

Research Paper

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# Lessons for Global Health from Global Environmental Governance



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## Summary

Global health governance has developed beyond the consideration of different policy choices; it now encompasses the design of sophisticated collective action processes that involve both state and non-state actors and aim to address increasingly complex transnational challenges. This leads to a pressing question: how should global health's institutional architecture be matched with its governance needs? This paper responds to that question by drawing lessons from the field of global environmental governance. Not only are there correspondences in global systemic changes between the health and environment fields – in terms of the large number of actors, diverse initiatives and multiple levels of decision-making – but the institutions set up to facilitate collaboration are also similar. When reviewing the range of institutional options in global health governance, it makes sense to look to the global environmental governance domain for lessons learned, as the latter's institutions have been subject to rigorous academic research for more than 30 years. This paper is a scoping review of research in that domain, and takes stock of the body of knowledge that now exists. It highlights three lessons that exemplify the potential for cross-fertilization on how global institutions can make a difference. By starting to draw links across sectors, the paper approaches the broader questions of how global environmental governance in the 21st century has developed in new and interesting directions, and what can be learned from these developments.

### Key lessons

- Coordination among the institutions of a complex and crowded governance system does not depend on grand overarching structures. Coordination can also be achieved through decentralized management and through decisions made within each institution or by institutional stakeholders. Synergy, however, can come at the cost of subordinating a given objective to stronger political or normative forces.
- Scientific knowledge is not only a precondition for action but actually coevolves with it, necessitating institutional structures that protect its independence from politics, while simultaneously facilitating a productive interaction.
- The effectiveness of global governance depends on states having both sufficient governmental capacity and the political will to forge national policy coherence in support of implementation.

# Introduction

Over the past two decades, business as usual in global health has been punctuated by intermittent disease outbreaks and public health events of international concern. Emergencies such as SARS, H1N1 influenza and Ebola have triggered responses by what is commonly thought of as the global health system. The existence of global poverty – and the premature death and disability it causes – has similarly triggered responses from the global health system to meet health targets such as those articulated in the Millennium Development Goals (MDGs). These issues have spurred reflection among policy-makers and analysts on how well the rapidly expanding global health system is solving the problems that it was specifically set up to deal with, and is promoting and protecting population health more broadly. Such reflection provokes important questions such as: how should global health’s institutional architecture be matched with its governance needs? This is a question that is not confined to the health sector.

As a scoping review of research literature on global environmental governance that addresses the above question, this paper aims to build bridges for transferring lessons learned to the field of global health. Global environmental issues have been high on the international agenda since the first UN Conference on the Human Environment, held in Stockholm in 1972. Since then, hundreds of multilateral agreements have been established to deal with various international environmental problems. Other avenues have also been pursued, including loose frameworks, targets, timetables and market-based strategies. For more than three decades, global environment scholars have built an evidence base for assessing if, when and how environmental institutions make a difference.<sup>1</sup>

**Now, more than ever, knowledge acquired about global environmental governance will help global health researchers to leapfrog analytical groundwork on global governance and fast forward their own research.**

The learning potential that can be passed from the environment sector to the health sector is therefore based on the accumulation of experiences from the environmental issue area. The environment and health sectors today share the same challenges posed by highly complex systems, in which large numbers of diverse actors – both state and non-state – present new dilemmas and opportunities. Now, more than ever, knowledge acquired about global environmental governance will help global health researchers to leapfrog analytical groundwork on global governance and fast forward their own research. It should be noted, however, that we do not perceive the environment sector as a role model or panacea for the challenges facing global health governance; rather, we see it as a field that has been given more attention by global governance scholars and from which lessons can be gleaned to inform the evolution of the global health system.

The environment and health are related areas in the sense that they both seek to preserve the conditions for life itself. The two also interact directly on certain issues, such as the governance of intellectual property rights, or regulations addressing biological and genetic resources. Still, observers

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<sup>1</sup> For example, Biermann, F., Abbott, K., Andresen, S. et al. (2012), ‘Navigating the Anthropocene: Improving Earth System Governance’, *Science*, 335, 1306–07; Kanie, N., Haas, P.M., Andresen, S. et al. (2013), ‘Green Pluralism: Lessons for Improved Environmental Governance in the 21st Century’, *Environment: Science and Policy for Sustainable Development* 55:5, 14–30.

have noted that there is a ‘large disconnect between global environmental policy and global health policy, as well as between the research communities.’<sup>2</sup> Some reasons for this may be in their respective histories of engagement: global health emerged quite recently out of a tropical medicine tradition where the diffusion of medical technology and expertise from richer to poorer regions played a big part. This tradition influenced its practices and those of development assistance for health. The development of global environmental efforts, on the other hand, followed a different trajectory. Environmental efforts started with domestic politics and with concerns over negative externalities of industrialization and development, initially primarily in high-income countries and evolving later into a global issue.

Why, then, should global health policy-makers look to the environment sector for insights? In an age of growing transnational health threats, and with new Sustainable Development Goals (SDGs) currently being articulated for the post-2015 development era (these are scheduled to be adopted by the UN General Assembly in September 2015), the two sectors will likely follow a more similar path and be connected at key junctures. The synthesis and translation of lessons learned from one sector to the other is one way of promoting a growing awareness of innovative approaches that have been tried and learned from various unique perspectives. As those who work in global governance know, there is a certain path dependence associated with institutional structures: once established, institutions are usually hard to change, let alone dismantle. Therefore, when considering ways to improve the system, relevant knowledge derived from each sector can save time, resources and opportunity costs.

The aim of this scoping review is to generate some lessons from ways in which actors in global environmental governance have grappled with dilemmas relating to institutional persistence and change. This has been achieved through a review of published literature on global environmental governance, with a particular focus on recent review articles that take stock of the field. The three lessons were selected on the basis of their identification, through the literature as well as by an expert panel, of institutional challenges currently shared by both issue areas. A second, more in-depth review of global environmental governance in political science and international relations journals from 2000–14 was then performed, focusing on these three areas: managing institutional complexity, science/policy interfaces, and implementation of regime complexes.<sup>3</sup> This paper follows these three lessons.

