## MANAGING THE FRAGMENTATION OF INTERNATIONAL ENVIRONMENTAL LAW: FORESTS AT THE INTERSECTION OF THE CLIMATE AND BIODIVERSITY REGIMES

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The extensive debate on the fragmentation of international law has only paid cursory attention to its manifestation within the area of international environmental law, even though this field has spawned a great number of international legal instruments. Against that background, this Article assesses strategies to manage the overlap between two legal regimes dealing with the interconnected global environmental threats of biodiversity loss and climate change. Although the climate and biodiversity treaties are not fundamentally in discord, there is potential for conflict between the regimes, particularly following decisions on forest carbon sinks in the Kyoto Protocol, while at the same time there are synergies to be captured by tackling deforestation. The Article reviews the techniques offered by international law for mitigating conflicts, including conflict avoidance and conflict resolution techniques. This is followed by an appraisal of institutional cooperation and coordination between the regimes. The Article shows that the usefulness of legal techniques for resolving conflicts is limited given two characteristics of international environmental law, namely the overlap in objectives and the role of treaty body decisions. Furthermore, it argues that institutional cooperation and coordination have not yet managed to adequately accommodate biodiversity considerations in the climate regime due to different memberships and restricted mandates. Therefore, autonomous action aimed at enhancing synergies between the two regimes seems the most fruitful option in the immediate future, although this does not address the regimes' longterm relationship. The Article concludes that further inquiry into different strategies for managing the fragmentation of international environmental law is warranted.

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I.	INTRODUCTION: THE FRAGMENTATION OF			
	INTERNATIONAL ENVIRONMENTAL LAW			
II.	The Climate and Biodiversity Regimes:			
	Ste	PPING INTO THE VOID OF GLOBAL FOREST		
	Go	VERNANCE?	1212	
	А.	Climate Change, Biodiversity Loss, and the		
		Crucial Role of Forests	1213	
	B.	The Climate Convention, the Biodiversity		
		Convention, and the Missing Forest Convention .	1215	
	С.	The Climate Regime: Promoting Forests as Carbon		
		Sinks	1218	
	D.	The Biodiversity Regime: Protecting Forests		
		Holistically	1224	
III.	Ov	erlapping Treaties, Conflicting		
	Ou	TCOMES?	1228	
	А.	General Relationship Between the Climate and		
		Biodiversity Treaties	1229	
		1. Provisions in the Climate Treaties	1229	
		2. Provisions in the Biodiversity Convention	1230	
	B.	Forest Carbon Sinks in the Kyoto Protocol: A		
		Threat to Biodiversity?	1231	
	С.	Tackling Deforestation: Everybody Wins?	1236	
IV.	MANAGING INTERACTIONS BETWEEN MULTILATERAL			
	Env	JIRONMENTAL AGREEMENTS	1243	
	А.	Legal Techniques: Promises and Pitfalls	1244	
		1. Conflict Avoidance Techniques	1244	
		2. Conflict Resolution Techniques	1248	
		3. Tracing the Origins of Interactions: The Role		
		of Treaty Bodies	1252	
		4. Conflicts and Synergies: The Limits of Legal	1055	
	n	Techniques	1255	
	В.	Institutional Cooperation and Coordination: The	1050	
		"Soft" Alternative	1258	
		1. The Conferences of the Parties: Passive/	1050	
			1258	
		2. The Secretariats: Integration by Stealth	1263	
		3. Memberships, Mandates and Legitimacy: The		
		Limits of Institutional Cooperation and	1965	
	C	Cooraination	1205	
	C.	Autonomous Management as an Interim	1969	
		Soution :	1208	
		1. Autonomous Management by States	1209	

	2.	Autonomous Management by Non-State	
		Actors	1271
	3.	The Need for a Structural Solution	1273
V.	Conclu	USIONS	1274

# I. INTRODUCTION: THE FRAGMENTATION OF INTERNATIONAL ENVIRONMENTAL LAW

Over the past decade, the fragmentation of international law has moved from the periphery to the center of international legal debate. While the growing specialization of international law had been noted by early observers,<sup>1</sup> discussions on the subject—and the use of the term itself—intensified after 2000, when it was included in the work program of the International Law Commission (ILC).<sup>2</sup> Finalized six years later, the ILC Study Group report on fragmentation provides an impressive overview of the various questions raised by the increasing specialization and diversification of international

<sup>1.</sup> One of the early contributions on the issue of "self-contained regimes" examined whether it was possible for specialized regimes to exist in isolation from general international law. *See* Bruno Simma, *Self-Contained Regimes*, 16 NETH. Y.B. INT'L L. 111 (1985). Another early contribution consisted of a comparative assessment of the extent to which increasing specialization may have detrimental effects on the unity of international law. *See* DIVERSITY IN SECONDARY RULES AND THE UNITY OF INTERNATIONAL LAW (L.A.N.M. Barnhoorn & Karel C. Wellens eds., 1995).

<sup>2.</sup> See Rep. of the Int'l L. Comm'n, 52nd Sess., May 1-June 9, July 10-Aug. 18, 2000, ¶ 729, U.N. Doc. A/55/10; GAOR, 55th Sess., Supp. No. 10 (2000). On the fragmentation of international law, see generally Eyal Benvenisti & George W. Downs, The Empire's New Clothes: Political Economy and the Fragmentation of International Law, 60 STAN. L. REV. 595 (2007); Gerhard Hafner, Pros and Cons Ensuing from Fragmentation of International Law, 25 MICH. J. INTL'L L. 849 (2004); Alexandra Khrebtukova, A Call to Freedom: Towards a Philosophy of International Law in an Era of Fragmentation, 4 J. INT'L L. & INT'L REL. 51 (2008); Joost Pauwelyn, Bridging Fragmentation and Unity: International Law as a Universe of Inter-Connected Islands, 25 MICH. J. INTL'L L. 903 (2004). Several commentators have argued that the very notion of "fragmentation" as such is used for political purposes. See Matthew Craven, Unity, Diversity and the Fragmentation of International Law, 14 FIN. Y.B. INT'L L. 3 (2003); Martti Koskenniemi & Päivi Leino, Fragmentation of International Law? Postmodern Anxieties, 15 LEIDEN J. INT'L L. 553 (2002); Anne-Charlotte Martineau, The Rhetoric of Fragmentation: Fear and Faith in International Law, 22 LEI-DEN J. INT'L L. 1 (2009). For the purposes of this Article, however, the term is simply used to refer to a landscape where various international legal instruments are overlapping in terms of substantive issue coverage.

law.<sup>3</sup> It shows how conflicts may arise between special and general international law, as well as between different branches of international law, and reviews various legal techniques for avoiding and resolving normative conflicts.

