr and colleagues from the United Nations Committee for Development Policy, this might

imply that while governments have embraced the principle of ‘leaving no one behind’ for sustainable development, they still fail to translate it into concrete and comprehensive policies that go beyond a single area of intervention (e.g., social protection, participation or productive sector) (UNCDP 2020: 7). Institutional effects of the Sustainable Development Goals are almost indiscernible. In many countries, the goals increase only the saliency of inclusiveness in existing institutions and policy processes (Barbier and Burgess 2017; Siegel and Bastos Lima 2020; Weitz et al. 2018). Overall, it is doubtful whether any improvement towards inclusiveness in countries is causally linked to the Sustainable Development Goals, even though there is some evidence that civil society organizations increasingly use the goals as a reference framework to hold governments to account (e.g., Chancel, Hough and Voituriez 2018; Siegel and Bastos Lima 2020).

### *Steering Effects on Inclusiveness at Global Level*

We now turn to discussing the steering effects of the Sustainable Development Goals on inclusiveness in global governance, and here in particular on whether and how they have made governance more inclusive for the least developed countries. Given the emphasis of the 2030 Agenda on the leave no one behind principle, we should expect that the least developed countries are better integrated in global governance. In what follows, we successively review the recognition, representation, and distribution aspects of inclusiveness for the least developed countries.

**The Recognition of Least Developed Countries.** The 2030 Agenda recognizes that least developed countries deserve special attention in the sustainable development process (UNGA 2015). Throughout the document, least developed countries are mentioned 38 times, in the Preamble, and in many targets related to the means of implementation of the Sustainable Development Goals. For instance, Sustainable Development Goal 10.b aims to ‘encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries’ (UNGA 2015: 21), while Goal 17.2 encourages developed countries to consider setting a target to provide at least 0.2 per cent of their gross national income as official development assistance to the least developed countries. However, the question remains what is new in this respect. The targets under the goals build, to the extent that they relate to the least developed countries, on decades of earlier international normative frameworks such as the programmes of action for the least developed countries, the first of which was adopted at the United Nations conference on the least developed countries in 1981. By large measure, the Sustainable Development Goals have simply aligned their targets on least developed countries with the Istanbul Programme of Action for the least developed countries for the Decade 2011-2020.

**The Representation of Least Developed Countries.** Beyond this recognition in the 2030 Agenda, have the Sustainable Development Goals strengthened the representation of least developed countries in global governance? Our review finds that the potential of the goals in this respect is low. The progress on Goal 16.8, which aims to broaden and strengthen the participation of developing countries in global governance, is not even reported. Since 2015, none of the progress reports on the implementation of the Sustainable Development Goals prepared by the United Nations Statistics Division for the Secretary-General includes data on the ‘proportion of members and voting rights of developing countries in international organizations’, the formal indicator adopted to measure this specific target. Additionally, evidence shows that this formal, normative call to greater representation of the developing countries predates the Sustainable Development Goals and can be traced back to as early as the 2002 United Nations Development Programme’s Human Development Report (Choer Moraes 2019).

Overall, the participation of the least developed countries in global governance has not changed following the adoption of the Sustainable Development Goals. On the one hand, the principle of sovereign equality grants least developed countries a voice and a vote in most United Nations institutions. All least developed countries have a seat in the United Nations General Assembly, and together they hold 24 per cent of all votes in the assembly (47 out of 193 votes), more than their share of the world population (which is 13 per cent). In the smaller Economic and Social Council, least developed countries account for 14 percent of members. On the other hand, the presidency of this council has been held in the last 75 years only three times by a representative from a least developed country (Biermann and S nit 2022). And beyond the United Nations, the Bretton Woods institutions have developed mechanisms that exclude or weaken the representation of least developed countries. Both the World Bank and the International Monetary Fund weigh voting rights according to the financial contributions that countries make, which severely marginalizes the influence of least developed countries (Fioretos and Heldt 2019; Kaya 2015). Least developed countries are also not integrated in clubs of major economies, such as the Group of 7 or the Group of 20, while these groups play an increasing role in global governance and more inclusive institutions, such as the United Nations General Assembly, are often bypassed by the richer countries. In international trade institutions industrialized countries prioritize often plurilateral or regional trade-talks that lock out smaller developing countries from the macroeconomic benefits associated with global trade and investment (Schwab 2011). Not much change is observable that can be causally linked to the Sustainable Development Goals and the 2030 Agenda.

**The Distribution of Resources, such as Aid and Trade, to Least Developed Countries.** With 13 per cent of the world’s population, least developed countries

contribute only 1.1 per cent of the global economy measured in gross domestic product in current USD (World Bank n.d.). In 2018, their share in the world's total exports was at a low 1.02 per cent (WTO 2019). This is particularly the case with the seventeen landlocked least developed countries, which are especially remote from, and unintegrated within, the global economy. In recent years, however, both indicators are progressing. The share of least developed countries in the global gross domestic product has increased by 15 per cent between 2015 and 2019. The annual growth of the least developed countries' gross domestic has increased from 3.6 per cent in 2015 to 4.4 per cent in 2019 (World Bank n.d.). Similarly, the exports of goods and services from least developed countries to the rest of the world increased from an annual value of USD 204 million in 2015 to USD 252 million in 2019 (World Bank n.d.). This is an increase of 23 per cent; yet it falls far short of Sustainable Development Goal 17.11, which aimed at doubling least developed countries' share of global exports by 2020.

Least developed countries have scarce and unstable domestic financial resources and limited access to external private finance. While foreign direct investment net inflows to least developed countries increased by 150 per cent between 2010 and 2015, reaching almost 4 per cent of the gross domestic product of these countries in 2015, net inflows of foreign direct investment sharply decreased between 2015 and 2019 (World Bank n.d.). In 2019, net inflows of foreign direct investment represented only 1.7 per cent of the gross domestic product of least developed countries. Remittances also constitute an important share of the domestic resources of the least developed countries (Nurse 2018). These have steadily increased since 2010 and reached 4.7 per cent of the gross domestic product of least developed countries in 2019 (World Bank n.d.). Nevertheless, the United Nations estimated that between 2019 and 2020 remittances were expected to decline by 40 per cent (United Nations 2020). Such a decrease in both foreign direct investments and remittances further questions the role of the Sustainable Development Goals in enhancing the inclusiveness of the least developed countries in the global economy. Financing instruments to enhance the capabilities of the least developed countries thus mainly rely on the support from the international community through official development assistance and other multilateral funding mechanisms such as, for instance, the Green Climate Fund. In some countries, the ratio of official development assistance to the gross national income is particularly high – in Liberia, for instance, it is 62 per cent (2015). Such dependence makes these countries highly vulnerable to a withdrawal of foreign aid.

In 2018, least developed countries received USD 53.6 billion of official development assistance, representing 32 per cent of global aid flows (World Bank n.d.). According to the World Bank, the net official development assistance received by least developed countries has increased by 23.5 per cent between



2015 and 2018. But the role of the Sustainable Development Goals in steering the increase of aid flows to least developed countries is still unclear. In recent years, China has stepped up its aid and investments, claiming that its grants and investments under the Belt and Road Initiative promote the global goals (Banik and Lin 2019). It also claims that new regional institutions such as the Forum on China-Africa Cooperation will provide African countries with more financial resources. Both India and China often portray their South-South cooperation as promoting the Sustainable Development Goals (Banik 2018; Kim 2019).

When looking at the longer trend of official development assistance to least developed countries, the increase of aid flows towards least developed countries began in 2000, when the Brussels Programme of Action for the least developed countries was adopted. After a decrease in 2014, the trend of aid to least developed countries started to increase again in 2016 (World Bank n.d.). However, regardless of whether one considers commitments or gross disbursements, in 2011–2020 the average growth rates of aid flows to least developed countries have been less than half those recorded in 2001–2010 (UNCTAD 2019). In addition, and despite the adoption of the global goals in 2015, official development assistance for least developed countries is merely 0.09 per cent of the gross national income of donor countries, which is below the target range of 0.15–0.20 (Goal 17.2). There is also still a major gap if one compares today's funding with the financial needs of least developed countries. For climate adaptation alone, the International Institute for Environment and Development estimates that the cost for least developed countries of implementing their climate plans are around USD 93 billion per year (Nasir and Feisal 2015). Our review suggests that the Sustainable Development Goals have not performed any additional steering, as the target for aid allocation to least developed countries in the 2030 Agenda simply dates back to the 1981 Substantial New Programme of Action for these countries. These targets have been reaffirmed in every international action programme since then, including the Millennium Development Goals and now the Sustainable Development Goals.

In sum, we do not find evidence of direct steering of the Sustainable Development Goals on the inclusiveness of the least developed countries in global governance. While a few economic indicators for the inclusion of least developed countries in the global economy are encouraging, the causal role of the goals in steering such limited progress is yet to be proven. Some scholars would even argue that such economic integration is further aggravating the poverty trap in which least developed countries are caught (Sachs 2004; Selwyn 2019). In addition, the global political system remains unchanged since the adoption of the goals, as the formal representation of least developed countries in global institutions has not yet increased despite the inclusion of a specific target within the goals. All in all, while

the least developed countries are often prioritized in global discourses around the implementation of the Sustainable Development Goals, our analysis shows that the goals have not triggered the creation of new norms or institutions that could benefit the least developed countries.

Future research needs to explore how the least developed countries have used the Sustainable Development Goals' institutional framework, the High-level Political Forum, and the reporting exercise, to advance their interests and whether other countries have engaged in addressing global inequalities by helping leverage least developed countries out of their entrenched marginalized position.

### **Conclusions and Future Directions**

This chapter has found that the Sustainable Development Goals have not had significant steering effects that would raise the inclusiveness of vulnerable groups at national level, or of the least developed countries in the global economy and institutions. Vulnerable people and countries are often nominally prioritized in the discourse around the implementation of the goals, as evidenced in the large uptake of the principle of 'leaving no one behind' by policy-makers and civil society. However, our assessment has shown that normative and institutional steering effects of the goals are thus far unclear. At the national level, studies suggest that many policies and institutional frameworks on inclusiveness existed before the adoption of the goals. Rather than fostering normative developments on inclusiveness, the goals have often simply legitimized earlier national policy frameworks. At the same time, civil society organizations increasingly use the goals as a reference framework to hold governments to account (e.g., Chancel, Hough and Voituriez 2018; Siegel and Bastos Lima 2020). Even if this is not evidence of institutional, normative or discursive steering effects as defined in this chapter, it is still important in political contexts that are less welcoming to civil society influence. Internationally, we found no evidence that the Sustainable Development Goals have disrupted long-established legal frameworks to increase political participation of least developed countries in global institutions. Our review suggests a continuous lack of compliance with norms that seek to benefit the least developed countries, such as special commitments on aid and trade, and hence questions a new normative role of the Sustainable Development Goals in steering towards a better integration of these countries in the global economy.

What explains the lack of steering of the Sustainable Development Goals on inclusiveness remains unclear. Our literature review suggests three possible explanations.

The first is inherent to the framing of the goals. If the Sustainable Development Goals did not steer towards more inclusiveness, it may be due to the narrative with

which the goals were framed. As some authors suggest (e.g., Rai, Brown and Ruwanpura 2019), the goals leave the structures of global capitalism unchallenged and remain trapped in frames disconnected from broader movements for global justice. Because the goals are aligned with neoliberal rules and regulations of international development institutions such as the World Trade Organization, some studies even argue that the commitment to 'leave no one behind' only 'serves to justify the further consolidation of the conditions through which deprivations of fundamental entitlements have been sustained and reproduced' (Weber 2017: 400). Other studies argue that to unlock the goals' full potential for steering inclusiveness and overcoming unequal power relations, the goals would need to challenge the mainstream approach to growth and embrace the principles of inclusive development (Gupta and Vegelin 2016), with a view to realizing human rights on a basis of substantive equality (Elson 2019). Such critiques suggest the need for a new and radically different set of goals to advance inclusiveness.

A second explanation is external and relates to the political context. We found that the steering effects of the Sustainable Development Goals on inclusiveness within countries significantly vary and seem to be bound by domestic politics. Our analysis indeed shows the vital role of political leadership and institutional settings that allows for any steering effects of the Sustainable Development Goals. Yet such institutional and normative steering fluctuates with changes in government and domestic policies. Some governments may significantly erode the domestic salience of the Sustainable Development Goals, as the (often unsustainable) interests of the few gain ground. In some cases (for example, Brazil), the official rhetoric becomes antagonistic to international norms on sustainable development, but there are also risks that dominant players use the Sustainable Development Goals to legitimize business as usual, paying lip service to the goals while failing to undertake any significant change.

A third explanation is that while the Sustainable Development Goals have raised attention to the exclusion of groups both nationally and internationally, the international system is designed to address exclusion only in situations with international consequences (Haas 2017; Pellet 2010). Countries tend not to invest in monitoring, assisting or sanctioning each other's policies on inclusiveness; often not even when a country strips its citizens of their citizenship or uses them as forced labour. Only when policies on inclusion have consequences beyond the borders of a state becomes action more likely. If exclusion in one country leads for example to forced migration across borders, we often see international assistance or sanctions to increase inclusion and reduce the outflow of migrants (Fine, Dennison and Gowan 2019). Thus, the impact of the Sustainable Development Goals is limited by both their voluntary nature and the structure of an international system that prioritizes sovereign rights over the inclusion of vulnerable groups.

Finally, more research is needed to understand the varying effects of the Sustainable Development Goals on inclusiveness and the conditions under which the goals can steer inclusion at national and international levels. This chapter has revealed that the impact of the Sustainable Development Goals on inclusiveness is not prominently discussed in the literature. Future research may, for example, involve systematic studies of Voluntary National Review reports to determine the steering effects of the Sustainable Development Goals on the policy strategies related to inclusion. Changes often develop over much longer time periods, and hence researchers must continue to explore the effects of the Sustainable Development Goals in relation to complex issues such as inclusiveness and justice. Only then will we know with more confidence whether the goals can effectively steer global development towards planetary justice.

### Notes

- 1 We exclude, however, two additional groups named in paragraph 22 of the Preamble of the 2030 Agenda, that is, people living with HIV/AIDS and older persons. We do this because of the lack of literature that links the degree of inclusion of those groups at national level to the implementation of the Sustainable Development Goals.
- 2 This dimension was divided into two sub-themes with three separate search strings:  
 Search string 1 [vulnerable groups] TITLE-ABS-KEY ( ('Sustainable development goal\*' OR SDG\*) AND (refugees OR migrants OR 'women and girls' OR children OR youth OR 'indigenous peoples' OR disabled OR disability) AND ('leave no one behind' OR inclusiveness OR inclusion OR inequalit\*)) AND (LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) )  
 Search string 2 [vulnerable countries] TITLE-ABS-KEY (('Sustainable development goal\*' OR SDG\*) AND ('least developed countries' OR LDC\*) OR 'low income countries') AND (LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) )  
 Search string 3 [SDGs and inequalities/inclusion] TITLE-ABS-KEY (('Sustainable development goal\*' OR SDG\*) AND ('inequalities within countries' OR 'inequalities among countries' OR 'inequalities between countries') OR ('leave no one behind' OR inclusiveness OR inclusion)) AND (LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) ).

### References

- Abualghaib, O., Groce, N., Simeu, N., Carew, M. T., & Mont, D. (2019). Making visible the invisible: Why disability-disaggregated data is vital to 'Leave No-One Behind'. *Sustainability*, 11, 3091.
- Acemoglu, D., & Robinson, J. A. (2012). *Why nations fail: The origins of power, prosperity and poverty*. New York, NY: Crown Publishers.
- Acemoglu, D., & Robinson, J. A. (2020). *The narrow corridor: States, societies, and the fate of liberty*. New York, NY: Penguin Books.
- African Child Policy Forum (2020). *Harmonization of laws on children in Africa*. Addis Ababa: African Child Policy Forum.

- Alvaredo, F., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2018). *World Inequality Report 2018*. Paris: Paris School of Economics.
- Arts, K. (2017). Inclusive sustainable development: A human rights perspective. *Current Opinion in Environmental Sustainability*, 24, 58–62.
- Azcona, G., & Bhatt, A. (2020). Inequality, gender, and sustainable development: Measuring feminist progress. *Gender & Development*, 28, 337–55.
- Bäckstrand, K. (2006). Democratizing global environmental governance? Stakeholder democracy after the World Summit on Sustainable Development. *European Journal of International Relations*, 12, 467–98.
- Banik, D. (2018). Taking stock of the SDGs. In D. Dwivedi & P. Pandey (eds.), *Leaving no one behind: SDGs and South–South cooperation* (pp. n.d.). New Delhi: Crossbill.
- Banik, D., & Lin, K. (2019). Business and morals: Corporate strategies for sustainable development in China. *Business and Politics*, 21, 514–39.
- Banks, L. M., Hameed, S., Kawsar Usman, S., & Kuper, H. (2020). No one left behind? Comparing poverty and deprivation between people with and without disabilities in the Maldives. *Sustainability*, 12, 2066.
- Barbier, E. B., & Burgess, J. C. (2017). The Sustainable Development Goals and the systems approach to sustainability. *Economics: The Open-Access, Open-Assessment E-Journal*, 11 (28), 1–23.
- Bidegain Ponte, N., & Enríquez, C. R. (2016). Agenda 2030: A bold enough framework towards sustainable, gender-just development? *Gender & Development*, 24, 83–98.
- Biermann, F., & Gupta, A. (2011). Accountability and legitimacy in earth system governance: A research framework. *Ecological Economics*, 70, 1856–64.
- Biermann, F., & Kalfagianni, A. (2020). Planetary justice: A research framework. *Earth System Governance*, 6, 100049.
- Biermann, F., & Sénit, C.-A. (2022). Decolonizing global sustainability governance. Unpublished manuscript. Utrecht: Utrecht University.
- Canadian Council for International Co-operation (2018). *Progressing national SDGs implementation: An independent assessment of the Voluntary National Review reports submitted to the United Nations High-level Political Forum on Sustainable Development*. Ottawa: Canadian Council for International Co-operation.
- Chancel, L., Hough, A. & Voituriez, T. (2018). Reducing inequalities within countries: Assessing the potential of the Sustainable Development Goals. *Global Policy*, 9, 5–16.
- Choer Moraes, H. (2019). Beyond a seat at the table. *Global Governance: A Review of Multilateralism and International Organizations*, 25, 563–86.
- CIVICUS Monitor (2019). *People power under attack*. Johannesburg: CIVICUS World Alliance for Citizen Participation.
- CIVICUS Monitor (2020). *Civic space on a downward spiral*. Johannesburg: CIVICUS World Alliance for Citizen Participation.
- Cutter, A. (2016). *Progressing national SDG implementation: Experiences and recommendations from 2016*. London, UK: Bond.
- Dhar, S. (2018). Gender and Sustainable Development Goals (SDGs). *Indian Journal of Gender Studies*, 25, 47–78.
- The Economist Intelligence Unit (2018). *Democracy Index 2017: Free speech under attack*. Available at: <https://spcommreports.ohchr.org/TMResultsBase/DownloadFile?gId=34079>. Accessed: 6 November 2020.
- Elson, D. (2019). Push no one behind. *Journal of Globalization and Development*, 9, 20180026.
- Esquivel, V. (2016). Power and the Sustainable Development Goals: A feminist analysis. *Gender & Development*, 24, 9–23.

- FAO [Food and Agriculture Organization] (2020). *The impact of Covid-19 on food security and nutrition*. Rome: United Nations.
- Fioretos, O., & Heldt, E. C. (2019). Legacies and innovations in global economic governance since Bretton Woods. *Review of International Political Economy*, 26, 1089–111.
- Fritz, V., Levy, B., & Ort, R. (2014). *Problem-driven political economy analysis: The World Bank's experience*. Washington, DC: World Bank.
- Fine, S., Dennison, S., & Gowan, R. (2019). False moves: Migration and development aid. *ECFR Policy Brief*, No. 303. London: European Council on Foreign Relations.
- Fukuda-Parr, S. (2016). From the Millennium Development Goals to the Sustainable Development Goals: Shifts in purpose, concept, and politics of global goal setting for development. *Gender & Development*, 24, 43–52.
- Gilbert, J., & Lennox, C. (2019). Towards new development paradigms: The United Nations Declaration on the Rights of Indigenous Peoples as a tool to support self-determined development. *The International Journal of Human Rights*, 23, 104–24.
- Government of Iceland (2019). *Iceland's implementation of the 2030 Agenda for Sustainable Development. Voluntary National Review June 2019*. Reykjavik: Prime Minister's Office.
- Government of Serbia (2019). *2019 Voluntary National Review of the Republic of Serbia on the implementation of the 2030 Agenda for Sustainable Development. Towards equality of sustainable opportunities for everyone and everywhere in Serbia through growing into sustainability*. Available at: [https://sustainabledevelopment.un.org/content/documents/23471Serbia\\_VNR\\_Report\\_2019\\_final.pdf](https://sustainabledevelopment.un.org/content/documents/23471Serbia_VNR_Report_2019_final.pdf). Accessed: 8 December 2020.
- Government of Sierra Leone (2019). *2019 VNR Report on SDGs in Sierra Leone. Final draft*. Freetown: Ministry of Planning and Economic Development.
- Gupta, J., & Baud, I. S. A. (2015). Sustainable development. In P. Pattberg, & F. Zelli (eds.), *Encyclopedia of global environmental politics and governance* (pp. 61–72). Cheltenham: Edward Elgar Publishing.
- Gupta, J., Pouw, N., & Ros-Tonen, M. (2015). Towards an elaborated theory of inclusive development. *The European Journal of Development Research*, 27, 541–59.
- Gupta, J., & Vegelin, C. (2016). Sustainable development goals and inclusive development. *International Environmental Agreements*, 16, 433–48.
- Haas, R. N. (2017). World order 2.0: The case for sovereign obligation. *Foreign Affairs*, 96, 1–9.
- Hall, G. H., & Gandolfo, A. (2016). *Poverty and exclusion among indigenous peoples: The global evidence*. Available at: <https://blogs.worldbank.org/voices/poverty-and-exclusion-among-indigenous-peoples-global-evidence>. Accessed: 3 November 2020.
- Hall, G. H., & Patrinos, H. A. (eds.) (2012). *Indigenous peoples, poverty, and development*. Cambridge: Cambridge University Press.
- Hathie, I. (2019). Leave no one behind: A cross-country synthesis. In Southern Voice (ed.), *Global State of the SDGs: Three Layers of Critical Action. Report 2019* (pp. 67–92). Southern Voice.
- Hickey, S. (2013). Thinking about the politics of inclusive development: Towards a relational approach. *ESID Working Paper*, No. 1/2013. Manchester, UK: University of Manchester Effective States and Inclusive Development Research Centre.
- Hickey, S., Sen, K., & Bukenya, B. (eds.) (2015). *The politics of inclusive development: Interrogating the evidence*. Oxford: Oxford University Press.
- Hogg, C. L. (2009). Women's political representation in post-conflict Rwanda: A politics of inclusion or exclusion? *Journal of International Women's Studies*, 11 (3), 34–54.
- Honneth, A. (2001). Recognition or redistribution: Changing perspectives on the moral order of society. *Theory, Culture, and Society*, 18, 43–55.

- Horn, P., & Grugel, J. (2018). The SDGs in middle-income countries: Setting or serving the domestic development agendas? Evidence from Ecuador. *World Development*, 109, 73–84.
- IOM [International Organisation for Migration] (2016). *Germany backs establishment of global migration data portal in Berlin*. Available at: [www.iom.int/news/germany-backs-establishment-global-migration-data-portal-berlin](http://www.iom.int/news/germany-backs-establishment-global-migration-data-portal-berlin). Accessed: 7 June 2021.
- Kaijser, A., & Kronsell, A. (2014). Climate change through the lens of intersectionality. *Environmental Politics*, 23, 417–33.
- Kalfagianni, A., Gerlak, A. K., Olsson, L., & Scobie, M. (2020). Justice. In A. Kalfagianni, D. Fuchs, & A. Hayden (eds.), *Routledge handbook of global sustainability governance* (pp. 75–87). Abingdon: Routledge.
- Kashwan, P., Biermann, F., Gupta, A., & Okereke, C. (2020). Planetary justice: Prioritizing the poor in earth system governance. *Earth System Governance*, 6, 100075.
- Kaya, A. (2015). *Power and global economic institutions*. Oxford: Oxford University Press.
- Kim, E. M. (2017). Gender and the Sustainable Development Goals. *Global Social Policy*, 17, 239–44.
- Kim, N. (2019). Will the Belt and Road initiative boost least developed countries towards sustainable development? *IDS Bulletin*, 50, 139–54.
- Leininger, J., Lührmann, A., & Sigman, R. (2019). The relevance of social policies for democracy: Preventing autocratisation through synergies between SDG 10 and SDG 16. *Discussion Paper*, No. 7/2019. Bonn: Deutsches Institut für Entwicklungspolitik.
- Mamo, D. (ed.). (2020). *The indigenous world 2020* (34th ed.). Copenhagen: International Work Group for Indigenous Affairs.
- Migration Data Portal (n.d.). *Remittances*. Available at: <https://migrationdataportal.org/themes/remittances>. Accessed: 14 June 2021.
- Nanz, P., & Steffek, J. (2004). Global governance, participation and the public sphere. *Government and Opposition*, 39, 314–35.
- Nasir, N., & Feisal, R. (2015). *Can the Least Developed Countries count on the Green Climate Fund?* Stockholm: Stockholm Environment Institute.
- Niewohner, J., Pierson, S., & Meyers, S. J. (2020). ‘Leave no one behind’? The exclusion of persons with disabilities by development NGOs. *Disability & Society*, 35, 1171–6.
- Nolan, B., Richiardi, M. G., & Valenzuela, L. (2019). The drivers of income inequality in rich countries. *Journal of Economic Surveys*, 33, 1285–324.
- Nurse, K. (2018). Migration, diasporas, remittances and the Sustainable Development Goals in Least Developed Countries. *Journal of Globalization and Development*, 9, 1–13.
- OHCHR [Office of the High Commissioner for Human Rights] (2020). *Child rights and the 2030 Agenda for Sustainable Development: Accelerated action and transformative pathways: realizing the decade of action and delivery for sustainable development*. Available at: [https://sustainabledevelopment.un.org/content/documents/26130Child\\_Rights\\_2030\\_Agenda\\_HLPF\\_2020.pdf](https://sustainabledevelopment.un.org/content/documents/26130Child_Rights_2030_Agenda_HLPF_2020.pdf). Accessed: 7 December 2020.
- Okereke, C. (2007). *Global justice and neoliberal environmental governance: Ethics, sustainable development and international co-operation*. London: Routledge.
- Okereke, C. (2020). North–South inequity and global environmental governance. In A. Kalfagianni, D. Fuchs, & A. Hayden (eds.), *Routledge handbook of global sustainability governance* (pp. 167–79). Abingdon: Routledge.
- Okereke, C., & Agupusi, P. (2015). *Homegrown development in Africa: Reality or illusion?* London: Routledge.
- Oxfam (2020). *Time to care: Unpaid and underpaid care work and the global inequality crisis*. Oxford: Oxfam GB.

- Pécoud, A. (2020). Introduction: The International Organization for Migration as the new 'UN Migration Agency'. In M. Geiger, & A. Pécoud (eds.), *The International Organization for Migration. The new 'UN Migration Agency' in critical perspective* (pp. 1–27). Cham: Palgrave Macmillan.
- Pellet, A. (2010). The definition of responsibility in international law. In J. Crawford, A. Pellet, & S. Olleson (eds.), *The law of international responsibility* (pp. 1–15). Oxford: Oxford University Press.
- Rai, S. M., Brown, B. D., & Ruwanpura, K. N. (2019). SDG 8: Decent work and economic growth: A gendered analysis. *World Development*, 113, 368–80.
- Razavi, S. (2016). The 2030 Agenda: Challenges of implementation to attain gender equality and women's rights. *Gender & Development*, 24, 25–41.
- Robinson, C. (2020). Measuring 'well-governed' migration: The IOM's migration governance indicators. In M. Geiger, & A. Pécoud (eds.), *The International Organization for Migration. The new 'UN Migration Agency' in critical perspective* (pp. 123–43). Cham: Palgrave Macmillan.
- Rosche, D. (2016). Agenda 2030 and the Sustainable Development Goals: Gender equality at last? An Oxfam perspective. *Gender & Development*, 24, 111–26.
- Russo Lopes, G., & Bastos Lima, M. G. (2020). Necropolitics in the jungle: COVID-19 and the marginalisation of Brazil's forest peoples. *Bulletin of Latin American Research*, 39, 92–7.
- Sachs, I. (2004). From poverty trap to inclusive development in LDCs. *Economic and Political Weekly*, 39, 1802–11.
- Scharpf, F. W. (1997). Economic integration, democracy and the welfare state. *Journal of European Public Policy*, 4, 18–36.
- Schwab, S. C. (2011). After Doha: Why the negotiations are doomed and what we should do about it. *Foreign Affairs*, 90, 104–17.
- Selwyn, B. (2019). Poverty chains and global capitalism. *Competition and Change*, 23 (1), 71–97.
- Semenenko, I., Halhash, R., & Ivchenko, Y. (2019). Role of international organizations in promoting sustainable development in conflict-affected regions: Case of Luhansk region in Ukraine. *European Journal of Sustainable Development*, 8 (2), 21–34.
- Siegel, K. M., & Bastos Lima, M. G. (2020). When international sustainability frameworks encounter domestic politics: The Sustainable Development Goals and agri-food governance in South America. *World Development*, 135, 105053.
- Stiglitz, J. E. (2002). Participation and development: Perspectives from the comprehensive development paradigm. *Review of Development Economics*, 6, 163–82.
- Stuart, E., & Woodroffe, J. (2016). Leaving no-one behind: Can the Sustainable Development Goals succeed where the Millennium Development Goals lacked? *Gender & Development*, 24, 69–81.
- UNCDP [United Nations Committee for Development Policy] Subgroup on Voluntary National Reviews (2020). *Voluntary National Reviews Reports: What do they (not) reveal?* CDP Background Paper, No. 50. New York, NY: UNCDP.
- UNCTAD [United Nations Conference on Trade and Development] (2019). *The Least Developed Countries Report 2019. The Present and Future of External Development Finance: Old dependence, new challenges*. Geneva: United Nations.
- UNDP [United Nations Development Programme] (2016). *Michelle Yeoh urges Asia-Pacific governments to adopt UNDP Gender Equality Seal*. UNDP Pacific Office in Fiji. Available at: [www.asia-pacific.undp.org/content/rbap/en/home/presscenter/press-releases/2016/11/24/michelle-yeoh-urges-asia-pac-governments-to-adopt-undp-gender-equality-seal.html](http://www.asia-pacific.undp.org/content/rbap/en/home/presscenter/press-releases/2016/11/24/michelle-yeoh-urges-asia-pac-governments-to-adopt-undp-gender-equality-seal.html). Accessed: 24 June 2021.