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<sup>2</sup> Kovats, R.S. (2012), ‘Global health and global environmental governance – Research for policy’ (editorial), *Global Environmental Change* 22, 1–2.

<sup>3</sup> Note on terminology: we use the terms ‘institutions’ and ‘regimes’ interchangeably, where the latter is commonly defined as ‘sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors’ expectations converge in a given area of international relations’, Krasner, S.D. (1982), ‘Structural causes and regime consequences: Regimes as intervening variables’, *International Organization*, 36 (2), 185–206.

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## Lesson One: Achieving Coordination Among Institutions

Coordination among the institutions of a complex and crowded governance system does not depend on grand overarching structures. Coordination can also be achieved through decentralized management and through decisions made within each institution or by institutional stakeholders. Synergy, however, can come at the cost of subordinating a given objective to stronger political or normative forces.

The first lesson we can glean from global environmental governance addresses the inclination to search for ordering principles and tools to simplify an increasingly complex and unruly global system through centralized coordination. Counter to this almost intuitive reaction, however, institutional complexes in global environmental governance are known not only naturally to find a division of labour among themselves, but actually to evolve from a condition of fragmentation and competition towards greater density and integration. Such integration has been achieved just by the evolving interaction among institutions themselves.<sup>4</sup> For environmental issues, global governance evolved from the late 1970s, and in the mid-1990s started to change from a landscape characterized by a number of monolithic multilateral environmental agreements (MEAs, negotiated by states) to one comprising many more such agreements alongside new forms of initiative involving non-state actors.<sup>5</sup> The proliferation of institutions resulted in more interaction between formal structures of separate institutions and their stakeholders, raising concerns about duplication of efforts and conflicting commitments.

The patterns and effects of this interaction have been observed through a focus on institutional complexes, defined as networks ‘of three or more international regimes that relate to a common subject matter; exhibit overlapping membership; and generate substantive, normative or operative interactions recognized as potentially problematic whether or not they are managed effectively.’<sup>6</sup> The components of a complex are thus individual institutions with their own structures of decision-making and implementation.

The way in which groups of institutions coordinate themselves has garnered significant academic attention. Working over many years, academics have started to elucidate the tools with which global actors engage in global political processes to reap synergies and mitigate conflicts. It has been found that such engagement happens at the following four levels:<sup>7</sup>

- The first level is the overarching institutional framework, consisting of the UN and general rules of international law;

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<sup>4</sup> Morin, J.F and Orsini, A. (2013), ‘Regime Complexity and Policy Coherency: Introducing a Co-adjustments Model’, *Global Governance* (19), 41–51; Oberthür, S. and Stokke, O.S. (2011), ‘Conclusions: Decentralized Interplay Management in an Evolving Institutional Order’, in Oberthür, S. and Stokke, O.S. (eds), *Managing Institutional Complexity. Regime Interplay and Global Environmental Change* (Cambridge, MA: MIT Press).

<sup>5</sup> Biermann, F. and Pattberg, P. (2008), ‘Global Environmental Governance: Taking Stock, Moving Forward’, *Annual Review of Environment and Resources*, 33.

<sup>6</sup> Orsini, A., Morin, J.F. and Young, O. (2013), ‘Regime Complexes, a Buzz, a Boom or a Boost for Global Governance?’, *Global Governance* 19 (2013), 27–39.

<sup>7</sup> Oberthür, S. and Stokke, O.S., 2011.

- The second level consists of designated structures that facilitate joint management and cross-institutional coordination;
- The third level, further away from a central authority, is made up of unilateral management based on collective decisions within one or more of the interactive institutions; and
- The fourth level consists of autonomous management efforts by states or other actors, such as civil society or business interests.<sup>8</sup>

A major lesson from global environmental governance is that interplay management largely happens – and is most successful – at the decentralized third and fourth levels.

*As the global environmental domain gets busier with interlinked and overlapping governance activity, there is an emerging interest among actors in avoiding incompatible commitments, while preserving existing institutions.*

An important reason why decentralized interplay management is so pervasive is that procedures within organizations tend to be ‘sticky’ and not easily changed to accommodate overarching coordination demands. Very often, there is also reluctance to involve others in relevant decisions.<sup>9</sup> Decentralized management comes about as a result of the incremental steps through which institutions evolve from negotiations to agreements, and through to implementation. In some instances, multilateral agreements have adopted savings clauses that make space for the concerns of interlinked institutions. In other cases, the secretariats of related institutions have conducted joint scientific assessments. States are similarly known to use joint monitoring.<sup>10</sup> What seems clear is that, as the global environmental domain gets busier with interlinked and overlapping governance activity, there is an emerging interest among actors in avoiding incompatible commitments, while preserving existing institutions.

### Example of trade in genetically modified organisms<sup>11</sup>

In the late 1990s there were seeds of counterproductive competition between the World Trade Organization (WTO) and the Convention on Biological Diversity over which institution should regulate the trade and use of genetically modified organisms (GMOs). But over time, this competition gradually shifted, with incremental steps and adaptations, to yield a division of labour between them.

The background for the competition was a conflict between GMO exporting countries and GMO importing countries over how trade in this area should be regulated (with a view to avoiding negative consequences for the environment). Regulatory overlap began after the 1995 WTO Uruguay Round adopted measures aimed at preventing regulations already in force in states to protect the environment (as well as health) from becoming barriers to trade. As a result, developing countries and a group of industrialized countries – led by the EU – shifted their discussion of these issues to the Convention on Biological Diversity forum. This shift was motivated by the perception that it was a

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<sup>8</sup> Ibid, p. 316.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> The example draws on Gehring T. and Faude, B. (2014), ‘A theory of emerging order within institutional complexes: How competition among regulatory international institutions leads to institutional adaptation and divisions of labour’, *Review of International Organizations*, doi:10.1007/s11558-014-9197-1.

better forum for elaborating a rule-set that could balance that of the WTO when it came to trade in GMOs. Adoption of the Convention on Biological Diversity's Cartagena Protocol on Biosafety, in 2000, was thus a victory for reluctant importers, in making biosafety information-sharing mandatory for exporting countries, and legitimizing a country's right to restrict imports of GMOs – thereby swapping the burden of proof originally established by the WTO. However, and problematically, this forum shift initially generated two coexisting and partly contradictory regimes, which created ambiguity and led to opportunities for undermining the international rule-system.