In its report, the ILC Study Group acknowledges the tension that may exist between different branches of international law, recommending that "increasing attention will have to be given to the collision of norms and regimes and the rules, methods and techniques for dealing with such collisions."4 This Article aims to take up this challenge, focusing specifically on international environmental law.<sup>5</sup> However, the approach of this Article departs from the approach of the ILC Study Group report in two important respects. First, rather than viewing "international environmental law" as a unitary body of rules and norms interacting with other branches of international law, such as international trade law or human rights law,<sup>6</sup> it is concerned with the manifestation of fragmentation within the body of international environmental law. Second, the Article is not only interested in *collisions* of norms and regimes, but also in the question of how different regimes and norms could work to support each other, or, in other words, how to achieve synergies. In doing so, the Article seeks to move

6. See, e.g., Tim Stephens, Multiple International Courts and the Fragmentation' of International Environmental Law, 25 AUSTL. Y.B. INT'L L. 227 (2006) (discussing the implementation of environmental law through human rights law).

<sup>3.</sup> See Rep. of the Study Group of the Int'l Law Comm'n, 58th Sess., May 1–June 9, July 3–Aug. 11, 2006, U.N. Doc. A/CN.4/L.682 (Apr. 13, 2006) [hereinafter ILC Study Group Report] (finalized by Martti Koskenniemi) (examining the impact of fragmentation of international law).

<sup>4.</sup> Id. ¶ 493.

<sup>5.</sup> This Article is not the first contribution to the fragmentation literature focusing on a specific branch of international law. For a discussion of fragmentation within world trade law, see Panagiotis Delimatsis, *The Fragmentation of International Trade Law*, 45 J. WORLD TRADE 87 (2011). Similarly, for a discussion of fragmentation within international investment law, see Anne van Aaken, *Fragmentation of International Law: The Case of International Investment Law*, 17 FIN. Y.B. INT'L L. 91 (2006); for fragmentation in international criminal law, see Mark Klamberg, *What Are the Objectives of International Criminal Procedure? – Reflections on the Fragmentation of an International Legal Regime*, 79 NORDIC J. INT'L L. 279 (2010); for fragmentation in international climate change law, see Harro van Asselt et al., *Global Climate Change and the Fragmentation of International Law*, 30 LAW & POL'Y 423 (2008).

away from the narrow focus on "conflict" that characterizes much of the fragmentation literature.<sup>7</sup>

The proliferation of international legal instruments is one of the key features of the development of international environmental law over past decades.<sup>8</sup> Environmental treaties have mostly emerged in a piecemeal fashion, reflecting how environmental problems were viewed mainly as separate (scientific) issues at the time treaties were negotiated.<sup>9</sup> Over the years, this has led to a multiplication of multilateral, regional and bilateral treaties in the field, with some estimates indicating that almost 3,000 environmental treaties have been adopted.<sup>10</sup> In 1993, Edith Brown Weiss had already highlighted the possible consequences of this "treaty congestion" in international environmental law.<sup>11</sup> She not only pointed to substantive incompatibilities among different environmental

9. Id. at 794.

<sup>7.</sup> Most studies on the relationship of norms and treaties in international law focus on the (potential) conflicts that may arise, and methods for dealing with such conflicts. *See, e.g.,* JOOST PAUWELYN, CONFLICT OF NORMS IN PUBLIC INTERNATIONAL LAW: HOW WTO LAW RELATES TO OTHER RULES OF INTERNATIONAL LAW (2003); SEYED ALI SADAT-AKHAVI, METHODS OF RESOLV-ING CONFLICTS BETWEEN TREATIES (2003); RÜDIGER WOLFRUM & NELE MATZ, CONFLICTS IN INTERNATIONAL ENVIRONMENTAL LAW (2003); Christopher J. Borgen, *Resolving Treaty Conflicts,* 37 GEO. WASH. INT'L L. REV. 573 (2005); Wladyslaw Czapliński & Gennady M. Danilenko, *Conflicts of Norms in International Law,* 21 NETH. Y.B. INT'L L. 3 (1990); C. Wilfred Jenks, *The Conflict of Law-Making Treaties,* 30 BRIT. Y.B. INT'L L. 401 (1953); Jan B. Mus, *Conflicts Between Treaties in International Law,* 45 NETH. INT'L L. REV. 208 (1998). This focus on conflict may well be driven by a jurisprudential interest in norms *stricto sensu,* rather than in the outcomes in terms of behavioral changes that such norms may induce.

<sup>8.</sup> See Gerhard Loibl, International Environmental Regulations – Is a Comprehensive Body of Law Emerging or is Fragmentation Going to Stay?, in INTERNA-TIONAL LAW BETWEEN UNIVERSALISM AND FRAGMENTATION: FESTSCHRIFT IN HONOUR OF GERHARD HAFNER 783, 784 (Isabelle Buffard et al. eds., 2008) (discussing the recent growth of the number of international environmental regulations).

<sup>10.</sup> The International Environmental Agreements database lists 1125 multilateral environmental agreements, 1569 bilateral environmental agreements, and 259 other (non-bilateral, non-multilateral) agreements. Ronald B. Mitchell, *IEA Project Contents*, INTERNATIONAL ENVIRONMENTAL AGREEMENTS DATABASE PROJECT (VERSION 2012.1), http://iea.uoregon.edu/page.php? query=home-contents.php (last visited Apr. 5, 2012).