- UNDESA [United Nations, Department of Economic and Social Affairs, Population Division], IOM [International Organization for Migration], & OECD [Organisation for Economic Cooperation and Development] (2019). *SDG indicator 10.7.2. Number of countries with migration policies to facilitate orderly, safe, regular and responsible migration and mobility of people, Global and regional aggregates*. Available at: [www.un.org/en/development/desa/population/theme/SDG/index\\_10\\_7\\_2.asp](http://www.un.org/en/development/desa/population/theme/SDG/index_10_7_2.asp). Accessed: 7 June 2021.
- UNDESA [United Nations Department of Economic and Social Affairs, Population Division] (2020). *SDG indicator 10.7.2: Data Booklet (ST/ESA/SER.A/441)*. Available at: [www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un\\_2019\\_sdg\\_10.7.2\\_databooklet.pdf](http://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un_2019_sdg_10.7.2_databooklet.pdf). Accessed: 7 June 2021.
- UNGA [United Nations General Assembly] (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1.
- UNICEF [United Nations Children's Emergency Fund] (2019). *Progress for every child in the SDG era: Are we on track to achieve the SDGs for children? The situation in 2019*. New York, NY: UNICEF.
- United Nations (1995). *Report of the World Summit for Social Development, Copenhagen, 6–12 March 1995*. A/CONF.166/9. New York, NY: United Nations.
- United Nations (2020). *Sustainable Development Goals Report 2020*. New York, NY: United Nations.
- United Nations (2021). *Progress towards the Sustainable Development Goals. Report of the Secretary-General*. New York, NY: United Nations.
- United Nations Women (2017). *Equal pay for work of equal value*. Available at : [www.unwomen.org/en/news/in-focus/csw61/equal-pay](http://www.unwomen.org/en/news/in-focus/csw61/equal-pay). Accessed: 14 December 2020.
- Wahlen, C. B. (2016). *Nordic countries advance cooperation on SDGs*. Available at: <http://sdg.iisd.org/news/nordic-countries-advance-cooperation-on-sdgs/>. Accessed: 2 November 2020.
- Weber, H. (2017). Politics of 'leaving no one behind': Contesting the 2030 Sustainable Development Goals agenda. *Globalizations*, 14, 399–414.
- WEF [World Economic Forum] (2020). *Global Gender Gap Report 2020*. Geneva: World Economic Forum.
- Weitz, N., Carlsen, H., Nilsson, M., & Skanberg, K. (2018). Towards systemic and contextual priority setting for implementing the 2030 Agenda. *Sustainability Science*, 13, 531–48.
- Winkler, I. T., & Satterthwaite, M. L. (2017). Leaving no one behind? Persistent inequalities in the SDGs. *The International Journal of Human Rights*, 21, 1073–97.
- World Bank (2020a). *Poverty and shared prosperity 2020: Reversals of fortune*. Washington, DC: World Bank.
- World Bank (2020b). COVID-19 crisis through a migration lens. *Migration and Development Brief*, No. 32/2020. Washington, DC: World Bank.
- World Bank (n.d.). *World Bank Open Data*. Available at: <https://data.worldbank.org/>. Accessed: 4 June 2021.
- WTO [World Trade Organization] (2019). *World trade statistical review 2019*. Geneva: World Trade Organization.
- Yap, M. L., & Watene, K. (2019). The Sustainable Development Goals (SDGs) and indigenous peoples: Another missed opportunity? *Journal of Human Development and Capabilities*, 20, 451–67.

# 6

## Planetary Integrity

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The priorities of the 2030 Agenda for Sustainable Development revolve around ‘people’, ‘planet’ and ‘prosperity’. Yet, the precise relationship between these three concerns remains vaguely defined in the 2030 Agenda, as does the place of the ‘planet’ in this plan of action. Implicit in the 17 Sustainable Development Goals is that we can ensure global prosperity and equality only within a stable ecological context. Commentators acknowledge that how countries pursue ecological objectives will directly affect their ‘ability to address the majority of the Sustainable Development Goals’ (Vasseur et al. 2017: 732). The Sustainable Development Goals must therefore, in principle, seek to secure the basis of human well-being, while maintaining the biophysical capacity of our planet. Although it remains debatable what this implies in practice, it is reasonable to assume that the integrity of the earth’s life-support systems, or *planetary integrity* in short, must be maintained for long-term sustainability. Then the following questions arise: To what extent have the Sustainable Development Goals advanced planetary integrity, and where can we see positive changes towards planetary integrity in governance efforts that can be attributed to the global goals?

This is the central question in this chapter. We first offer a brief account of the concept of planetary integrity as a global public good that is maintained by keeping the earth system within its ecological limits (Westra, Bosselmann and Gwiazdon 2018). By drawing on an extensive literature survey, we then reflect on a theoretical debate about the actual and potential role of the Sustainable Development Goals in advancing planetary integrity; a debate that, while ranging between optimism and scepticism, is predominantly sceptical about such potential. Next we provide four examples situated at the international, regional, local and transnational levels of governance within which the Sustainable Development Goals aim to steer (see, for a similar approach, Biermann and Kim 2020a). At the international level we consider key environmental institutions, namely, the United Nations Environment Assembly and the international regimes on climate change

and biodiversity, and contrast this perspective with an analysis of the International Labour Organization, which is not explicitly concerned with environmental matters. Regionally, we shift our analysis to the European Union and the Economic Commission for Latin America and the Caribbean, which offers contrasting perspectives from the Global South and Global North on how regional institutions use the Sustainable Development Goals to pursue planetary integrity. At the national level, we discuss how South Africa, a hugely diverse country and an influential political and economic player in Africa, engages with the Sustainable Development Goals to pursue socio-economic development in the context of planetary integrity. We then focus on the role of transnational corporations, as increasingly influential global actors, in employing the Sustainable Development Goals in their efforts to advance, or hinder, the pursuit of planetary integrity. We conclude with a summary of our findings, a reflection on theoretical implications, and suggestions for future research.

We do not claim to cover the entire spectrum of perspectives, or that the findings from the international, regional, national and transnational examples we discuss are generalizable. However, we seek to contribute to theory-building on when and how governance through global goals work (Kanie and Biermann 2017), and to make policy-relevant recommendations for the second half of the 2030 Agenda and the discussions for the period after 2030.

### Conceptualization and Methods

The idea of the Anthropocene suggests that humans are embedded in the earth system and able to alter its vital functions. Human activities are now being exercised on a planet that is not passive, but increasingly hostile and unpredictable, with important consequences for governance and law (Biermann 2014; Kotzé 2020). Our future will be determined as much by the earth system of which we are an integral part as by our choices and behaviour, which, in turn, are shaped by grand development visions such as the Sustainable Development Goals (Stengers 2015). Planetary integrity will therefore have to be maintained to sustain all life on earth. The notion of planetary integrity derives from its root term ‘ecological integrity’, which was initially developed to describe the declining state of biodiversity on a sub-global scale (Hurley and Tittensor 2020; Westra 2005). In this context, ‘integrity’ is a way of thinking about ecological health affected by human activities (Burdon 2020; Kim and Bosselmann 2015).

The concept of planetary integrity is becoming popular at several levels of analysis (Parnell 2018). It is, for example, implied in the notion of planetary boundaries – a conceptual framework that seeks to quantify the ‘safe limits outside of which the Earth system cannot continue to function in a stable, Holocene-like

state' (Rockström et al. 2009: 474; also Steffen et al. 2015). Here, planetary integrity is used, and has been critiqued (Biermann and Kim 2020b; French and Kotzé 2021), to describe a 'safe operating space' beyond which the earth system will behave in unpredictable ways, and to describe a threshold for the ability of ecosystems to support human society (Bridgewater, Kim and Bosselmann 2014). The boundaries include, among others, those for a safe climate, for protecting biodiversity, and to avoid serious pollution.

The safe operating space for humanity is, however, getting smaller, at a rate much faster than initial predictions. Evidence from earth system science shows unprecedented and accelerating levels of global environmental change and associated deepening of socio-ecological injustices between and within generations, which affect humans and non-humans. The signs of decaying planetary integrity are apparent in terms of epistemic frameworks such as the Anthropocene and predictions showing that we are fast approaching global tipping points (Lenton et al. 2020), and possibly even a Sixth Mass Extinction event (Briggs 2017). There now seems to be general agreement that planetary integrity is being impacted in unprecedented ways, and that deliberate and thoroughgoing steering mechanisms, such as through the Sustainable Development Goals, are urgently needed (French and Kotzé 2018). Yet, have the global goals also advanced planetary integrity, and where do we see positive changes towards planetary integrity in governance efforts that can be attributed to the global goals?

This chapter offers a range of perspectives that trace out preliminary answers to these questions. We conducted a systematic qualitative literature survey using *Scopus*. We searched for publications published in English before 2021 that include the Sustainable Development Goals or the acronym in their title, abstract or keywords with reference to the environment in conjunction with governance.<sup>1</sup> This search returned 101 studies, among which we found 15 publications to be particularly relevant for our chapter. This choice of highly relevant publications has informed the core findings of our analysis. We then also drew on other sources that reference, or are referenced by, these publications, which we relied on to guide, elaborate and substantiate our discussion of the literature we surveyed. Very few of these publications explicitly discuss the actual or potential steering effects of the Sustainable Development Goals in relation to planetary integrity, and where they do, they predominantly focus on the potential instead of the actual steering effects of the Goals. Concrete empirical analysis of the actual steering effects of the Sustainable Development Goals in relation to planetary integrity is therefore still lacking, which points to a clear research gap and the need for future analyses. As a result of this gap, for present purposes, we complemented this theoretical discussion with a meta-assessment that draws on grey literature and the multidisciplinary expertise and perspectives of the authors. These focused

discussions offer a snapshot of perspectives from the Global South and Global North, and the multiple complex concerns that lie at the heart of the 2030 Agenda, including views on the potential and actual environmental steering effects of the Sustainable Development Goals in varied contexts.

### **Research Findings and Practical Insights**

In this section we present key findings of the literature review on the potential and limits of the Sustainable Development Goals in steering societies towards planetary integrity. We understand the steering effects of the Sustainable Development Goals here through the lens of institutionalism. The Sustainable Development Goals reflect the interests, ideas and aspirations of differentially endowed actors (Kashwan, MacLean and García-Lopéz 2019), and they reflect dynamic settlements (Mahoney and Thelen 2009). As all institutions, the Sustainable Development Goals are human creations within socio-economic and political contexts and remain susceptible to continuous manoeuvring by many actors. In our analysis of the steering effects of the Sustainable Development Goals, we are therefore sensitive to the configuration of the purposes that the specific framings and designs of the goals are oriented to serve in the context of planetary integrity. Our analysis also broadly embraces an understanding of the types of steering effects as elaborated in Chapter 1. To this end, the assessment specifically looks at whether and in what ways the Sustainable Development Goals have led to changes (positive and negative) in relation to how political, economic and societal actors pursue planetary integrity. We seek to determine whether it is possible to observe actual or potential policy, legal and broader regulatory framework (normative) changes; institutional changes such as the creation of new governance structures; and discursive changes in and of civil society actors.

#### ***The Potential for Environmental Steering by the Goals***

Several studies refer to the Sustainable Development Goals as an important frame for sustainable development (e.g., Racioppi et al. 2020). Yet, these studies do not attribute any primary steering powers to the Sustainable Development Goals, and the goals are not seen as *directly* steering behaviour (De Schutter et al. 2019; Mansourian 2018; Smith et al. 2019). Instead, researchers find rather indirect steering where Sustainable Development Goals act as ‘orchestrators’ (Biermann, Kanie and Kim 2017; Underdal and Kim 2017). One example is when the Sustainable Development Goals facilitate the clustering of international agreements or serve as collective ‘headlines’ (for example, Sustainable Development Goals 14 and 15 for biodiversity). One study concludes that ‘clear lines of sight between

the SDGs and their impacts are unlikely to emerge. Rather, the SDGs are likely . . . to have a range of “messy, contradictory and refractory effects” (Hirons 2020: 322).

Several factors might complicate the ability of the Sustainable Development Goals to have environmental steering effects. For example, environmental targets under the Sustainable Development Goals often sit in non-environmental goals, with indicators ending up diluting or contradicting the environmental ‘mission’ of the 2030 Agenda as a whole (Elder and Olsen 2019). Some scholars, for example, have argued that the goals for eradicating poverty or economic growth could result in environmental degradation (Liverman 2018; Sexsmith and McMichael 2015). At the same time, most environmental targets under the Sustainable Development Goals were extracted from earlier agreements, which might draw resistance from other bodies or agreements in the same area, and even give rise to conflicting priorities (Elder, Bengtsson and Akenji 2016; Kim 2016). The potential for turf wars in such a setting is real, as is the lack of ambition of the goals (Kotzé and French 2018). Such turf wars could limit the steering effect of Sustainable Development Goals and significantly weaken efforts to pursue ambitious environmental protection through law, policy and governance. Some commentators hence argue that the goals may help to highlight environmental protection as a concern in achieving sustainable development, but that their rationale and content remains still structurally incompatible with steering towards the more ambitious goal of planetary integrity (Griggs et al. 2013).

### *Inherent Design Limitations*

Some studies also argue that the Sustainable Development Goals might even have a negative steering effect on planetary integrity in that they could incentivize countries to further subordinate environmental priorities in their developmental plans (Zeng et al. 2020). In other words, doubts about the steering qualities of the Sustainable Development Goals towards environmental protection arise not only from their ability to steer, but also from the fact that they do not seem to prioritize environmental protection in the first place (Craig and Ruhl 2020). The 2030 Agenda’s explicit inclusion of the ‘planet’ as one of its main concerns might signal some focus on a planetary perspective, although the agenda does not refer explicitly to ‘planetary integrity’, or to ‘planetary limits’ or ‘planetary boundaries’ (Elder, Bengtsson and Akenji 2016; Randers et al. 2019). The absence of an overarching environmental or ‘planetary’ goal is remarkable (Brandt 2015), with environmental protection left to a cluster of environment-focused Sustainable Development Goals down the list at numbers 13, 14 and 15. While including these explicit environmental goals might advance environmental protection, some also

argue that Goals 13, 14 and 15 could compartmentalize environmental issues (climate, land and oceans) without an overarching SDG on ‘planetary integrity’ (Costanza et al. 2015; Kim 2016; Kim and Bosselmann 2015; Young et al. 2017). Therefore, simply based on a textual analysis of the Sustainable Development Goals, the goals do not pursue planetary integrity as such, but do recognize the importance of protecting environmental aspects such as climate, land and the oceans.

Where environmental protection was integrated into several non-environmental goals, the Sustainable Development Goals also adopted some conservative and unambitious perspectives on the tensions between economic growth and environmental sustainability (Adelman 2018; Eisenmenger et al. 2020; Kotzé 2018). This is evident, for example, in their emphasis on longstanding but dubious claims about decoupling and resource efficiency as technological solutions to the environmental crisis (Elder and Olsen 2019; Fletcher and Rammelt 2017). Governments also rejected as potential core ideas underpinning the Sustainable Development Goals the more transformative objective of looking beyond gross domestic product as an indicator of prosperity (Costanza et al. 2015); the notion of planetary boundaries and the limits this would imply for unrestrained neoliberal development (Elder and Olsen 2019); and the need for robust implementation measures, which are currently considered to be ‘not carefully thought out or systematic’ (Elder, Bengtsson and Akenji 2016: 6). For example, Gasper, Shah and Tankha (2019) show that while the emergence of Sustainable Development Goal 12 (to ensure sustainable consumption and production patterns) as a stand-alone goal resulted from pressure by developing countries on industrialized countries, it was in the end business interests that shaped the targets and indicators under this goal. This explains why Goal 12 reflects a narrative of ‘sustainable growth’, which some critics consider a business-friendly, neoliberal approach embedded in sustainable development, and which places much faith in yet-to-be-developed future technological innovations (Adelman 2018).

Several intergovernmental environmental agencies and civil society groups took part in the formulation of the Sustainable Development Goals, which could have increased the ambition of these goals towards environmental protection (Sémit 2020). However, the influence of governments and business organizations prevailed and resulted in unambitious and vague targets of a non-committal nature (Gasper, Shah and Tankha 2019). Similarly, growth as envisaged in Sustainable Development Goal 8 is seen to be inherently incompatible with environmental protection targets, such as those articulated in Goals 6, 13, 14 and 15 (Hickel 2019). Some therefore argue that the Sustainable Development Goals’ focus on sustainable *economic* development is inevitably detrimental to planetary integrity and justice (Kotzé 2018), which require both limits to economic growth

and the removal of ‘developmental’ disparities between the rich and the poor (Kashwan et al. 2020; Lydgate 2012).

### *A Matter of Window Dressing?*

Some studies point to the dangers of ‘cherry picking’, ‘window dressing’ and ‘greenwashing’ (e.g., Forestier and Kim 2020). On paper, the 17 Sustainable Development Goals are unprioritized and all equal (see also Chapter 4 of this book): The goals are at least in spirit a ‘network of targets’ (Le Blanc 2015). However, they do not come as a truly indivisible package, but leave room for governments to strategically prioritize certain goals in their implementation (Forestier and Kim 2020). One study claimed that the goals are all ‘characterized by an absence of any top-down priority setting mechanisms [and] States have the freedom to pursue (or ignore) the goals however they want’ (Hirons 2020: 325). For instance, it has been argued that governments and businesses actively prioritize the social and economic goals over the environmental goals in both rhetoric and practice (Craig and Ruhl 2020). Even the 2030 Agenda explicitly says that environmental threats merely ‘add to and exacerbate’ the list of challenges faced by humanity (UNGA 2015: 5). This ignores evidence that environmental degradation is caused by a narrow focus on economic growth, and it undermines the goals of broad-based development that is at once just, fair and equitable and that can only be achieved in the context of a healthy ecosystem (Adelman 2018). Studies suggest that instead of promoting a more holistic form of ecologically friendly development, many governments still prioritize economic growth while neglecting environmental protection (Custer et al. 2018). Commentators have shown that among the 169 targets under the Sustainable Development Goals, environmental targets are often less easily trackable and measurable, and require larger and more uncertain investments (Craig and Ruhl 2020). As we show below, the prioritization of non-environmental goals also results from political–business cycle dynamics: short-term economic growth and ill-conceived ideas of development trump longer-term planetary integrity, and then create a vicious cycle that further subordinates planetary integrity (Kotzé 2018). All this goes to the heart of concerns about the ontological design and ethical orientation of the Sustainable Development Goals: their focus seems to remain, as one study argues, on ‘growth and use of resources ... and [it] departs from an individual, not collective, point of view’; and they remain ‘underpinned by strong (Western) modernist notions of development: sovereignty of humans over their environment (anthropocentrism), individualism, competition, freedom (rights rather than duties), self-interest, belief in the market leading to collective welfare, private property (protected by legal systems), rewards based on merit, materialism,



quantification of value, and instrumentalization of labour' (van Norren 2020: 453; see also Liverman 2018).

These insights in the literature lead one to question whether the Sustainable Development Goals are the *appropriate* vehicle to pursue planetary integrity. Some critics argue that the goals are inappropriate for this purpose and show, for example, that the goals do not acknowledge the centrality of healthy ecosystems to the optimal functioning of the vast majority of social and economic systems (Kotzé and French 2018). In other words, the Sustainable Development Goals fail to recognize that planetary, people and prosperity concerns are all part of one earth system, and that the protection of planetary integrity should not be a means to an end, but an end in itself.

Some studies also see the Sustainable Development Goals as essentially anthropocentric and mainly aimed at promoting economic development for (some) humans, despite their high rhetoric to the contrary. These studies argue that the goals are therefore unlikely to help solve the fundamental planetary problems that arise from the specific type of unbridled neoliberal economic development that the Sustainable Development Goals promote (Adelman 2018; Kotzé 2018). A principal concern is that the Sustainable Development Goals remain fixated on the idea that economic growth is foundational to achieve all pillars of sustainable development; as one author argues, 'the SDGs are not biocentric aiming to respect nature for nature's sake, enabling reciprocity with nature. They embody linear growth/results thinking which requires unlimited resource exploitation, and not cyclical thinking replacing growth with well-being (of all beings)' (van Norren 2020: 431).

In sum, owing to ontological and systemic factors, and limitations in their design and purpose, the available literature does not see the Sustainable Development Goals as having any significant potential to steer governance towards a prioritization of planetary integrity. Whatever indirect steering effects the Sustainable Development Goals might have in this respect are merely implied through the environmental goals at the bottom of the list of the Sustainable Development Goals. On the one hand, these environmental goals might facilitate discussions about the importance and potential of the Sustainable Development Goals to pursue planetary integrity. They also might inspire future initiatives that eventually drive positive change (Kopnina 2018). Indeed, there is 'an increased recognition of the importance of the environment in the SDGs' (Vasseur et al 2017: 732). On the other hand, the findings of our literature survey support the view that the Sustainable Development Goals are not fully geared towards steering, and capable of facilitating, the pursuit of planetary integrity. Zeng et al. (2020) put this in even starker terms, that 'environmental destruction [has not been] avoided with the Sustainable Development Goals'.

We further explore this insight below, with reference to experiences at the international, regional, national and transnational levels of governance in order to determine in more practical terms what the steering effects of the Sustainable Development Goals in mainstreaming planetary integrity have been.

### *Experiences from International Governance*

We start with experiences from international governance. Here, the United Nations Environment Assembly is often considered to be the world's most influential international institution for global environmental governance. Considering the centrality of the Sustainable Development Goals to the world's development vision and the prominence of the Assembly and its pivotal role in global environmental governance, one would expect that the Sustainable Development Goals are a key consideration in the agenda of the United Nations Environment Assembly. Such a consideration is supported by literature on the relationship between international institutions and organizations and the Sustainable Development Goals, with studies on whether and how international bodies can contribute to the 2030 Agenda, including environmental protection (Cormier 2016). Much scholarly attention has therefore been on the contribution of international institutions, such as the United Nations Environment Assembly (e.g., Ivanova 2021), to environmental protection, although not explicitly as part of the Sustainable Development Goals (Perrez 2020). This reflects public statements and policy documents by these institutions, which all stress their commitment to living up to the challenge of global environmental protection. Yet, it remains unclear to what extent the United Nations Environment Assembly has actually promoted planetary integrity through incorporating the environmental dimensions of the Sustainable Development Goals in its programmes.

At first glance it seems that the Assembly has done rather well. For example, the titles of several meetings of the Assembly embrace concerns of the Sustainable Development Goals, such as the first United Nations Environment Assembly, which focused on 'Sustainable Development Goals and the Post-2015 Development Agenda, including sustainable consumption and production'; and the fourth assembly on 'Innovative solutions for environmental challenges and sustainable consumption and production'. The choice of theme for the fifth United Nations Environment Assembly, 'Strengthening Actions for Nature to Achieve the Sustainable Development Goals', suggests further attention to the links between the Sustainable Development Goals and planetary integrity. This holds out considerable potential for the Assembly to govern the complex interactions arising from the Sustainable Development Goals, with a view to ultimately promoting environmental concerns as its core mandate (Kaniaru 2014; Rantala et al. 2020).

On closer examination, however, it seems that the United Nations Environment Assembly has undertaken only tentative steps towards governing these interactions in pursuit of planetary integrity. Attention to nexus issues that could support broader environmental and societal benefits has gradually increased as has support for cross-sectoral policy coherence (Rantala et al. 2020). For example, the Assembly has emphasized the need to improve links between pollution, climate change, biodiversity loss and ecosystem degradation (UNEA 2018), and the need to strengthen links between soil pollution, land use and the Sustainable Development Goals (UNEA 2017). Another area where the Assembly has much potential to facilitate synergies between the Sustainable Development Goals and environmental protection is sustainable consumption and production, which it considers essential to improve sustainability and to support the achievement of all other goals that relate to Goal 12 (Rantala et al. 2020).

In other areas, again, the Assembly fares worse than expected. For example, an opportunity to address interactions was missed at the fourth United Nations Environment Assembly, which failed to approve a draft resolution ‘Deforestation and agricultural commodity supply chains’, which was intended to halt deforestation (Goal 15) while contributing to ensure food security and nutrition (Goal 2) (Rantala et al. 2020). Therefore, while the United Nations Environment Assembly is a proponent of the Sustainable Development Goals, it mostly uses the goals to facilitate synergies between disparate environmental regimes, and to ‘contemporize’ the work it does through the label of the Sustainable Development Goal. The Assembly has not yet offered anything radically different that would suggest an ambitious change of course towards planetary integrity within the context of the Sustainable Development Goals.

As far as the climate regime is concerned, the Intergovernmental Panel on Climate Change recognizes the links between the Sustainable Development Goals and climate change. It has done so in its special report on *Global Warming of 1.5°C*, where it highlighted the Sustainable Development Goals as a key consideration in how countries can engage in decarbonized development pathways for sustainable development (IPCC 2018). Chapter 5 of the report, in particular, looked at how climate change might undermine the Sustainable Development Goals, and at possible synergies and trade-offs between responses to climate change and the goals. With the forthcoming Intergovernmental Panel on Climate Change Sixth Assessment Report also likely to connect climate change to the Sustainable Development Goals, such links are encouraging insofar as influential global scientific climate change assessments at least seem to rely on, and to reflect, the many dimensions propagated by the Sustainable Development Goals, including their environmental dimensions. Interestingly, however, the 2030 Agenda is not a major reference in the Paris Climate Agreement and climate governance debates,

although the co-evolution of the negotiations on the 2030 Agenda and the preparation of the Paris Climate Agreement in 2015 have mobilized some of the core principles of the 2030 Agenda. For example, the SDG-linked notion of ‘co-benefits’ between decarbonization and economic development, and between decarbonization and the reduction of inequalities (Deep Decarbonization Pathways Project 2015), has been central to ensuring support for the Paris Climate Agreement by some emerging economies and their corporations. Despite valid concerns that this might merely amount to greenwashing (Johnsson et al. 2020), it at least highlights interactions between key Sustainable Development Goals and climate change in global climate change negotiations. The inclusion of Nationally Determined Contributions and national Long-Term Strategies in the Paris Agreement is also consistent with the centrality of country-specific transformation pathways to reach the Sustainable Development Goals, as some proponents of the 2030 Agenda point out (Kőrösi 2015). Although it is difficult to say whether this is as a direct result of the Sustainable Development Goals, the need to develop decarbonization pathways that can protect biodiversity has also been put at the centre of climate negotiations (Deprez, Vallejo and Rankovic 2019) – an effort that emphasizes possible synergies, but also conflicts, between two directly related Sustainable Development Goals. With respect to climate finance, some financial actors have begun to align their investment portfolios with the Paris Climate Agreement (for example, by aligning Goals 8 and 9 with Goal 13), both as a pilot initiative and long-term learning process aimed at more fully synergizing their portfolios with the 2030 Agenda over the long term (OECD and UNDP 2020; Riaño et al. 2020). A redirection of global investment strategies alongside the framework of the Sustainable Development Goals, including, for example, increased investment in renewable energy, could in time promote more sustainable corporate practices that have planetary integrity as a major focus.

Reference to the Sustainable Development Goals is more explicit in the biodiversity regime. For example, the Global Assessment Report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services emphasizes the contribution of biodiversity and ecosystem services to realize all the Sustainable Development Goals (IPBES 2019). The draft texts under discussion for the proposed 2030 framework of the 1992 Convention on Biodiversity also reference the 2030 Agenda and the institutions in charge of this agenda through two entry points. One is the proposed global biodiversity goals for 2030 that will be decided at the 2021 conference of the parties. These will likely include not only goals centred on biodiversity but also on the contribution of biodiversity to reaching Sustainable Development Goals and their targets, such as food security (Convention on Biodiversity 2020). The overall aim of these goals is to anchor biodiversity integrity in the broader development perspectives of countries.

Another entry point is efforts related to facilitate mainstreaming, where the Convention on Biological Diversity could define a collective work programme with other institutions that are responsible for sectors that impact biodiversity conservation (such as the Food and Agricultural Organization for food systems transformation, and the World Trade Organization for global trade). To legitimize such a co-defined work programme, which is aimed at strengthening synergies, some studies have proposed that the High-level Political Forum on Sustainable Development should be the overarching institution for such a process (Kinniburgh and Rankovic 2019).

While the Sustainable Development Goals seem to have shaped discussions around the climate and biodiversity regimes and to have drawn attention to and consolidate support for specific concerns and their interlinkages, many key issues of planetary integrity had been part of negotiations well before the adoption of the 2030 Agenda. In climate governance, for example, negotiations on issues that could create wider environmental co-benefits beyond Sustainable Development Goal 13 – such as land use, land-use change and forestry – precede the 2030 Agenda. In 2011, states set guidelines for activities on land use, land-use change and forestry under the United Nations Framework Convention on Climate Change that should ‘[b]e consistent with the objective of environmental integrity and take into account the multiple functions of forests and other ecosystems’ and ‘[b]e consistent with Parties’ national sustainable development needs and goals’ (UNFCCC 2010). In biodiversity governance, the Sustainable Development Goals are grounded in earlier commitments from several international agreements and soft law instruments, rather than the other way around. This is reflected, for example, in the Aichi Targets, which form the basis of the targets under Sustainable Development Goal 15, including target 15.1 on conservation and target 15.3 on reversing biodiversity degradation. The post-2020 global biodiversity framework that will define goals for global biodiversity governance up to 2030 further builds on these targets, but also aims to raise ambition, especially those targets under Goal 15 that end by 2020 (for example, targets 15.1, 15.2 and 15.3) (Rantala et al. 2020). While the Sustainable Development Goals can build on previous commitments, some studies highlight the adverse distributional consequences of biodiversity conservation regimes that are concentrated in countries with high levels of economic inequality and poor democratic institutions (Kashwan 2017). This is an instance of potential trade-offs between the centralizing tendencies of goal-oriented governance against the potential for process-oriented approaches that offer alternative opportunities to resolve deliberations over the prioritization of goals.

So far, we have discussed international institutions with an explicit environmental policy mandate. How about institutions that have environmental protection

not as their primary task? Are they influenced by environmental components of the Sustainable Development Goals? The limited literature on this issue (the bulk of information is drawn from studies conducted by these institutions themselves) observes here mostly ‘secondary’ steering towards environmental protection by upgrading an institution’s environmental profile to contribute to the overall success of the 2030 Agenda (e.g., IMF 2021; World Bank 2015). Secondary steering refers to change that happens ‘in the name of the Sustainable Development Goals’. For example, one study has shown a trend towards more environmental integration in the International Labour Organization’s approach to sustainability, in normative and institutional terms (Montesano et al. 2021). This trend seems to have accelerated and coincides with the vision of the 2030 Agenda. However, when it comes to environmental protection, the link between the International Labour Organization and the Sustainable Development Goals is not straightforward. On the one hand, the negotiation and adoption of the goals has left its mark on the evolution of environmental ideas, norms and institutions within the International Labour Organization, particularly regarding framing programmes such as Green Jobs and partnerships for sustainability (ILO 2019). On the other hand, the International Labour Organization sees itself more as a manager than a recipient of the goals, stressing its active and deliberate role in shaping the 2030 Agenda in line with its priorities and in selectively using the goals as a platform to catalyse its socio-economic mandate (ILO 2015; 2016).

In sum, *the literature studies do not support claims that the Sustainable Development Goals reorient international organizations towards planetary integrity*, especially when such organizations are only indirectly concerned with environmental protection, such as the International Labour Organization (Montesano et al. 2021). The Sustainable Development Goals at best only seem to have secondary steering effects in this regard. Their impact on international organizations, as far as advancing planetary integrity is concerned, is indirect to the extent that they only offer a loose framework for creating synergies and emphasising the need to pursue environmental protection goals, many of which have already been agreed well before the 2030 Agenda came into being. Considering our earlier arguments about the limited prominence of planetary integrity in the 2030 Agenda and conceptual doubts about the ability of the Sustainable Development Goals to steer towards planetary integrity, expectations related to their impact on international organizations to pursue planetary integrity must be further diluted.