Nevertheless, these contradictions were eventually resolved. The first step taken was the adaptation of WTO rules during the negotiations that led to the Cartagena Protocol on Biosafety. This was achieved by accepting the full participation of states that were against the Protocol in order to minimize conflict. Second, the Protocol included clauses aimed at ensuring compatibility with WTO rules. Third, negotiations among countries played out as a configuration of three negotiating camps: one comprising mostly high-income countries that preferred working through the WTO; one consisting of mostly low-income countries that preferred working through the Convention on Biological Diversity; and a third representing mostly 'middle powers' that had mixed preferences and drew the other two groups towards a middle-ground compromise.

Adaptation also happened the other way: first, in 1999, by states resisting efforts to shift biosafety negotiations to the WTO, thus preventing that forum from acquiring regulatory authority; second, through the WTO's reinterpretation of its own rules (which is difficult, given that single powerful members may block amendments); and third, by the WTO dispute settlement mechanism acknowledging the legal force of the Cartagena Protocol on Biosafety when EU restrictions on GMO importation were challenged.

These institutional adaptations ensured compatibility between environmental concerns and trade rules. The WTO ultimately prevailed as the comprehensive framework for international trade, while the Cartagena Protocol on Biosafety – as part of the Convention on Biological Diversity – defines the rules for national regulation of importation and domestic use of GMOs, interfering as little as possible with the trade domain. Significantly, however, the WTO remains the dominant institution today, and thus the effectiveness of resultant synergies is not necessarily an ideal outcome from an environmental perspective.

### Lessons for global health governance

This example aligns well with the general experience of environmental regime complexes over the past 10 years. The interlocked governance structures seen today are commonly the result of interactions between the actors that operate within the system. This is in contrast to systems that may have an overarching rational design or some form of forced coordination.<sup>12</sup> However, this example does not escape the question of whether decentralized interplay management is better than overarching structures, or merely a viable alternative when such structures do not exist. In the environmental domain, the need for overarching approaches is especially acute with the conspicuous lack of a 'World Environment Organization', as the existing UN Environment Programme (UNEP) is

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<sup>12</sup> Underdal, A. and Young, O.R. (eds) (2004), *Regime Consequences* (Dordrecht: Kluwer).

considered to be insufficiently endowed with institutional capacity to perform a strong coordination function.<sup>13</sup> (Opinions among scholars and policy practitioners differ as to whether such an organization is desirable, and if it would even result in a more streamlined system.<sup>14</sup>)

The debate over a streamlined versus decentralized system has also been common in the global health sector, at least since the turn of the millennium. Entities such as GAVI and the Global Fund to Fight AIDS, Tuberculosis and Malaria were created by donor countries, private foundations, international organizations and networks of experts in their search for new ways to address lingering health challenges, and by less wealthy states and civil society representatives that were pushing for access to medicines and for greater public health concern within the intellectual property regime that was limiting access. In this way, as is evident in global environmental governance, complexes in global health take many forms. Yet the WHO has increasingly been perceived as losing influence in the face of institutional pluralism, as opposed to assuming a strong coordination role.<sup>15</sup> This lesson is therefore not an unconditional recommendation to emphasize decentralization, but rather a recommendation to balance such forms of interplay management with the roles and functions of central organizations.

Figuring out how to manage any competition or overlap within regime complexes is most importantly a question about which of the above four levels one should work at to achieve coordination. In global health, decentralized co-management opportunities are bound to exist, especially in the areas of health technology procurement, development assistance, monitoring and implementation. An assessment of existing co-management experiences, such as the Global Alliance for Chronic Diseases and the Multilateral Organisation Performance Assessment Network, could offer valuable lessons for coordination.

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<sup>13</sup> Oberthür, S. and Stokke, O.S., 2011.

<sup>14</sup> Andresen, S., Boasson, E. and Hønneland, G. (2012), 'Ideals and practice in international environmental politics', in Andresen, Boasson, Hønneland (eds), *International Environmental Agreements: An Introduction* (Abingdon: Routledge).

<sup>15</sup> Hoffman, S.J. and Röttingen, J.-A. (2014), 'Split WHO in Two: Strengthening Political Decision-making and Securing Independent Scientific Advice', *Public Health*, 128 (2), 188–94, doi:10.1016/j.puhe.2013.08.021.

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## Lesson Two: Managing the Interface Between Science and Politics

Scientific knowledge is not only a precondition for action but actually coevolves with it, necessitating institutional structures that protect its independence from politics, while simultaneously facilitating a productive interaction.

The second lesson is about managing the interface between science and politics in global governance. Here, we can highlight experiences demonstrating how environmental institutions have organized science in relation to political processes, as a co-production of knowledge.<sup>16</sup> To reach this understanding, at least two myths had to give way. The first myth was that expert knowledge is always neutral and politics is always conflicted. The second was that failures of governance happen when policy-makers let political interests override evidence-based solutions.<sup>17</sup> Instead, experience in the global environment field suggests that science has political dimensions – for instance, in the framing of targets, in deciding what gets counted, and in determining what is considered legitimate knowledge – and that there will always be a degree of uncertainty about any given problem or solution.