<sup>11.</sup> Edith Brown Weiss, International Environmental Law: Contemporary Issues and the Emergence of a New World Order, GEO. L.J. 675, 697–702 (1993). For further discussion of treaty congestion, see Bethany Lukitsch Hicks,

treaties, but also identified "operational inefficiency" as one of the key problems.<sup>12</sup> While the multiplication of international environmental agreements has certainly not been ignored in the period since, and has received particular consideration in the context of discussions on reforming international environmental governance,<sup>13</sup> only limited attention has been paid to the effectiveness of strategies for managing the fragmentation of international environmental law.<sup>14</sup>

Against this backdrop, this Article examines strategies for managing the consequences of the fragmentation of international environmental law, focusing on forest-related interactions between the global climate regime and the global biodiversity regime.<sup>15</sup> The two regimes are chosen for several reasons. First, biodiversity loss and climate change are undoubtedly two of the main environmental threats facing the world today. The United Nations Framework Convention on Climate Change (UNFCCC)<sup>16</sup> and its Kyoto Protocol,<sup>17</sup> as well

Comment, Treaty Congestion in International Environmental Law: The Need for Greater International Coordination, 32 U. RICH. L. REV. 1643 (1999).

<sup>12.</sup> Brown Weiss, *supra* note 11, at 697. However, she also pointed to potential "inconsistencies in obligations." *Id.* at 699.

<sup>13.</sup> See, e.g., Steinar Andresen, Global Environmental Governance: UN Fragmentation and Co-ordination, in YEARBOOK OF INTERNATIONAL CO-OPERATION ON ENVIRONMENT AND DEVELOPMENT 19 (Olav Schram Stokke & Øystein B. Thommesen eds., 2001) (discussing global governance and the role of the U.N. in the proliferation of multilateral environmental agreements); Steven Bernstein & Maria Ivanova, Institutional Fragmentation and Normative Compromise in Global Environmental Governance: What Prospects for Re-embedding?, in GLOBAL LIBERALISM AND POLITICAL ORDER: TOWARDS A NEW GRAND COMPRO-MISE? 161 (Steven Bernstein & Louis W. Pauly eds., 2007) (positing that forces of globalization have reinforced the fragmentation of environmental governance).

<sup>14.</sup> Notable exceptions are W. BRADNEE CHAMBERS, INTERLINKAGES AND THE EFFECTIVENESS OF MULTILATERAL ENVIRONMENTAL AGREEMENTS 47–93 (2008); WOLFRUM & MATZ, *supra* note 7, at 119–209.

<sup>15.</sup> The notion of regime refers to "principles, norms, rules, and decision-making procedures around which actor expectations converge in a given issue-area." Stephen D. Krasner, *Structural Causes and Regime Consequences: Regimes as Intervening Variables*, 36 INT'L. ORG. 185, 185 (1982).

<sup>16.</sup> United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107 (entered into force Mar. 21, 1994), *available at* http://unfccc.int/resource/docs/convkp/conveng.pdf [hereinafter UNFCCC].

<sup>17.</sup> Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, 2303 U.N.T.S. 148 (entered into force Feb. 16,

as the Convention on Biological Diversity (CBD),<sup>18</sup> all enjoy near-universal membership<sup>19</sup>—an indication of the widespread perception that the problems need to be addressed.<sup>20</sup> But while separate legal regimes have been created, there is increasing scientific evidence that the problems are inextricably intertwined in terms of their causes, consequences, and policy responses.<sup>21</sup> This Article sheds light on this interdependence by considering the role of forests at the intersection of both regimes. Second, given that the UNFCCC and CBD were negotiated in parallel, and the objectives and principles of the climate and biodiversity treaties are not fundamentally in discord,<sup>22</sup> one could assume that there is limited scope for conflicts but ample opportunity for achieving mutually supportive outcomes. However, the emphasis so far has been on conflicts or potential conflicts between the two regimes, particularly following decisions on the use of forest carbon sinks in the Kyoto Protocol.23

The Article posits that the usefulness of legal techniques for resolving potential conflicts between the two legal regimes is constrained because of specific characteristics of interna-

18. Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 79 (entered into force Dec. 29, 1993), *available at* http://www.cbd.int/convention/convention.shtml [hereinafter CBD].

19. As of April 1, 2011, 195 parties (194 countries and the European Union) have ratified the UNFCCC, including major greenhouse gas emitters such as the United States, the European Union, China, Russia, and Japan. *See* United Nations Framework Convention on Climate Change, *Status of Ratification*, http://unfccc.int/essential\_background/convention/status\_of\_ratification/items/2631.php. The Kyoto Protocol has been ratified by 192 parties (191 countries and the European Union), with the U.S. being one of the few key countries that has not ratified the convention. *See* Kyoto Protocol, *Status of Ratification*, http://unfccc.int/kyoto\_protocol/status\_of\_ratification/items/2613.php. The CBD has been ratified by 193 parties (including the European Union), with the United States again being a non-party. *See* Convention on Biological Diversity, *List of Parties*, http://www.cbd. int/convention/parties/list/.

20. Of course, such broad participation may also be a sign of the weakness of the agreements' commitments, allowing states to become a party without incurring significant costs. *See* DANIEL BODANSKY, THE ART AND CRAFT OF INTERNATIONAL ENVIRONMENTAL LAW 182 (2010).

- 21. See infra Part II.A.
- 22. See infra Part III.A.
- 23. See infra Part III.B.

<sup>2005),</sup> *available at* http://unfccc.int/resource/docs/convkp/kpeng.pdf [hereinafter Kyoto Protocol].

tional environmental law, namely the overlap in objectives and the important role of treaty body decisions in international environmental lawmaking. Furthermore, it argues that while the treaties' decision-making and administrative bodies have sought to enhance synergies between the two regimes, these efforts have not yet managed to adequately accommodate biodiversity considerations in the rules of the climate treaties, mainly because of incongruent treaty memberships and restricted mandates. However, legal techniques may still be useful when it comes to drafting a new climate treaty or amending the existing ones, while "soft," informal approaches may slowly but surely create sufficient awareness of the inherent linkages between the treaties. In the meantime, it is primarily up to autonomous efforts by state and non-state actors to ensure that conflicts are mitigated and synergies are enhanced.