### *Experiences from Regional Governance*

It is often claimed that the European Union is a frontrunner in regional environmental governance. It is, for example, one of the few major regional actors

to have enshrined the concept of planetary boundaries in its legal system (Fernández and Malwé 2019). Some early European Parliament resolutions already featured the idea of planetary boundaries, including one mentioning them as being ‘imperative’ for the 2030 Agenda (European Parliament 2013a), while the 7th Environment Action Programme, titled ‘Living Well, within the Limits of Our Planet’, includes references to planetary boundaries and ecological limits. More recent studies by European Union agencies, such as the European Environment Agency, further apply the concept and develop the idea of a ‘safe operating space for Europe’ (European Environment Agency 2020). The Environment Action Programme also directly links its ambitious vision of ecological limits with the Sustainable Development Goals: the goals constitute ‘politically binding environmental commitments’ (European Parliament 2013b: paragraph 13), and both the European Union and its member states are to ensure that such commitments are implemented (Corrado et al. 2020). The Environment Action Programme further calls on the European Union to ensure that its post-2015 approach to development, including its reliance on the Sustainable Development Goals, reflects an integrated understanding of sustainable development. It specifically mentions environmental concerns such as climate change and biodiversity (European Parliament 2013b: paragraph 106.i).

Likewise, a 2016 European Commission communication explicitly links the need to transform European Union production and consumption to achieve a ‘low-carbon, climate resilient, resource efficient and circular economy’ to Sustainable Development Goals 8 and 12 (European Commission 2016: 2). More recently, the European Union Circular Economy Action Plan and the Bioeconomy Strategy of 2018 have showcased the growing awareness of the importance of an integrated approach to production and consumption when addressing environmental impacts (Sanyé-Mengual et al. 2019). The European Union Commission’s Directorate-General for International Partnerships also explicitly links European Union development initiatives to the Sustainable Development Goals (European Commission 2020a). For example, with reference to Goal 13, it stresses European Union assistance to partner countries to transition to low-carbon sustainable development. All this shows that the Sustainable Development Goals have played a role in orienting the European Union’s environmental laws and policies towards the pursuit of planetary integrity – at least on paper.

While these are all positive signs that could advance planetary integrity under the guidance of the Sustainable Development Goals, the European Union’s goals-inspired sustainability roadmap still sees economic growth as a key enabler, in stark contrast to scientific evidence about the incompatibility of economic growth and long-term environmental protection (Hickel 2021). For example, for Goals 14 and 15, there are no specific indications in European Union law and policy

about new initiatives that would follow the Sustainable Development Goals, only a cursory mention of earlier programmes, such as Biodiversity for Life, which was launched in 2014.

Nevertheless, environmental concerns linked to the Sustainable Development Goals seem to become more central in Brussels. For example, the Juncker Commission published in 2019 a reflection paper titled 'Towards a Sustainable Europe by 2030' (European Commission 2019), which mentioned the Sustainable Development Goals as an agenda for the European Union to address interdependent challenges. The paper emphasizes 'ecological debt' as the greatest challenge to ensuring sustainability for future generations, and explicitly mentions planetary boundaries as the ecological limits that must shape socio-economic systems (European Commission 2019: 10). In its text on Sustainable Development Goal 15, the link between the 2030 Agenda and planetary integrity discourse is especially strong. The von der Leyen Commission later launched the European Union Green Deal as an umbrella for a range of policy initiatives to make Europe a climate-neutral continent. One such initiative is the European Union 2030 Biodiversity Strategy (European Commission 2020b); another is a new industrial strategy (European Commission 2020c). In some of these initiatives, links to the Sustainable Development Goals are explicit, and the initiatives are often presented as an integral part of the European Union's efforts to achieve the 2030 Agenda (European Commission 2020b: 19), highlighting some convergence between global and European sustainability agendas.

Across the Atlantic, the Latin America and the Caribbean region is important in leading up to the adoption of the 2030 Agenda and the Sustainable Development Goals. Here, many countries and regional governance bodies were involved in the negotiations on the Sustainable Development Goals (Nicolai et al. 2016). As a response to the United Nations' call for regional cooperation in implementing the 2030 Agenda, the members of the Economic Commission for Latin America and the Caribbean (ECLAC) established a forum on sustainable development in 2016 (ECLAC 2016). This forum is open to stakeholders but remains a state-led regional institution that seeks to contribute to the 2030 Agenda by, among others, strengthening coordination and cooperation, sharing best practices and providing political guidance and reviewing regional progress. The forum also seeks to foster the integration of the three dimensions of sustainable development in a holistic and cross-sectoral manner, including environmental protection and the promotion of living well in harmony with nature. Since its creation, the forum has recognized in several of its meetings the environmental dimensions of the Sustainable Development Goals (UNEP and Centro de Pensamiento Estratégico Internacional 2020). For instance, it has been noted that development policies 'must take into account the environmental dimension' and that policy-making should 'promote



structural progressive change towards sustainable development in order to protect ecosystems and biodiversity'; 'break the link between production and pollution'; 'move towards low carbon economies'; 'detoxify the air, soil and water' and promote a shift towards sustainable use of natural resources (ECLAC 2017, 2018). Governments also stressed that the '2030 Agenda, more than having environmental goals, was environmental as a whole, because progress could not be made on health or industrialization without taking the relevant environmental considerations into account' (ECLAC 2018: 41). While all these references indicate some efforts of the forum to integrate the environmental dimension of the Sustainable Development Goals into regional policies, these are still limited and do not include specific commitments (UNEP and Centro de Pensamiento Estratégico Internacional 2020). Critics also question to what extent this might lead to a form of socio-economic growth that respects planetary integrity in Latin America and the Caribbean, especially when environmentally destructive investment policies continue being prioritized (Ray and Gallagher 2016). The forum, for example, still prioritizes economic issues, while stressing the need for economic growth (ECLAC 2017, 2019), which will presumably be based on the extraction-based model prevailing in Latin America and the Caribbean (Silva 2012).

The Forum of Ministers of Environment of Latin America and the Caribbean contributes to the integration of environmental priorities into the implementation of the 2030 Agenda (UNEP 2016; UNEP and Centro de Pensamiento Estratégico Internacional 2020). In 2016, the forum revised and updated the Latin American and Caribbean Initiative for Sustainable Development to support the 2030 Agenda (UNEP 2016). The Initiative for Sustainable Development includes priority areas, goals and purposes for actions linked to environment-related Sustainable Development Goals, such as water management (Goal 6); energy (Goal 7); and climate change (Goal 13). The forum also agreed to promote the conservation and sustainable use of biodiversity and its mainstreaming in sectors such as agriculture, mining and energy (UNEP 2016, 2018).

Yet, despite such alignment of policies with environment-related Sustainable Development Goals, some studies doubt the benefits in relation to advancing planetary integrity in the region. For example, Hiron's (2020: 327) study on the interplay of the goals and mining argued that 'the prospects for the Sustainable Development Goals contributing positively to efforts to address environmental and social issues in ASM [artisanal and small-scale mining] are poor'. With reference to Goal 12, the Initiative for Sustainable Development refers to the need to improve resource efficiency and sustainable patterns of consumption and production to support economic growth (UNEP 2016). But in a region where national economies heavily rely on natural resources extraction and exports (Silva 2012; UNEP 2017), sustained economic growth inevitably leads to an increased

demand for these resources while amplifying environmental degradation (UNEP and World Conservation Monitoring Centre 2016).

In 2016, the Organization of American States adopted the Inter-American Program for Sustainable Development 2016–21 (Organization of American States 2017a). It defines strategic actions to ensure that the work of the organization's secretariat is aligned with the implementation of the 2030 Agenda, and that its objectives are guided by the Sustainable Development Goals (Organization of American States 2017a). The programme supports actions in focus areas, such as sustainable management of ecosystems (Goal 15); integrated water resources management (Goal 6); and sustainable energy management (Goal 7). While the Organization of American States has agreed on an institutional policy instrument that integrates environmental concerns, and while its members have reaffirmed their 'inalienable prerogative to defend Mother Earth, the planet, and life with consistent policies and practices' (Organization of American States 2017b: 95; original in Spanish), the declarations and resolutions adopted by its General Assembly since 2016 show that no significant actions have been taken to establish an ambitious regional scheme towards safeguarding planetary integrity.

In sum, the Sustainable Development Goals seem to be more central in regional governance bodies as compared to international organizations. Our analysis suggests that it is especially the European Union that has most significantly advanced in linking its governance agenda with the 2030 Agenda and developing environment-focused policies because of the Sustainable Development Goals. In the Global South, Latin American and Caribbean institutions seem to be rhetorically committed to integrating the Sustainable Development Goals' concerns into regional policies, but they fall short on more concrete action plans (Lucci, Surasky and Gamba 2015; Páez Vieyra 2019; UNEP and Centro de Pensamiento Estratégico Internacional 2018) While both of these regional institutions seem to actively recognize the importance of the Sustainable Development Goals and their environmental goals, which have been incorporated into some regional policies and plans, *the actual environmental steering effects of the Goals seem to be limited, while efforts to strengthen environmental protection in the face of unconstrained socio-economic development remain a challenge.* We therefore doubt whether the Sustainable Development Goals as such will suffice to drive radical change towards planetary integrity in a developed European region where economic development remains a key priority, and in the Latin American and Caribbean region, which continues to face numerous environmental conflicts and developmental challenges.

### ***Experience from National Governance***

We now turn to national governance. Here we focus on the example of South Africa, a highly unequal country with many socio-economic challenges, including

poverty, unemployment and low and unequal levels of access to water, sanitation and adequate housing. These must all be addressed within the context of a fragile ecological system.

Some progress has been reported: for example, access to electricity has increased from 36 per cent at the end of apartheid to 95 per cent by 2017 (Bekker et al. 2008; Government of South Africa 2019). This contributes to achieving Sustainable Development Goal 7, which in turn helps realize other goals (Fuso Nerini et al. 2018; Santika et al. 2019). However, South Africa's economy still heavily depends on coal, which supplies most of South Africa's electricity; this is contrary to the clean energy objective of Goal 7 and the goal of combating climate change (Goal 13). While climate change is receiving more attention in South Africa (as evidenced by stronger climate policies), the Integrated Resource Plan 2019 provides that coal power will still account for 59 per cent of South Africa's electricity supply by 2030, while wind and solar power will supply only 25 per cent. Although this increased share of renewable energy – which today is less than 2 per cent – is promising and can contribute to the achievement of Goals 7, 12 and 13, it remains insufficient. Importantly, the reliance on coal will bring adverse impacts on health (Goal 3), water (Goal 6), and life on land (Goal 15). Coal-based electricity generation also adds to climate change (Goal 13) and ocean acidification (Goal 14). In short, climate and energy-related governance in South Africa is not yet consistent with advancing planetary integrity, despite the Sustainable Development Goals. Although this must be seen in the context of the principle of common but differentiated responsibilities and respective capabilities that direct the climate policies and governance of many Global South countries, South Africa's progress on Goal 13, in particular, has been described as 'stagnating' (De la Mothe Karoubi et al. 2019). The country's Nationally Determined Contribution under the Paris Climate Agreement has also been rated as 'highly insufficient', as it would contribute to a global temperature increase of three to four degrees Celsius (Climate Action Tracker n.d.). In turn, the South African government highlights that climate change is complicating efforts to address the country's socio-economic challenges (Government of South Africa 2019; Mugambiwa and Tirivangasi 2017). This experience is in line with the broader observation that climate change may exacerbate socio-economic risks and vulnerabilities, particularly in developing countries (El Bilali et al. 2020; Islam and Khan 2018; Reyer et al. 2015).

Even though South Africa's 2012 National Development Plan preceded the 2030 Agenda for Sustainable Development, the government still reports that it has a '74 per cent convergence' with the Sustainable Development Goals (Government of South Africa 2019: 5). While the National Development Plan includes a chapter dedicated to environmental sustainability and refers to many ecological challenges, the focus of the National Development Plan is on socio-economic development. For example, the plan argues that to address poverty and inequality (the country's

main challenge), ‘the economy must grow faster and in ways that benefit all South Africans’ (National Planning Commission 2012: 24). This focus is reiterated in the latest 2019–24 Medium-Term Strategic Framework, a five-year plan through which the National Development Plan is implemented. The centrality of the National Development Plan in the South African policy context is clear. For instance, in assessing progress on the Sustainable Development Goals generally, the government uses the National Development Plan as a starting point (Government of South Africa 2019). Also, when considering progress on the environmental goals and climate change, the government refers to ‘policies, strategies and programmes, with the National Development Plan as the overarching policy’ (Statistics South Africa 2019: 155). While the government highlights policies towards the more environment-oriented Sustainable Development Goals, most of these predate the Sustainable Development Goals. Only four out of 12 energy- and climate-related policy documents published since 2016 mention the Sustainable Development Goals, with only a few containing explicit links to the goals (for example, the Draft Post-2015 National Energy Efficiency Strategy). Most of these policy documents, however, are meant to be in line with the National Development Plan. Thus, while they are relevant to the Sustainable Development Goals, the goals themselves have not shaped these policy measures. Furthermore, as suggested above, most economic growth measures are not necessarily consistent with safeguarding planetary integrity. Rather, the government has attempted to ‘align the implementation of the Sustainable Development Goals with its domestic development agenda’ (Haywood et al. 2019: 557).

Importantly, *there is not much evidence that the Sustainable Development Goals had any significant steering effects to advance planetary integrity in South Africa*, a country that still focuses on economic growth in order to achieve its main objective of addressing poverty and inequality. This appears to be consistent with experience elsewhere. Some research has shown, for example, that countries of varying income levels prioritize those Sustainable Development Goals that are consistent with their earlier development policies (Forestier and Kim 2020), and that the Sustainable Development Goals serve to ‘legitimise development goals and policies that have already been decided on’ (Horn and Grugel 2018: 74). The general trend is that many countries prioritize the socio-economic goals over the environmental goals (Randers et al. 2019); as Forestier and Kim (2020: 1269) concluded, poverty eradication and economic growth were ‘by far most widely prioritized’ by developing and developed countries alike.

### *Experiences from Transnational Governance*

While Chapter 3 of this book focused, among others, on the more general steering effects of the Sustainable Development Goals in relation to corporate actors, this

section specifically interrogates the environmental steering effects of the Sustainable Development Goals in the transnational corporate sector. Here we ask the question: Do the Sustainable Development Goals have any steering effects in relation to transnational corporate actors as far as the promotion of planetary integrity is concerned? Some studies find that some companies go beyond the growth-paradigm in their operations through innovative sustainability business models (Coscieme et al. 2019). Yet, many companies still seem to support the view that prioritizes ‘productive functions of ecosystems over non-productive life supporting functions such as, in particular, biodiversity and climate stabilization’ (De Schutter et al. 2019: 2). Accordingly, business leaders are encouraged to understand that ‘the firm exists as part of, and because of, the socio-ecological system, and competitive advantage is found through the combination of internal competencies and from the full consideration of external drivers’ (Sullivan, Thomas and Rosano 2018: 245).

Amidst such concerns, and as shown in [Chapter 3](#) of this volume, the Sustainable Development Goals seem to have sparked a renewed push for corporate participation in the 2030 Agenda. Networks like *Businesses for 2030* (United States Council for International Business 2020) and the World Business Council for Sustainable Development’s Sustainable Development Goals Business Hub (World Business Council for Sustainable Development 2020), for instance, seek to showcase best practices and to support the integration of the Sustainable Development Goals into corporate practices. The United Nations Global Compact, with over 5,000 companies participating, provides tools and information to ‘drive business awareness and action in support of the SDGs’ (United Nations Global Compact 2020). Its Action Platforms on issues such as Sustainable Ocean Business and Decent Work in Global Supply Chains aim to foster collective action and underline how business activities need to operate within planetary boundaries.

Generally seen, research suggests that, on balance, integration of the Sustainable Development Goals into the business sector is growing (Dahlmann et al. 2020; Williams, Whiteman and Parker 2019). Since 2017, the share of companies publishing sustainability reports in line with Goal 12.6. has nearly doubled (United Nations 2020), and over 85 per cent of the world’s 500 largest corporations include the Sustainable Development Goals in their annual reporting (United Nations Global Sustainability Index Institute 2019). Goal 13 was found to be the most frequently referenced goal (88 per cent), whereas Goal 15 (51 per cent) and Goal 14 (32 per cent) lag behind (World Business Council for Sustainable Development 2019), drawing a less optimistic picture of corporate engagement in pursuing planetary integrity. Scholars therefore stress the urgent need to transform traditional business models to better protect the global environment (Coscieme et al. 2019; De Schutter et al. 2019; Scheyvens, Banks and Hughes 2016; Shrivastava 2018).

Despite a growing integration of the Sustainable Development Goals into sustainability performance assessments of corporations, studies have criticized the insufficient contribution of the goals to ‘helping companies diagnose the proximate and systemic causes of poor performance’ (Fleming et al. 2017: 98). Of even greater concern is the widespread perception that businesses engage in so-called ‘SDG washing’, that is, using the Sustainable Development Goals to increase social legitimacy while concealing only modest sustainability efforts or malpractices (Dahlmann et al. 2020). Moreover, one survey indicates that international businesses rather engage with the Sustainable Development Goals internally (along their value chain), than externally (in collaboration with partners), and they are keener to address targets under the Sustainable Development Goals that mitigate negative externalities than those directed at generating positive externalities (van Zanten and van Tulder 2018). Specifically, high engagement was found with Sustainable Development Goals 5, 8, 12, 13, 16 and 17. Slight or no contributions, in turn, were found regarding Goals 11, 14 and 15. While this points to a worrying trend in corporations’ inability to address social, environmental and economic targets collectively, it also suggests that corporations only marginally engage with those Sustainable Development Goals that relate more explicitly to planetary integrity (such as Goals 14 and 15). On a more positive note, some studies indicate that non-state transnational sustainability governance can also complement state efforts; but this is also dependent on an internationally agreed framework and regulation of, and cooperation with, state actors to increase accountability and long-term sustainability effects (Chan et al. 2019; Kumi, Yeboah and Kumi 2020). In that sense, the presence of Sustainable Development Goals as a common denominator or normative guiding framework might contribute to providing a shared vision for corporations, enabling a collective drive towards integrated sustainability governance that respects planetary integrity.

In sum, our analysis suggests that *the extent to which corporations rely on the Sustainable Development Goals to bolster their efforts in pursuit of planetary integrity remains a mixed bag*. Overall, corporations seem to be more receptive towards embracing the Sustainable Development Goals generally, which is positive. But the environment-focused Sustainable Development Goals apparently play only a peripheral role in steering corporations towards the integration of planetary integrity concerns into their activities. This is worrisome considering, on the one hand, that corporations remain major drivers of ecological destruction, and on the other hand, that corporations can also be hugely influential in initiating and driving transformative change in pursuit of planetary integrity (e.g., Wright and Nyberg 2015). More fully embracing the environmental dimensions of the Sustainable Development Goals could offer corporations a valuable opportunity to drive such positive transformations.

## Conclusions and Future Directions

The Sustainable Development Goals are clear on the need to protect the planet. However, the extent to which the goals could mainstream planetary integrity into laws, policies and practices, and to steer towards planetary integrity, remain debatable. Some studies argue that the Sustainable Development Goals are incapable, or only marginally able, of doing so; yet other studies contend that the goals may still help mobilize resources and galvanize action in pursuit of planetary integrity.

Based on the findings from our analyses, the balance of evidence leans towards the critics, which leads us to conclude that the Sustainable Development Goals have not (yet) become a significant transformative governance force aimed at the advancement of planetary integrity through the process of goal-setting. Therefore, *on balance, we find that the steering effects of the Sustainable Development Goals with respect to planetary integrity are rather indirect and not too significant.* At best, the Sustainable Development Goals seem to have played a role in the orchestration of disparate environmental policies and regimes, but they surely did not manage to radically change the course of global governance to advance planetary integrity. While we observe some political and institutional changes as a result of the Sustainable Development Goals, and while the goals seem to have been cited as an inspiration or motivation by many actors, numerous doubts remain: about additionality (whether changes we observed would not have materialized without the goals); about ambition (whether the goals call for something drastically new and sufficiently ambitious); about coherence (whether the goals are themselves coherent enough to be able to foster a push towards planetary integrity); and about implementation (whether the means of implementation in the goals actually have the ability to improve their steering effects).

What explains this lack of impact remains unclear; and these are all issues that require further research. Is it the design of the Sustainable Development Goals themselves? In other words, had the Sustainable Development Goals been differently designed (or agreed through a different process), would we see a more (or even less) impactful set of global goals? Here we can think of design elements such as the number of goals, the structure of the goal framework (for example, the non-hierarchical structure), the coherence between the goals, the specificity or measurability of the targets, the language used in the text, and their reliance on neoliberal economic development-oriented sustainable development as their core orientation. Furthermore, one may argue that sustainability on a planetary scale is only achievable under an overarching Planetary Integrity Goal that recognizes the biophysical limits of the planet, as we have shown above. Some scholars have also raised questions about the relationship between the nature of the negotiations of the

goals, targets and indicators and their impact, especially on mainstreaming environmental concerns (Gasper, Shah and Tankha 2019).

Yet, no matter the design of Sustainable Development Goals, they are only non-binding and aspirational. Any form of ‘governance through goals’ is inherently not an effective alternative to ‘governance through rules’ (Kanie et al. 2019), although these approaches could, and arguably should, usefully reinforce one another. Furthermore, the Sustainable Development Goals are a mere reflection of the existing normative framework of international law (Kim 2016). Any ‘governance through goals’ approach under the Sustainable Development Goals banner must be sensitive to the problem of path-dependency: Do the goals have a realistic chance to be something truly transformative if they are merely a collection of earlier commitments, reflecting already agreed language? While we remain doubtful of the transformative potential of the goals, we are hopeful that global institutions such as the High-level Political Forum can help mainstream environmental concerns of a planetary nature at global, regional, national and transnational levels, if further strengthened with the necessary resources and authority (Abbott and Bernstein 2015; Stevens and Kanie 2016).

Clearly more research is needed to understand the impact of the Sustainable Development Goals on planetary integrity and the extent to which they, and their successors, could contribute to steering human development in a way that pursues and respects planetary integrity. For one, the lack of empirical data and the concomitant critical research gap that we have identified in this chapter dealing with the actual ability of the Sustainable Development Goals to steer in relation to planetary integrity must be addressed. This could be done, for example, by documenting conditions under which the Sustainable Development Goals are operating and comparing these to identify necessary or sufficient conditions for the Sustainable Development Goals to make a positive impact. Causality is always difficult to prove between the Sustainable Development Goals and any changes we see, especially in the environmental domain. To overcome this hurdle, we need both more in-depth case studies and large-*n* quantitative data analysis, as well as medium-*n* comparative analysis in between.

Finding out how, when and why the Sustainable Development Goals could put the planet at the centre of concern will be a key challenge in the years to come. This epistemic endeavour will be rewarding for generating specific and generalizable insights on how and why global goals work or do not work. Only an advanced understanding of the mechanisms through which the Sustainable Development Goals have impacts on planetary integrity will lead to policy-relevant knowledge that could help guide a post-2030 goal-setting process, and enable actors such as states, regional organizations, institutions and corporations to decide



on whether to adopt and to pursue in a dedicated manner post-2030 global goals, and if so, in what form and through what process.

### Note

1 Search string ( ( TITLE ( “sustainable development goals” ) ) ) OR TITLE ( “sdgs” ) AND ( ( TITLE-ABS-KEY ( “environment\*” ) ) ) AND ( ( TITLE-ABS-KEY ( “governance” ) ) ) .

### References

- Abbott, K. W., & Bernstein, S. (2015). The High-level Political Forum on Sustainable Development: Orchestration by default and design. *Global Policy*, 6, 222–33.
- Adelman, S. (2018). The Sustainable Development Goals: Anthropocentrism and neoliberalism. In D. French, & L. J. Kotzé (eds.), *Sustainable Development Goals: Law, theory and implementation* (pp. 15–40). Cheltenham: Edward Elgar Publishing.
- Bekker, B., Eberhard, A., Gaunt, T., & Marquard, A. (2008). South Africa’s rapid electrification programme: Policy, institutional, planning, financing and technical innovations. *Energy Policy*, 36, 3125–37.
- Biermann, F. (2014). *Earth system governance. World politics in the Anthropocene*. Cambridge, MA: MIT Press.
- Biermann, F., & Kim, R. E. (2020a). *Architectures of earth system governance: Institutional complexity and structural transformation*. Cambridge: Cambridge University Press.
- Biermann, F., & Kim, R. E. (2020b). The boundaries of the planetary boundary framework: A critical appraisal of approaches to define a ‘safe operating space’ for humanity. *Annual Review of Environment and Resources*, 45, 497–521.
- Biermann, F., Kanie, N., & Kim, R. E. (2017). Global governance by goal-setting: The novel approach of the UN Sustainable Development Goals. *Current Opinion in Environmental Sustainability*, 26–27, 26–31.
- Brandi, C. (2015). Safeguarding the earth system as a priority for sustainable development and global ethics: The need for an earth system SDG. *Journal of Global Ethics*, 11, 32–6.
- Bridgewater, P., Kim, R. E., & Bosselmann, K. (2014). Ecological integrity: A relevant concept for international environmental law in the Anthropocene? *Yearbook of International Environmental Law*, 25, 61–78.
- Briggs, J. C. (2017). Emergence of a sixth mass extinction? *Biological Journal of the Linnean Society*, 122, 243–48.
- Burdon, P. D. (2020). Ecological law in the Anthropocene. *Transnational Legal Theory*, 11, 33–46.
- Chan, S., Boran, I., van Asselt, H., Iacobuta, G., Niles, N., Rietig, K., . . . Wambugu, G. (2019). Promises and risks of nonstate action in climate and sustainability governance. *Wiley Interdisciplinary Reviews: Climate Change*, 10, e572.
- Climate Action Tracker. (n.d.). *Countries*. Available at <https://climateactiontracker.org/countries/>. Accessed: 31 March 2021.
- Convention on Biodiversity (2020). *Zero draft of the post-2020 Global Biodiversity Framework*. CBD/WG2020/2/3.
- Cormier, B. (2016). Analyzing if and how international organizations contribute to the Sustainable Development Goals: Combining power and behavior. *Journal of Organizational Behavior*, 39, 545–58.

- Corrado, S., Rydberg, T., Oliveira, F., Cerutti, A., & Sala, S. (2020). Out of sight out of mind? A life cycle-based environmental assessment of goods traded by the European Union. *Journal of Cleaner Production*, 246, 118954.
- Coscieme, L., Sutton, P., Mortensen, L. F., Kubiszewski, I., Costanza, R., Trebeck, K., . . . Fioramonti, L. (2019). Overcoming the myths of mainstream economics to enable a new wellbeing economy. *Sustainability*, 11, 1–17.
- Costanza, R., McGlade, J., Lovins, H., & Kubiszewski, I. (2015). An overarching goal for the UN Sustainable Development Goals. *Solutions*, 5, 13–16.
- Craig, R. K., & Ruhl, J. (2020). New realities require new priorities: Rethinking Sustainable Development Goals in the Anthropocene. In J. Owley & K. Hirokawa (eds.), *Environmental law beyond 2020. University of Utah College of Law Research Paper*, No. 319. (forthcoming). Available at: <http://dx.doi.org/10.2139/ssrn.3401301>.
- Custer, S., DiLeronzo, M., Masaki, T., Sethi, T., & Harutyunyan, A. (2018). *Listening to leaders 2018: Is development cooperation tuned-in or tone-deaf?* Williamsburg, VA: AidData.
- Dahlmann, F., Stubbs, W., Raven, R., & Porto de Albuquerque, J. (2020). The ‘purpose ecosystem’: Emerging private sector actors in earth system governance. *Earth System Governance*, 4, 100053.
- De la Mothe Karoubi, E., Dushime, O., Fuller, G., Nyorekwa Twinoburyo, E., Simkolo, A., & Verburg, G. (2019). *Africa SDG Index and Dashboards Report 2019*. Kigali/New York, NY: SDG Centre for Africa and Sustainable Development Solutions Network.
- Deep Decarbonization Pathways Project. (2015). *Pathways to deep decarbonization 2015 report*. Paris: Sustainable Development Solutions Network & Institute for Sustainable Development and International Relations.
- Deprez, A., Vallejo, L., & Rankovic, A. (2019). Towards a climate change ambition that (better) integrates biodiversity and land use. *IDDRI Study*, No. 08/2019. Paris: Institute for Sustainable Development and International Relations.
- De Schutter, L., Giljum, S., Häyhä, T., Bruckner, M., Naqvi, A., Omann, I., & Stagl, S. (2019). Bioeconomy transitions through the lens of coupled social-ecological systems: A framework for place-based responsibility in the global resource system. *Sustainability*, 11, 5705.
- ECLAC [Economic Commission for Latin America and the Caribbean] (2016). *Resolutions adopted by the Economic Commission for Latin America and the Caribbean at its thirty-sixth session*. Mexico City, 23–27 May 2016. LC/G.2693. Mexico City: ECLAC.
- ECLAC [Economic Commission for Latin America and the Caribbean] (2017). *Report of the first meeting of the Forum of the Countries of Latin America and the Caribbean on Sustainable Development*. Mexico City, 26–28 April 2017. LC/FDS.1/5. Mexico City: ECLAC.
- ECLAC [Economic Commission for Latin America and the Caribbean] (2018). *Report of the second meeting of the Forum of the Countries of Latin America and the Caribbean on Sustainable Development*. Santiago, 18–20 April 2018. LC/FDS.2/7. Santiago: ECLAC.
- ECLAC [Economic Commission for Latin America and the Caribbean] (2019). *Report of the third meeting of the Forum of the Countries of Latin America and the Caribbean on Sustainable Development*. Santiago, 24–26 April 2019. LC/FDS.3/6. Santiago: ECLAC.
- Eisenmenger, N., Pichler, M., Krenmayr, N., Noll, D., Plank, B., Schalmann, E., . . . Gingrich, S. (2020). The Sustainable Development Goals prioritize economic growth over sustainable resource use: A critical reflection on the SDGs from a socio-ecological perspective. *Sustainability Science*, 15, 1101–10.

- El Bilali, H., Henri Nestor Bassole, I., Dambo, L., & Berjan, S. (2020). Climate change and food security. *Agriculture and Forestry*, 66, 197–210.
- Elder, M., & Olsen, S. H. (2019). The design of environmental priorities in the SDGs. *Global Policy*, 10, 70–82.
- Elder, M., Bengtsson, M., & Akenji, L. (2016). An optimistic analysis of the means of implementation for Sustainable Development Goals: Thinking about goals as means. *Sustainability*, 8, 2–24.
- European Commission. (2016). *Next steps for a sustainable European future: European action for sustainability*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2016) 739 final. Strasbourg: European Commission.
- European Commission. (2019). *Reflection paper: A sustainable Europe by 2030*. COM(2019)22. Brussels: European Commission.
- European Commission. (2020a). *A new industrial strategy for Europe*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2020) 102 final. Brussels: European Commission.
- European Commission. (2020b). *EU Biodiversity Strategy for 2030: Bring nature back into our lives*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2020) 380 final. Brussels: European Commission.
- European Commission. (2020c). *International cooperation and development: The Sustainable Development Goals*. Available at [https://ec.europa.eu/international-partnerships/sustainable-development-goals\\_en](https://ec.europa.eu/international-partnerships/sustainable-development-goals_en). Accessed: 31 March 2021.
- European Environment Agency. (2020). Is Europe living within the limits of our planet? An assessment of Europe's environmental footprints in relation to planetary boundaries. *EEA Report*, No. 01/2020. Luxembourg: Publications Office of the European Union.
- European Parliament. (2013a). European Parliament resolution of 13 June 2013 on the Millennium Development Goals – defining the post-2015 framework (2012/2289 (INI). Available at [www.europarl.europa.eu/doceo/document/TA-7-2013-0283\\_EN.html](http://www.europarl.europa.eu/doceo/document/TA-7-2013-0283_EN.html). Accessed: 6 January 2022.
- European Parliament. (2013b). Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet'. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013D1386>. Accessed: 5 January 2022.
- Fernández, E. F., & Malwé, C. (2019). The emergence of the 'planetary boundaries' concept in international environmental law: A proposal for a framework convention. *Review of European, Comparative & International Environmental Law*, 28, 48–56.
- Fleming, A., Wise, R. M., Hansen, H., & Sams, L. (2017). The Sustainable Development Goals: A case study. *Marine Policy*, 86, 94–103.
- Fletcher, R., & Rammelt, C. (2017). Decoupling: A key fantasy of the post-2015 Sustainable Development Agenda. *Globalizations*, 14, 450–67.
- Forestier, O., & Kim, R. E. (2020). Cherry-picking the Sustainable Development Goals: Goal prioritization by national governments and implications for global governance. *Sustainable Development*, 28, 1269–78.
- French, D., & Kotzé, L. J. (eds.) (2018). *Sustainable Development Goals: Law, theory and implementation*. Cheltenham: Edward Elgar Publishing.
- French, D., & Kotzé, L. J. (eds.) (2021). *Research handbook on law, governance and planetary boundaries*. Cheltenham: Edward Elgar Publishing.