Extensive research on the interrelations between science and politics in global environmental governance has focused attention on the conditions under which scientists can help reduce uncertainty and policy-makers can facilitate institutional learning.<sup>18</sup> Scientific panels are quite common in environmental governance, established as part of many environmental regimes. Panels can allow for constant construction and transmission of usable knowledge within the regime, and we see three types of structures: scientific groups that set their own schedules and research agendas; those whose meeting times and pace of work are set by a Conference of Parties; and ad hoc science panels set up to respond to particular one-time needs. In addition to such designated panels, one also finds that subcommittees responsible for different functions of governance, such as basic research monitoring and policy analysis, contribute to productive relationships between scientists and policy-makers.<sup>19</sup>

When searching and testing the factors that make the greatest difference for the effectiveness of institutions, global environment scholars have found that the role of science in relation to politics is key. Regimes become more successful when there are strong scientific networks present, evolving towards scientific consensus through a process of social learning.<sup>20</sup> Organizations that facilitate dialogue and interaction between science and politics – but also keep them separate – have been shown to yield the best results.<sup>21</sup> Such organizations support the notion that the more autonomous

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<sup>16</sup> Morin, J.F. and Oberthür, S. (2013), 'The Interface between Expert Knowledge and Politics in a Coproduction Model', in Morin, J.F. and Orsini, A. (eds), 'Insights from Global Environmental Governance', *International Studies Review*, 15 (4), 562–89.

<sup>17</sup> Ibid.

<sup>18</sup> Ibid.

<sup>19</sup> Haas, P. and Stevens, C. (2011), 'Organized Science, Usable Knowledge and Multilateral Environmental Governance', in Lindskog, R. and Sundquis, G. (eds), *Governing the Air: The Dynamics of Science Policy and Citizen Interaction* (Cambridge, MA: MIT Press).

<sup>20</sup> Miles, E.L., Underdal, A., Andresen, A., Wettstad, J., Skjærset, J.B. and Carlin, E.M. (2002), *Environmental Regime Effectiveness: Confronting Theory with Evidence* (Cambridge, MA: MIT Press).

<sup>21</sup> Koetz, T., Farrel, K.N. and Bridgewater, P. (2012), 'Building better science-policy interfaces for international environmental governance: Assessing potential within the Intergovernmental Platform for Biodiversity and Ecosystem Services', *International Environmental Agreements: Politics, Law and Economics*, 12 (1), 1–21.

science is from policy, the greater its potential influence.<sup>22</sup> At the same time, research also shows that influence is greater when political conflicts are low; thus it can be argued that substance is ultimately determined by political processes, not by scientific findings.<sup>23</sup>

### Example one: long-range transboundary air pollution

The 1979 Long-range Transboundary Air Pollution Convention is an example of a regime that is considered to have successfully handled the science/politics interface, starting out with vague ambitions in the 1970s that were increasingly strengthened over time.<sup>24</sup> The regime addresses the problem of air pollutants that harm human health and ecological systems. One prominent example is acid rain. Signatories of the convention (negotiated under the auspices of the UN Economic Commission for Europe) included European countries in addition to the United States and Canada. Originally, they did not adopt a binding treaty, but rather just a declaration committing to ‘develop joint strategies by exchanging information, consultation, research and monitoring.’<sup>25</sup> Since then, the regime has added eight main regulatory protocols with legally binding content. In terms of institutional design, there is a scientific body as part of the governance structure, and a permanent forum where the scientific community and policy-makers meet.<sup>26</sup> States parties to the treaty nominate experts to the scientific body, but thereafter the scientists are insulated from the political process. The scientific body sets its own agenda – albeit with guidance from the Conference of Parties and the secretariat of the treaty – and oversees sub-working groups and research centres in member countries.<sup>27</sup>

**States parties to the treaty nominate experts to the scientific body, but thereafter the scientists are insulated from the political process.**

Over time, science’s evolving knowledge base on the problem of long-range transboundary air pollution and innovative solutions became a driving force for regime change. At the beginning, emitter states contested the extent and depth of the problem. At the same time, scientists were reaching consensus on a critical loads-approach, which suggested differentiated targets for pollution reduction relating to a country’s position in relation to natural environments with varying biological tolerance thresholds.<sup>28</sup> This was a more flexible approach that eased collaboration among signatory states and helped diminish resistance among emitting states.

Moreover, scientists’ increased knowledge about how different substances interact set in motion negotiations for additional protocols on other polluting substances, hence broadening the regulatory focus of the regime.<sup>29</sup> Although success is mixed in reaching targets on some compounds, reduction in pollution is documented through the work of the scientific body. Thus, there is wide

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<sup>22</sup> Haas, P. and Stevens, C. (2011).

<sup>23</sup> Andresen, S. (2014), ‘The Role of Scientific Expertise in Multilateral Environmental Agreements: Influence and Effectiveness’, in Ambrus, M., Arts, K., Hey, E. and Raulus, H. (eds), *The Role of ‘Experts’ in International and European Decision-Making Processes: Advisors, Decision-Makers or Irrelevant Actors?* (Cambridge: Cambridge University Press, 2014), 105–26.

<sup>24</sup> Andresen, S., Boasson, E.L., and Hønneland, G. (2012), ‘Ideals and Practice in International Environmental Politics’, in Andresen, S., Boasson, E.L., and Hønneland, G. (eds), *International Environmental Agreements: An Introduction* (Abingdon: Routledge).

<sup>25</sup> Wettestad, J. (2012), ‘Reducing Long-range Transport of Air Pollutants in Europe’, in Andresen, S., Boasson, E.L., and Hønneland, G.

<sup>26</sup> Ibid.

<sup>27</sup> Haas, P. and Stevens, C. (2011).

<sup>28</sup> Wettestad, J. (2012).