Part II of the Article provides the general background of the relationship between the climate and biodiversity regimes, showing how both conventions have started to fill a void in global forest governance after the 1992 Earth Summit. Part III turns to the key forest-related interactions between the two regimes, and assesses the outcomes of such interactions in terms of conflicts and synergies. Part IV subsequently evaluates various means of managing the outcomes of interactions between the two regimes. It first examines the tools offered by international law for mitigating conflicts, followed by an assessment of institutional cooperation and coordination activities. Finally, it illustrates how autonomous management could form an interim solution for addressing the relationship between two environmental regimes. The concluding remarks summarize the main implications of this case in light of the discussions on the fragmentation of international law.

## II. THE CLIMATE AND BIODIVERSITY REGIMES: STEPPING INTO THE VOID OF GLOBAL FOREST GOVERNANCE?

The interactions between the climate and biodiversity regimes can be broadly explained by the fact that the problems are interconnected in complex ways, while the legal regimes have largely developed in isolation. This Part elaborates on this explanation by first pointing to the role of forests at the intersection of climate change mitigation and adaptation on the one hand, and the protection of biodiversity on the other. It then proceeds to explain how the climate and biodiversity regimes have started to fill a gap in global forest governance, albeit from their own particular angle.

## A. Climate Change, Biodiversity Loss, and the Crucial Role of Forests

The linkages between climate change and biodiversity loss are manifold and complex.<sup>24</sup> In the first place, climate change is a major threat to the conservation of biodiversity, and already has negative impacts on ecosystems, species, genetic diversity, and ecological interactions.<sup>25</sup> These impacts include changes to the distribution of ecosystems, for instance by inducing a poleward shift of ecosystems,<sup>26</sup> and the composition of ecosystems, for instance through the introduction of invasive alien species.<sup>27</sup> Another important connection is that ecosystems with high biological diversity are generally more resilient in the face of climate change and variability than impover-

<sup>24.</sup> See generally INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLI-MATE CHANGE AND BIODIVERSITY (Habiba Gitay et al. eds., 2002); CLIMATE CHANGE AND BIODIVERSITY (Thomas E. Lovejoy & Lee Hannah eds., 2005); SECRETARIAT OF THE CONVENTION ON BIOLOGICAL DIVERSITY, CONNECTING BI-ODIVERSITY AND CLIMATE CHANGE MITIGATION AND ADAPTATION: KEY MESSAGES FROM THE REPORT OF THE SECOND AD HOC TECHNICAL EXPERT GROUP ON BIODIVERSITY AND CLIMATE CHANGE (2009) [hereinafter Secretariat of the CBD 2009]; Secretariat of the Convention on Biological Diversity, In-TERLINKAGES BETWEEN BIOLOGICAL DIVERSITY AND CLIMATE CHANGE: ADVICE ON THE INTEGRATION OF BIODIVERSITY CONSIDERATIONS INTO THE IMPLEMENTA-TION OF THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE AND ITS KYOTO PROTOCOL (2003) [hereinafter Secretariat of the CBD 2003]; Secretariat of the Convention on Biological Diversity, Review OF THE LITERATURE ON THE LINKS BETWEEN BIODIVERSITY AND CLIMATE CHANGE: IMPACTS, ADAPTATION AND MITIGATION (2009) [hereinafter Secreta-RIAT OF THE CBD 2009, REVIEW].

<sup>25.</sup> See, e.g., SECRETARIAT OF THE CBD 2009, REVIEW, supra note 24, at 12–29 (describing environmental changes brought about by climate change and modeling studies thereof); see also Chris D. Thomas et al., Extinction Risk from Climate Change, 427 NATURE 145, 145 (2004) (explaining how under mid-range climate change scenarios, 15–37% of a representative sample of species will be "committed to extinction").

<sup>26.</sup> See, e.g., Camille Parmesan & Gary Yohe, A Globally Coherent Fingerprint of Climate Change Impacts Across Natural Systems, 421 NATURE 37, 37 (2003) (discussing range shifts).

<sup>27.</sup> See, e.g., Frank J. Rahel & Julian D. Olden, Assessing the Effects of Climate Change on Aquatic Invasive Species, 22 CONSERVATION BIOLOGY 521 (2008) (examining the effects of warmer waters on invasive species).

ished ecosystems. Hence, if other pressures on biodiversity<sup>28</sup> decrease, it is more likely that ecosystems will adapt naturally to climate change.<sup>29</sup> For instance, healthy coral reefs are shown to be able to better adapt to climate change impacts such as coral bleaching.<sup>30</sup> Furthermore, biodiversity can support humans in their efforts to adapt to climate change impacts.<sup>31</sup> For example, coastal ecosystems can strengthen coastal defense systems to prevent floods and erosion.<sup>32</sup> Finally, ecosystems play an important role in the carbon cycle by either taking up (sequestering) or emitting carbon.<sup>33</sup>

This complex relationship between climate change and biodiversity is especially pertinent in the case of forest ecosystems. Forests are an important component of the world's biological diversity, while also playing a role in maintaining global biodiversity in general. Intact forests will likely be more resilient to climate change impacts, making the protection of such forests a sound adaptation strategy.<sup>34</sup> At the same time, forests are important from the perspective of climate change mitigation, as they form either net carbon sinks or sources of emissions. Young, growing trees act as sinks by absorbing carbon dioxide from the atmosphere. However, most carbon dioxide is stored in old-growth forests, which form vast reservoirs of carbon over a long period. When forests or harvested wood products are burned or decompose, the biomass loses its function as a sink and becomes a source of carbon.<sup>35</sup> Varying estimates indicate that tropical deforestation and forest degradation account for about 12-20% of global carbon dioxide emis-

<sup>28.</sup> Other notable threats to biodiversity include habitat loss, overexploitation, pollution, and the invasion of alien species. *See* Georgina Mace et al., *Biodiversity, in* 1 ECOSYSTEMS AND HUMAN WELL-BEING: CURRENT STATUS AND TRENDS 77, 96–99 (Rashid Hassan et al. eds., 2005).

<sup>29.</sup> See SECRETARIAT OF THE CBD 2003, supra note 24, at 78 ("[B]iodiversity itself can play a potentially important role in enhancing ecosystem capacity to recover . . . and adapt to the impacts of climate change . . . .").