- Fuso Nerini, F., Tomei, J., To, L. S., Bisaga, I., Parikh, P., Black, M., ... Mulugetta, Y. (2017). Mapping synergies and trade-offs between energy and the Sustainable Development Goals. *Nature Energy*, 3, 10–15.
- Gaspar, D., Shah, A., & Tankha, S. (2019). The framing of sustainable consumption and production in SDG 12. *Global Policy*, 10, 83–95.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M. C., Shyamsundar, P., ... Noble, I. (2013). Sustainable Development Goals for people and planet. *Nature*, 495, 305–7.
- Government of South Africa. (2019). *2019 South Africa Voluntary National Review. Empowering people and ensuring inclusiveness and equity*. Available at [https://sustainabledevelopment.un.org/content/documents/23402RSA\\_Voluntary\\_National\\_Review\\_Report\\_The\\_Final\\_24\\_July\\_2019.pdf](https://sustainabledevelopment.un.org/content/documents/23402RSA_Voluntary_National_Review_Report_The_Final_24_July_2019.pdf). Accessed: 6 April 2021.
- Haywood, L. K., Funke, N., Audouin, M., Musvoto, C., & Nahman, A. (2019). The Sustainable Development Goals in South Africa: Investigating the need for multi-stakeholder partnerships. *Development Southern Africa*, 36, 555–69.
- Hickel, J. (2019). The contradiction of the Sustainable Development Goals: Growth versus ecology on a finite planet. *Sustainable Development*, 27, 873–84.
- Hickel, J. (2021). *Less is more: How degrowth will save the world*. London: Windmill Books.
- Hirons, M. (2020). How the Sustainable Development Goals risk undermining efforts to address environmental and social issues in the small-scale mining sector. *Environmental Science & Policy*, 114, 321–8.
- Horn, P., & Grugel, J. (2018). The SDGs in middle-income countries: Setting or serving domestic development agendas? Evidence from Ecuador. *World Development*, 109, 73–84.
- Hurley, I., & Tittensor, D. P. (2020). The uptake of the biosphere integrity planetary boundary concept into national and international environmental policy. *Global Ecology and Conservation*, 22, e01029.
- ILO [International Labour Organization] (2015). *Guidelines for a just transition towards environmentally sustainable economies and societies for all*. Geneva: International Labour Office.
- ILO [International Labour Organization] (2016). *ILO Implementation Plan: 2030 Agenda for Sustainable Development*. Geneva: International Labour Office.
- ILO [International Labour Organization] (2019). *SDG note: Green jobs*. Available at [www.ilo.org/wcmsp5/groups/public/-dgreports/-integration/documents/genericdocument/wcms\\_560709.pdf](http://www.ilo.org/wcmsp5/groups/public/-dgreports/-integration/documents/genericdocument/wcms_560709.pdf). Accessed: 31 March 2021.
- IMF [International Monetary Fund] (2021). *Factsheet: IMF and the Sustainable Development Goals*. Available at [www.imf.org/en/About/Factsheets/Sheets/2016/08/01/16/46/Sustainable-Development-Goals](http://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/16/46/Sustainable-Development-Goals). Accessed: 31 March 2021.
- IPBES [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services] (2019). *Summary for policymakers of the global assessment report on biodiversity and ecosystem services*. Bonn: IPBES Secretariat.
- IPCC [Intergovernmental Panel on Climate Change] (2018). *Global warming of 1.5°C. An IPCC Special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. V. Masson-Delmotte et al. (eds.). Geneva: World Meteorological Organisation.
- Islam, M. R., & Khan, N. A. (2018). Threats, vulnerability, resilience and displacement among the climate change and natural disaster-affected people in South-East Asia: An overview. *Journal of the Asia Pacific Economy*, 23, 297–323.

- Ivanova, M. (2021). *The untold story of the world's leading environmental institution: UNEP at fifty*. Cambridge, MA: MIT Press.
- Johnsson, F., Karlsson, I., Rootzén, J., Ahlbäck, A., & Gustavsson, M. (2020). The framing of a Sustainable Development Goals assessment in decarbonizing the construction industry: Avoiding 'greenwashing'. *Renewable and Sustainable Energy Reviews*, 131, 110029.
- Kaniaru, D.W. (2014). United Nations Environment Assembly: Some highlights and challenges. *Environmental Policy and Law*, 44, 342–8.
- Kanie, N., & Biermann, F. (eds.) (2017). *Governing through goals: Sustainable Development Goals as governance innovation*. Cambridge, MA: MIT Press.
- Kanie, N., Griggs, D., Young, O., Waddell, S., Shrivastava, P., Haas, P. M., . . . Körösi, C. (2019). Rules to goals: Emergence of new governance strategies for sustainable development. *Sustainability Science*, 14, 1745–9.
- Kashwan, P. (2017). Inequality, democracy, and the environment: A cross-national analysis. *Ecological Economics*, 131, 139–51.
- Kashwan, P., MacLean, L. M., & García-López, G. A. (2019). Rethinking power and institutions in the shadows of neoliberalism (An introduction to a special issue of *World Development*). *World Development*, 120, 133–46.
- Kashwan, P., Biermann, F., Gupta, A., & Okereke, C. (2020). Planetary justice: Prioritizing the poor in earth system governance. *Earth System Governance*, 6, 100075.
- Kim, R. E. (2016). The nexus between international law and the Sustainable Development Goals. *Review of European, Comparative & International Environmental Law*, 25, 15–26.
- Kim, R. E., & Bosselmann, K. (2015). Operationalizing sustainable development: Ecological integrity as a *Grundnorm* of international law. *Review of European, Comparative & International Environmental Law*, 24, 194–208.
- Kinniburgh, F., & Rankovic, A. (2019). *Mobilising the chemical conventions to protect biodiversity: An example with pesticides and the Stockholm and Rotterdam Conventions*. Paris: Institute for Sustainable Development and International Relations.
- Kopnina, H. (2018). Teaching Sustainable Development Goals in the Netherlands: A critical approach. *Environmental Education Research*, 24, 1268–83.
- Körösi, C. (2015). Negotiating a common future: What we have learned from the SDGs. In A. Pachauri, T. Paugam, & L. Tubiana (eds.), *A planet for life: Building the future we want* (pp. 74–8). Delhi: TERI.
- Kotzé, L. J. (2018). The Sustainable Development Goals: An existential critique alongside three new-millennial analytical paradigms. In D. French, & L. J. Kotzé (eds.), *Sustainable Development Goals: Law, theory and implementation* (pp. 41–65). Cheltenham: Edward Elgar Publishing.
- Kotzé, L. J. (2020). Earth system law for the Anthropocene: Rethinking environmental law alongside the earth system metaphor. *Transnational Legal Theory*, 11, 75–104.
- Kotzé, L. J., & French, D. (2018). The Anthropocentric ontology of international environmental law and the Sustainable Development Goals: Towards an ecocentric rule of law in the Anthropocene. *Global Journal of Comparative Law*, 7, 5–36.
- Kumi, E., Yeboah, T., & Kumi, Y. A. (2020). Private sector participation in advancing the Sustainable Development Goals (SDGs) in Ghana: Experiences from the mining and telecommunications sectors. *The Extractive Industries and Society*, 7, 181–90.
- Le Blanc, D. (2015). Towards integration at last? The Sustainable Development Goals as a network of targets. *Sustainable Development*, 23, 176–87.
- Lenton, T. M., Rockström, J., Gaffney, O., Rahmstorf, S., Richardson, K., Steffen, W., & Schellnhuber, H. J. (2019). Climate tipping points: Too risky to bet against. *Nature*, 575, 592–5.

- Liu, Q.-Q., Yu, M., & Wang, X.-L. (2015). Poverty reduction within the framework of SDGs and post-2015 development agenda. *Advances in Climate Change Research*, 6, 67–73.
- Liverman, D. M. (2018). Geographic perspectives on development goals: Constructive engagements and critical perspectives on the MDGs and the SDGs. *Dialogues in Human Geography*, 8, 168–85.
- Lucci, P., Surasky, J., & Gamba, C. (2015). *Getting ready for SDG implementation in Latin America: The example of Colombia*. Bogotá/London, UK: CEPEI and Overseas Development Institute.
- Lydgate, E. B. (2012). Sustainable development in the WTO: From mutual supportiveness to balancing. *World Trade Review*, 11, 621–39.
- Mahoney, J., & Thelen, K. (2009). *Explaining institutional change: Ambiguity, agency, and power*. Cambridge: Cambridge University Press.
- Mansourian, S. (2018). In the eye of the beholder: Reconciling interpretations of forest landscape restoration. *Land Degradation & Development*, 29, 2888–98.
- Montesano, F. S., Biermann, F., Kalfagianni, A. & Vijge, M. (2021). Can the Sustainable Development Goals green international organisations? Sustainability integration in the International Labour Organisation. *Journal of Environmental Policy and Planning* Online First. Available at: <https://doi.org/10.1080/1523908X.2021.1976123>.
- Mugambiwa, S. S., & Tirivangasi, H. M. (2017). Climate change: A threat towards achieving ‘Sustainable Development Goal number two’ (end hunger, achieve food security and improved nutrition and promote sustainable agriculture) in South Africa. *Jàmbá: Journal of Disaster Risk Studies*, 9 (1), 350.
- National Planning Commission. (2012). *National Development Plan 2030: Our future: Make it work*. Presidency of the Republic of South Africa.
- Nicolai, S., Bhatkal, T., Hoy, C., & Aedv, T. (2016). *Projecting progress: The SDGs in Latin America and the Caribbean*. London: Overseas Development Institute.
- Organization of American States. (2017a). *Actas y Documentos. Volumen I*. Santo Domingo, Dominican Republic. 17 January 2017. OEA/Ser.P/XLVI-O.2. Santo Domingo: OAS.
- Organization of American States. (2017b). *Declaración y Resoluciones Aprobadas por la Asamblea General de la OEA*. Cancún, Mexico. 22 September 2017. AG/doc.5606/17 rev. 1. Cancún: OAS.
- OECD [Organisation for Economic Co-operation and Development], & UNEP [United Nations Development Programme] (2020). *Aligning private finance with the Sustainable Development Goals: Report for the G7*. Paris: OECD & UNEP.
- Páez Vieyra, J. C. (2019). Una agenda común sobre desarrollo sostenible en América Latina. *InterNaciones*, 18, 121–43.
- Parnell, S. (2018). Globalization and sustainable development: At the urban crossroad. *The European Journal of Development Research*, 30, 169–71.
- Perrez, F. X. (2020). The role of the United Nations Environment Assembly in emerging issues of international environmental law. *Sustainability*, 12, 1–20.
- Racioppi, F., Martuzzi, M., Matic, S., Braubach, M., Morris, G., Krzyżanowski, M., . . . Adamonytė, D. (2020). Reaching the Sustainable Development Goals through healthy environments: Are we on track? *European Journal of Public Health*, 30, i14–i18.
- Randers, J., Rockström, J., Stoknes, P.-E., Goluke, U., Collste, D., Cornell, S. E., & Donges, J. (2019). Achieving the 17 Sustainable Development Goals within 9 planetary boundaries. *Global Sustainability*, 2, e24.
- Rantala, S., Iacobuta, G., Minestrini, S., & Tribukait, J. (2020). Gaps and opportunities for synergies in international environmental law on climate and biodiversity to promote

- the Sustainable Development Goal. In T. Honkonen, & S. Romppanen (eds.), *2019 International environmental law-making and diplomacy review* (pp. 58–99). Joensuu: University of Eastern Finland.
- Ray, R., & Gallagher, K. (2016). China in Latin America: Environment and development dimensions. *Revista Tempo do Mundo*, 2, 131–54.
- Reyer, C. P. O., Adams, S., Albrecht, T., Baarsch, F., Boit, A., Canales Trujillo, N., . . . Thonicke, K. (2015). Climate change impacts in Latin America and the Caribbean and their implications for development. *Regional Environmental Change*, 17, 1601–21.
- Riaño, M., Boutaybi, J., Barchiche, D., & Treyer, S. (2020). *Scaling up public development banks' transformative alignment with the 2030 Agenda for Sustainable Development*. Paris: Institute for Sustainable Development and International Relations.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E. F., . . . Foley, J. A. (2009). A safe operating space for humanity. *Nature*, 461, 472–5.
- Santika, W. G., Anisuzzaman, M., Bahri, P. A., Shafiullah, G. M., Rupf, G. V., & Urmee, T. (2019). From goals to joules: A quantitative approach of interlinkages between energy and the Sustainable Development Goals. *Energy Research & Social Science*, 50, 201–14.
- Sanyé-Mengual, E., Secchi, M., Corrado, S., Beylot, A., & Sala, S. (2019). Assessing the decoupling of economic growth from environmental impacts in the European Union: A consumption-based approach. *Journal of Cleaner Production*, 236, 117535.
- Scheyvens, R., Banks, G., & Hughes, E. (2016). The private sector and the SDGs: The need to move beyond 'business as usual'. *Sustainable Development*, 24, 371–82.
- Sénit, C.-A. (2020). Transforming our world? Discursive representation in the negotiations on the Sustainable Development Goals. *International Environmental Agreements: Politics, Law and Economics*, 20, 411–29.
- Sexsmith, K., & McMichael, P. (2015). Formulating the SDGs: Reproducing or reimagining state-centered development? *Globalizations*, 12, 581–96.
- Shrivastava, P. (2018). Business not-as-usual to achieve SDGs under climate change. In J. McIntyre, S. Ivanaj, & V. Ivanaj (eds.), *CSR and climate change implications for multinational enterprises* (pp. 21–36). Cheltenham: Edward Elgar Publishing.
- Silva, E. (2012). Environment and sustainable development. In P. Kingstone, & D. Yashar (eds.), *Routledge handbook of Latin American politics* (pp. 181–99). Abingdon: Routledge.
- Smith, P., Adams, J., Beerling, D. J., Beringer, T., Calvin, K. V., Fuss, S., . . . Keesstra, S. (2019). Land-management options for greenhouse gas removal and their impacts on ecosystem services and the Sustainable Development Goals. *Annual Review of Environment and Resources*, 44, 255–86.
- Statistics South Africa. (2019). *Sustainable Development Goals (SDGs): Country report 2019 – South Africa*. Pretoria: Statistics South Africa.
- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., . . . Sorlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347, 1259855.
- Stengers, I. (2015). *In catastrophic times: Resisting the coming barbarism*. London: Open Humanities Press.
- Stevens, C., & Kanie, N. (2016). The transformative potential of the Sustainable Development Goals (SDGs). *International Environmental Agreements: Politics, Law and Economics*, 16, 393–6.
- Sullivan, K., Thomas, S., & Rosano, M. (2018). Using industrial ecology and strategic management concepts to pursue the Sustainable Development Goals. *Journal of Cleaner Production*, 174, 237–46.

- Underdal, A., & Kim, R. E. (2017). The Sustainable Development Goals and multilateral agreements. In N. Kanie, & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 241–58). Cambridge, MA: MIT Press.
- UNEA [United Nations Environment Assembly] (2017). *Managing soil pollution to achieve sustainable development*. Resolution 3/6.
- UNEA [United Nations Environment Assembly] (2018). *Ministerial Declaration of the United Nations Environment Assembly at its third session: Towards a pollution-free planet*. UNEP/EA.3/HLS.1.
- UNEP [United Nations Environment Programme] (2016). *Final report XX Meeting of the Forum of Ministers of Environment of Latin America and the Caribbean Ministerial Segment*. Cartagena: United Nations.
- UNEP [United Nations Environment Programme] (2017). *GEO-6 regional assessment for Latin America and the Caribbean*. Nairobi: UNEP.
- UNEP [United Nations Environment Programme] (2018). *Report XXI Meeting of the Forum of Ministers of Environment of Latin America and the Caribbean Ministerial Segment*. Buenos Aires: UNEP.
- UNEP [United Nations Environment Programme] & Centro de Pensamiento Estratégico Internacional. (2018). *El Enfoque Integrado para el Desarrollo Sostenible y la Dimensión Ambiental en los Informes Nacionales Voluntarios sobre la implementación de la Agenda 2030 presentados por países de América Latina y el Caribe (2016–2017)*. Ciudad de Panamá: UNEP.
- UNEP [United Nations Environment Programme] & Centro de Pensamiento Estratégico Internacional. (2020). *La Dimensión Ambiental de la Gobernanza de la Agenda 2030 en América Latina y el Caribe*. Ciudad de Panamá: UNEP.
- UNEP [United Nations Environment Programme] & World Conservation Monitoring Centre. (2016). *El estado de la biodiversidad en América Latina y el Caribe*. Cambridge: UNEP–WCMC.
- UNFCCC [United Nations Framework Convention on Climate Change] (2010). *The Cancun Agreements: Outcome of the work of the ad hoc working group on long-term cooperative action under the convention*. 1.CP. 16.
- UNGA [United Nations General Assembly] (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1.
- United Nations. (2020). *The Sustainable Development Goals report 2020*. New York: United Nations.
- United Nations Global Compact. (2020). *Uniting business for a better world*. Available at <https://unglobalcompact.org/take-action/20th-anniversary-campaign>. Accessed: 31 March 2021.
- United Nations Global Sustainability Index Institute. (2019). *SDG commitment report, 2019 edition*. Wintney/Vienna: UN Global Sustainability Index Institute Foundation.
- United States Council for International Business. (2020). *Businesses for 2030*. Available at [www.businessfor2030.org](http://www.businessfor2030.org). Accessed: 31 March 2021.
- Van Norren, D. E. (2020). The Sustainable Development Goals viewed through gross national happiness, Ubuntu, and *buen vivir*. *International Environmental Agreements: Politics, Law and Economics*, 20, 431–58.
- Van Zanten, J. A., & van Tulder, R. (2018). Multinational enterprises and the Sustainable Development Goals: An institutional approach to corporate engagement. *Journal of International Business Policy*, 1, 208–33.
- Vasseur, L., Horning, D., Thornbush, M., Cohen-Shacham, E., Andrade, A., Barrow, E., Edwards, S. R., Wit, P., & Jones, M. (2017). Complex problems and unchallenged



- solutions: Bringing ecosystem governance to the forefront of the UN Sustainable Development Goals. *Ambio*, 46, 731–42.
- Westra, L. (2005). Ecological integrity. In C. Mitcham (ed.), *Encyclopedia of science, technology, and ethics*. Detroit: Thomson Gale.
- Westra, L., Bosselmann, K., & Gwiazdon, K. (eds.) (2016). *Ecological integrity, law and governance*. London: Routledge.
- Williams, A., Whiteman, G., & Parker, J. N. (2019). Backstage interorganizational collaboration: Corporate endorsement of the Sustainable Development Goals. *Academy of Management Discoveries*, 5, 367–95.
- World Bank. (2015). *Trajectories for Sustainable Development Goals: Framework and country applications*. Washington, DC: World Bank.
- World Business Council for Sustainable Development. (2019). *Reporting matters: Navigating the landscape: A path forward for sustainable reporting*. Geneva: World Business Council for Sustainable Development.
- World Business Council for Sustainable Development. (2020). *SDG business hub*. Available at <https://sdghub.com/>. Accessed: 31 March 2021.
- Wright, C., & Nyberg, D. 2015. *Climate change, capitalism, and corporations: Processes of creative self-destruction*. Cambridge: Cambridge University Press.
- Young, O. R., Underdal, A., Kanie, N., & Kim, R. E. (2017). Goal setting in the Anthropocene: The ultimate challenge of planetary stewardship. In N. Kanie, & F. Biermann (eds.), *Governing through goals: Sustainable Development Goals as governance innovation* (pp. 53–74). Cambridge, MA: MIT Press.
- Zeng, Y., Maxwell, S., Runting, R. K., Venter, O., Watson, J. E., & Carrasco, L. (2020). Environmental destruction not avoided with the Sustainable Development Goals. *Nature Sustainability*, 3, 795–8.

# Methods for Analysing Steering Effects of Global Goals

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The 2030 Agenda for Sustainable Development is meant to build a better and sustainable future for all, as specified in 17 Sustainable Development Goals. A critical question is whether the world is on track to achieve these goals. Given the all-encompassing character of the 2030 Agenda, developing and applying research methods that can answer this question are a tremendous challenge. In this chapter, we discuss research methods to understand and explain the steering effects of the Sustainable Development Goals.

The previous chapters synthesized scholarship on the steering effects of the Sustainable Development Goals in five key areas. As defined in [Chapter 1](#), the term ‘steering effects’ refers to the influence of the global goals on behavioural change of political, economic and societal actors. We need to know how the goals influence political discourse, institutional change and decision-making from local to global scales. Therefore, we need to include methods that aim to capture these aspects. Ultimately, however, the Sustainable Development Goals must also be evaluated in broader terms of the actual progress towards their achievement. This can be done either for the current situation and recent past or through projecting possible future impacts of current trends.

We have chosen to use a broad definition of steering effect to capture both elements: the political and societal responses to the Sustainable Development Goals and the degree to which the Sustainable Development Goals are achieved. These elements can be compared to two methods to evaluate the steering of a car: The steering effect can be measured by either changes in the steering wheel’s position or in the car’s direction. One needs both types of information: Looking at the direction of the car alone does not inform on whether it is the steering wheel that causes changes, while monitoring the steering wheel alone does not inform on whether changes are sufficient and in the right direction. Here, the steering wheel stands for the impact on institutional change, decision-making and the political discourse, and the direction of the car the overall achievement of the goals.

This chapter presents a review of the multi-faceted landscape of methods used to study the steering effects of the Sustainable Development Goals. While the other chapters in this book carried out a systematic literature review, this chapter provides an overview of the methods that are used to understand the steering effects of the goals, based on a literature review. This chapter provides a meta-level and interdisciplinary perspective on these methods. Our analysis covers methods, which we define as approaches to answer questions about the steering effects of the Sustainable Development Goals. We distinguish these approaches from tools, which build on such methods and help to bridge research, policy-making and the wider public debate. Tools often give access to data and make research on the goals more accessible. Although our analysis focuses on methods, we include tools where relevant. We include quantitative and qualitative methods and illustrate their diversity. However, we do not aim for complete coverage of all methods; we focus on those that are most widely applied.

In the next section, we first discuss the political use of science and the complex relations between science and politics. We then lay out and apply our framework for discussing the methods, organized around four dimensions relevant for understanding the methods' contribution to studying the Sustainable Development Goals: the temporal perspective, geographical scale, topical coverage, and interactions and interlinkages. Based on this, we discuss the main purposes of the methods and their strengths and limitations. We also identify knowledge gaps and suggest potential steps forward. Finally, we summarize and compare the methods before listing some observations for further research on the steering effects of the Sustainable Development Goals.

### **The Political Use of Scientific Evidence**

Emphasizing the need for evidence-based policy-making is constitutive for the 2030 Agenda and its implementation. The Millennium Development Goals were often criticized for being unmeasurable and that it was hard to know what was achieved (Feeny 2020). When the Sustainable Development Goals were developed, more attention was devoted to elaborating a system of goals, targets and indicators to measure implementation, progress and achievements. United Nations bodies such as the Open Working Group, the Inter-agency and Expert Group on SDG Indicators, and science at large contributed to this process. As such, the Sustainable Development Goals can be seen as part of a global effort to move to transparent, evidence-based policy-making.

Although considered decisive for the steering effects of the Sustainable Development Goals, the evidence-based policy-making approach has also been challenged. First, already during the negotiations leading to the adoption of the

2030 Agenda, tensions arose around whether targets were to be derived directly from science, which was perceived as more neutral, or whether they should be more norm-based. In this context, trends towards further polarization in some societies have also led to questions about the empirical evidence for sustainable development (Gottenhuber and Mulholland 2020).

Despite these challenges, the use of scientific data and evidence can serve important purposes for politics and society, such as agenda-setting, accountability, informing decision-making, and monitoring and evaluation. First, data and evidence are critical for political agenda-setting (Chimhowu, Hulme and Munro 2019). For instance, the Fridays For Future movement uses scientific evidence for pressuring governments to change their policies towards more sustainability. Second, holding governments and other actors accountable requires data on policy processes and outcomes. For instance, governments need to be transparent and inform citizens about progress in the implementation of the Sustainable Development Goals (Breuer and Leininger 2021; Laberge and Touihri 2019). Third, data and evidence are needed for informing public policy-making. Evidence can feed into theories of change of policy programmes. For example, designing social cash transfers (Goal 1) to improve food security (Goal 2) requires knowledge about the mechanisms that link such social protection measures with sustainable food provision (Burchi, Scarlato and d'Agostino 2018). Fourth, monitoring and evaluation are needed to measure progress of implementing the goals (monitoring) and to gain knowledge on the effectiveness of their implementation (evaluation) (Bowen et al. 2017).

Various methods have been applied for these types of political use of scientific evidence in the context of implementation of the global goals. On the one hand, studies that use prospective methods can bring out new issues on political agendas and inform policy-making. For instance, modelling future scenarios as reported by the Intergovernmental Panel on Climate Change and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services has had a decisive impact on shaping environmental agendas of governments and international bodies (Beck and Mahoney 2018). On the other hand, all types of political use of data and evidence require a retrospective use. For instance, societies can hold their governments accountable, and specific programmes can monitor progress by applying a set of predefined and adaptable indicators.

Although various methods are available and used to study the Sustainable Development Goals, some aspects of the 2030 Agenda require new thinking and further methodological developments. This relates to the development of a network

of measurable targets and addressing the interlinkages between goals with implications for the use of specific methods. Five implications can be highlighted:

First, a lack of data to measure all 17 Sustainable Development Goals is still a challenge (Fukuda-Parr and McNeill 2019). Some of the 169 targets and the 231 unique indicators lack a reliable data basis. This is in part owing to governments agreeing on these targets and indicators even though some were not measurable in the beginning.

Second, the Sustainable Development Goals are a system of interacting components rather than just a collection of goals, targets and indicators (Pradhan 2019), aiming to leave sectoral silos behind (Breuer, Leininger and Tosun 2019). Science needs to use and develop methods, which allow them to capture and assess integrated policy-making.

Third, there is a tension between the innovative character of the 2030 Agenda and the state of the science. Science cannot provide all information and evidence that is necessary for goal implementation (Lang et al. 2012). More transdisciplinary research, theory-building, integration of methods and generalizable evidence are needed to inform implementation of the Sustainable Development Goals.

Fourth, science–policy interfaces need to be aligned to the 2030 Agenda (Roehrl, Liu and Mukherjee 2020). For instance, despite broad acknowledgement of the need for evidence-based policy-making, science representatives are hardly present in national implementation (TWI2050 2020). This is important as only an informed society plays a significant role in holding governments accountable and setting public agendas (Fox 2015).

Fifth, evidence and data are not sufficient if they are not ‘translated’ for policy-makers. Methods, including those described in this chapter, are often complex and make results less accessible for policy-makers. Policy-makers mostly care little about the methods used as long as results are reliable and robust (di Lucia et al. 2020). This is where tools can come in to bridge between scientific methods and policy-makers.

In discussing the methods used in the literature, we will thus consider these functions of data and evidence as well as these five implications of the particularities of the Sustainable Development Goals.

### **Most Common Methods**

Various methods have been applied to assess the steering effects of the Sustainable Development Goals. They differ in the two fundamental aspects of the steering

effects that we explained above: they assess either the impact of goals on decision-making and politics or the progress towards achieving the goals. Four dimensions are especially relevant for better understanding the main methods.

First, methods differ as to their temporal perspective. They can be useful to either examine the current situation and historical progress (that is, in a retrospective or ex-post evaluation) or to develop scenarios and project trends that help understand whether the goals can be met by 2030 (that is, a prospective or ex-ante evaluation). Second, methods can be used at different scales (global, regional, national or local), often linking local developments with national or global effects. Data availability on the Sustainable Development Goals, however, differs strongly across these scales. Third, methods can vary in topical coverage. Some assess only a single goal. Others can address multiple goals and topics and even their interrelations. Fourth, the 17 goals and their 169 targets are a set of integrated objectives that interact across scales and sustainability dimensions. A robust understanding of such interactions within and across the goals is vital for shaping policies towards achieving the goals (see also [Chapter 4](#) of this book).

We now use these four dimensions to characterize and assess five widely used methods to study the Sustainable Development Goals. These methods are monitoring approaches, model-based scenario approaches, qualitative case studies, network analysis, and discourse and interpretative approaches. Regarding the two fundamental elements of steering effects, the first two approaches aim at measuring progress towards the goals, while the other three aim at studying the goals' impact on decision-making and political discourses. In the following, we discuss the main purposes, strengths and limitations of the methods, also in the light of the five specific challenges that we introduced above.

### *Monitoring Approaches*

We define monitoring approaches as methods that use data on historical and current trends to study the steering effects of the Sustainable Development Goals in terms of progress towards goal achievement. These approaches use indicators and indices to measure, monitor and rank progress in attaining some or all Sustainable Development Goals. Indicator frameworks are also used as management tools for developing implementation strategies and resource allocations for achieving the goals (Sustainable Development Solutions Network 2015). Additionally, indicators can be combined to form indices or be used as a set to understand interlinkages among Sustainable Development Goals.

To monitor progress, various indicator frameworks are used on scales from global to local. Specifically there are three indicator frameworks or databases that policy-makers, practitioners and researchers widely use (see [Table 7.1](#)):

Table 7.1. *Data availability provided by three global indicator databases in mid-August 2020*

Parameters and databases	United Nations (2020)	World Bank (2020)	Bertelsmann Stiftung & Sustainable Development Solutions Network (Sachs et al. 2020)
Countries and areas	258	215	193
Time period	1967–2019	1990–2019	2000–2020
Unique indicators	192	—	114***
Unique series codes*	432	367	—
Disaggregation level**	29	9	—
Covered targets	136	75	—

\* Series code is a technical abbreviation for indicators for the Sustainable Development Goals, further fragmented into individual indicators without duplications across targets.

\*\* Disaggregation level refers to country-disaggregated data in terms of demographic factors (such as gender, age, urban and rural population), which is required to monitor the pledge of the 2030 Agenda to ‘leave no one behind’, and in terms of non-demographic factors (such as cities, type of product, or type of sector).

\*\*\* 85 global indicators and 29 OECD-only indicators.

The first is the Official Global Indicator Framework for Sustainable Development Goals of the United Nations, which defines 231 indicators that cover the multidimensional aspects of the 17 Sustainable Development Goals and their 169 targets (E/CN.3/2020/2). Based on this indicator framework, the United Nations offers historical and current data on the Sustainable Development Goals, mostly based on reports from countries or international organizations (United Nations 2020). It also provides disaggregated data, for example on gender, age group, rural–urban, cities, sectors or products, to monitor the key principle of the 2030 Agenda to ‘leave no one behind’.

For the second set, the World Bank has extracted indicators from the World Development Indicators and reorganized them according to the Sustainable Development Goals and targets (World Bank 2020). These indicators help monitor the goals; however, they do not always match the United Nations’ official indicators (United Nations 2020; World Bank 2020).