<sup>29</sup> Ibid.

acknowledgment of positive results, and the scientific dimension – in terms of creating a politically usable scientific consensus that has largely been adhered to – is often highlighted as a decisive factor for this success.<sup>30</sup>

### Example two: climate change

The climate change regime differs greatly from long-range transboundary air pollution in that it is thus far considered largely unsuccessful, as it has not resulted in significant emission reductions since its launch in the early 1990s. Still, the Intergovernmental Panel on Climate Change (IPCC) is probably the best-known scientific forum for global environmental governance, regularly publishing assessment reports on the causes, consequences and means of addressing climate change. Being intergovernmental, the IPCC is not purely scientific in the sense that both governments and experts review and approve drafts, and thus the final text ‘bears the influence of the policy-makers’.<sup>31</sup> Still, over the 20 years that the Panel has worked, it is generally agreed that the underlying science has progressed, even though knowledge has not been decisive in terms of pushing the political process forward.<sup>32</sup>

A key factor holding back the political process is that greenhouse gas emissions are so pervasive and closely linked with ordinary practices of production and consumption. This means that stark interests are pitted against one another. The IPCC has articulated a 2° Celsius limit of what is considered within acceptable boundaries of global warming. Although generally accepted, this limit is not legally binding like the Kyoto Protocol.<sup>33</sup> Moreover, the political process has not adopted scientifically grounded targets for specific atmospheric concentrations of greenhouse gases.<sup>34</sup> North–South divergences in interests represent a further impediment to the political process. The climate change regime informally works according to the principle of common-but-differentiated responsibilities. Nevertheless, the IPCC has evolved from its original domination by Western scientists to a broader membership, thus increasing its legitimacy over the years.<sup>35</sup> Still, there are legitimate claims that scientists engaged in the assessment process of the IPCC lack autonomy from governments. The risk is that science may become too tied to the bargaining of politics, which could actually work to inhibit the creation of knowledge that can be used to make progress in political negotiations.<sup>36</sup>

Despite the barriers to scientific inputs into political processes, the IPCC is one of the central pillars in the climate change regime.<sup>37</sup> Notwithstanding a lack of progress in negotiations, the Panel itself has probably achieved a positive effect by raising the political priority of the climate issue on domestic and international agendas, as well as driving greater public attention worldwide.<sup>38</sup> Perhaps the high credibility and visibility of the IPCC, combined with current frustration over political stalemate, will help the Panel to trigger new forms of global action in the future.

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<sup>30</sup> Haas, P. and Stevens, C. (2011), Andresen, S., Boasson, E.L. and Hønneland, G. (2012), Wettestad, J. (2012).

<sup>31</sup> Andresen, S. and Boasson, E.L. (2012), ‘International Climate Cooperation: Clear Recommendations, Weak Commitments’, in *International Environmental Agreements: An Introduction* (Abingdon: Routledge).

<sup>32</sup> Ibid., Haas, P. and Stevens, C. (2011).

<sup>33</sup> Andresen, S. and Boasson, E.L. (2012).

<sup>34</sup> Haas, P. and Stevens, C. (2011).

<sup>35</sup> Andresen, S. and Boasson, E.L. (2012).

<sup>36</sup> Haas, P. and Stevens, C. (2011).

<sup>37</sup> Andresen, S. and Boasson, E.L. (2012).

<sup>38</sup> Ibid., Park, J., Finger, M. and Conca, K. (2008), ‘The Death of Rio Environmentalism’, in Park, J., Conca, K. and Finger, M. (eds), *The crisis of global environmental governance: Towards a new political economy of sustainability* (Abingdon: Routledge).

## Lessons for global health governance

The above two examples offer perspectives on what it takes to develop continuous systems of knowledge-building in governance efforts. Besides recognizing the two-way dialogue between science and politics, a key condition for constructing useful knowledge is the institutional design choice of actually separating science and politics and then facilitating transmission and debate between them at regular intervals.<sup>39</sup> There are also other more recent examples of such scientific bodies, including the UN Intergovernmental Platform on Biodiversity and Ecosystem Services, as well as many different types of institutional arrangements that have been shown to facilitate helpful interaction.<sup>40</sup>

Within the global health system, science is important in so many ways – through the innovation and development of health technologies, through generation of evidence to inform health policies, and setting priorities for health care and public health action. But science is probably too often seen by the global health community as belonging at the very beginning or end of a linear health product pipeline, in laboratories or through biomedical effects in human beings. Furthermore, the evidence-based policy tradition in global health may mean that the global health community has come to focus too much on outcomes, and that it forgets that process often matters as well. Independent scientific panels that continuously track an issue area over time are less visible in global health (with the Global Burden of Disease Study team, perhaps, representing a notable exception). What kind of science is needed and who should do it will always be a point of contention, regardless of issue area. Perhaps the best value of science lies in shedding light on uncertainty, and bringing this reality into the political arena for exposure, debate and information purposes.

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<sup>39</sup> Haas, P. and Stevens, C. (2011).

<sup>40</sup> Morin, J.F. and Oberthür, S. (2013).

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## Lesson Three: The Importance of Capacity and Political Will

The effectiveness of global governance depends on states having both sufficient governmental capacity and the political will to forge national policy coherence in support of implementation.

The last lesson of this paper draws on an area within global environmental governance where empirical research is sparse, but where recent conceptual developments are fuelling a renewed focus on the conditions for successful implementation. In global environmental governance scholarship, implementation is less concerned with putting technologies to use, as it is with the domestic political processes that kick in when global governance ‘hits the ground’ (for example, resulting in the action or inaction of domestic stakeholders in translating international commitments into policies and programmes). Often, implementation requires linkages with existing institutions and policies at different levels, and sometimes across sectors.<sup>41</sup> In the 1990s, when environmental regime-establishment was on the rise, scholarship on implementation focused on compliance with binding rules of single regimes, and identified the political will and capacity of states as necessary conditions for successful implementation.<sup>42</sup> However, with increasing numbers, and more diverse sets of often interlinked global environmental institutions, researchers have questioned whether a focus on single institutions can still capture the reality of governance arrangements.<sup>43</sup>