<sup>30.</sup> Id. at 79-80.

<sup>31.</sup> See SECRETARIAT OF THE CBD 2009, REVIEW, supra note 24, at 73 ("Enhancing the resilience of biodiversity to the impacts of climate change is likely to be important for societal adaptation and for mitigation.").

<sup>32.</sup> Id. at 54-56.

<sup>33.</sup> Id. at 93-97.

<sup>34.</sup> Id. at 62-63.

<sup>35.</sup> SECRETARIAT OF THE CBD 2003, supra note 24, at 48.

sions.<sup>36</sup> Hence, measures to protect existing forests or to increase forest cover have a significant potential for climate change mitigation, but the impacts on biodiversity may be positive, neutral, or negative.<sup>37</sup>

Given these complex interrelations between climate change and biodiversity loss, it is difficult to view either problem in isolation. In particular, forest ecosystems play a crucial role in biodiversity protection as well as climate change adaptation and mitigation. Having outlined the interconnectedness of the two problems, the following sections will discuss how the climate and biodiversity regulatory regimes have started to address forests.

## B. The Climate Convention, the Biodiversity Convention, and the Missing Forest Convention

The relationship between the climate and biodiversity treaties goes back to their very origins. The UNFCCC and the CBD were negotiated in parallel during what can be deemed the heyday of modern international environmental lawmaking. Both treaties were submitted for adoption to the Earth Summit in Rio de Janeiro in 1992. While the "Rio Conventions,"<sup>38</sup> together with Agenda 21,<sup>39</sup> were the most notable outcomes of this landmark conference, the failure to reach agreement on a global forest convention was probably the biggest disappointment of the meeting.<sup>40</sup> One of the often-cited reasons for this failure is that developing countries stood

<sup>36.</sup> Guido van der Werf et al.,  $CO_2$  Emissions from Forest Loss, 2 NATURE GEOSCIENCE 737, 737 (2009). According to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), the share of the forestry sector (including deforestation) in anthropogenic greenhouse gas emissions in 2004 was 17.3%. IPCC, CLIMATE CHANGE 2007: SYNTHESIS REPORT 36 (2007), http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\_syr.pdf.

<sup>37.</sup> SECRETARIAT OF THE CBD 2009, REVIEW, supra note 24, at 102-4.

<sup>38.</sup> In addition to the UNFCCC and the CBD, the third "Rio Convention" is the United Nations Convention to Combat Desertification.

<sup>39.</sup> Agenda 21 is a "soft law" action plan, outlining actions to be undertaken by a wide range of actors in the pursuit of sustainable development. *See* United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3–14, 1992, *Agenda 21*, U.N. Doc. A/CONF. 151/26 (Aug. 12, 1992), http://www.un.org/esa/dsd/agenda21/.

<sup>40.</sup> See generally DAVID HUMPHREYS, FOREST POLITICS: THE EVOLUTION OF INTERNATIONAL COOPERATION 83–104 (1996) (discussing the negotiation

united in their claim that their forests were a sovereign natural resource as opposed to a global commons.<sup>41</sup> With a legally binding agreement on forests out of reach, countries settled for the adoption of the non-legally binding "Forest Principles"<sup>42</sup> and the inclusion of a chapter on deforestation in Agenda 21.<sup>43</sup>

Since 1992, various initiatives have emerged in the area of global forest governance, contributing to an emerging body of "soft law."<sup>44</sup> This plethora of public, private and public-private initiatives at various levels of governance all work in interaction with each other.<sup>45</sup> In the United Nations context, these include the Intergovernmental Panel on Forests, established in 1995, which was succeeded by the Intergovernmental Forum

process surrounding a global forest instrument during the United Nations Conference on Environment and Development).

<sup>41.</sup> David Humphreys, *The Elusive Quest for a Global Forests Convention*, 14 REV. EUR. COMMUNITY & INT'L ENVTL. L. 1, 1 (2005). There are other explanations, however. Davenport argues forcefully that it was not so much the sovereignty concerns of the developing countries that caused the negotiations to break down, but rather the fact that the costs for the U.S. to take on leadership were deemed to be too high. Deborah S. Davenport, *An Alternative Explanation for the Failure of the UNCED Forest Negotiations*, 5 GLOBAL ENVTL. POL. 105, 106 (2004).

<sup>42.</sup> United Nations Conference on Environment and Development, Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, June 13, 1992, 31 I.L.M. 881.

<sup>43.</sup> U.N. GAOR, 46th Sess., Agenda Item 21, U.N. Doc. A/CONF.151/26 Chapter 11 (1992).

<sup>44.</sup> David Humphreys, Logiam: Deforestation and the Crisis of Global Governance 114-15 (2006).

<sup>45.</sup> It is beyond the scope of this Article to discuss the multitude of initiatives in global forest governance. See generally Peter Glück et al., Core Components of the International Forest Regime Complex, in EMBRACING COMPLEXITY: MEETING THE CHALLENGES OF INTERNATIONAL FOREST GOVERNANCE 37 (Jeremy Rayner et al. eds., 2010) [hereinafter EMBRACING COMPLEXITY] (examining the interlinkages between different policy instruments); Constance Mc-Dermott et al., International Forest Policy – The Instruments, Agreements and Processes that Shape It, UNITED NATIONS FORUM ON FORESTS SECRETARIAT (2007), http://www.un.org/esa/forests/pdf/publications/Intl\_Forest\_Policy\_instruments\_agreements.pdf (for an overview of instruments and initiatives in global forest governance). For an analysis of the role of private and public-private forest certification schemes, and their role in forest governance, see, e.g., Lars H. Gulbrandsen, Overlapping Public and Private Governance: Can Forest Certification Fill the Gaps in the Global Forest Regime?, 4 GLOBAL ENVTL. POL. 75 (2004).

on Forests in 1997, which was itself subsequently replaced by the United Nations Forum on Forests in 2001.<sup>46</sup> These intergovernmental discussion venues have helped to share knowledge and experiences and build trust between states.<sup>47</sup> One of the major outputs of the United Nations Forum on Forests has been the adoption of the "Non-legally Binding Instrument on All Types of Forests" as a resolution by the UN General Assembly in 2008.<sup>48</sup>

While there is an ongoing intergovernmental political process to keep the hope of a global forest convention alive,<sup>49</sup> actors in existing multilateral environmental agreements have also become aware of the links between forests and the respective subject matters of these treaties.<sup>50</sup> This includes the climate and biodiversity regimes, which have started to address forests, and are, in this sense, stepping into a void in global forest governance: the treaties provide a potential "hard law" avenue for protecting the world's forests.<sup>51</sup> As the following discussion shows, however, they have done so from their own respective angles.