A third data set is provided by the Bertelsmann Stiftung and Sustainable Development Solutions Network, which has defined a set of indicators to measure and monitor the Sustainable Development Goals. These indicators are mapped to the Sustainable Development Goals but not to their respective targets.

In addition to the global perspective, indicators are also developed to monitor and assess progress on the goals on the regional, national and local level. Government agencies have proposed indicators to monitor progress on the

Sustainable Development Goals at national and local levels based on the Global Indicator Framework (e.g., National Planning Commission 2017). For instance, in support of Germany's Sustainable Development Strategy, Germany's statistical authority has launched a national open online reporting platform that presents time series and metadata in an edited, interactive and downloadable way (Destatis 2020). As another case, Nepal has integrated the Sustainable Development Goals into national development frameworks. Besides Voluntary National Reviews and roadmap reports, Nepal provides a platform for the Sustainable Development Goals with data and indicator projections until 2030 (Nepal in Data 2020). Both local and national governments are committed to reporting their progress towards the Sustainable Development Goals either locally through Voluntary Local Reviews or nationally through Voluntary National Reviews (e.g., NGO Federation of Nepal 2020). These reviews are bottom-up processes based on the participation of stakeholder groups, providing insights into policy developments to achieve the goals. Thus, Voluntary National Reviews are a vehicle to understand the steering effects of the Sustainable Development Goals. Also some civil society organizations use indicators to hold governments accountable for their goal implementation. The community of civil society 'watchdogs' that use these indicators has been growing slowly. One example is the 2030Watch project, which focuses on high-income countries (Hege and Demailly 2018). At the local level, the Sustainable Development Solutions Network offers municipal indicators covering, for instance, cities in Bolivia (Andersen et al. 2020), Europe (Lafortune et al. 2019), and the United States (Lynch, LoPresti and Fox 2019). These few examples show the diversity of indicator datasets for the Sustainable Development Goals and data development and adaption of the Global Indicator Framework at various levels.

Some stakeholders and scholars creating future scenarios have begun to develop methodologies for summarizing the complex data sets of Sustainable Development Goals indicators, for example, by condensing the Global Indicator Framework into fewer numbers (Bidarbakhtnia 2020) or by creating an Sustainable Development Goals index. Several studies have also tried to understand the interactions among goals and targets at global, regional and national scales based on such indicators and indices. These studies used statistical techniques to quantify correlations between two or more variables (Pradhan et al. 2017), to reduce complexity through factor analysis constructing composite indices of the Sustainable Development Goals (Shaker 2018), to identify inconsistencies and measure progress through Confirmatory and Explanatory Factor Analyses (Spaiser et al. 2017) or to understand relationships between goals through Granger causality, that is, a prediction-based statistical causality concept (Apergis, Jebli and Youssef 2018; Dörgö, Sebestyén and Abonyi 2018). However, the availability of data, the assumption of linearity in many techniques, and confounding variables in the bivariate analysis limit this type of



analyses (Kroll, Warchold and Pradhan 2019; Pradhan et al. 2017; Spaiser et al. 2017; Warchold, Pradhan and Kropp 2020). Finally, many examples in this section have also created tools to access information to strengthen the interface to decision-makers.

While the implementation of the Sustainable Development Goals started in 2015, data availability and quality of indicators at global, regional, national and local scales are still limited. First, we lack data for several of the 169 targets (see Table 7.1). Data coverage varies across countries and domains. Second, not all global indicators can be applied to all countries. Third, there is sometimes a mismatch between data types and scales for the same indicator (Kraak, Ricker and Engelhardt 2018). Fourth, disaggregated data often still lack consistency.

Importantly, the COVID-19 pandemic has radically altered the economic, social and environmental realities. The pandemic has negatively affected many Sustainable Development Goals, even though it might have also given a narrow window of opportunity for sustainable transformation (Pradhan et al. 2021). As a result, the basis on which the indicators for the Sustainable Development Goals were built in 2015 has shifted (Naidoo and Fisher 2020; Nature Editorial 2020). A Nature Editorial (2020) thus called for a revision of the Global Indicator Framework. In such a revision, the limits of the indicator framework should also be addressed, with a priority for transformative recovery after the pandemic.

### *Model-based Scenario Approaches*

Model-based scenario approaches are another method to study the steering effects in terms of progress towards the goals. Model-based approaches can describe the relations between societal trends and the Sustainable Development Goals. They can help understand trends retrospectively but also be used for future projections. Such projections can look at current trends and policies or what policies and measures would be needed to achieve the Sustainable Development Goals. Models may have different purposes, such as exploring different futures, supporting decision-making under uncertainty, social learning, and developing system understanding and experimentation (Kelly et al. 2013). Different types of models have been applied studying the Sustainable Development Goals, from economic models such as general equilibrium models and (macro-)econometric models to multi-regional input–output models, system dynamics models, agent-based models and integrated assessment models (Allen, Metternicht and Wiedmann 2016; Bennich, Weitz and Carlsen 2020). Many of these models can help investigate the multiple dimensions of the Sustainable Development Goals, assess the strategies to achieve multiple goals simultaneously (van Soest et al. 2019), and to explore potential future changes.

Several studies have used models to investigate sets of Sustainable Development Goals, for instance the impact of climate, biodiversity and land-use policies

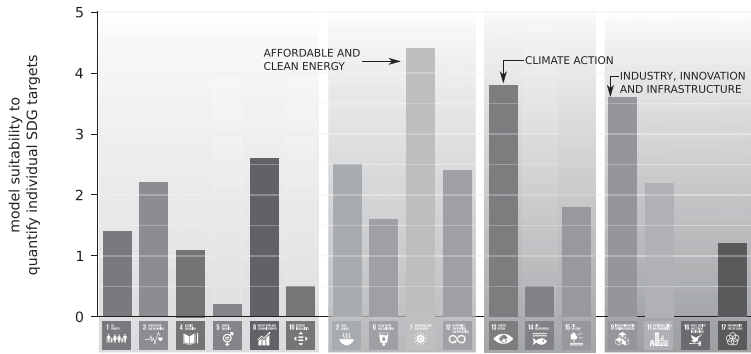
and their interrelations (e.g., Collste, Pedercini and Cornell 2017; Humpenöder et al. 2018; Obersteiner et al. 2016; Popp et al. 2011; van Vuuren et al. 2015). One example is the *Roads from Rio+20* study, which looked at a subset of the Sustainable Development Goals (PBL Netherlands Environmental Agency 2012). The study presented three pathways for achieving development and environmental goals. More recently, *The World in 2050* reports (TWI2050 2018, 2019, 2020) have used multiple models to identify ambitious scenarios and their characteristics. Another approach is to translate the Sustainable Development Goals to a target space to test how a normative multidimensional objective can be met through different pathways, for example in van Vuuren and others (2021), who use a limited set of indicators representative of the Sustainable Development Goals to make the targets more concrete and manageable.

Models can also be used for assessing how a specific policy goal may affect different Sustainable Development Goals. For example, several studies examined the impacts of increased use of biomass for modern energy and material purposes on the Sustainable Development Goals (Cavallett and Cherubini 2018; Humpenöder et al. 2018; Wicke et al. 2022). They show how synergies and trade-offs can occur and how socio-economic factors or policy measures can help minimize trade-offs and boost synergies. These studies focus more on the environmental dimension than on other sustainability dimensions. This gap is a general challenge for integrated assessment models, when economic and social dimensions are less well covered (Allen, Metternicht and Wiedmann 2016; van Soest et al. 2019; Zimm, Sperling and Busch 2018). Figure 7.1 compares the importance of linkages between goals according to experts and the degree to which they are covered in models; it shows the strong coverage of models of economic growth, climate change, energy and consumption and productions, but less so on education, gender equality, health, peace and justice and governance. Still, there is some progress on covering inequality, poverty and living standards (e.g., Kikstra et al. 2021; Rao et al. 2019).

The strengths of integrated assessment models and their scenarios are their projection ability, offering a consistent set of information between now and 2030 that allows to assess interactions between goals. However, the models themselves are complex and require many assumptions.

Many gaps also need to be closed by better covering the different dimensions of the goals in such models, such as human development and governance (O'Neill et al. 2020; van Soest et al. 2019; Zimm, Sperling and Busch 2018). Integrating approaches from the social sciences and scenario modelling is necessary to better model the Sustainable Development Goals. Also, the level of granularity in terms of space and time and socio-economic heterogeneity of population groups is often insufficient to meet real-world challenges, and models struggle with potential disruptions and non-linear changes.

**a** IAM representation of individual SDGs



**b** SDG interactions and their representation in IAMs

		HUMAN DEVELOPMENT						RESOURCE USE				EARTH SYSTEM			GOVERNANCE & INFRASTRUCTURE			
		1 No Poverty	3 Good Health and Well-being	4 Quality Education	5 Gender Equality	8 Decent Work and Economic Growth	10 Reduced Inequalities	2 Zero Hunger	6 Clean Water and Sanitation	7 Affordable and Clean Energy	12 Responsible Consumption and Production	13 Climate Action	14 Life Below Water	15 Life on Land	9 Industry, Innovation and Infrastructure	11 Sustainable Cities and Communities	16 Peace, Justice and Strong Institutions	17 Partnerships for the Goals
1	NO POVERTY	Improbable				Conceivable	Conceivable											
3	GOOD HEALTH AND WELL-BEING	Conceivable	Improbable			Conceivable												
4	QUALITY EDUCATION			Improbable		Conceivable												
5	GENDER EQUALITY				Improbable													
8	DECENT WORK AND ECONOMIC GROWTH	Conceivable			Improbable	Improbable												
10	REDUCED INEQUALITIES				Improbable	Improbable												
2	ZERO HUNGER	Conceivable				Conceivable	Improbable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable					
6	CLEAN WATER AND SANITATION					Conceivable	Improbable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable					
7	AFFORDABLE AND CLEAN ENERGY					Conceivable		Improbable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable					
12	RESPONSIBLE CONSUMPTION AND PRODUCTION					Conceivable		Improbable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable					
13	CLIMATE ACTION					Conceivable		Improbable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable					
14	LIFE BELOW WATER					Conceivable		Improbable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable					
15	LIFE ON LAND	Conceivable				Conceivable		Improbable	Conceivable	Conceivable	Conceivable	Conceivable	Conceivable					
9	INDUSTRY, INNOVATION AND INFRASTRUCTURE				Improbable	Conceivable								Improbable				
11	SUSTAINABLE CITIES AND COMMUNITIES	Conceivable				Conceivable									Improbable			
16	PEACE, JUSTICE AND STRONG INSTITUTIONS															Improbable		
17	PARTNERSHIPS FOR THE GOALS																Improbable	Improbable

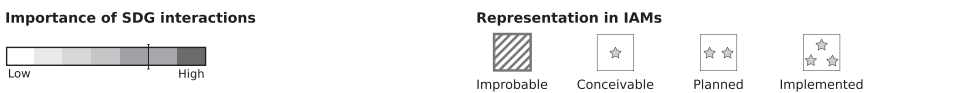


Figure 7.1 The representation of the Sustainable Development Goals by Integrated Assessment Models (van Soest et al. 2019)

Full coverage of all interactions is impossible also owing to a lack of quantitative data. Sometimes, scenario narratives can help to provide consistency between model assumptions. Researchers have tried to make their models more accessible, transparent and replicable to facilitate uptake of the scenarios runs by different disciplines, for example in the Integrated Assessment Modelling Consortium initiative IAMC 1.5°C Scenario Explorer (Huppmann et al. 2019).

Promising areas for future development are the better representation of indicators to track progress and of interactions between goals to assess trickle-down effects of policies. For the latter, closer collaboration between scientists who work with other methods would be necessary. Such collaboration would also help in assessing scenario feasibility and developing scenarios that achieve multiple goals simultaneously.

### *Qualitative Case Studies*

Qualitative case studies assess the steering effects in terms of the goals' influence on decision-making and political discourses. This approach is widely used across the social sciences. A qualitative case study has been defined as 'the intensive study of a particular case where the purpose of that study is – at least in part – to shed light on a larger class of cases' (Gerring 2007: 20). Qualitative case studies on the steering effects of the Sustainable Development Goals look in detail at governance structures and policy processes to trace political changes in a specific jurisdiction and a particular period. In other words, with qualitative case studies, we can focus on the in-depth investigation of the implications of the adoption of the goals for an actor or institution, such as a country, city, business or civil society organization.

Numerous qualitative case studies are available on steering effects of the goals on political processes at global, national and local levels. Many are incorporated in the literature reviews conducted in the earlier chapters of this book. Some case studies examine the implementation of one or several goals in a country or region. Others take a broader perspective and explore the influence of several or all 17 goals on the behaviour of actors. Typical examples of qualitative case studies include empirical investigations of how the Sustainable Development Goals lead to changes in the institutional settings and policy landscape in countries (e.g., Breuer and Oswald Spring 2020; Forestier and Kim 2020; Horn and Grugel 2018; Tosun and Leininger 2017); assessments of how the goals are locally implemented (e.g., Hickmann 2021; Krellenberg et al. 2019) or evaluations of the emergence of public and private alliances and collaborations to attain the goals (Florini and Pauli 2018).

The main purpose of these case studies is to offer a detailed description and find crucial patterns of the case, using a particular analytical lens and theoretical

concept. Scholars building on the qualitative case study method usually conduct content analyses of primary and secondary sources, undertake interviews or surveys, and sometimes engage in participatory observation such as at negotiations or in government agencies. By comparing cases, scholars zoom in on possible explanatory variables for implementing the Sustainable Development Goals, such as political leadership, congruence of stakeholder interests or pressure from civil society. In this way, scholars try to draw broader conclusions beyond the cases to find general enabling and constraining conditions for implementing the goals.

The case study method has several strengths. First, it is a good method to critically reflect and evaluate conceptual approaches (van Evera 1997: 55–67), which contributes to the broader theoretical debate on the effectiveness of global goal-setting (Kanie and Biermann 2017). Second, the case study method allows researchers to emphasize ‘substantively important cases’ (Mahoney and Goertz 2006: 242). While in quantitative studies, each case is equally important, researchers who use a case study approach often compare cases with diverse performance towards the Sustainable Development Goals. In this way, scholars can carve out key factors for the success or failure of governance interventions. Such selection strategies are based on prior knowledge about the relevant actors and institutions that deal with the Sustainable Development Goals. Third, a qualitative case study can also address broad research questions (Creswell 2009: 141). Compared to other methods that concentrate on specific issues and questions, qualitative case studies often start with broad questions about the wider impact of the goals. In addition, qualitative case studies look at the interlinkages of the goals and targets. A growing literature on nexus governance explores the overlap of institutions in interrelated policy domains. Scholars in this case use the Sustainable Development Goals as a point of reference and evaluate to what extent the integration of institutional responses leads to goal achievement (Hülsmann and Ardakanian 2018; Schwindenhammer and Gonglach 2021; van Zanten and van Tulder 2020).

However, the case study method also has limitations. One problem is internal validity. Case study researchers exploring the steering effects of the Sustainable Development Goals cannot easily control the effect of alternative factors. For example, if a country has made progress on sustainability, this progress can either be owing to the adoption of the Sustainable Development Goals or to other developments, such as economic growth or broadening of social welfare. Scholars building on the case study method must try to control other factors and conditions to counter critiques that their findings are indeterminate (Collier, Seawright and Munck 2010: 47). A second problem of the case study method is external validity. Qualitative scholars analyse either a single or a few cases of the steering effects of the Sustainable Development Goals. Hence, to arrive at general claims that can be

applied to other countries, cities or the corporate sector and civil society, qualitative case study researchers must generalize to a larger group of cases, which brings the danger that findings from one case do not apply to others (Lieberson 1991; Munck 2005).

Many scholars use the case study method to analyse the steering effects of Sustainable Development Goals. Qualitative case studies allow for an in-depth examination of the changes generated by the goals on specific institutions, policies, political programmes or implementation processes. The strength of the case study method is that it helps to evaluate theoretical approaches, focus on detailed empirical phenomena, and address broader research questions. However, internal and external validity are two shortcomings of this method. Researchers must thus apply the case study method with great care to minimize these limitations and maximize the strengths of this research. When acknowledging such limitations and strengths, qualitative case studies can produce in-depth empirical knowledge on the steering effects of goals on local or global policy-making, helping to identify enabling and constraining factors for the implementation of the goals.

### *Network Analysis*

Network analysis is a method to assess the steering effects in terms of the goals' influence on decision-making and political courses. Network analysis studies relations between entities. These entities are conceptualized as nodes of a network, and the relationships between them as 'ties' or 'edges'. The relational pattern arising from these nodes and ties then forms the network. In principle, nodes and ties can be anything: the researcher defines what is of interest and, by extension, what the network is (Borgatti and Halgin 2011).

The main purpose of network analysis is to characterize networks as a whole or show the position of specific nodes in a network. Such analysis is valuable on its own and can be useful to find the most central actors in a field, for example in the international health aid community (Coscia et al. 2018). In addition, these characteristics of networks and nodes may serve as independent or dependent variables for further analysis (Borgatti and Halgin 2011). For example, one can study whether human rights organizations that take up a central position in their network have a higher advocacy output (Murdie 2014); or how different network structures relate to coordination in agricultural development policy networks (Rudnick et al. 2019).

Network analysis is applied in research on Sustainable Development Goals in two main ways.

First, it is used to assess interactions among goals and targets, which is essential for goal achievement but does not measure it directly. Instead, it can itself be seen

as a steering effect of the goals that can be assessed by identifying interactions in different periods. For example, Kroll, Warchold and Pradhan (2019) highlighted successful transformations of trade-offs into synergies for some Sustainable Development Goals, which occurred between 2010 and 2016. Network analysis provides here insights into how goals and targets relate to each other and how interventions on one target can positively (synergies) or negatively (trade-offs) impact other targets. This analysis helps to find targets that are leverage points to intervene or hurdles in achieving the goals. Interactions between goals and targets have been conceptualized in different ways, including textual references (Le Blanc 2015), expert rating (Allen, Metternicht and Wiedmann 2019; Nilsson, Griggs and Visbeck 2016; Weitz et al. 2018), indicator data (Lusseau and Mancini 2019; Putra, Pradhan and Kropp 2020), indicator data combined with literature reviews (Zhou and Moinuddin 2017) and expert knowledge (Anderson et al. 2021), or bibliometric data of academic publications (Ramirez et al. 2019).

A second application of network analysis is to study the *social* networks of actors involved in the governance of the goals. To achieve the Sustainable Development Goals, a collective effort of a vast number of actors is required, including states and local governments, international organizations, non-governmental organizations, civil society and business (Kanie and Biermann 2017; UNGA 2015). All these actors must coordinate and collaborate, and these interactions build up extensive global governance networks in which decision-making takes place (Eilstrup-Sangiovanni 2016). Network analysis allows the analysis of these governance networks. For example, one can ask which actors take up the central coordinating positions in water governance networks (Angst et al. 2018); how civil society networks engage with the Southern African Development Community in regional governance (Hulse et al. 2018); whether reciprocity is an influencer of networking patterns among international development organizations (Atouba and Shumate 2010); or which international public administration has most online authority in global climate policy (Goritz et al. 2020).

The main strength of network analysis is its focus on relations. The method builds on the assumption that the nodes in a network are not independent. Instead, nodes influence and are influenced by each other, not only as defined by their direct ties but also by nodes with which they connect through other nodes (Wasserman and Faust 1994). Thus, a network can constrain or enable each node. Studying the nodes as separate units will thus neither lead to a complete understanding of their functioning, behaviour, or state nor an understanding of the entire network. In a world where global challenges and the actors dealing with them are increasingly interconnected, network analysis thus provides a valuable method to conceptualize, visualize and analyse those connected challenges and actors.

There are also difficulties. First, relational data is usually not readily available; obtaining it is often laborious, especially if one wants to assess changing networks over time. Moreover, network analysis is sensitive to missing data. If one of the critical nodes is missing, this may affect the entire network structure. Moreover, while network analysis can provide insights on the ‘bigger picture’ of relations in a system, it often falls short in providing details on the quality or strength of those relations.

Future network analysis applications for the study of the Sustainable Development Goals will most certainly involve more studies on goal interlinkages. Here, research on interlinkages at the local level will be significant, as relations between targets may differ based on localized context (Breuer, Janetschek and Malerba 2019). In addition, the study of the structure, effects and effectiveness of (global) governance networks will remain important as institutions and actors are connected across the world. An understudied area here is how the Sustainable Development Goals themselves affect these networks. Given the emphasis of the goals on collaborative efforts and increased vertical and horizontal coordination (‘breaking down silos’), an important question is whether the Sustainable Development Goals are indeed changing governance or collaboration networks in any way (Bogers et al. 2021; Vijge et al. 2020). For example, one could ask whether there is increased collaboration between public and private actors, organizations working in different areas, national and local government, or cities globally. Answering such questions is critical to determine whether and to what extent the Sustainable Development Goals change actor relations and drive new partnerships for joint goal implementation.

### *Discourse Analysis and Interpretative Approaches*

Discourse analysis and interpretative approaches address the steering effects in terms of the goals’ influence on decision-making and political courses. Discourse analysis is a method to study written, spoken or sign language to understand and unravel how ideas, concepts, opinions and norms become plausible social contexts (Cummings et al. 2018; Wodak and Meyer 2001). Discourse is understood as the ‘shared meaning of a phenomenon’ (Adger et al. 2001: 683) that results from using a collection of ideas, concepts and categories (Hajer and Versteeg 2005: 175). The literature sometimes differentiates between ‘noncritical’ and ‘critical’ discourse analysis (Wodak and Meyer 2001). While noncritical discourse analysis describes the formal characteristics of a text, critical discourse analysis seeks to analyse the ‘opaque as well as transparent structural relations of dominance, discrimination, power and control as manifested in language’ (Gee 2011; van Dijk 2001; Wodak and Meyer 2001: 2). To achieve that, critical discourse analysis looks at the



‘words-in-use’ and the ‘words-in-context’ in their broader socio-cultural practice, in addition to the discourse practice (Fairclough 1995; Fairclough and Fairclough 2012). In the following discussion, we draw specifically on critical discourse analysis, as it is the type of discourse analysis that best allows understanding progress in implementing the Sustainable Development Goals and what may be halting it.

Research employing critical discourse analysis in the context of the Sustainable Development Goals highlights that the goals are not necessarily transformative. Carant (2017), for instance, analyses the dominant and peripheral feminist discourses within the Sustainable Development Goals. She finds that some criticisms of liberal feminists (that is, feminists generally agreeing with the assumptions and solutions of liberal economic theories) concerning sexual and reproductive rights, human trafficking and a focus on women were incorporated in the Sustainable Development Goals. However, more transformative discourses of the ‘reinvention of democracy’ – that is, new ways of decision-making not limited to, or imposed by, the interests of powerful economic, patriarchal and political figures and nations – are seen as still lacking.

Similarly, Cummings and others (2018) examine the discourses of knowledge of the main policy document of the negotiations of the 2030 Agenda. They conclude that a techno–scientific–economic discourse is dominant at the level of goal implementation, thus excluding more transformational discourses. Cummings, Seferiadis and de Haan (2019) take a genealogical approach to examine the presence of four discourses about the corporate sector in key texts of the Millennium Development Goals and the Sustainable Development Goals. They find that a pro-business discourse with unconditional support for the corporate sector is dominant within both sets of goals, but especially in the Sustainable Development Goals, reflecting the role of the corporate sector in their formulation. Ala-Uddin (2019) shows that although the 2030 Agenda employs the language of global equality, justice and peace, the means of implementation and the proposed structure of global partnerships contradicts these principles. Similar observations have been made by Biermann and Kalfagianni (2020), who show that despite an overall cosmopolitan vision of justice in the 2030 Agenda, the concrete means of implementation stated there are market-liberal, thus contradicting the aspirations of ‘leaving no one behind’.

Critical discourse analysis is a method particularly useful to study processes of inclusion and exclusion, dominance and marginalization, as these are expressed through language. In the context of the Sustainable Development Goals, this type of analysis allows identifying progress in including aspects previously excluded from global development agendas, such as in the Millennium Development Goals, but also to reveal that this progress remains superficial, as the dominant

neoliberal logics prevail in the means of implementation of the Sustainable Development Goals.

There are also limitations regarding the application of this methodology, including the hermeneutic approach to text analysis, which may enter the subjectivities of the researcher into the analysis, the difficulties involved in distinguishing a discourse from what is not a discourse, as well as difficulties in showing the impact of a discourse on the objects of this discourse. For these reasons, critical discourse analysts argue that this research should be ‘intelligible in its interpretations and explanations’ (Titscher et al. 2000: 164), that the process of collecting, analysing and explaining data should be recognizable, and that findings should be accessible and readable for the social groups under investigation (van Dijk 2006). Triangulation techniques are sometimes used here to enrich trustworthiness in the intersubjective validity of data. This means to make transparent and cross-check the openness and interchange between diverse types of data, interventions by participants and researcher interventions, interpretations and explanations (Fairclough 1995; van Dijk 2006; Wodak 2007).

Future applications of critical discourse analysis for examining the steering effects of the Sustainable Development Goals are likely to expand beyond single goals and focus on their interlinkages. In addition, conflicting discourses and the actors, interests and power behind them need more attention to better understand the politics and diffusion mechanisms of the goals. Further, research that links discourse with practice is necessary to shed light on how the norms and ideas behind the goals are translated into their implementation.

### ***Other Methods and Tools***

There are many other methods in addition to the ones that we have just described; we now discuss some of these, without being able to be comprehensive.

Participatory research seeks to co-create knowledge with research participants by sharing the design of the research agenda, process and actions. Participatory research entails action in that the participants are not only engaged in the scientific inquiry but also in thinking of and implementing solutions for the problem at hand. In research on the Sustainable Development Goals, examples of the application of this method include the co-creation of pathways and knowledge for goal implementation at the local level (Lepore, Hall and Tandon 2020; Szetey et al. 2021), as well as the development of participatory methods to study the Sustainable Development Goals in academic curricula (Trott, Weinberg McMeeking 2018).

Besides the modelling approaches for projecting future developments addressed earlier, other quantitative and qualitative forecasting and foresight methods are

used. Trend analysis is one of the quantitative forecasting methods used to assess whether progress in achieving the goals is enough to meet the 2030 Agenda. Various tools such as the SDG Atlas (<https://datatopics.worldbank.org/sdgatlas/>) and SDG Dashboard (<https://dashboards.sdgindex.org/>) include results from trend analysis, highlighting that many countries are not on track in attaining the Sustainable Development Goals (Sachs et al. 2020; United Nations 2020). Qualitative foresight methods aim to anticipate multiple possible futures, to develop desired visions for sustainable futures or to define concrete steps for achieving a specific, selected envisioned future; this is often done in a participatory manner, engaging different stakeholders and working with different levels of participation (van den Ende et al. 2021).

Another example is computational text analysis or quantitative content analysis to identify how written or spoken text relates to the Sustainable Development Goals. Analysis methods include dictionary methods (keyword searches) and machine learning algorithms to classify large sets of texts to the Sustainable Development Goals. In some cases, researchers are interested in whether the goals and their targets are mentioned in the text, such as investigating cherry-picking of the Sustainable Development Goals (Forestier and Kim 2020). It is often of interest whether and to what extent the topics embedded in the Sustainable Development Goals are addressed in large bodies of text. Recent work in this area includes classifying publications of the United Nations Department of Economic and Social Affairs to the Sustainable Development Goals (LaFleur 2019), mapping the EU Recovery Plan to the Sustainable Development Goals (Borchardt et al. 2020), identifying whether start-ups contribute to the Sustainable Development Goals (Horne et al. 2020) and assessing how the United Nations General Assembly resolutions mention the Sustainable Development Goals (Kim and LaFleur 2020).

Besides these methods for scientific research, online tools have been developed to make the study of and support of decision-making on the Sustainable Development Goals more accessible to non-scientific audiences. For example, tools such as the SDG Tracker (<https://sdg-tracker.org>), the World Bank SDG dashboard (<https://datatopics.worldbank.org/sdgs>), and the SDG dashboards of the Sustainable Development Solutions Network (<https://dashboards.sdgindex.org>) present available data on indicators in an interactive manner so that progress made on achieving the goals can be tracked openly. Additional to tracking the process, there are tools to understand goal interactions and interlinkages. For example, the SDG Synergies tool (<https://www.sdg synergies.org>) focuses on interactions and interlinkages based on expert opinions and network analysis (Nilsson, Griggs and Visbeck 2016; Weitz et al. 2018); the SDG Impact Assessment Tool (<https://sdgimpactassessmenttool.org>) elicits the knowledge of users to qualify impacts and interactions (Johnsson et al. 2020; Olfe-Kräutlein 2020). Increasingly, commercial

tools have also been developed for corporations to align their activities to achieving the Sustainable Development Goals. For example, the SDG Compass (<https://sdgcompass.org>) aims at instructing companies on, among other things, how to monitor and manage working towards achieving the Sustainable Development Goals. The Sustain2030 tool (<https://icondu.de/sustain2030/en/>) helps the private sector to make sustainable decisions in line with the Sustainable Development Goals, accounting for interlinkages and interactions. The SDG Monitor (<https://www.sdgmonitor.co/>) supports private sector activities to be paired with the Sustainable Development Goals by assessing their impact based on a sustainability index.

### Conclusions and Future Directions

The steering effects of the Sustainable Development Goals can be assessed in terms of their influence on political decision-making and discourse, on the one hand, and on the progress towards achieving the goals on the other. The usefulness of methods to study these aspects depends on the question at hand. The strength of each method varies across different dimensions, including the main focus, the temporal perspective (retrospective or prospective); geographical scale (from local to global); the coverage of topics and areas (focus on single goals or many); and interactions and interlinkages.

We summarize the main discussion and some of the main characteristics in [Table 7.2](#). Interactions and interlinkages have been studied with different methods by different disciplines and scientific communities, which indicates the diversity of perspectives that can be taken and the importance of interactions and interlinkages for achieving the Sustainable Development Goals.

As for the temporal perspective, most methods focus on retrospective analysis, with scenario-based modelling being the only method that allows assessing future scenarios and policy options and their implications for reaching the Sustainable Development Goals. While most methods could be applied from local to global scale, they are typically used on only one or two scales. For example, integrated assessment models are mainly used at the global level, and monitoring approaches at national and local levels.

Regarding coverage, some methods address all goals (for example, the SDG Index and the Global Indicator Framework for SDGs), while others are mainly used for specific groups of goals, for example in some integrated assessment models (Allen, Metternicht and Wiedmann 2016; van Soest et al. 2019), or for only one goal (e.g., Akuraju et al. 2020). Such cherry-picking of goals, however, cannot reflect the holistic and integrative nature of the 2030 Agenda. The Sustainable Development Goals are a system of interacting components, not a

Table 7.2. Overview of key methods, the type of steering effects of the Sustainable Development Goals that they address, their main purpose and the four key dimensions, illustrating their typical uses

Method	Monitoring approaches	Model-based scenario approaches	Qualitative case studies	Network analytical approaches		
				Identification of interactions	Governance networks	Discourse analysis and interpretative approaches
<b>Elements of effect<sup>a</sup></b>	Monitor progress	Monitor progress	Impact on discourse & decision-making	Not applicable <sup>d</sup>	Impact on discourse & decision-making	Impact on discourse & decision-making
<b>Purpose method</b>	Monitor progress towards goal achievement over time or compare countries	Assess implications of policies; Explore possible futures & their progress; Identify preconditions for maximising benefits and minimising burdens	Investigate steering effects on political processes, including institutional settings, policy-making and implementation; Primarily looking at how goals affect actors and institutions	Assess interactions between goals and targets	Assess social networks of actors involved in governance of sustainable development	Assess progress and barriers to implementation of the Sustainable Development Goals
<b>Temporal scale</b>	Retrospective	Mainly prospective	Retrospective	Retrospective	Retrospective	Retrospective
<b>Geographical scale<sup>b</sup></b>	Local to national resolution; comparison across countries globally	Local to global; spatially specific or administrative units such as country or world regions	Local to global	Most often, global or national	Most often, global or regional	Local to global

Table 7.2. (cont.)