An emerging focus on the implementation of regime complexes shifts the emphasis from compliance to the means by which states address multiple demands agreed within, or articulated by, global institutions. Conceptual work that builds on scholarship on implementation suggests that creating national policies that are coherent across competing demands and interests could be a precondition for effectively implementing the wide range of expectations and rules. The need for coherence seems to be most acute when multiple regimes address the same subject (e.g. GMOs) or multiple subjects (e.g. long-range transboundary air pollution). In the literature on global environmental governance, policy coherence is typically defined according to two dimensions. The first relates to process, referring to the degree of internal coordination in policy-making. The second dimension concerns outcomes, referring to the degree of complementarity between adopted policies. Full coherence in a given issue area requires ‘both the institutional capacity for procedural coherence, and the political commitment for substantive coherence.’<sup>44</sup> A typology for coherence has been developed that organizes states according to their governmental capacity and political will: states that are low on both procedural and substantive coherence will tend to shape policies erratically, based on an understanding that each international institution is unrelated to individual

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<sup>41</sup> Puppim de Oliveira, J.A. (2014), ‘The Mismatch of Implementation Networks in International Environmental Regimes: Lessons from Different Agreements’, in Kaine, N., Andresen S. and Haas, P.M. (eds), *Improving Global Environmental Governance: Best Practice for Architecture and Agency* (Abingdon: Routledge).

<sup>42</sup> Victor, D.G., Raustiala, K. and Skolnikoff, E.B., eds (1998), *The Implementation and Effectiveness of International Environmental Commitments* (Cambridge, MA: MIT Press).

<sup>43</sup> Bernstein, S., and Cashore, B. (2012), ‘Complex Global Governance and Domestic Policies: Four Pathways of Influence’, *International Affairs*, 88 (3), 585–604.

<sup>44</sup> Morin, J.F. and Orsini, A. (2014), ‘Policy Coherency and Regime Complexes: the Case of Genetic Resources’, *Review of International Studies*, 40, 303–24.

others, even when they form part of the same regime complex. Two conditions that increase the risk of erratic policy-making are: a lack of leadership among cross-cutting coordination teams; and a strong specialization of governmental units involved in national policy-making. The ideal of systematic, whole-of-government and coherent policy-making is found at the high end of the spectrum, requiring high coordination capacity within government and integrated policy outcomes.<sup>45</sup>

### Example: implementation of the Convention on Biological Diversity<sup>46</sup>

Successful intergovernmental negotiations led to the Convention on Biological Diversity's adoption in 1992 to address the global loss of biodiversity. Two decades later, this regulation scores low on implementation effectiveness. The Convention forms part of a broader regime complex that includes the Cartagena Protocol on Biosafety and the recent (2010) Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization. The Global Environment Fund is also important as the financial implementation arm of the Convention in developing countries in Eastern Europe. Making the regime even more crowded are the many parallel sets of international rules on food security, plant breeding and technological development set by the World Intellectual Property Organization and the Food and Agriculture Organization, as well as by the WTO.

An important challenge is posed by the Convention on Biological Diversity's lack of specific implementation provisions, and the fact that it does not evoke legal or economic sanctions if countries do not follow through on their commitments. Still, countries are obliged to prepare national action plans, and – for countries covered by the Global Environment Fund – commitments depend on transfers of technology and financial resources. A noteworthy feature of the Convention was a new obligation for countries to integrate the work of all stakeholder sectors involved in the issue.

In tracing implementation, a prevailing difficulty is the lack of governmental capacity and political will to forge coherent ties among stakeholders who all need to be part of the solution. A key challenge is that industry sectors that manage farming, fisheries and forestry often disagree with environmental authorities on respective powers and competencies. An additional problem is how societies tend to undervalue ecosystems within general economic policy, and, as a result, underuse economic measures that can help protect biodiversity. 'The result,' environmental scholars have seen, 'is that some end up paying more than others to meet the cost of protecting biodiversity', and, at the national level, some groups are 'affected disproportionately by implementation measures'.<sup>47</sup> The fact that ecosystem management must address natural conditions that vary widely among countries, and is not amenable to simple technological solutions, adds to the challenge.

### Lessons for global health governance

One of the key challenges associated with biodiversity is that the commitments inherent in the Convention on Biological Diversity are vague, compared with the regime on air pollution, for instance, where targets are very specific. Striking the balance between comprehensive and targeted goals is therefore a matter of setting the level of expectations to what states can achieve at the

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<sup>45</sup> Ibid.

<sup>46</sup> This example draws on Rosendal, K. and Schei, P.J. (2012), 'Convention on Biological Diversity: from National Conservation to Global Responsibility', in S. Andresen, E.L. Boasson and G. Hønneland (eds), *International Environmental Agreements: An Introduction* (Abingdon: Routledge).

<sup>47</sup> Ibid.

domestic level. Increasingly, the performance of global environmental institutions depends on robust responses by the Global South, including emerging middle-income countries. Rapidly growing economies such as China and India harbour not only a gradually greater share of the problem, but also the solution in the form of rising political strength within global decision-making processes. At the same time, effective implementation of global institutions in many less wealthy countries depends on financial transfers through development assistance, combined with national prioritization. This is a familiar challenge for global health governance. However, the difference is that development assistance for health is a more pervasive feature of the governance complex as a whole, and the drive for effective funding mechanisms has fuelled institutional proliferation. The result is that the states that interact most with the global health complex are either high- or low-income countries, as donors or recipients. In this way, low-income countries are faced with the most implementation demands, yet they may have the least governmental capacity for national policy coherence or opportunities to participate in global governance. Thus, they risk missing out on the potentially positive feedback loop whereby pressures on states to have coherent national policies emanate from participation in global regimes.

**Low-income countries are faced with the most implementation demands, yet they may have the least governmental capacity for national policy coherence or opportunities to participate in global governance.**

In global health, the challenges facing middle-income countries are an emerging issue as these countries graduate out of the income brackets conditional for health aid, yet struggle with the same health issues and the largest populations of poor people. An increasing focus on universal approaches, such as multilateral treaties, may bring middle-income countries to the fore, with implications for the areas that may become more important for studying the implementation of global health institutions in the years to come.

The experience from global environmental governance is that policy change among governments is often erratic and uneven, but that political leaders' fear of being seen as inconsistent and losing credibility at national and international levels should not be underestimated. One important question remains unanswered: as the world moves towards greater policy coherence, will pressure increase on laggard states to follow suit?<sup>48</sup> The global environmental governance literature does not yet have an answer.