49. See Humphreys, supra note 41, at 9 (positing that "[i]t is likely that the type of temporary institutional arrangement that has prevailed since 1995. . .will continue for the foreseeable future" and noting what pre-conditions may need to exist before a permanent and binding arrangement may be implemented).

50. See HUMPHREYS, supra note 44, at 190 (arguing that a forests regime has slowly emerged as a result of overlap between various agreements).

51. The word "potential" should perhaps be stressed here, as not all commentators would agree that the CBD actually represents "hard law." *See, e.g.,* Stuart R. Harrop & Diana J. Pritchard, *A Hard Instrument Goes Soft: The Implications of the Convention on Biological Diversity's Current Trajectory,* 21 GLOBAL ENVTL. CHANGE 474 (2011).

<sup>46.</sup> See Melanie Steiner, *The Journey from Rio to Johannesburg: Ten Years of Forest Negotiations, Ten Years of Successes and Failures,* 32 GOLDEN GATE U. L. REV. 629 (2002) for a historical overview.

<sup>47.</sup> Humphreys, supra note 41, at 9.

<sup>48.</sup> Non-legally Binding Instrument on All Types of Forests, G.A. Res. 62/98, U.N. Doc. A/RES/62/98 (Jan. 31, 2008). Like the "Forest Principles" adopted in Rio, the 2008 non-legally binding instrument is another example of the development of "soft law" in this area of international environmental policy. While the two documents have been created through different U.N. processes, they contain some overlapping principles, such as the sovereign right of nations to exploit their own forest resources. Glück et al., *supra* note 45, at 40.

### C. The Climate Regime: Promoting Forests as Carbon Sinks

Forests have played a prominent role in the climate regime in the discussions about removals and emissions from land use, land-use change, and forestry (LULUCF). In other words, forests have been regarded first and foremost as a means of climate change mitigation through their function as carbon sinks (and, conversely, their potential as a source of emissions). The main commitment contained in the UNFCCC in this regard is that all parties must report annual emissions by sources and removals by sinks.<sup>52</sup> Furthermore, all parties must also promote the sustainable management of all sinks and reservoirs, including forests.<sup>53</sup>

The Kyoto Protocol put the use of carbon sinks high on the agenda by opening up the possibility of using sinks to meet the emission reduction targets agreed upon by industrialized countries.<sup>54</sup> Article 3.3 of the Protocol states that

net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct humaninduced land-use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, measured as verifiable changes in carbon stocks in each commitment period, shall be used to meet the commitments [of industrialized countries].<sup>55</sup>

In addition, article 3.4 determines that rules concerning the use of LULUCF activities other than afforestation, reforestation, and deforestation shall be decided upon by the first Conference of the Parties serving as Meeting of the Parties to the Kyoto Protocol (COP/MOP).<sup>56</sup> The indeterminate wording of these provisions led to protracted discussions in the years after Kyoto, and was part of the reason why the sixth Conference of the Parties (COP) of the UNFCCC failed in

55. Id. art. 3, ¶ 3.

<sup>52.</sup> UNFCCC, *supra* note 16, art. 4, ¶ 1(a).

<sup>53.</sup> *Id.* art. 4, ¶ 1(d).

<sup>54.</sup> The Kyoto Protocol introduces binding greenhouse gas emission targets for (mainly industrialized) countries, with specific targets listed in Annex B. Meeting these targets should result in a 5% reduction in emissions compared to 1990 levels between 2008 and 2012. Kyoto Protocol, *supra* note 17, art. 3, ¶ 1.

<sup>56.</sup> Id. art. 3, ¶ 4.

2000.<sup>57</sup> Eventually, the 2001 Marrakesh Accords<sup>58</sup> resolved many of the outstanding issues regarding sinks and clarified how they should be accounted for.<sup>59</sup> Parties agreed on several principles for implementing LULUCF activities,<sup>60</sup> provided definitions for key terms such as "afforestation,"<sup>61</sup> "reforestation,"<sup>62</sup> and "deforestation,"<sup>63</sup> and clarified the activities that could be accounted for under article 3.4.<sup>64</sup>

While the Marrakesh Accords provided a much-needed compromise on the use of forest carbon sinks in achieving the Kyoto targets, another hot issue remained on the table: the use of forestry activities in the Kyoto Protocol's Clean Development Mechanism (CDM). Under the CDM, industrialized

59. This included agreement on a "gross-net" approach, where LULUCF removals or emissions were excluded from the calculation of base year emissions, but were included in the assessment of compliance at the end. FARHANA YAMIN & JOANNA DEPLEDGE, THE INTERNATIONAL CLIMATE CHANGE REGIME: A GUIDE TO RULES, INSTITUTIONS AND PROCEDURES, 82 (2004). For more details on the agreement, see *id.* at 122–29.

60. See Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol Dec. 16/CMP.1, Rep. of the Conference of the Parties, 1st Sess., Nov. 28–Dec. 10., 2005, U.N. Doc. FCCC/KP/CMP/2005/8/Add.3 ¶ 1(e) (Mar. 30, 2006) [hereinafter Decision 16/CMP.1] (codifying the parties' agreement on principles governing LULUCF).

61. Afforestation is defined as "the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed resources." *Id.* Annex,  $\P$  1(b).

62. Reforestation is defined as "the direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land." *Id.* ¶ 1(c). The decision adds that reforestation in the first commitment period (2008-2012) can only take place "on those lands that did not contain forest on 31 December 1989." *Id.* 

63. Deforestation is defined as "the direct human-induced conversion of forested land to non-forested land."  $Id. \ 1d.$ 

64. These activities are revegetation, forest management, cropland management, and grazing land management. Id.  $\P$  6.