Method	Monitoring approaches	Model-based scenario approaches	Qualitative case studies	Network analytical approaches		
				Identification of interactions	Governance networks	Discourse analysis and interpretative approaches
<b>Coverage<sup>c</sup></b>	Comprehensive	Multiple goals	Single goal to comprehensive	Two or more targets or goals	Single to multiple goals	Single to comprehensive
<b>Interlinkages</b>	Broad understanding of how interactions unfolded in the past	Knowledge of the impacts of future interventions across several goals	Some case studies look at interlinkages of goals and targets	Understanding of how targets or goals relate to each other and what is key for intervention	Not addressed	Not addressed in the examined literature; a potential topic of future research
<b>Illustrative example</b>	United Nations (2020), World Bank (2020), Pradhan et al. (2017)	Allen et al. (2019), van Soest et al. (2019), Collste, Pedercini and Cornell (2017)	Horn and Grugel (2018), Breuer and Oswald Spring (2020)	Lusseau and Mancini (2019), Weitz et al. (2018)	Goritz et al. (2020), Hulse et al. (2018)	Carant (2017), Cummings et al. (2019), Ala-Uddin (2019)

<sup>a</sup> We define two elements of steering effects in this chapter: first, methods that assess how the Sustainable Development Goals affect policy-making and political discourse at local to global scales, including examining the development of policy tools or assessing the degree to which people have internalized Sustainable Development Goals in their decision-making (abbreviated here as ‘impact on discourse & decision-making’), and second, progress towards the actual achievement of the Sustainable Development Goals, or the lack thereof (abbreviated here as ‘monitor progress’).

<sup>b</sup> *Local* includes not only municipality level but also companies.

<sup>c</sup> Coverage of topics and issues is classified as focus on single goals or sustainability topic being investigated; multiple goals or topics; comprehensive goal coverage or sustainability topics.

<sup>d</sup> Understanding interactions is essential for goal achievement but does not measure it directly. Instead, it can itself be considered a steering effect (see also section *Network analysis*).

collection of goals, targets and indicators (Pradhan 2019). Covering more goals is therefore important in future research.

The implementation of the Sustainable Development Goals can bring synergies as well as trade-offs. Sufficient understanding of how interactions within and across the goals unfold is crucial for achieving the goals, because synergies can leverage the achievement of the 2030 Agenda while trade-offs can make it impossible. Such trade-offs hence need to be tackled and made at least non-obstructive, so that progress on one goal or target does not hinder progress on another. Both quantitative and qualitative methods are therefore needed to understand synergies and trade-offs among goals. When empirical data are available, quantitative methods can generate evidence and understanding of goal interactions. In case of data limitation, qualitative methods can complement this.

Methods are often used in combination with others. For example, expert interviews, participatory research or surveys could offer insights into interlinkages between goals and targets, and these data could then be analysed through network analysis or applied to specify interlinkages in models. Indicators can assess progress but also to understand how interlinkages, discourse analysis and interviews can feed into qualitative case studies, and so on. This building on to each other of different methods makes the distinction between approaches sometimes hard and even arbitrary. Nevertheless, it is important to look at both elements of steering effects of the Sustainable Development Goals simultaneously.

Looking at the full set of the methods that we assessed, some overarching observations are evident that also point to directions for future research.

*No single method can give a comprehensive overview of steering effects.*

Only studies that combine methods to look at the impact on decision-making and discourse and goal achievement can provide a complete picture. Looking particularly at the two elements of steering effects identified in this chapter, various methods address only one element. However, we need a better understanding of how the influence of goals and targets on political decisions and discourses interacts with progress towards achieving the Sustainable Development Goals.

For a comprehensive overview we need to bring together the results of different methods and study the steering effects of global goals in an interdisciplinary manner. Closer cooperation within and between research communities can help close the remaining gaps. For example, while model studies can identify how much air pollutant emissions need to be reduced to meet the air quality guidelines of the World Health Organization, such studies can tell little about how these reductions can be achieved, that is, which actors need to be involved and what legislation is needed. Nor can they identify the role of the Sustainable

Development Goals. In other words, interdisciplinary cooperation and mixed methods approaches are needed. Interdisciplinary research brings together different theoretical perspectives in one study and can foster methodological innovation. Some examples already exist that employ mixed methods to understand the steering effects of the Sustainable Development Goals. For example, network analysis is often employed alongside other methods to quantify relationships between sets of indicators, including statistical techniques (Mainali et al. 2018), expert opinions (Weitz et al. 2018) or text analysis (Le Blanc 2015). Also, statistical techniques have been integrated with literature reviews and network analysis (Somanje et al. 2020) or in combination with dynamical system modelling (Spaiser et al. 2017). Finally, also integrated models have been applied in combination with different methods. Collste, Pedercini and Cornell (2017) employed qualitative causal loop diagrams as the basis for developing a systems dynamics model.

*There is a critical lack of data.*

Overall, lack of quantitative and qualitative data complicates research on the Sustainable Development Goals, especially with regard to data at local levels, data of low-income countries and data collected and reported in other languages than English. This is not surprising, as data collection is difficult and expensive even for countries with advanced statistical systems (MacFeely 2018). Notably, data are not systematically collected on policy changes related to the Sustainable Development Goals. Such data are collected only on a case-by-case basis and often in qualitative research. Such research thus remains restricted to the documents studied and to information from people that the research team had access to, which results in biases towards texts in the English language and generally the Global North. While this is problematic in any field, it is more so when researching goals that are implemented globally.

*Not all Sustainable Development Goals are covered equally in research.*

Third, methods vary in the degree to which they cover the Sustainable Development Goals. Although many methods can address multiple goals, only few can comprehensively address all 17 goals. Given the interconnected nature of goals and targets, increased goal coverage is needed to study the interactions. Qualitative methods such as case studies and discourse analysis can comprehensively address the goals. Of the quantitative methods, only studies using indicators and indices can address all goals, but they are constrained by data availability, as discussed. Other modelling approaches are suited to address multiple goals or targets but cannot cover them comprehensively. These models selectively study specific goals and targets but miss key synergies or trade-offs. However, at the



same time, adding the possibility to study more goals in modelling approaches may also not necessarily be suitable or even possible owing to increased complexity or numerical limitations.

*Interlinkages among Sustainable Development Goals must be better addressed.*

A critical aspect of the Sustainable Development Goals is their interactions. Accounting for the interactions allows identifying synergy and trade-offs. Some have tried to capture the interlinkages – for instance, in the use of models, but also monitoring approaches or more social science-based methods. However, as shown by van Soest and colleagues (2019), the coverage of linkages is still limited and primarily for specific clusters only.

In addition, there are interactions across scale: Advancing towards achievement of the Sustainable Development Goals in one locality affects the ability of impact-receiving places to meet their goals (Engström et al. 2021). Addressing spill-overs when designing sustainable development actions is imperative to connect the ‘global indivisibility’ of the agenda with local and national implementation of the Sustainable Development Goals. Recent initiatives to account for spill-overs have focused on national indexes; see SDG Index and Dashboards (Sachs et al. 2020). However, indexes and indicators do not provide guidance on the impacts of new actions. While models describe some of the relationships, model complexity, data demands and computational time, these models may not be suitable for application at the local level (Engström et al. 2019). Another challenge is to analyse which type of institutions and governance mechanisms facilitate the design and implementation of integrated goal achievement. If interlinkages between goals and targets cannot be ‘translated’ into a tangible policy process, integrated implementation will not be successful.

*Developing science-based targets.*

A critical reflection is also needed on how the Sustainable Development Goals are developed and negotiated. Compared to the Millennium Development Goals, more attention was paid to represent perspectives of stakeholders, including scientists, while setting up the Sustainable Development Goals. The set of goals, targets and indicators were negotiated in the United Nations system through an iterative process considering political preferences, science arguments and data availability. The question arises to what level these Sustainable Development Goals in the end are science-based, or whether they are purely policy targets. Global goals have the potential to steer social, environmental and economic systems towards desirable directions. Therefore, it is crucial to base these goals on science and evidence. A methodological challenge is then to develop global goals based on science-based

targets that also account for sustainable governance of global and local commons to ensure societal well-being and public and planetary health.

In conclusion, no single method can comprehensively study the steering effects of global goals. All methods have strengths and weaknesses and contribute their part to the overall assessment whether we are on track with implementing the Sustainable Development Goals. Only together can the methods yield a clearer picture of reality. To adequately assess and communicate to users whether we are on track in attaining the global goals, we need to further develop our methods but also to better promote the use of this information in the science–policy interface.

### References

- Adger, N., Benjaminsen, T. A., Brown, K., & Svarstad, H. (2001). Advancing a political ecology of global environmental discourses. *Development and Change*, 32, 681–715.
- Akuraju, V., Pradhan, P., Haase, D., Kropp, J. P., & Rybski, D. (2020). Relating SDG11 indicators and urban scaling: An exploratory study. *Sustainable Cities and Society*, 52, 101853.
- Ala-Uddin, M. (2019). Sustainable discourse: A critical analysis of the 2030 Agenda for Sustainable Development. *Asia Pacific Media Educator*, 29, 214–24.
- Allen, C., Metternicht, G., & Wiedmann, T. (2016). National pathways to the Sustainable Development Goals (SDGs): A comparative review of scenario modelling tools. *Environmental Science & Policy*, 66, 199–207.
- Allen, C., Metternicht, G., & Wiedmann, T. (2019). Prioritising SDG targets: Assessing baselines, gaps and interlinkages. *Sustainability Science*, 14, 421–38.
- Allen, C., Metternicht, G., Wiedmann, T., & Pedercini, M. (2019). Greater gains for Australia by tackling all SDGs but the last steps will be the most challenging. *Nature Sustainability*, 2, 1041–50.
- Andersen, L. E., Canelas, S., Gonzales, A., & Peñaranda, L. (2020). *Atlas municipal de los Objetivos de Desarrollo Sostenible en Bolivia 2020*. La Paz: Universidad Privada Boliviana and Sustainable Development Solutions Network Bolivia.
- Anderson, C., Denich, M., Warchold, A., Kropp, J. P., & Pradhan, P. (2021). A systems model of SDG target influence on the 2030 Agenda for Sustainable Development. *Sustainability Science*.
- Angst, M., Widmer, A., Fischer, M., & Ingold, K. (2018). Connectors and coordinators in natural resource governance. *Ecology and Society*, 23 (2), 1.
- Apergis, N., Jebli, M. B., & Youssef, S. B. (2018). Does renewable energy consumption and health expenditures decrease carbon dioxide emissions? Evidence for sub-Saharan Africa countries. *Renewable Energy*, 127, 1011–16.
- Atouba, Y., & Shumate, M. (2010). Interorganizational networking patterns among development organisations. *Journal of Communication*, 60, 293–317.
- Beck, S., & Mahoney, M. (2018). The IPCC and the new map of science and politics. *Wiley Interdisciplinary Reviews: Climate Change*, 9, e547.
- Bennich, T., Weitz, N., & Carlsen, H. (2020). Deciphering the scientific literature on SDG interactions: A review and reading guide. *Science of The Total Environment*, 728, 138405.
- Bidarbakhtnia, A. (2020). Measuring Sustainable Development Goals (SDGs): An inclusive approach. *Global Policy*, 11, 56–67.

- Biermann, F., & Kalfagianni, A. (2020). Planetary justice: A research framework. *Earth System Governance*, 6, 100049.
- Bogers, M., Biermann, F., Kalfagianni, A., Kim, R. E., Treep, J., & de Vos, M. G. (2021). Reducing fragmentation with global goals? The effects of the Sustainable Development Goals on the network of international organizations from 2012 to 2019. Unpublished manuscript. Utrecht: Utrecht University.
- Borchardt, S., Barbero-Vignola, G., Buscaglia, D., Maroni, M., & Marelli, L. (2020). *A sustainable recovery for the EU: A text mining approach to map the EU Recovery Plan to the Sustainable Development Goals*. Luxembourg: Publications Office of the European Union.
- Borgatti, S. P., & Halgin, D. S. (2011). On network theory. *Organisation Science*, 22, 1168–81.
- Bowen, K. J., Cradock-Henry, N. A., Koch, F., Patterson, J., Häyhä, T., Vogt, J., & Barbi, F. (2017). Implementing the ‘Sustainable Development Goals’: Towards addressing three key governance challenges – collective action, trade-offs, and accountability. *Current Opinion in Environmental Sustainability*, 26–27, 90–6.
- Breuer, A., & Leininger, J. (2021). Horizontal accountability for SDG implementation: A comparative cross-national analysis of emerging national accountability regimes. *Sustainability*, 13, 7002.
- Breuer, A., & Oswald Spring, U. (2020). The 2030 Agenda as agenda setting event for water governance? Evidence from the Cuautla River Basin in Morelos and Mexico. *Water*, 12, 314.
- Breuer, A., Janetschek, H., & Malerba, D. (2019). Translating sustainable development goal (SDG) interdependencies into policy advice. *Sustainability*, 11, 2092.
- Breuer, A., Leininger, J., & Tosun, J. (2019). Integrated policy-making: Choosing an institutional design for implementing the Sustainable Development Goals (SDGs). Discussion Paper, No. 14/2019. Bonn: German Development Institute.
- Burchi, F., Scarlato, M., & d’Agostino, G. (2018). Addressing food insecurity in sub-Saharan Africa: The role of cash transfers. *Poverty & Public Policy*, 10, 564–89.
- Carant, J. B. (2017). Unheard voices: A critical discourse analysis of the Millennium Development Goals’ evolution into the Sustainable Development Goals. *Third World Quarterly*, 38, 16–41.
- Cavalett, O., & Cherubini, F. (2018). Contribution of jet fuel from forest residues to multiple Sustainable Development Goals. *Nature Sustainability*, 1, 799–807.
- Chimhowu, A. O., Hulme, D., & Munro, L. T. (2019). The ‘new’ national development planning and global development goals: Processes and partnerships. *World Development*, 120, 76–89.
- Collier, D., Seawright, J., & Munck, G. L. (2010). The quest for standards: King, Keohane and Verba’s *Designing Social Inquiry*. In D. Collier & H. E. Brady (eds.), *Rethinking social inquiry: Diverse tools, shared standards* (pp. 21–50). Lanham, MD: Rowman & Littlefield.
- Collste, D., Pedercini, M., & Cornell, S. E. (2017). Policy coherence to achieve the SDGs: Using integrated simulation models to assess effective policies. *Sustainability Science*, 12, 921–31.
- Coscia, M., Hamaguchi, K., Pinglo, M. E., & Giuffrida, A. (2018). Mapping the international health aid community using web data. *EPJ Data Science*, 7, 12.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles, CA: Sage Publications.
- Cummings, S., Seferiadis, A.-A., & de Haan, L. (2019). Getting down to business? Critical discourse analysis of perspectives of the private sector in sustainable development. *Sustainable Development*, 28, 759–71.

- Cummings, S., Regeer, B., de Haan, L., Zweekhorst, M., & Bunders, J. (2018) Critical discourse analysis of perspectives on knowledge and the knowledge society within the Sustainable Development Goals. *Development Policy Review*, 36, 727–42.
- Destatis. (2020). *German National Reporting Platform on the SDG Indicators (SDG–NRP): National Data for UN-SDGs*. Available at: <http://sdg-indikatoren.de/en/>. Accessed: 14 June 2021.
- Di Lucia, L., Nilsson, L. J., Khan, J., & Slade, R. (2020). *Knowledge of Sustainable Development Goal interactions for decision making: Are current approaches fit for purpose?* Available at: <https://doi.org/10.31235/osf.io/seq8n>.
- Dörgő, G., Sebestyén, V., & Abonyi, J. (2018). Evaluating the interconnectedness of the Sustainable Development Goals based on the causality analysis of sustainability indicators. *Sustainability*, 10, 3766.
- Eilstrup-Sangiovanni, M. (2016). Global governance networks. In J. N. Victor, A. H. Montgomery, & M. Lubell (eds.), *The Oxford handbook of political networks* (pp. 659–714). Oxford: Oxford University Press.
- Engström, R. E., Destouni, G., Howells, M., Ramaswamy, V., Rogner, H., & Bazilian, M. (2019) Cross-scale water and land impacts of local climate and energy policy. A local Swedish analysis of selected SDG interactions. *Sustainability*, 11, 1847.
- Engström, R. E., Collste, D., Cornell, S. E., Johnson, F. X., Carlsen, H., Jaramillo, F., . . . Fuso-Nerini, F. (2021). Succeeding at home and abroad: Accounting for the international spillovers of cities' SDG actions. *npj Urban Sustainability*, 1, 18.
- Fairclough, I. and Fairclough, N. (2012). *Political discourse analysis: A method for advanced students*. London: Routledge.
- Fairclough, N. 1995. *Critical discourse analysis: The critical study of language*. London: Longman.
- Feeny, S. (2020). Transitioning from the MDGs to the SDGs: Lessons learnt? In S. A. Churchill (ed.), *Moving from the Millennium to the Sustainable Development Goals: Lessons and recommendations* (pp. 343–51). Singapore: Palgrave Macmillan.
- Florini, A., & Pauli, M. (2018). Collaborative governance for the Sustainable Development Goals. *Asia & the Pacific Policy Studies*, 5, 583–98.
- Forestier, O., & Kim, R. E. (2020). Cherry-picking the Sustainable Development Goals: Goal prioritisation by national governments and implications for global governance. *Sustainable Development*, 28, 1269–78.
- Fox, J. A. (2015). Social accountability: What does the evidence really say? *World Development*, 72, 346–61.
- Fukuda-Parr, S., & McNeill, D. (2019). Knowledge and politics in setting and measuring the SDGs: Introduction to special issue. *Global Policy*, 10, 5–15.
- Gee, J. P. (2011). *How to do discourse analysis: A toolkit*. New York, NY: Routledge.
- Gerring, J. (2007). *Case study research: Principles and practices*. New York, NY: Cambridge University Press.
- Goritz, A., Schuster, J., Jörgens, H., & Kolleck, N. (2020). International public administrations on Twitter: A comparison of digital authority in global climate policy. *Journal of Comparative Policy Analysis: Research and Practice*. Available at: <https://doi.org/10.1080/13876988.2020.1824548>.
- Gottenhuber, S., & Mulholland, E. (2020). Implementing the Sustainable Development Goals in times of rising right-wing populism in Europe. *Sustainability*, 12, 8465.
- Hajer, M., & Versteeg, W. (2005). A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives. *Journal of Environmental Policy & Planning*, 7, 175–84.

- Hege, E., & Demailly, D. (2018). NGO mobilisation around the SDGs. *IDDRI Study*, 01/18. Paris: Institute for Sustainable Development and International Relations.
- Hickmann, T. (2021). Locating cities and their governments in multi-level sustainability governance. *Politics and Governance*, 9, 211–20.
- Horn, P., & Grugel, J. (2018). The SDGs in middle-income countries: Setting or serving domestic development agendas? Evidence from Ecuador. *World Development*, 109, 73–84.
- Horne, J., Recker, M., Michelfelder, I., Jay, J., & Kratzer, J. (2020). Exploring entrepreneurship related to the Sustainable Development Goals – mapping new venture activities with semi-automated content analysis. *Journal of Cleaner Production*, 242, 118052.
- Hulse, M., Gürth, L., Kavsek, H., Stauber, V., Wegner, D., & Weinreich, J. (2018). Civil society engagement in regional governance: A network analysis in Southern Africa. *Discussion Paper*, No. 30/2018. Bonn: German Development Institute.
- Hülsmann, S., & Ardakanian, R. (2018). The nexus approach as tool for achieving SDGs: Trends and needs. In S. Hülsmann, & R. Ardakanian (eds.), *Managing water, soil and waste resources to achieve Sustainable Development Goals* (pp. 1–9). Cham: Springer International Publishing.
- Humpenöder, F., Popp, A., Bodirsky, B.L., Weindl, I., Biewald, A., Lotze-Campen, H., ... Müller, C. (2018). Large-scale bioenergy production: How to resolve sustainability trade-offs? *Environmental Research Letters*, 13, 024011.
- Huppmann, D., Krieger, E., Krey, V., Riahi, K., Rogelj, J., Calvin, K., ... Zhang, R. (2019). *IAMC 1.5°C Scenario Explorer and Data hosted by IIASA*. Available at: <https://doi.org/10.5281/zenodo.3363345>. Accessed: 10 June 2021.
- Johnsson, F., Karlsson, I., Rootzén, J., Ahlbäck, A., & Gustavsson, M. (2020). The framing of a sustainable development goals assessment in decarbonising the construction industry – avoiding ‘greenwashing’. *Renewable and Sustainable Energy Reviews*, 131, 110029.
- Kanie, N., & Biermann, F. (eds.) (2017). *Governing through goals: Sustainable Development Goals as governance innovation*. Cambridge, MA: The MIT Press.
- Kelly, R. A., Jakeman, A. J., Barreteau, O., Borsuk, M. E., ElSawah, S., Hamilton, S. H., ... Voinov, A. A. (2013). Selecting among five common modelling approaches for integrated environmental assessment and management. *Environmental Modelling & Software*, 47, 159–81.
- Kikstra, J. S., Mastrucci, A., Min, J., Riahi, K., & Rao, N. D. (2021). Decent living and energy needs around the world. *Environmental Research Letters*, 16, 095006.
- Kim, N., & LaFleur, M. (2020). *What does the United Nations ‘say’ about global agenda?: An exploration of trends using natural language processing for machine learning*. New York, NY: United Nations.
- Kraak, M., Ricker, B., & Engelhardt, Y. (2018). Challenges of mapping Sustainable Development Goals indicators data. *ISPRS International Journal of Geo-Information*, 7, 482.
- Krellenberg, K., Koch, F., Schubert, S., & Libbe, J. (2019). Einmal Transformation für alle, bitte! Kommunen, Stadtforschung, Forschungsförderung und die Umsetzung der SDGs. *GAIA – Ecological Perspectives for Science and Society*, 28, 337–41.
- Kroll, C., Warchold, A., & Pradhan, P. (2019). Sustainable Development Goals (SDGs): Are we successful in turning trade-offs into synergies? *Palgrave Communications*, 5, 140.
- Laberge, M., & Touihri, N. (2019). Can SDG 16 data drive national accountability? A cautiously optimistic view. *Global Policy*, 10, 153–6.

- LaFleur, M. (2019). Art is long, life is short: An SDG classification system for DESA publications. *Working Paper*, No. 159 ST/ESA/2019/DWP/159. New York, NY: United Nations Department of Economic and Social Affairs.
- Lafortune, G., Zoeteman, K., Mulder, R., Dagevos, J., & Schmidt-Traub, G. (2019). *SDG Index and Dashboards Report for European Cities. Prototype Version*. Tilburg: Sustainable Development Solutions Network and Brabant Center for Sustainable Development (TELOS).
- Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., . . . Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustainability Science*, 7, 25–43.
- Le Blanc, D. (2015). Towards integration at last? The Sustainable Development Goals as a network of targets. *Sustainable Development*, 23, 176–87.
- Lepore, W., Hall, B. L., & Tandon, R. (2020). The knowledge for change consortium: A decolonising approach to international collaboration in capacity-building in community-based participatory research. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*. Available at: <https://doi.org/10.1080/02255189.2020.1838887>.
- Lieberson, S. (1991). Small Ns and big conclusions: An examination of the reasoning in comparative studies based on a small number of cases. *Social Forces*, 70, 307–20.
- Lusseau, D., & Mancini, F. (2019). Income-based variation in Sustainable Development Goal interaction networks. *Nature Sustainability*, 2, 242–7.
- Lynch, A., LoPresti, A., & Fox, C. (2019). *The 2019 US Cities Sustainable Development Report*. New York, NY: Sustainable Development Solutions Network.
- MacFeely, S. (2018). *The 2030 Agenda: An unprecedented statistical challenge*. Berlin/ New York, NY: Friedrich-Ebert-Stiftung and Global Policy and Development.
- Mahoney, J., & Goertz, G. (2006). A tale of two cultures: Contrasting quantitative and qualitative research. *Political Analysis*, 14, 227–49.
- Mainali, B., Luukkanen, J., Silveira, S., & Kaivo-oja, J. (2018). Evaluating synergies and trade-offs among Sustainable Development Goals (SDGs): Explorative analyses of development paths in South Asia and sub-Saharan Africa. *Sustainability*, 10, 815.
- Munck, G. L. (2005). Ten fallacies about qualitative research. *Newsletter of the American Political Science Association's Organised Section on Qualitative Methods and Multi-Method Research*, 3, 2–5.
- Murdie, A. (2014). The ties that bind: A network analysis of human rights international nongovernmental organisations. *British Journal of Political Science*, 44, 1–27.
- Naidoo, R., & Fisher, B. (2020). Reset Sustainable Development Goals for a pandemic world. *Nature*, 583, 198–201.
- National Planning Commission (2017). *Nepal's Sustainable Development Goals –Baseline Report 2017*. Kathmandu: Government of Nepal–National Planning Commission.
- Nature Editorial. (2020). Time to revise the Sustainable Development Goals. *Nature*, 583, 331–2.
- Nepal in Data (2020). *Data – SDGs: Find out data on Sustainable Development Goals (SDGs) of Nepal along with targets, indicators, and data and statistics*. Available at: <https://nepalindata.com/sdg/>. Accessed: 11 June 2021.
- NGO Federation of Nepal (2020). *Nepal civil society perspectives on the 2030 Agenda for Sustainable Development: CSOs' voluntary national review 2020*. Kathmandu: NGO Federation of Nepal.
- Nilsson, M., Griggs, D., & Visbeck, M. (2016). Policy: Map the interactions between Sustainable Development Goals. *Nature*, 534, 320–2.

- Obersteiner, M., Walsh, B., Frank, S., Havlík, P., Cantele, M., Liu, J., . . . van Vuuren, D. P. (2016). Assessing the land resource–food price nexus of the Sustainable Development Goals. *Science Advances*, 2, e1501499.
- Olfe-Kräutlein, B. (2020). Advancing CCU technologies pursuant to the SDGs: A challenge for policy making. *Frontiers in Energy Research*, 8, 198.
- O’Neill, B. C., Carter, T. R., Ebi, K., Harrison, P. A., Kemp-Benedict, E., Kok, K., . . . Pichs-Madruga, R. (2020). Achievements and needs for the climate change scenario framework. *Nature Climate Change*, 10, 1074–84.
- PBL Netherlands Environmental Assessment Agency (2012), *Roads from Rio+20. Pathways to achieve global sustainability goals by 2050*. The Hague: PBL Netherlands Environmental Assessment Agency.
- Popp, A., Dietrich, J. P., Lotze-Campen, H., Klein, D., Bauer, N., Krause, M. . . . Edenhofer, O. (2011). The economic potential of bioenergy for climate change mitigation with special attention given to implications for the land system. *Environmental Research Letters*, 6, 034017.
- Pradhan, P. (2019). Antagonists to meeting the 2030 Agenda. *Nature Sustainability*, 2, 171–2.
- Pradhan, P., Costa, L., Rybski, D., Lucht, W., & Kropp, J. P. (2017). A systematic study of Sustainable Development Goal (SDG) interactions. *Earth’s Future*, 5, 1169–79.
- Pradhan, P., Subedi, D. R., Khatiwada, D., Joshi, K. K., Kafle, S., Chhetri, R. P., . . . Bhuju, D. R. (2021). The COVID-19 pandemic not only puts challenges but also opens opportunities for sustainable transformation. *Earth’s Future*. Available at: <https://doi.org/10.1002/essoar.10506037.1>.
- Putra, M. P. I. F., Pradhan, P., & Kropp, J. P. (2020). A systematic analysis of water–energy–food security nexus: A South Asian case study. *Science of The Total Environment*, 728, 138451.
- Ramirez, M., Romero, O., Schot, J., & Arroyave, F. (2019). Mobilising the transformative power of the research system for achieving the Sustainable Development Goals. *SPRU Working Paper Series*, No. 05/2019. Brighton: University of Sussex.
- Rao, N., Sauer, P., Gidden, M., & Riahi, K. (2019). Income inequality projections for the Shared Socioeconomic Pathways (SSPs). *Futures*, 105, 27–39.
- Roehrl, R. A., Liu, W., & Mukherjee, S. (2020). The COVID-19 pandemic: A wake-up call for better cooperation at the science–policy–society interface. *UNDESA Policy Brief*, No. 62. New York, NY: UNDESA.
- Rudnick, J., Niles, M., Lubell, M., & Cramer, L. (2019). A comparative analysis of governance and leadership in agricultural development policy networks. *World Development*, 117, 112–26.
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. 2020. *The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020*. Cambridge: Cambridge University Press.
- Schwindenhammer, S., & Gonglach, D. (2021). SDG Implementation through technology? Governing food–water–technology nexus challenges in urban agriculture. *Politics and Governance*, 9, 176–86.
- Shaker, R. R. (2018). A mega-index for the Americas and its underlying sustainable development correlations. *Ecological Indicators*, 89, 466–79.
- Somanje, A. N., Mohan, G., Lopes, J., Mensah, A., Gordon, C., Zhou, X., . . . Takeuchi, K. (2020). Challenges and potential solutions for sustainable urban–rural linkages in a Ghanaian context. *Sustainability*, 12, 507.
- Spaiser, V., Ranganathan, S., Swain, R. B., & Sumpter, D. J. T. (2017). The sustainable development oxymoron: Quantifying and modelling the incompatibility of

- Sustainable Development Goals. *International Journal of Sustainable Development & World Ecology*, 24, 457–70.
- Sustainable Development Solutions Network (2015). *Indicators and a monitoring framework for the Sustainable Development Goals: Launching a data revolution for the SDGs*. Available at: <https://resources.unsdsn.org/indicators-and-a-monitoring-framework-for-sustainable-development-goals-launching-a-data-revolution-for-the-sdgs>. Accessed: 31 March 2021.
- Szeteý, K., Moallemi, E. A., Ashton, E., Butcher, M., Sprunt, B., & Bryan, B. (2021). Co-creating local socio-economic pathways for achieving the sustainable development goals. *Sustainability Science*. Available at: <https://doi.org/10.1007/s11625-021-00921-2>.
- Titscher, S., Meyer, M., Wodak, R., & Fetter, E. (2000). *Methods of text and critical discourse analysis*. London: Sage Publications.
- Tosun, J., & Leininger, J. (2017). Governing the interlinkages between the Sustainable Development Goals: Approaches to attain policy integration. *Global Challenges*, 1, 1700036.
- Trott, C. D., Weinberg, A. E., & McMeeking, L. B. S. (2018). Prefiguring sustainability through participatory action research experiences for undergraduates: Reflections and recommendations for student development. *Sustainability*, 10, 3332.
- TWI2050 [The World in 2050] (2018). *Transformations to achieve the Sustainable Development Goals. Report prepared by The World in 2050 initiative*. Laxenburg, Austria: International Institute for Applied Systems Analysis (IIASA).
- TWI2050 [The World in 2050] (2019). *The digital revolution and sustainable development: Opportunities and challenges. Report prepared by The World in 2050 initiative*. Laxenburg, Austria: International Institute for Applied Systems Analysis (IIASA).
- TWI2050 [The World in 2050] (2020). *Innovations for sustainability. Pathways to an efficient and post-pandemic future. Report prepared by The World in 2050 initiative*. Laxenburg, Austria: International Institute for Applied Systems Analysis (IIASA).
- UNGA [United Nations General Assembly] (2000). *United Nations Millennium Declaration*. UN Doc. A/RES/55/2.
- UNGA [United Nations General Assembly] (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1.
- United Nations. (2020). *SDG indicators. United Nations Global SDG Database*. Available at: <https://unstats.un.org/sdgs/indicators/database/>. Accessed: 10 June 2021.
- Van den Ende, M., Wardekker, A., Mees, H., Hegger, D., & Vervoort, J. (2021). *Towards a climate-resilient future together: A toolbox with participatory foresight methods, tools and examples from climate and food governance*. Utrecht: Utrecht University.
- Van Dijk, T. A. (2001). Critical discourse analysis. In D. Tannen, D. Schiffrin, & H. Hamilton (eds.), *Handbook of discourse analysis* (pp. 352–71). Oxford: Blackwell.
- Van Dijk, T. A. (2006). Ideology and discourse analysis. *Journal of Political Ideologies*, 11, 115–40.
- Van Evera, S. (1997). *Guide to methods for students of political science*. Ithaca, NY: Cornell University Press.
- Van Soest, H. L., van Vuuren, D. P., Hilaire, J., Minx, J.C., Harmsen, M. J. H. M., Krey, V. . . . Luderer, G. (2019). Analysing interactions among Sustainable Development Goals with integrated assessment models. *Global Transitions*, 1, 210–25.
- Van Vuuren, D. P., Kok, M., Lucas, P.L., Prins, A. G., Alkemade, R., van den Berg, M. . . . Stehfest, E. (2015). Pathways to achieve a set of ambitious global sustainability



- objectives by 2050: Explorations using the IMAGE integrated assessment model. *Technological Forecasting and Social Change*, 98, 303–23.
- Van Vuuren, D. P., Zimm, C., Busch, S., Kriegler, E., Leininger, J., Messner, D., . . . Soergel, B. (2021). Defining a Sustainable Development target space for 2030 and 2050. Available at: <https://doi.org/10.1016/j.oneear.2022.01.003>.
- Van Zanten, J. A., & van Tulder, R. (2020). Towards nexus-based governance: Defining interactions between economic activities and Sustainable Development Goals (SDGs). *International Journal of Sustainable Development & World Ecology*, 28, 210–26.
- Vijge, M. J., Biermann, F., Kim, R. E., Bogers, M., van Driel, M., Montesano, F. S., . . . Kanie N. (2020). Governance through global goals. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance: Institutional complexity and structural transformation* (pp. 254–74). Cambridge: Cambridge University Press.
- Warchold, A., Pradhan, P., & Kropp, J. P. (2020). Variations in sustainable development goal interactions: Population, regional, and income disaggregation. *Sustainable Development*, 29, 285–99.
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge: Cambridge University Press.
- Weitz, N., Carlsen, H., Nilsson, M., & Skånberg, K. (2018). Towards systemic and contextual priority setting for implementing the 2030 Agenda. *Sustainability Science*, 13, 531–48.
- Wicke, B., van Leeuwen, J. D., Daioglou, V., de Bruin, J. M., Biermann, F., van Vuuren, D. P. (2022). Quantifying synergies and trade-offs between the biobased economy and the Sustainable Development Goals. Unpublished manuscript.
- Wodak, R. (2007). Pragmatics and critical discourse analysis. *Pragmatics and Cognition*, 15, 203–25.
- Wodak, R., & Meyer, M. (2001). *Methods of critical discourse analysis*. London: Sage Publications.
- World Bank (2020). *DataBank: Sustainable Development Goals (SDGs)*. Available at: <https://databank.worldbank.org/reports.aspx?source=sustainable-development-goals-%28sdgs%29>. Accessed: 8 June 2021.
- Zhou, X., & Moinuddin, M. (2017). Sustainable Development Goals interlinkages and network analysis: A practical tool for SDG integration and policy coherence. *IGES Research Report*, No. RR1602. Hayama: IGES.
- Zimm, C., Sperling, F., & Busch, S. (2018). Identifying sustainability and knowledge gaps in socio-economic pathways vis-a-vis the Sustainable Development Goals. *Economies*, 6, 20.