In the mean time, there are at least two practical applications of this lesson. First, assessing the implementation of multiple institutions within a regime complex yields better knowledge than the evaluation of single initiatives. Second, if a goal for global health governance is to strengthen national health systems, a focus on national policy coherence in relation to global health institutions may be an entry point that allows for national actors to make use of institutional complementarity for facilitating reform of their own health systems.

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<sup>48</sup> Morin, J.F. and Orsini, A. (2014).

## Conclusion

Actors in global environmental governance have long grappled with dilemmas of institutional persistence and change. In this paper, we have drawn on knowledge about how both state and non-state actors exercise agency within a patchwork of global institutions and through implementation, engaging in mutual changes that have systemic consequences. The body of knowledge from the environment sector is extensive, and a focus on the above three lessons captures a glimpse of what can be borrowed.

What differences do global institutions make? According to UNEP's last status report, there have been few true success stories among MEAs, and this observation is supported by extensive research. Still, there are strong variations in achievement and a tendency to move towards positive results over time, and clearly better outcomes than if collective efforts had been completely absent. Often, the political deadlock witnessed in climate change negotiations overshadows the positive achievements of several international regimes that have successfully protected the atmosphere and oceans.<sup>49</sup> The lessons covered here have nevertheless highlighted that even if environmental institutions influence sectors that tend to be more dominant, such as WTO commitments, they are still restricted by external constraints such as broader norms about how the world works – or should work. In such cases, concerns have been raised that systemic stability is not necessarily a goal when change is necessary for solving problems.

**While it is true that the global health system may have achieved more results over the last two decades than the environment sector, there has been broader attention within the environment sector to the political barriers and conflicting interests that impede collective action for good global governance.**

The picture presented here of global environmental governance is not one simply of ideals to follow, nor failures to avoid. Instead, the purpose has been to start harvesting the knowledge of more than 30 years of attention to how global governance works in the field of the environment, how global governance evolves, and why this matters. While it is true that the global health system may have achieved more results over the last two decades than the environment sector (for example, if one juxtaposes progress attained towards achieving the health-related MDGs against rising greenhouse gas emissions), there has been broader attention within the environment sector to the political barriers and conflicting interests that impede collective action for good global governance. Consequently, there are many opportunities for learning.

A key difference between the two issue areas is that health is so closely linked to the medical profession that it is sometimes viewed as a 'technical' issue: one that is apolitical. However, it is increasingly beyond doubt that broader political and social factors represent key drivers and barriers for achieving health goals. Another difference is the time frame under consideration: in the environmental field, progress can be hampered by high up-front costs to collective action, with benefits accruing over the long term. For global health governance, benefits are more instantaneous, such as saving lives

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<sup>49</sup> Andresen, S. (2014).

in the current birth cohort, but more uncertain in the longer term. None the less, the three lessons presented here offer a basis for reflection on current practices and dilemmas in global health. It is to be hoped that the lessons also raise new questions about the conditions under which certain strategies work better than others, as well as stimulate future research on what lessons the health sector may offer the environment sector.

The potential for drawing lessons across the environmental and health domains obviously extends far beyond what we have captured here. The literature on global environmental governance documents practices that offer a host of other lessons, some of which include the questions of whether institutional pluralism displaces traditional diplomacy and inter-state negotiations, and whether there is any substitute for the legitimacy and universality provided by the UN system; the significance of institutional design for regime effectiveness and legitimacy, such as voting rules, compliance procedures, top-down versus bottom-up approaches, and hard-law versus soft-law; and the significance of leadership, power and norms. Also on this list of unexplored territory are topics that remain understudied in both the environmental and health fields, such as comparative experiences of North–South resource transfers, understanding accountability of global governance systems, and issues of equity and justice as part of allocation mechanisms. In some areas, such as the implementation of new technology, it is likely that there is ample room for the environment community to learn from experiences in global health governance.<sup>50</sup>

Looking ahead, leaders in the global environment sector – like those in global health – are starting to ask: what constitutes legitimate, effective and accountable global governance for the 21st century? Clearly, a workable global environmental system will require a different kind of governance to what has been built over the past century. Solutions will depend on the ability of states to delegate authority to networks of actors and to find ways of achieving global collective action on matters of mutual concern and interest.<sup>51</sup> Rather than relying on issue-specific international agreements where states just shift problems to higher levels of negotiations, there may be a need for processes that will be able to integrate environmental, social and economic concerns with a more active form of participation at more levels of governance.<sup>52</sup>

Perhaps the soon-to-be articulated SDGs will trigger this global governance transformation. At the very least, the SDGs are likely to bring the health and environment sectors closer together. It will be important that each sector learns from the other if they are ever to work together in building on their successes and avoiding each other's failures.

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<sup>50</sup> Hoffman, S.J. and Røttingen, J.-A. (2012), 'Assessing Implementation Mechanisms for an International Agreement on Research and Development for Health Products', *Bulletin of the World Health Organization*, 90 (12), 854–63, doi:10.2471/BLT.12.109827.

<sup>51</sup> Kanie, N., Haas, P.M., Andresen, S., Auld, G., Cashore, B., Chasek, P.S., Puppim de Oliveira, J.A., Renschens, S., Stokke, O.S., Stevens, C., VanDeveer, S.D. and Iguchi, M. (2013), 'Green Pluralism: Lessons for Improved Environmental Governance in the 21st century', *Environment Magazine*, 55 (5), 14–30.

<sup>52</sup> Park, J. et al., (2008).