<sup>57.</sup> See Zoya E. Bailey, The Sink That Sank The Hague: A Comment on the Kyoto Protocol, 16 TEMP. INT'L & COMP. L.J. 103, 106 (2002) (explaining how commentators saw carbon sinks as the "Waterloo" of the 2000 meeting at the Hague).

<sup>58.</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change, 7th Sess., Oct. 29–Nov. 10, 2001, U.N. Doc. FCCC/CP/2001/13/Add.1, FCCC/CP/2001/13/Add.2, FCCC/CP/2001/13/Add.3 (Jan. 21, 2002).

countries may form voluntary partnerships with developing countries to undertake greenhouse gas emission reduction projects. The dual purpose of the CDM, as outlined in the Kyoto Protocol, is to assist developing countries in achieving sustainable development, while entitling industrialized countries to count certified emissions reductions towards their Kyoto targets.<sup>65</sup>

In Marrakesh, parties had already decided that only afforestation and reforestation-and hence not avoidance of deforestation—would be eligible under the CDM, and only to a very limited extent.<sup>66</sup> It took two more years to negotiate detailed modalities and procedures to address a host of potential problems related to the inclusion of sinks in the CDM.<sup>67</sup> This included the issue of "non-permanence"—the risk that forests lose their function as sinks and become sources of carbon emissions if they are harvested or affected by pests, forest fires, etc.<sup>68</sup> Furthermore, there were concerns that forestry activities that resulted in emission reductions in one location would cause an emissions increase elsewhere, nationally and even internationally-the issue of "leakage." Another issue that needed to be resolved related to accounting for LULUCF emissions and changes in such emissions over time. In particular, there were questions about how to establish whether emission reductions would be "additional" compared to a busi-

68. See Graichen, supra note 67, at 13-14 (discussing non-permanence).

<sup>65.</sup> Kyoto Protocol, *supra* note 17, art. 12. For a critical discussion of the CDM, see Harro van Asselt & Joyeeta Gupta, *Stretching Too Far? Developing Countries and the Role of Flexibility Mechanisms Beyond Kyoto*, 28 STAN. ENVTL. L.J. 311, 343–56 (2009).

<sup>66.</sup> The cap for credits from forest carbon sinks in the first commitment period (2008-2012) of the Kyoto Protocol is 1% of the base year emissions times five. *See* Decision 16/CMP.1, *supra* note 60, at Annex, ¶ 13–14. For an overview of reasons why deforestation was not included in the CDM, see Johannes Ebeling, *Risks and Criticisms of Forestry-Based Climate Change Mitigation and Carbon Trading, in* CLIMATE CHANGE AND FORESTS: EMERGING POLICY AND MARKET OPPORTUNITIES 43 (Charlotte Streck et al. eds., 2008) [hereinafter CLIMATE CHANGE AND FORESTS].

<sup>67.</sup> See generally Patrick Graichen, Can Forestry Gain from Emissions Trading? Rules Governing Sinks Projects under the UNFCCC and the EU Emissions Trading System, 14 REV. EUR. COMMUNITY & INT'L ENVTL. L. 11, 11–16 (2005) (describing and analyzing the Kyoto debate pertaining to LULUCF). For an analysis of the negotiation process, see Emily Boyd et al., UNFCCC Negotiations (Pre-Kyoto to COP-9): What the Process Says About the Politics of CDM-Sinks, 8 INT'L ENVTL. AGREEMENTS: POL. L. & ECON. 95 (2008).

ness-as-usual scenario.<sup>69</sup> Finally, the inclusion of sinks in the CDM raised concerns about their socio-economic and environmental impacts.<sup>70</sup> Eventually, parties settled their differences on these issues, leading to an agreement on the inclusion of afforestation and reforestation in the CDM in 2003.<sup>71</sup>

In the context of the negotiations on a follow-up agreement to the Kyoto Protocol for the period after 2012, forests again became a prominent subject of contestation, but this time as a source of emissions.<sup>72</sup> The starting point was a proposal by Papua New Guinea and Costa Rica to discuss options for reducing emissions from deforestation in tropical countries, which was tabled at the eleventh UNFCCC COP in Montréal, Canada in 2005.<sup>73</sup> This issue became known as reducing emissions from deforestation and forest degradation (REDD),<sup>74</sup> and was included as an official negotiation item for

70. Socio-economic concerns raised include the displacement of indigenous and local communities because of the establishment of tree plantations, whereas environmental concerns raised include the increased use of pesticides and chemicals as well as the impacts on local biodiversity. Karin Bäckstrand & Eva Lövbrand, *Planting Trees to Mitigate Climate Change: Contested Discourses of Ecological Modernization, Green Governmentality and Civic Environmentalism,* 6 GLOBAL ENVIL. POL. 50, 65 (2006). See *infra* Part III.B for a more detailed discussion of the biodiversity concerns raised by the inclusion of forest carbon sinks in the CDM.

71. Conference of the Parties to the United Nations Framework Convention on Climate Change Dec. 19/CP.9, Rep. of the Conference of the Parties, 9th Sess., Dec. 1–12, 2003, U.N. Doc. FCCC/CP/2003/6/Add.2 (Mar. 30, 2004) [hereinafter Decision 19/CP.9]; Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol Dec. 5/CMP.1, Rep. of the Conference of the Parties, 1st Sess., Nov. 28–Dec. 10., 2005, U.N. Doc. FCCC/KP/CMP/2005/8/Add.1 (Mar. 30, 2006) [hereinafter Decision 5/CMP.1]. The issue of permanence was resolved by introducing temporary credits under the CDM, whereas the rules also provide safeguards to ensure that real emission reductions take place. *See* Graichen, *supra* note 67 (discussing emission baselines and credits as they relate to permanence).

72. See William Boyd, Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance, 37 ECOLOGY L.Q. 843, 876 (2010) (noting how attention shifted from forests as emission sinks to sources in the negotiations).

73. See Rep. of the Conference of the Parties to the United Nations Framework Convention on Climate Change, 1st Sess., Nov. 28–Dec. 10., 2005, U.N. Doc. FCCC/CP/2005/5, ¶¶ 76–84 (Mar. 30, 2006).