## 8

# The Sustainable Development Goals as a Transformative Force?

### *Key Insights*

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The scope of the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals is unprecedented. So is the broad ambition expressed in this agreement. While the United Nations has rarely shied away from declaring far-reaching policy aspirations in the past, the 2030 Agenda sets the bar high – possibly higher than it has ever been before, with ambitious goals to end hunger and poverty while simultaneously reducing unsustainable consumption and protecting the natural foundations of life on earth. The Sustainable Development Goals also add new areas of policy ambition that have not been promoted in this form before, such as reducing global and national inequalities or promoting good governance, both now enshrined as stand-alone global policy goals.

And yet we need to ask: Have these 17 goals helped to steer governments, civil society or corporations towards sustainable development? Have actors, from global to local levels, adjusted their course of action because of the global goals that the United Nations General Assembly set in 2015? If evidence on these questions were positive, this would support those who argue that ‘governance through global goals’ can work – that the global agreement of ambitious goals can steer policies and change behaviours even when they lack legal force, institutionalization and large funding and are not preceded by major reforms in political and economic structures (Kanie and Biermann 2017). If the goals had steered political systems and societies towards sustainability over the last few years, goal-setting as a global political strategy could be expanded. More goals could be set, the ambition further raised, and slowly but steadily the world would transition towards sustainability.

Yet, is there evidence of such steering effects of the Sustainable Development Goals? What is the state of knowledge in the social sciences about this important question that is relevant for both global governance and global sustainability? Did the non-legally binding, often qualitative and ambiguous global goals and targets show normative force in shaping the policies of governments,

international organizations, civil society, businesses, universities and so forth? Is there evidence for such steering effects – or is it all business-as-usual and the global goals are nothing more than the fading smoke of a 2015 firework of noble ideas and enthusiastic engagement, but in the end also delusion and collective self-deceit?

This assessment has been designed to answer these questions by taking stock of the first seven years of research on the steering effects of the Sustainable Development Goals. As we explained in [Chapter 1](#), the assessment relies on the collective work of sixty-one governance scholars who have thoroughly analysed the body of scientific literature on the steering effects of the global goals and the 2030 Agenda, organized around six dimensions. Overall, more than 3,000 scientific articles have been reviewed for this study.

Here we bring all insights together in an overarching conclusion of what the social sciences have revealed, so far, about the steering effects of the global goals. We organize this final discussion following the structure of this book and its six main chapters.

## **Global Governance**

We start with analysing the steering effects of the Sustainable Development Goals on the international political landscape, that is, the United Nations system of programmes, agencies and other institutions. We do so because the Sustainable Development Goals are primarily a product of this global policy system. They emanate from United Nations processes, and even though they are to be implemented at all levels, the United Nations should play a key role in achieving the goals, especially providing multilateral leadership and guidance (Beisheim 2020). Since international organizations lack institutional power and financial resources to have a strong direct impact on the policies of governments and local actors, scholars have emphasized that international organizations could function here as ‘orchestrators’ (Abbott et al. 2015; Abbott, Bernstein and Janzwood 2020; Bernstein 2017). In this view, international organizations act like conductors in a concert hall or at least offer the arrangements that aim to bring out harmonious effects; in this way organizations steer the actors, like musicians in a concert, in synergistic directions with a harmonious symphony as result. But have the United Nations and other international organizations orchestrated global governance towards the implementation of the Sustainable Development Goals? What have been the steering effects of the global goals on international agencies in the first place – did international organizations within and beyond the United Nations change their policies and programmes after 2015 because of the Sustainable Development Goals? (See [Chapter 2](#) for more detail.)

***In the practice of international organizations, the effects of the Sustainable Development Goals have been largely discursive.***

First, the literature suggests a mismatch between the formal aspirations of the United Nations to promote the Sustainable Development Goals as central guidelines in global governance and the limited transformative outcomes. Research indicates that even though the goals might have helped create a few new institutional arrangements and that many organizations have formally aligned their work with the global goals, actual reforms in the operations of international organizations since 2015 have been modest. Changes are largely discursive with limited practical effects thus far (e.g., Schnitzler, Seifert and Tataje 2020). While the governance principles that underpin the Sustainable Development Goals – such as universality, coherence, integration, and ‘leaving no one behind’ – have changed the discourse in multilateral institutions, there is no strong evidence that the Sustainable Development Goals have had a transformative impact on global governance practices (e.g., Kloke-Lesch 2021; P rez-Pineda and Wehrmann 2021; Rudolph 2017). Specifically, the literature provides little evidence that the Sustainable Development Goals have had transformative effects on the mandates, practices or resource allocation of international organizations and institutions within the United Nations system (Weinlich et al. 2022).

***The High-level Political Forum on Sustainable Development has not lived up to expectations of becoming an ‘orchestrator’ in global governance.***

As part of a larger reform following the 2012 United Nations Conference on Sustainable Development, governments decided to terminate the United Nations Commission on Sustainable Development and to establish in its place a High-level Political Forum on Sustainable Development. This new forum was meant to function as a regular meeting place for governments and non-state representatives to assess global progress towards sustainable development and, after 2015, to review the implementation of the Sustainable Development Goals. The creation of this overarching institution for sustainability governance, involving high-level government representatives, was also expected to enhance system-wide coherence in the follow-up and progress reviews under the 2030 Agenda.

The literature indicates that the High-level Political Forum has not lived up to these expectations. The forum has failed to act as an orchestrator to promote system-wide coherence. The reasons for this include its broad and unclear mandate combined with a lack of resources and a lack of political leadership owing to divergent national interests (e.g., Amanuma et al. 2019; Beisheim 2020; Brimont and Hege 2020; Monkelbaan 2019). The forum has not provided political

leadership and effective guidance for achieving the 2030 Agenda (e.g., Beisheim 2018; Dimitrov 2020; Hege, Chabason and Barchiche 2020). Recent reform discussions did not change this (Beisheim 2021).

The United Nations sought to build on the 2030 Agenda by providing system-wide guidance to the United Nations development system and by authorizing normative reforms and initiating institutional changes. Some of them are far-reaching but not transformational, mostly because of governments' incoherent signals in the governing bodies and funding practices that impede integrated approaches at scale (e.g., Golding 2021; Gruener and Hammergren 2021; Samarasinghe 2021; Weinlich et al. 2020).

The United Nations Environment Programme and the United Nations Environment Assembly, formally mandated to catalyse cooperation for environmental policies, have also not been able to expand their leadership following the adoption of the 2030 Agenda. The polycentric nature of global environmental governance, with more than one thousand multilateral environmental agreements, continues to limit institutional change in this field and system-wide coherence, especially regarding transboundary environmental problems (e.g., Chasek and Downie 2021; Elder and Olsen 2019; Ivanova 2020; Urho et al. 2019).

### ***The Sustainable Development Goals initiated peer-learning among governments.***

Some studies suggest that the Sustainable Development Goals and the High-level Political Forum initiated, and served as a platform for, peer-learning among governments. They also offered some new opportunities for non-state and sub-national actors to become involved in global sustainability governance (e.g., Amanuma et al. 2019; Beisheim 2020; Beisheim and Bernstein 2020). At the annual sessions of the High-level Political Forum, for instance, governments present Voluntary National Reviews on their measures to implement the Sustainable Development Goals. This process has enabled some non-confrontational peer-learning among governments (Beisheim 2020). In addition, non-governmental organizations, which are invited as observers to these meetings, perform public review functions by delivering statements or posing questions to government delegates, and by publicly disclosing their critique through their networks. Yet, there is no robust evidence that peer-learning and voluntary reporting has steered governments and other actors in the direction of structural and transformative change towards sustainable development.

Some evidence suggests that the Sustainable Development Goals influence multilateral development organizations and finance and trade institutions beyond the United Nations. One mechanism to involve international organizations is the 'custodianships' through which international organizations have agreed to lead the

development and review of some of the 231 indicators set to operationalize the global goals. For example, it seems that a joint custodianship of international organizations increases cooperation among these organizations and augments policy coherence (van Driel et al. 2021).

***Observable changes often reflect long-term trajectories not causally linked to the launch of the Sustainable Development Goals.***

Certain ambitions of the Sustainable Development Goals have been part of reform debates in global governance for a long time, for example, the reform of the United Nations development system and the need to increase institutional integration and policy coherence for sustainability. Yet, it is difficult to identify in the literature robust change in long-term trends that could be causally related to the launch of the global goals in 2015. The goals had some discursive effects, and reform processes are now often justified and legitimized by referring to them. Nevertheless, studies hardly ever detect clear, unidirectional causality that any major reform processes have been initiated because of the goals.

**Implementation at Multiple Levels**

The Sustainable Development Goals must eventually be implemented in domestic political contexts through policies and programmes enacted by governments and public agencies with support and engagement of non-state actors. Governments have to formulate and implement demanding sustainability strategies that may range from conventional hierarchical steering to novel governance mechanisms. Cities and regional authorities need to design and implement concrete projects to localize the goals within their political frameworks and capacities. The corporate sector is often seen as an important actor as well, not least as financier of sustainable development projects. Civil society plays a significant role in agenda-setting, raising awareness and monitoring progress towards achievement of the Sustainable Development Goals. In short, the success of the goals requires all actors to collaborate in an effective system of multilevel governance. Can we observe any such effects of the global goals at domestic level? (See [Chapter 3](#) for more detail.)

***The degree of policy change at country level varies, with sub-national authorities and non-state actors often assuming pioneering roles.***

There is some evidence indeed that diverse actors at multiple governance levels have become active in implementing the Sustainable Development Goals. The performance of national governments varies, however, and most countries lag

behind in implementing the global goals. Some evidence suggests that sub-national authorities, and especially cities, are sometimes more pioneering and progressive than their central governments in building coalitions for implementing the Sustainable Development Goals. We see indications of an increased interest and participation of corporate actors in sustainable development through public–private partnerships, even though the effectiveness of such arrangements is still uncertain. In several national political systems, civil society actors have begun to hold public actors accountable for their commitments to realize the vision of ‘leaving no one behind’. The growing role of actors beyond national governments suggests an emerging multifaceted and multilayered approach to implementing the 2030 Agenda (e.g., Björkdahl and Somun-Krupalija 2020; Horn and Grugel 2018; Valencia et al. 2019).

***Domestic steering effects are observable largely at the discursive level.***

Evidence suggests that political effects of the Sustainable Development Goals have remained largely at the discursive level. For instance, governments increasingly refer to the goals in official policy documents and take part in the voluntary review of their performance in the High-level Political Forum on Sustainable Development (Bexell and Jönsson 2019). Sub-national authorities refer to the Sustainable Development Goals in their communications; corporate actors use language of the 2030 Agenda in their reports, and civil society organizations emphasize the goals in their campaigns (e.g., Banik and Lin 2019; Francis, Henriksson and Stewart 2020; Horn and Grugel 2018). We also found some relational effects, in particular in new or strengthened public–private partnerships and in terms of local collaborative governance (Mawdsley 2018).

These references to the Sustainable Development Goals in the political debate over the last seven years could be a first step towards more far-reaching transformational changes. Examples in some countries are the creation or reform of institutions to promote the global goals or the formation of new relationships and partnerships. In the coming years, this slowly changing discourse could lead to accelerated public and private funding for the implementation of the goals. As of the time of writing, however, it remains uncertain whether the observable discursive effects of the Sustainable Development Goals signal a first phase of deep transformation towards sustainable development or whether their impact will remain mainly at the discursive level until 2030.

***Institutional change often replicates existing priorities and trajectories.***

Many countries have begun to integrate Sustainable Development Goals in their public administrative system. Some governments have designated bodies or

formed new units and departments that are responsible for implementing the goals. Many of these institutions, however, seem to merely reproduce earlier structures and priorities of governments or lack institutional power to bring about transformative changes towards sustainable development (e.g., Morita, Okitasari and Masuda 2020; Tosun and Leininger 2017). Evidence suggests a selective implementation of those global goals that governments had previously prioritized in their political agendas (e.g., Forestier and Kim 2020), with the result that the 2030 Agenda merely reproduces existing agendas without engendering transformative change. This underlines the importance of actors outside national governments to work towards a more holistic and more transformative implementation of the Sustainable Development Goals, for instance, by showing examples of how to innovative realize the goals locally.

### *There is limited evidence for the mobilization of additional funding.*

There is hardly any evidence that governments significantly reallocate funding to implement the Sustainable Development Goals, neither for national implementation nor international cooperation. The global goals do not seem to have changed public budgets and financial allocation mechanisms in any significant way. There is evidence, however, for limited resource effects of the Sustainable Development Goals in some local governance contexts (e.g., Valencia et al. 2019; Wang, Yuan and Liu 2020). Lack of funding could prevent genuine steering effects of the Sustainable Development Goals and indicate that the discursive changes that we identified above will not lead to transformative structural change and policy reform.

There is growing evidence that some corporate actors, including banks and investors, engage and invest in sustainability practices, promote green finance, facilitate large-scale sustainable infrastructure projects or expand their loan portfolios to environmental and social loans (e.g., Consolandi 2020; Denny 2018; Lee 2020; Liaw et al. 2017). Such practices are often discursively linked to the Sustainable Development Goals. Some studies warn here of ‘SDG washing’ by corporate actors, selective implementation of the goals, and the political risks linked to private investments in the context of continued shortage of public funding (Bebbington and Unerman 2018). Overall, a more fundamental change in incentive structures to guide public and private funding towards sustainable pathways seems still to be lacking.

## **Interlinkages, Integration and Coherence**

The 17 Sustainable Development Goals and their 169 targets form a complex mesh of norms and rules that seek to address almost all areas of human activity. Some studies suggest that synergies among goals can be achieved by designing policies



in a holistic way (e.g., Nilsson, Griggs and Visbeck 2016). Others argue, however, that inherent trade-offs in the 2030 Agenda and the goals are too often neglected in academic research and require more attention (Brand, Furness and Keijzer 2021). Overall, the 2030 Agenda and the Sustainable Development Goals are expected to provide guidance and resolve normative conflicts, institutional fragmentation and policy complexity. Many thought the goals could serve as ‘orchestrators’ in intergovernmental and transnational politics, using the soft power of conviction and persuasion to create better integrated and coherent governance from global to local levels (Abbott, Bernstein and Janzwood 2020) (see [Chapter 2](#)). To assess whether the global goals have advanced integration and coherence since 2015 has been the focus of a rapidly evolving research programme and a growing body of literature. (See [Chapter 4](#) for more detail.)

***There is limited empirical data on interlinkages, integration and coherence.***

Substantial academic work has been devoted to the conceptualization of governance fragmentation, institutional interlinkages and integration, and policy coherence. This has enhanced theoretical understanding and terminological clarity (Biermann and Kim 2020). Yet there are limited empirical insights on how these concepts play out in the national implementation of the Sustainable Development Goals. Several case studies on Bangladesh, Belgium, Colombia, Germany, India, the Netherlands, Sri Lanka and small island developing countries suggest that synergies and trade-offs in the 2030 Agenda manifest differently across national systems and governmental levels (e.g., Breuer, Leininger and Tosun 2019; de Zoysa, Gunawardena and Gunawardena 2020; Scobie 2019; Yunita et al. 2022). However, broader comparative assessments on the impacts of the interlinkages of global goals on national politics are lacking.

***The institutional integration for the Sustainable Development Goals varies.***

Evidence suggests that some governments have taken measures to align their institutions towards the Sustainable Development Goals. Some countries like the Netherlands have established coordination bodies within central agencies, and others like Germany have promoted inter-ministerial exchanges to bring their public administrative systems in line with the holistic vision of the 2030 Agenda (Breuer, Leininger and Tosun 2019; Yunita et al. 2022). These attempts, however, differ from country to country, leading to a huge variation of institutional integration for the Sustainable Development Goals at national level. Moreover, the responsibility for the goals lies in some countries in ministries and in others with

the head of state or government. The impact of either strategy remains uncertain and warrants further investigation.

### ***Policy coherence is lagging.***

Despite modest advances in institutional integration in some countries, governments overall fall short of enhancing policy coherence to implement the 2030 Agenda and the Sustainable Development Goals. While some governments have begun to integrate the goals in national development strategies and action plans, this has rarely led to the formulation of (cross-)sectoral policies and programmes that cohere with one another (e.g., de Zoysa, Gunawardena and Gunawardena 2020; Trimmer 2019). Most governments seem to be stuck in traditional divisions of tasks between line ministries without effective mechanisms to formulate policies that aim to exploit synergies across policy domains and address trade-offs. Experts are divided in their expectations as to whether stronger policy coherence for the Sustainable Development Goals will emerge until 2030.

### ***Barriers to institutional integration and policy coherence remain.***

Evidence points to many barriers in public administrative systems to institutional integration and policy coherence (e.g., Allen, Metternicht and Wiedmann 2019). These include cumbersome bureaucracies, lacking political interest, short-term political agendas and waning ownership of the Sustainable Development Goals. Admittedly, breaking down such barriers will take some time and require political leadership, continuous efforts by progressive policy-makers and pressure by civil society organizations. So far, however, there are few indications that the adoption of the 2030 Agenda has significantly reduced such barriers.

## **Inclusiveness**

Since the 1990s, inequality has risen in most countries, and ever larger shares of national wealth are accumulated with the richest families and individuals. Internationally, the gap between the richest and the poorest countries has grown as well. The 2030 Agenda is meant to address these inequalities and to ensure that no one is left behind. Vulnerable groups and vulnerable countries are extensively mentioned in the 2030 Agenda and in several goals and targets (UNGA 2015). The preamble of the 2030 Agenda identifies groups of people and countries that deserve attention, such as children and youth, persons with disabilities, indigenous peoples, and migrants and refugees (UNGA 2015: paragraph 23), as well as African countries, least developed countries, landlocked developing countries and

small island developing states, countries in situations of conflict and post-conflict countries (UNGA 2015: paragraph 22). Additionally, Goal 10 explicitly seeks to reduce inequality within and between countries, while Goal 5 is dedicated to promoting greater equality for women and girls. Yet, have the 2030 Agenda and the Sustainable Development Goals delivered on their promise to leave no one behind? (See [Chapter 5](#) for more detail.)

### ***Rhetoric and action do not match.***

Evidence suggests a mismatch between rhetoric and action when it comes to the impacts of the Sustainable Development Goals on inclusiveness within and between countries. On the one hand, vulnerable people and vulnerable countries are often discursively prioritized in the implementation of the goals, as evidenced by the broad uptake of the principle of ‘leaving no one behind’ in pronouncements by policy-makers and civil society activists. On the other hand, the normative or institutional effects of such discursive prioritization remain limited.

Within countries, the steering effects of the Sustainable Development Goals in reducing inequalities vary significantly and seem to be bound by domestic politics (e.g., Gehre Galvão, de Almeida Gontijo and Antunes Martins 2020; Siegel and Bastos Lima 2020). The literature suggests that the goals have not brought additional normative or institutional steering that promotes inclusiveness. Instead the Sustainable Development Goals have been leveraged, if at all, as an overarching international normative framework to legitimize existing national policies and institutions for the promotion of inclusiveness (Abualghaib et al. 2019; Banks et al. 2020; Dhar 2018). In some countries we even see counterproductive effects as political elites capture the goals to overlay exclusive institutional settings and add legitimacy to entrenched marginalization.

Internationally, there is no evidence that the launch of the Sustainable Development Goals in 2015 has advanced the political or economic position of the world’s poorest countries in global governance (Biermann and Sénit 2022). These countries are as vulnerable, politically and economically, as they were before 2015. There are no indications that the Sustainable Development Goals have steered global governance structures towards more inclusiveness, especially regarding least developed countries (e.g., Choer Moraes 2019; Fioretos and Heldt 2019). Some studies doubt whether the Sustainable Development Goals will ever be able to transform legal frameworks towards an increased political participation of vulnerable countries. The constant lack of compliance with longstanding norms that seek to support least developed countries, such as special commitments on aid from the Global North, further indicates the lack of steering effect of the goals on the inclusion of these countries in the global economy (Biermann and Sénit 2022).

There is some evidence, however, that emerging economies in the Global South increasingly frame their aid and investment commitments to poorer countries as promoting the Sustainable Development Goals (e.g., Banik 2018).

***The Sustainable Development Goals offer a novel accountability mechanism for civil society.***

There is some evidence that civil society organizations increasingly use the Sustainable Development Goals as a reference framework to hold governments to account (e.g., Alade and Oyatogun 2020; Chancel, Hough and Voituriez 2018; Goegele 2020; Lynes 2020). Even if this does not provide evidence of normative, institutional or discursive steering effects as defined in this assessment, this trend might be important to prevent policy backlash against inclusiveness, especially in countries that are less welcoming to civil society influence. More research is needed here to assess the steering effects of the Sustainable Development Goals in domestic institutions and how citizens use the goals as a tool to enhance the democratic quality of national policy-making.

***Research evidence is strikingly limited.***

Overall, the academic literature on the relationship between the Sustainable Development Goals and national and global inclusiveness and inequality is very limited. There is also not much research on Sustainable Development Goal 10, which seeks to reduce inequalities within and among countries. This lack in knowledge might reflect postcolonial structures of a predominantly Global North-based science community. More research is needed to understand the varying impact of the Sustainable Development Goals on inclusiveness and the conditions under which the goals may steer inclusion nationally and internationally.

**Planetary Integrity**

The Sustainable Development Goals are thematically more comprehensive than their precursor, the Millennium Development Goals. Partially because of that, tensions between environmental and economic goals and social imperatives are more pronounced. At the 2012 United Nations Conference on Sustainable Development, some environmentalists argued that new policy documents would need to raise the political saliency of protecting the living environment of our planet and what has been described as the ‘planetary boundaries’ and the ‘safe operating space of humankind’. Yet, the 2030 Agenda and the Sustainable

Development Goals did not refer to ‘planetary boundaries’, which proved too controversial, but instead emphasized the fundamental concerns of both people and the planet. The Sustainable Development Goals, as an integrated set of broad ambitions and specific targets, were meant to address both policy directions. But could the Sustainable Development Goals steer governments and non-governmental actors, globally and nationally, into the direction of ‘planetary integrity’? (See [Chapter 6](#) for more detail.)

***There is limited additionality, ambition and coherence for planetary integrity.***

The literature raises doubts about the steering effects of the Sustainable Development Goals towards planetary integrity on three grounds: lack of additionality, lack of ambition and lack of coherence.

First, there is little evidence of whether normative and institutional change towards planetary integrity would not have materialized without the Sustainable Development Goals. Experiences from international governance reveal that while the global goals seem to have shaped discussions around the climate and biodiversity regimes and have consolidated support for specific concerns and interlinkages (e.g., Deep Decarbonization Pathways Project [2015](#); Deprez, Vallejo and Rankovic [2019](#)), many such changes had been part of negotiations well before 2015 (e.g., Johnsson et al. [2020](#); Rantala et al. [2020](#)).

Second, most studies concur that when it comes to planetary integrity, the Sustainable Development Goals lack ambition and do not call for drastic changes that would be transformative enough (e.g., Adelman [2018](#); Craig and Rhul [2020](#); Eisenmenger et al. [2020](#); Kotzé [2018](#)).

Third, some studies suggest that the Sustainable Development Goals lack coherence to foster a meaningful and focused push towards planetary integrity. There are indications that this lack of ambition and coherence partially results from the design of the goals (e.g., Gasper, Shah and Tankha [2019](#)). For example, economic growth as envisaged in Goal 8 might be incompatible with some environmental protection targets under Goals 6, 13, 14 and 15 (e.g., Hickel [2019](#)). Some studies argued that the focus of the goals on neoliberal sustainable development is inevitably detrimental to planetary integrity and related justice concerns (e.g., Kotzé [2018](#)). As a result, experiences from the implementation of the Sustainable Development Goals in domestic, regional and international contexts reveal little evidence of steering effects towards advancing planetary integrity, as countries in both Global South and Global North largely prioritize the socio-economic Sustainable Development Goals over environmental ones, following their earlier national development policies (e.g., Forestier and Kim [2020](#); Zeng et al. [2020](#)).

***The goals raise concern but do not motivate transformative change.***

Recent studies suggest a limited role of the Sustainable Development Goals in facilitating the clustering of international agreements or in serving as collective ‘headlines’; however, they are not yet a radical game-changer in global governance to advance planetary integrity. At the global level, there is evidence that the Sustainable Development Goals have had some impact on advancing environmental regimes on biodiversity, climate change or ocean protection (Deep Decarbonization Pathways Project 2015; Delabre et al. under review; Deprez, Vallejo and Rankovic 2019; Watson 2020). At the regional level, while it seems that the Sustainable Development Goals have fed into policies and programmes of regional governance bodies and steered the creation of new institutions, in practice the steering effects of the goals towards better environmental protection remain limited (e.g., Corrado et al. 2020; Hirons 2020; Hickel 2021; P ez Vieyra 2019). Within countries, there is little evidence that the Sustainable Development Goals have strengthened environmental policies (e.g., de la Mothe Karoubi et al. 2019; Haywood et al. 2019). Some recent studies highlight implementation challenges relating to interdependencies and underlying conflicts (e.g., Nunes 2020) and that the goals led to only tactical linkages rather than substantive changes (Mahadi 2020). Overall, scholars tend to agree that while the Sustainable Development Goals may help highlight environmental protection as an important concern, their rationale and content are structurally incompatible with efforts to steer towards a more ambitious programme for planetary integrity. More research is needed to understand variation in the impacts of the goals.

## **Methods**

Research on the steering effects of the Sustainable Development Goals has employed a diverse set of methods. There are two broad groups of methods: those that explore the effects of the goals on political, societal and economic actors and their institutions from global to local, and those that seek to measure whether societies are on track to achieve the Sustainable Development Goals until 2030. (See Chapter 7 for more detail.)

***Combining methods is key to gain a complete picture.***

Both types of methods are needed for a clear picture of the overall impact of the Sustainable Development Goals, and it is important to build bridges across methodological communities that often work in isolation from each other. Building such bridges is not easy, yet nonetheless essential to gain a full understanding of

the steering effects of the global goals. While there is some pioneering work that uses mixed methods, more interdisciplinary collaboration is warranted. Particularly we need a better understanding of how the effects of the Sustainable Development Goals on different actors and institutions influence progress towards achieving the goals, and vice versa.

***Data gaps and unequal coverage of Sustainable Development Goals remain.***

Despite the growing number of researchers who study the 2030 Agenda and the Sustainable Development Goals, we still lack data (Fukuda-Parr and McNeill 2019; MacFeely 2018). This is particularly evident for data on the local level and data on least developed countries (Engström et al. 2019). Problematic is also the disjunct of language communities; many scientists rely on publications and data published in English, which underreports findings from regions where English is not the common working language. Comparative in-depth studies of steering effects of global goals in local governance are laborious, time-consuming and require adequate funding. Nevertheless, insights from field research are of utmost importance to assess the usefulness of globally agreed policy goals. Similarly, studies tend to focus on a limited number of the 17 Sustainable Development Goals and their interactions. As a result, some goals are under-researched, and comprehensive models that cover all 17 goals are lacking. More efforts are needed to understand interlinkages between global goals.

As highlighted throughout this assessment, at the centre of the 2030 Agenda is the ambition to address at the same time economic, ecological and social goals and to break down silos in policy-making at all political levels and societal scales. To overcome silos in decision-making and open windows of opportunity for more coherent policies towards sustainable development, we need to gain a deeper understanding of the complexity of the interlinkages across the goals (Breuer, Leininger and Tosun 2019; Pradhan 2019; van Vuuren et al. 2021). In line with key findings from Chapter 4 of this assessment, while a few recent studies have shed light on interactions between goals, we still need more research on what policies best reflect the synergies and trade-offs in the interplay of the goals (e.g., van Soest et al. 2019).