## Acronyms

EU	European Union
GMOs	Genetically modified organisms
IPCC	Intergovernmental Panel on Climate Change
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
SARS	Severe acute respiratory syndrome
SDGs	Sustainable Development Goals
UNEP	United Nations Environment Programme
WHO	World Health Organization
WTO	World Trade Organization

## References

- Andresen, S. (2014), 'The Role of Scientific Expertise in Multilateral Environmental Agreements: Influence and Effectiveness', in Ambrus, M., Arts, K., Hey, E. and Raulus, H. (eds), *The Role of 'Experts' in International and European Decision-Making Processes: Advisors, Decision-Makers or Irrelevant Actors?* (Cambridge: Cambridge University Press, 2014), 105–26.
- Andresen, S., Boasson, E.L., and Hønneland, G. (2012), 'Ideals and Practice in International Environmental Politics', in Andresen, S., Boasson, E.L., and Hønneland, G. (eds) *International Environmental Agreements: An Introduction* (Abingdon: Routledge).
- Andresen, S. and Boasson, E.L. (2012), 'International Climate Cooperation: Clear Recommendations, Weak Commitments', in Andresen, S., Boasson, E.L., and Hønneland, G. (eds) *International Environmental Agreements: An Introduction* (Abingdon: Routledge).
- Bernstein, S., and Cashore, B. (2012), 'Complex Global Governance and Domestic Policies: Four Pathways of Influence', *International Affairs*, 88 (3), 585–604.
- Biermann, F., Abbott, K., Andresen, S. et al. (2012), 'Navigating the Anthropocene: Improving Earth System Governance', *Science*, 335, 1306–07.
- Biermann, F. and Pattberg, P. (2008), 'Global Environmental Governance: Taking Stock, Moving Forward', *Annual Review of Environment and Resources*, 33.
- Gehring T. and Faude, B. (2014), A theory of emerging order within institutional complexes: How competition among regulatory international institutions lead to institutional adaptation and divisions of labour, *Review of International Organizations*, doi: 10.1007/s11558-014-9197-1.
- Haas, P. and Stevens, C. (2011), 'Organized science, usable knowledge and multilateral environmental governance', in Lindskog, R. and Sundquis, G. (eds), 'Governing the Air: The Dynamics of Science Policy and Citizen Interaction' (Cambridge, MA: MIT Press).
- Hoffman, S.J. and Røttingen, J.-A. (2014), 'Split WHO in Two: Strengthening Political Decision-making and Securing Independent Scientific Advice', *Public Health*, 128 (2), 188–94, doi:10.1016/j.puhe.2013.08.021.
- Hoffman, S.J., Røttingen, J.-A. (2012), 'Assessing Implementation Mechanisms for an International Agreement on Research and Development for Health Products', *Bulletin of the World Health Organization*, 90 (12), 854–63, doi:10.2471/BLT.12.109827.
- Kanie, N., Andresen and S. and Haas, P.M. (2014), 'Improving Global Environmental Governance: Best Practices for Architecture and Agency' (Abingdon: Routledge).
- Kanie, N., Haas, P.M., Andresen, S. et al. (2013), 'Green Pluralism: Lessons for Improved Environmental Governance in the 21st Century', in *Environment: Science and Policy for Sustainable Development* 55:5, 14–30.
- Koetz, T, Farrel, K.N. and Bridgewater, P. (2012), 'Building better science-policy interfaces for international environmental governance: Assessing potential within the Intergovernmental

- Platform for Biodiversity and Ecosystem Services', *International Environmental Agreements: Politics, Law and Economics*, 12 (1), 1–21.
- Kovats, R.S. (2012), 'Global health and global environmental governance – Research for policy' (editorial), *Global Environmental Change* 22, 1–2.
- Krasner, S.D. (1982), 'Structural causes and regime consequences: Regimes as intervening variables', *International Organization*, 36 (2), 185–206.
- Miles, E.L., Underdal, A., Andresen, A., Wettestad, J., Skjærset, J.B. and Carlin, E.M. (2002), *Environmental Regime Effectiveness: Confronting Theory with Evidence* (Cambridge, MA: MIT Press).
- Morin, J.F. and Orsini, A. (2014), 'Policy Coherency and Regime Complexes: the Case of Genetic Resources', *Review of International Studies*, 40, 303–24.
- Morin, J.F. and Orsini, A. (2013), 'Regime Complexity and Policy Coherency: Introducing a Co-adjustments Model', *Global Governance* (19), 41–51.
- Morin, J.F. and Orsini, A. (eds) (2013), 'Insights from Global Environmental Governance', *International Studies Review*, 15 (4), 562–89.
- Morin, J.F. and Oberthür, S. (2013), 'The Interface between Expert Knowledge and Politics in a Coproduction Model'.
- O'Neill, K. (2013), 'Vertical Linkages and Scale', in Morin, J.F. and Orsini, A. (eds) *Insights from Global Environmental Governance*.
- Oberthür, S. and Stokke, O.S. (2011), 'Conclusions: Decentralized Interplay Management in an Evolving Institutional Order', in Oberthür, S. and Stokke, O.S. (eds), *Managing Institutional Complexity. Regime Interplay and Global Environmental Change* (Cambridge, MA: MIT Press).
- Orsini, A., Morin, J.F. and Young, O. (2013), 'Regime Complexes, a Buzz, a Boom or a Boost for Global Governance?', *Global Governance* 19 (2013), 27–39.
- Park, J., Finger, M. and Conca, K. (2008), 'The Death of Rio Environmentalism', in Park, J., Conca, K. and Finger, M. (eds) *The Crisis of Global Environmental Governance: Towards a New Political Economy of Sustainability* (Abingdon: Routledge).
- Rosendal, K. and P.J. Schei (2012), 'Convention on Biological Diversity: From National Conservation to Global Responsibility', in Andresen, S, Boasson, E.L., and Hønneland, G. (eds), *International Environmental Agreements: An Introduction* (Abingdon: Routledge).
- Victor, D.G., Raustiala, K. and Skolnikoff, E.B., eds (1998), 'The Implementation and Effectiveness of International Environmental Commitments' (Cambridge, MA: MIT Press).
- Wettestad, J. (2012), 'Reducing Long-range Transport of Air Pollutants in Europe', in Andresen, S., Boasson, E.L., and Hønneland, G.

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