***Scientists need to engage more in science–policy–society interactions.***

The Sustainable Development Goals are the outcome of complex intergovernmental negotiations. Civil society groups, corporations and science organizations were able to bring in their views. Yet in the end, the 2030 Agenda and the 17 global goals were adopted by governments as a political agreement marked by

countless political compromises and bargains. To what extent are these goals then based on insights from science and scientific data? While scientists have informed the Sustainable Development Goals through various channels, some scholars argue that this has not been enough and now call for having a stronger voice in the implementation and operationalization of the goals (Roehrl, Liu and Mukherjee 2020). Others again warn of an overly technocratic approach that would give too much room for scientists, who are generally based in the Global North, to decide what are essentially global conflicts of value and interests (Hartley 2020). And yet, many science communities are also still absent in debates on the 2030 Agenda. More involvement of scientists, especially those from the Global South, is needed to help advance the global transformation towards sustainable development.

### **Conclusion**

The adoption of the 2030 Agenda and its 17 Sustainable Development Goals is often seen as a major accomplishment in global sustainability governance. The ambitious agenda, adopted by all United Nations member states, offers a new set of global priorities for achieving sustainable development worldwide. While many goals build on earlier agreements, the full set of 17 goals and 169 targets is breathtaking in its ambition, scope and comprehensiveness. The language of the 2030 Agenda is progressive, demanding and full of references to global justice, the eradication of poverty, and the protection of our planet's life-supporting systems.

And yet, we need to conclude that the 2030 Agenda and the 17 global goals have had thus far only limited political effects in global, national and local governance since their launch in 2015. Reflecting on our assessment in six key governance areas, it appears that the global goals have had discursive effects and have given some impetus to normative and institutional reform. They foster mutual learning among governments about sustainable development policies and experiments. In some contexts, they offer new instruments for local political and societal actors to organize, to gain more support from the government, or to mobilize international funding. The goals also enable civil society and non-governmental organizations to hold governments accountable and to ensure in concrete situations that the implementation of the goals can counter the interests of powerful actors.

But the goals are not (yet) a transformative force in and of themselves. There is little evidence that institutions are realigned, that funding for sustainable development is (re-)allocated, that policies are becoming more stringent, or that new and more demanding laws and programmes are established because of the goals. Attempts to strengthen the role of the High-level Political Forum on Sustainable Development and to harmonize the voluntary reporting system have



not found consensus among governments. This reporting system remains a soft peer-learning mechanism of governments that might even lead to uncontested endorsements of national performances if civil society organizations are not able to act as watchdogs in policy implementation.

It is also apparent that the effects of the Sustainable Development Goals, limited as they are, are neither linear nor unidirectional (see also UNDESA 2021). While the 2030 Agenda and the 17 goals with their 169 targets constitute a strong set of normative guidelines, their national implementation, translation to the local level, and dissemination across societal sectors remain a political process. The 2030 Agenda is a non-legally binding and relatively loose script, purposefully designed to provide leeway for actors to interpret the Sustainable Development Goals differently and often according to their interests. Many actors use the goals for their own purposes by shaping the content of the goals, targets and indicators. This finding challenges the aspiration shared by scholars and policy experts that the Sustainable Development Goals work as orchestrators. Rather, the goals and the 2030 Agenda can be conceived as an extensive set of musical scores played by different actors and subject to change and multiple interpretations. There is little evidence that the United Nations can adopt the role of central conductors to ensure that actors stick to the scores and unite towards achieving sustainable development worldwide.

Our assessment is a snapshot taken in 2021, and the time-horizon of the Sustainable Development Goals is 2030. Only then can their success be conclusively evaluated, and in the coming years the situation might change. Assessing future effects of the Sustainable Development Goals will require political scientists and scholars from related disciplines to deepen understanding of the 2030 Agenda as a field of study (Sianes 2021). Our assessment has shown that several questions are still under-researched, such as the impact of the global goals on planetary integrity or on inclusiveness within and between countries. Comparative research is one way forward, especially when it involves both small-*n* and large-*n* studies to explore a broader set of indicators.

Our conclusion that the goals have so far limited steering effects does also not preclude that many of their targets might eventually be achieved by 2030. As we laid out above, many goals build on existing agreements and are integral parts of other political processes, such as international agreements on biodiversity, climate, oceans or standards and programmes set by the International Labour Organization, the World Health Organization and so forth. For instance, target 3.a simply calls upon governments to ‘Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate’ (UNGA 2015: 16). Any progress on such vague targets that are part of broader policies is not necessarily a result of the global goals. Many targets are

qualitative, with some progress almost inevitable. For example, Goal 7.a – to ‘enhance [by 2030] international cooperation to facilitate access to clean energy research and technology . . . and promote investment in energy infrastructure and clean energy technology’ (UNGA 2015: 19) – is unlikely to be missed, as terms such as ‘enhance’ or ‘promote’ remain vague. Other targets, however, are clearly defined, demanding and transformative, for example the targets under Goal 2 to ‘end hunger’ and to ‘end all forms of malnutrition’ by 2030 or to ‘double the agricultural productivity and incomes of small-scale food producers’ (UNGA 2015: 15). Here and under many other goals, transformative change in global and local governance is needed to achieve such demanding targets. And yet, these major changes are not clearly observable today.

Optimists might argue that the limited incremental change that we have detected will eventually pick up speed and bring about transformative change, driven by civil society, progressive businesses and sub-national initiatives. Discursive effects alone can indicate future changes. Language is not without power, as discourse theory argues; any changing discourses may be a powerful and promising sign. Others might respond, however, that to observe any major societal change over the next few years, the seeds of such transformation would need to be visible today in new institutions and policies.

Critics would also point to emerging evidence that the Sustainable Development Goals might have even adverse effects, by providing a smokescreen of hectic political activity that blurs a reality of stagnation, dead ends and business-as-usual. In this perspective, the goals could be seen as a legitimizing meta-narrative that helps international organizations, governments and corporations to merely pretend to be taking decisive action to address the concerns of citizens while clinging to the status quo. The outcome might then be depoliticization – that the positive narrative of the 17 goals, with their promises of global justice, transformative change and a sustainable future, limits political contestation about deeper political and economic structures and marginalizes more fundamental critique and reform proposals (Louis and Maertens 2021).

In sum, our assessment of over 3,000 scientific articles, mainly from the social sciences, has provided some evidence that the 2030 Agenda and the Sustainable Development Goals have influenced institutions, policies and debates, from global governance to local politics. While this impact has so far largely been discursive, the goals had some normative and institutional effects as well. Yet overall, there is only limited transformative impact. The goals are incrementally moving political processes forward, with much variation among countries, sectors and across levels of governance. However, we are far away from ‘free[ing] the human race from the tyranny of poverty and want and heal[ing] and secur[ing] our planet’ (UNGA 2015: *preamble*). More fundamental change is needed for the Sustainable

Development Goals to become ‘the bold and transformative steps . . . to shift the world on to a sustainable and resilient path’ that the 2030 Agenda has promised.

## References

- Abbott, K., Bernstein, S., & Janzwood, A. (2020). Orchestration. In F. Biermann & R. E. Kim (eds.), *Architectures of earth system governance: Institutional complexity and structural transformation* (pp. 233–53). Cambridge: Cambridge University Press.
- Abbott, K. W., Genschel, P., Snidal, D., & Zangl, B. (eds.) (2015). *International organizations as orchestrators*. Cambridge: Cambridge University Press.
- Abualghaib, O., Groce, N., Simeu, N., Carew, M. T., & Mont, D. (2019). Making visible the invisible: Why disability-disaggregated data is vital to ‘Leave No-One Behind’. *Sustainability*, 11, 3091.
- Adelman, S. (2018). The Sustainable Development Goals: Anthropocentrism and neoliberalism. In D. French, & L. Kotzé (eds.), *Sustainable Development Goals: Law, theory and implementation* (pp. 15–40). Cheltenham: Edward Elgar Publishing.
- Alade, J., & Oyatogun, F. (2020). Four years of the SDGs and lessons from youth inclusion for the next ten years. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Allen, C., Metternicht, G., & Wiedmann, T. (2019). Prioritising SDG targets: Assessing baselines, gaps and interlinkages. *Sustainability Science*, 14, 421–38.
- Amanuma, N., Koike, H., Zusman, E., Hengesbaugh, M., Fujjino, J., & Sussman, D. D. (2019). *Assessing the HLPF four years on: Enhancing integration, linking processes and strengthening political leadership*. Available at: <https://sdg.iisd.org/commentary/guest-articles/assessing-the-hlpf-four-years-on-enhancing-integration-linking-processes-and-strengthening-political-leadership/>. Accessed: 8 October 2020.
- Banik, D. (2018). Taking stock of the SDGs. In D. Dwivedi & P. Pandey (eds.), *Leaving no one behind: SDGs and South–South cooperation* (pp. n.d.). New Delhi: Crossbill.
- Banik, D., & Lin, K. (2019). Business and morals: Corporate strategies for sustainable development in China. *Business and Politics*, 21, 514–39.
- Banks, L. M., Hameed, S., Kawsar Usman, S., & Kuper, H. (2020). No one left behind? Comparing poverty and deprivation between people with and without disabilities in the Maldives. *Sustainability*, 12, 2066.
- Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: An enabling role for accounting research. *Accounting, Auditing & Accountability Journal*, 31, 2–24.
- Beisheim, M. (2018). UN Reforms for the 2030 Agenda: Are the HLPF’s working methods and practices ‘fit for purpose’? *Research Paper*, No. 09/2018. Berlin: German Institute for International and Security Affairs.
- Beisheim, M. (2020). Reviewing the HLPF’s ‘format and organizational aspects’: What’s being discussed? *Working Paper*, No. 01/2020. Berlin: German Institute for International and Security Affairs.
- Beisheim, M., & Bernstein, S. (2020). *Matching the HLPF’s ambition to performance: Prospects for the review*. International Institute for Sustainable Development. Available at: <https://sdg.iisd.org/commentary/guest-articles/matching-the-hlpfs-ambition-to-performance-prospects-for-the-review/>. Accessed: 7 October 2020.
- Beisheim, M. (2021). Conflicts in UN Reform Negotiations: Insights into and from the Review of the High-level Political Forum on Sustainable Development. *Research Paper*, No. 09/2021. Berlin: German Institute for International and Security Affairs.

- Bernstein, S. (2017). The United Nations and the governance of Sustainable Development Goals. In N. Kanie & F. Biermann (eds.), *Governance through goals: Sustainable Development Goals as governance innovation* (pp. 213–39). Cambridge, MA: The MIT Press.
- Bexell, M., & Jönsson, K. (2019). Country reporting on the SDGs: The politics of performance review at the global–national nexus. *Journal of Human Development and Capabilities*, 20, 403–17.
- Biermann, F. & Kim, R. E. (eds.) (2020). *Architectures of earth system governance: Institutional complexity and structural transformation* (pp. 275–96). Cambridge: Cambridge University Press.
- Biermann, F., & Sénit, C.-A. (2022). Decolonizing sustainability. *Unpublished manuscript*. Utrecht: Utrecht University.
- Björkdahl, A., & Somun-Krupalija, L. (2020). Gender equality and local governance: Global norms and local practices. In S. Cheema (ed.), *Governance for urban services: Access, participation, accountability, and transparency* (pp. 107–26). Singapore: Springer International Publishing.
- Brand, A., Furness, M., & Keijzer, N. (2021). Policy coherence within the SDG framework: Externalities, trade-offs and illusions of manageability. *Politics and Governance*, 9 (1), 108–18.
- Breuer, A., Leininger, J., & Tosun, J. (2019). Integrated policymaking: Choosing an institutional design for implementing the Sustainable Development Goals (SDGs). *Discussion Paper*, No. 14/2019. Bonn: German Development Institute.
- Brimont, L., & Hege, E. (2018). *A High-level Political Forum with added value is necessary for SDG coherence*. Available at: [www.iddri.org/en/publications-and-events/blog-post/high-level-political-forum-added-value-necessary-sdg-coherence](http://www.iddri.org/en/publications-and-events/blog-post/high-level-political-forum-added-value-necessary-sdg-coherence). Accessed: 10 June 2021.
- Chancel, L., Hough, A. & Voituriez, T. (2018). Reducing inequalities within countries: Assessing the potential of the Sustainable Development Goals. *Global Policy*, 9, 5–16.
- Chasek, P. S., & Downie, D. Leonard (2021). *Global environmental politics*. London: Routledge.
- Choer Moraes, H. (2019). Beyond a seat at the table. *Global Governance: A Review of Multilateralism and International Organizations*, 25, 563–86.
- Consolandi, C., Phadke, H., Hawley, J., & Eccles, R. G. (2020). Material ESG outcomes and SDG externalities: Evaluating the health care sector’s contribution to the SDGs. *Organization and Environment*, 33, 511–33.
- Corrado, S., Rydberg, T., Oliveira, F., Cerutti, A., & Sala, S. (2020). Out of sight out of mind? A life cycle-based environmental assessment of goods traded by the European Union. *Journal of Cleaner Production*, 246, 118954.
- Craig, R. K., & Ruhl, J. (2020). New realities require new priorities: Rethinking Sustainable Development Goals in the Anthropocene. In J. Owley & K. Hirokawa (eds.), *Environmental law beyond 2020*. University of Utah College of Law Research Paper, No. 319. Available at: <http://dx.doi.org/10.2139/ssrn.3401301>.
- Deep Decarbonization Pathways Project. (2015). *Pathways to deep decarbonization 2015 report*. Paris: Sustainable Development Solutions Network & Institute for Sustainable Development and International Relations.
- De la Mothe Karoubi, E., Dushime, O., Fuller, G., Nyorekwa Twinoburyo, E., Simkolo, A., & Verburg, G. (2019). *Africa SDG Index and Dashboards Report 2019*. Kigali/New York: SDG Centre for Africa and Sustainable Development Solutions Network.
- Delabre, I., Smallwood, J., Rowhani, P., & Pinheiro Vergara, S. (under review). Forests, food and the Sustainable Development Goals: Discourses, tensions and possibilities

- for post-2020 sustainable forest governance. *Journal of Environmental Policy and Planning*.
- Denny, D. M. T. (2018). Human rights and market access [Direitos humanos e acesso ao mercado]. *Revista de Direito Internacional*, 15, 202–20.
- Deprez, A., Vallejo, L., & Rankovic, A. (2019). Towards a climate change ambition that (better) integrates biodiversity and land use. *Study*, No. 08/2019. Paris: Institute for Sustainable Development and International Relations.
- De Zoysa, U., Gunawardena, A., & Gunawardena, P. (2020). *Localising the transformation in the new normal: A domestic resource mobilization framework for Sustainable Development Goals in Sri Lanka*. Janathakshan (GTE) Ltd. and the Centre for Environment and Development.
- Dhar, S. (2018). Gender and Sustainable Development Goals (SDGs). *Indian Journal of Gender Studies*, 25, 47–78.
- Dimitrov, R. S. (2020). Empty institutions in global environmental politics. *International Studies Review*, 22, 626–50.
- Eisenmenger, N., Pichler, M., Krenmayr, N., Noll, D., Plank, B., Schalmann, E., ... Gingrich, S. (2020). The Sustainable Development Goals prioritize economic growth over sustainable resource use: A critical reflection on the SDGs from a socio-ecological perspective. *Sustainability Science*, 15, 1101–10.
- Elder, M., & Olsen, S. H. (2019). The design of environmental priorities in the SDGs. *Global Policy*, 10 (S1), 70–82.
- Engström, R. E., Destouni, G., Howells, M., Ramaswamy, V., Rogner, H., & Bazilian, M. (2019) Cross-scale water and land impacts of local climate and energy policy. A local Swedish analysis of selected SDG interactions. *Sustainability*, 11, 1847.
- Fioletos, O., & Heldt, E. C. (2019). Legacies and innovations in global economic governance since Bretton Woods. *Review of International Political Economy*, 26, 1089–111.
- Forestier, O., & Kim, R. E. (2020). Cherry-picking the Sustainable Development Goals: Goal prioritization by national governments and implications for global governance. *Sustainable Development*, 28, 1269–78.
- Francis, J., Henriksson, K., & Stewart, A. J. (2020). Collaborating for transformation: Applying the Co-Laboratorio approach to bridge research, pedagogy and practice. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*. Available at : <https://doi.org/10.1080/02255189.2020.1797650>.
- Fukuda-Parr, S., & McNeill, D. (2019). Knowledge and politics in setting and measuring the SDG s: Introduction to Special Issue. *Global Policy*, 10 (S1), 5–15.
- Gaspar, D., Shah, A., & Tankha, S. (2019). The framing of sustainable consumption and production in SDG 12. *Global Policy*, 10, 83–95.
- Gehre Galvão, T., Laís de Almeida Gontijo, V., & Antunes Martins, A. P. (2020). Designed to be inclusive or exclusive? Brazilian experiences on territorialising the 2030 Agenda by development programmes on gender. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Goegele, H. (2020). A polycentric perspective on the United Nations. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Golding, R. (2021). UN Accountability: *From frameworks to evidence and results*. In S. Browne, & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 221–34). London: Routledge.
- Gruener, S., & Hammergren, H. (2021). Sustaining peace and the 2030 development agenda. In S. Browne, & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 96–108). London: Routledge.

- Hartley, K. (2020). The epistemics of policymaking: From technocracy to critical pragmatism in the UN Sustainable Development Goals. *International Review of Public Policy*, 2 (2), 233–44.
- Haywood, L. K., Funke, N., Audouin, M., Musvoto, C., & Nahman, A. (2019). The Sustainable Development Goals in South Africa: Investigating the need for multi-stakeholder partnerships. *Development Southern Africa*, 36, 555–69.
- Hege, E., Chabason, L., & Barchiche, D. (2020). Review of the High-level Political Forum: Towards a pivotal institution coordinating the Decade of Action and Delivery. *Policy Brief*, No. 2/2020. Paris: Institute for Sustainable Development and International Relations.
- Hickel, J. (2019). The contradiction of the Sustainable Development Goals: Growth versus ecology on a finite planet. *Sustainable Development*, 27, 873–84.
- Hickel, J. (2021). *Less is more: How degrowth will save the world*. London: Windmill Books.
- Hirons, M. (2020). How the Sustainable Development Goals risk undermining efforts to address environmental and social issues in the small-scale mining sector. *Environmental Science & Policy*, 114, 321–8.
- Horn, P., & Grugel, J. (2018). The SDGs in middle-income countries: Setting or serving domestic development agendas? Evidence from Ecuador. *World Development*, 109, 73–84.
- Ivanova, M. (2020). Coloring the UN Environmental Programme. *Global Governance*, 26, 307–24.
- Johnsson, F., Karlsson, I., Rootz n, J., Ahlb ck, A., & Gustavsson, M. (2020). The framing of a Sustainable Development Goals assessment in decarbonizing the construction industry: Avoiding ‘greenwashing’. *Renewable and Sustainable Energy Reviews*, 131, 110029.
- Kanie, N., & Biermann, F. (eds.) (2017). *Governing through goals: Sustainable Development Goals as governance innovation*. Cambridge, MA: The MIT Press.
- Kloke-Lesch, A. (2021). The untapped functions of international cooperation in the age of sustainable development. In S. Chaturverdi, S. Klingebiel, E. Sidiropoulos, X. Li, H. Janus, A. de Mello e Souza, & D. Wehrmann (eds.), *The Palgrave handbook of development cooperation for achieving the 2030 Agenda: Contested collaboration* (pp. 127–63). London: Palgrave Macmillan.
- Kotz , L. J. (2018). The Sustainable Development Goals: An existential critique alongside three new-millennial analytical paradigms. In D. French & L. J. Kotz  (eds.), *Sustainable Development Goals: Law, theory and implementation* (pp. 41–65). Cheltenham: Edward Elgar Publishing.
- Lee, J. W. (2020). Green finance and SDGs: The case of China. *The Journal of Asian Finance, Economics and Business*, 7, 577–86.
- Liaw, S. T., Marcelo, A., Narasimhan, P., Ashraf, M. M., & Ray, P. (2017). Global eHealth, social business and citizen engagement: A natural convergence? *Studies in Health Technology and Informatics*, 245, 773–7.
- Louis, M., and Maertens, L. (2021). *Why international organizations hate politics. Depoliticizing the world*. London: Routledge.
- Lynes, L. (2020). Weaving indigenous knowledge into local early action plans. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- MacFeely, S. (2018). *The 2030 Agenda: An unprecedented statistical challenge*. Berlin/New York, NY: Friedrich-Ebert-Stiftung and Global Policy and Development.
- Mahadi, A. (2020). Influence of the SDGs on interlinkages: Domestic policy change on palm oil governance. Paper presented at the 2020 SDGs Research Symposium GlobalGoals2020, 9–11 June, Utrecht University.

- Mawdsley, E. (2018). 'From billions to trillions': Financing the SDGs in a world 'beyond aid'. *Dialogues in Human Geography*, 8, 191–5.
- Monkelbaan, J. (2019). *Governance for the Sustainable Development Goals: Exploring an integrative framework of theories, tools, and competencies*. Singapore: Springer International Publishing.
- Morita, K., Okitasari, M., & Masuda, H. (2020). Analysis of national and local governance systems to achieve the SDGs: Case studies of Japan and Indonesia. *Sustainability Science*, 15, 179–202.
- Nilsson, M., Griggs, D., & Visbeck, M. (2016). Policy: Map the interactions between Sustainable Development Goals. *Nature*, 534, 320–2.
- Nunes, A. R. (2020). Accelerating progress on heatwave resilience for sustainable development. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Páez Vieyra, J. C. (2019). Una agenda común sobre desarrollo sostenible en América Latina. *InterNaciones*, 18, 121–43.
- Pérez-Pineda, J. A., & Wehrmann, D. (2021). Partnerships with the private sector: Success factors and levels of engagement in development cooperation. In S. Chaturverdi, S. Klingebiel, E. Sidiropoulos, X. Li, H. Janus, A. de Mello e Souza, & D. Wehrmann (eds.), *The Palgrave handbook of development cooperation for achieving the 2030 Agenda: Contested collaboration* (pp. 649–70). London: Palgrave Macmillan.
- Pradhan, P. (2019). Antagonists to meeting the 2030 Agenda. *Nature Sustainability*, 2, 171–2.
- Rantala, S., Iacobuta, G., Ministrini, S., & Tribukait, J. (2020). Gaps and opportunities for synergies in international environmental law on climate and biodiversity to promote the Sustainable Development Goal. In T. Honkonen, & S. Romppanen (eds.), *2019 International environmental law-making and diplomacy review* (pp. 58–99). Joensuu: University of Eastern Finland.
- Roehrl, R. A., Liu W., & Mukherjee S. (2020). The COVID-19 pandemic: A wake-up call for better cooperation at the science–policy–society interface. *UNDESA Policy Brief*, No. 62. New York, NY: UNDESA.
- Rudolph, A. (2017). The concept of SDG-sensitive development cooperation: Implication for OECD–DAC members, *Discussion Paper*, 1/2017. Bonn: German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE).
- Samarasinghe, N. (2021). Human rights and sustainable development: Together at last? In S. Browne & T. G. Weiss (eds.), *Routledge handbook on the UN and development* (pp. 80–95). London: Routledge.
- Schnitzler, T., Seifert, M., & Tataje, C. (2020). Achieving sustainable partnership in the United Nations in the framework of the Sustainable Development Goals. *International Journal of Sustainable Development*, 24, 28–49.
- Scobie, M. (2019). Sustainable development and climate change adaptation: Goal interlinkages and the case of SIDS. In C. Klöck, & M. Fink (eds.), *Dealing with climate change on small islands: Towards effective and sustainable adaptation* (pp. 101–22). Göttingen: Universitätsverlag Göttingen.
- Sianes, A. (2021). Academic research on the 2030 Agenda: Challenges of a transdisciplinary field of study. *Global Policy*, 12, 286–97.
- Siegel, K. M., & Bastos Lima, M. G. (2020). When international sustainability frameworks encounter domestic politics: The Sustainable Development Goals and agri-food governance in South America. *World Development*, 135, 105053.
- Tosun, J., & Leininger, J. (2017). Governing the interlinkages between the Sustainable Development Goals: Approaches to attain policy integration. *Global Challenges*, 1, 1700036.

- Trimmer, C. (2019). *Mongolia finds many ways to use SDG Synergies approach*. Available at: [www.sei.org/featured/sdg-synergies-mongolia/](http://www.sei.org/featured/sdg-synergies-mongolia/). Accessed: 31 March 2021.
- UNDESA [United Nations Department of Economic and Social Affairs] (2021). *National institutional arrangements for implementation of the Sustainable Development Goals: A five-year stocktaking*. *World Public Sector Report 2021*. New York, NY: UN DESA.
- UNGA [United Nations General Assembly] (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1.
- Urho, N., Ivanova, M., Dubrova, A., & Escobar-Pemberthy, N. (2019). *International environmental governance: Accomplishments and way forward*. Copenhagen: Nordic Council of Ministers.
- Valencia, S. C., Simon, D., Croese, S., Nordqvist, J., Oloko, M., Sharma, T., . . . Versace, I. (2019). Adapting the Sustainable Development Goals and the New Urban Agenda to the city level: Initial reflections from a comparative research project. *International Journal of Urban Sustainable Development*, 11, 4–23.
- Van Driel, M., Biermann, F., Kim, R. E., & Vijge, M. J. (2020). Custodians of sustainable development: An assessment of indicator custodianship for the SDGs. Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Van Soest, H. L., van Vuuren, D. P., Hilaire, J., Minx, J. C., Harmsen, M. J. H. M., Krey, V. . . . Luderer, G. (2019). Analysing interactions among Sustainable Development Goals with integrated assessment models. *Global Transitions*, 1, 210–25.
- Van Vuuren, D. P., Zimm, C., Busch, S., Kriegler, E., Leininger, J., Messner, D., . . . Soergel, B. (2021). Defining a sustainable development target space for 2030 and 2050. Preprint available at <https://doi.org/10.31223/X5B62B>.
- Wang, Y., Yuan, J., & Lu, Y. (2020). Constructing demonstration zones to promote the implementation of Sustainable Development Goals. *Geography and Sustainability*, 1, 18–24.
- Watson, S. (2020). SDG 14's marine protected area target (SDG 14.5): Is it SMART enough to conserve biodiversity in Areas Beyond National Jurisdiction? Paper presented at the 2020 SDGs Research Symposium GLOBALGOALS2020, 9–11 June, Utrecht University.
- Weinlich, S., Baumann, M.-O., Lundsgaarde, E., & Wolff, P. (2020). *Earmarking in the multilateral development system: Many shades of grey*. Bonn: German Development Institute.
- Weinlich, S., Baumann, M.-O., Cassens-Sasse M., Hadank-Rauch R., Leibbrandt, F., Pardey, M., Simon, M., & Strey, A. (2022) New rules, same practice? Analysing UN Development System reform effects at the country level. Discussion Paper 3/2022. Bonn: German Development Institute.
- Yunita, A., Biermann, F., Kim, R. E., & Marjanneke, J. V. (2022). The (anti-)politics of policy coherence for sustainable development in the Netherlands: Logic, method, effects. *Geoforum*, 128, 92–102.
- Zeng, Y., Maxwell, S., Runting, R. K., Venter, O., Watson, J. E., & Carrasco, L. (2020). Environmental destruction not avoided with the Sustainable Development Goals. *Nature Sustainability*, 3, 795–8.



# Annex 1

## The Sustainable Development Goals

*Editorial note: Each Sustainable Development Goal consists of outcome targets, designated with Arabic numerals, and means of implementation targets, designated with letters.*

### **Goal 1. End poverty in all its forms everywhere**

- 1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day.
- 1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.
- 1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.
- 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.
- 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.
- 1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions.

- 1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions.

**Goal 2. End hunger, achieve food security and improved nutrition  
and promote sustainable agriculture**

- 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.
- 2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.
- 2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.
- 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- 2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.
- 2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.
- 2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.

- 2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

### **Goal 3. Ensure healthy lives and promote well-being for all at all ages**

- 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
- 3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.
- 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.
- 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.
- 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.
- 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.
- 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.
- 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
- 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
- 3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.
- 3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property

Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

- 3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.
- 3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

#### **Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

- 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.
- 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.
- 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.
- 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.
- 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.
- 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.
- 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.
- 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.

- 4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.
- 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.

### **Goal 5. Achieve gender equality and empower all women and girls**

- 5.1 End all forms of discrimination against all women and girls everywhere.
- 5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.
- 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.
- 5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.
- 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.
- 5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences.
- 5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.
- 5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.
- 5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

## **Goal 6. Ensure availability and sustainable management of water and sanitation for all**

- 6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
- 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.
- 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.
- 6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.
- 6.b Support and strengthen the participation of local communities in improving water and sanitation management.

## **Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all**

- 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services.
- 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
- 7.3 By 2030, double the global rate of improvement in energy efficiency.
- 7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.

- 7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.

**Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

- 8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries.
- 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.
- 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.
- 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.
- 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
- 8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training.
- 8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.
- 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.
- 8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

- 8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.
- 8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries.
- 8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization.

### **Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**

- 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- 9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.
- 9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.
- 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
- 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
- 9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States.
- 9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.
- 9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.



**Goal 10. Reduce inequality within and among countries**

- 10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.
- 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
- 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.
- 10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.
- 10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations.
- 10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions.
- 10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.
- 10.a Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements.
- 10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes.
- 10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent.

**Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable**

- 11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.
- 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public

- transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- 11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.
  - 11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage.
  - 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.
  - 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.
  - 11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.
  - 11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.
  - 11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels.
  - 11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.

## **Goal 12. Ensure sustainable consumption and production patterns**

- 12.1 Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.
- 12.2 By 2030, achieve the sustainable management and efficient use of natural resources.

- 12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.
- 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
- 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
- 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.
- 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities.
- 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.
- 12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.
- 12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.
- 12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

### **Goal 13. Take urgent action to combat climate change and its impacts\***

- 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- 13.2 Integrate climate change measures into national policies, strategies and planning.
- 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

- 13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.
- 13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.
- \* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

**Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development**

- 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.
- 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.
- 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.
- 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.
- 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.
- 14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential

- treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.
- 14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.
  - 14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.
  - 14.b Provide access for small-scale artisanal fishers to marine resources and markets.
  - 14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of *The Future We Want*.

**Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

- 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.
- 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.
- 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.
- 15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.
- 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

- 15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.
- 15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.
- 15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.
- 15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.
- 15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.
- 15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.
- 15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.

**Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels**

- 16.1 Significantly reduce all forms of violence and related death rates everywhere.
- 16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children.
- 16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all.
- 16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime.
- 16.5 Substantially reduce corruption and bribery in all their forms.
- 16.6 Develop effective, accountable and transparent institutions at all levels.
- 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels.
- 16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance.
- 16.9 By 2030, provide legal identity for all, including birth registration.

- 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.
- 16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.
- 16.b Promote and enforce non-discriminatory laws and policies for sustainable development.

### **Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development**

#### **Finance**

- 17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.
- 17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries.
- 17.3 Mobilize additional financial resources for developing countries from multiple sources.
- 17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress.
- 17.5 Adopt and implement investment promotion regimes for least developed countries.

#### **Technology**

- 17.6 Enhance North–South, South–South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.
- 17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.

- 17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology.

### **Capacity-building**

- 17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North–South, South–South and triangular cooperation.

### **Trade**

- 17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda.
- 17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020.
- 17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access.

### **Systemic issues**

#### *Policy and institutional coherence*

- 17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence.
- 17.14 Enhance policy coherence for sustainable development.
- 17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development.

#### *Multi-stakeholder partnerships*

- 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.



- 17.17 Encourage and promote effective public, public–private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

*Data, monitoring and accountability*

- 17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.
- 17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries.

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