74. Over time, the name of the agenda item has changed. What started as "RED" (reducing emissions from deforestation in developing countries)

<sup>69.</sup> See id. at 14-15 (analyzing Kyoto's implications, inter alia, for "additionality").

a future international climate change agreement in the 2007 Bali Action Plan.<sup>75</sup> Through a REDD mechanism, countries with tropical forests could be compensated for their efforts to reduce the rate of deforestation and forest degradation.<sup>76</sup> While the idea of creating incentives for reducing deforestation in developing countries is hardly contested, there is disagreement about the specific design of a REDD mechanism, with one of the key questions being whether such a mechanism should be primarily market- or fund-based, or a combination thereof.<sup>77</sup> Other questions relate to some of the same issues that troubled negotiators in the early 2000s, including

75. See Conference of the Parties to the United Nations Framework Convention on Climate Change Dec. 1/CP.13, Rep. of the Conference of the Parties, 13th Sess., Dec. 3-15, 2007, U.N. Doc. FCCC/CP/2007/6/Add.1 ¶ 1(b)(iii) (Mar. 14, 2008) (codifying recognition of REDD). The exact name of the item is "[p]olicy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries." Id. At the same COP, the Parties also adopted a first decision on REDD. See Conference of the Parties to the United Nations Framework Convention on Climate Change Dec. 2/CP.13, Rep. of the Conference of the Parties, 13th Sess., Dec. 3–15, 2007, U.N. Doc. FCCC/CP/2007/6/Add.1 (Mar. 14, 2008) [hereinafter Decision 2/CP.13]. For an historical analysis of how REDD emerged on the climate agenda, see generally David Humphreys, The Politics of 'Avoided Deforestation': Historical Context and Contemporary Issues, 10 INT'L FORESTRY REV. 433 (2008) (outlining the debate leading up to international recognition of REDD).

76. Or, as under REDD+, enhance their forest carbon stocks or conserve or sustainably manage their forests.

77. See, e.g., Claire Stockwell et al., Designing a REDD Mechanism: The TDERM Triptych, in CLIMATE LAW AND DEVELOPING COUNTRIES: LEGAL AND POLICY CHALLENGES FOR THE WORLD ECONOMY 151, 151 (Benjamin J. Richardson et al. eds., 2009) (noting the prominence of the market-based/fund-based debate).

became known as "REDD" (which also includes forest degradation) and is now commonly referred to as "REDD+" (which also includes the conservation and sustainable management of forests, as well as the enhancement of forest carbon stocks). This is by no means a matter of semantics, as the terminology refers to the scope of emission reductions included in a mechanism. *See* Kathleen Lawlor et al., *Expanding the Scope of International Terrestrial Carbon Options: Implications of REDD+ and Beyond* 5 (2010), *available at* http:// www.nicholas.duke.edu/institute/Implications\_of\_REDD.12.09.pdf (explaining the evolution of RED to REDD+). For the sake of clarity, this Article will use the term REDD consistently to refer to all three, unless stated otherwise.

monitoring and accounting methods, leakage, and non-permanence.  $^{78}$ 

The 2009 Copenhagen Accord recognized the need for the "immediate establishment" of a REDD mechanism.79 Furthermore, parties in Copenhagen adopted a decision on methodological guidance for REDD and other forest-related activities in developing countries.<sup>80</sup> They were not yet able to agree on a broader REDD decision, but one year later, at the sixteenth COP, REDD became an important part of the Cancún Agreements.<sup>81</sup> According to the decision adopted in Cancún, the stated objective for REDD is "to slow, halt and reverse forest cover and carbon loss."82 The fact that the text refers separately to the problems of forest cover loss and carbon loss indicates a shift away from the notion that forests are solely sources or sinks of carbon. The decision calls on developing countries to undertake REDD activities in three phases, starting with national planning and followed by implementation of policies and measures and, eventually, by results-based actions.83 It also requests developing countries to put in place the necessary infrastructure for undertaking REDD activities, for instance, by developing a national strategy, a national reference emission level, and a national monitoring system.<sup>84</sup> Finally, the decision contains specific language on social and environmental safeguards that must be respected whilst implementing

<sup>78.</sup> See, e.g., Robert O'Sullivan, Reducing Emissions from Deforestation in Developing Countries: An Introduction, in CLIMATE CHANGE AND FORESTS, supra note 66, 179, at 182–187 (discussing potential difficulties raised by these issues).

<sup>79.</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change Dec. 2/CP.15, Rep. of the Conference of the Parties, 15th Sess., Dec. 7–18, 2009, U.N. Doc. FCCC/CP/2009/11/Add.1, ¶ 6 (Mar. 30, 2010). The parties further considered how to fund such a mechanism. *Id.* ¶¶ 8, 10.

<sup>80.</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change Dec. 4/CP.15, Rep. of the Conference of the Parties, 15th Sess., Dec. 7–18, 2009, U.N. Doc. FCCC/CP/2009/11/Add.1, (Mar. 30, 2010) [hereinafter Decision 4/CP.15].

<sup>81.</sup> See Rep. of the Conference of the Parties to the United Nations Framework Convention on Climate Change Dec. 1/CP.16, Rep. of the Conference of the Parties, 16th Sess., Nov. 29–Dec. 10, 2010, U.N. Doc. FCCC/CP/2010/7/Add.1 (Mar. 15, 2011).

<sup>82.</sup> Id. pt. III.C, pmbl.

<sup>83.</sup> Id. ¶ 73.

<sup>84.</sup> Id. ¶ 71.

REDD activities.<sup>85</sup> The decision is an important milestone in the development of REDD in the climate regime, but many issues still remain unresolved. For instance, the precise substantive scope of the mechanism, as well as its connection to the Green Climate Fund established in Cancún, remain to be settled.<sup>86</sup> Modest progress was made at the seventeenth COP in Durban, for instance with respect to reporting on safeguards and establishing reference levels,<sup>87</sup> but crucial questions on financing REDD were not resolved. Parties continue to negotiate these issues in the Ad Hoc Working Group on Long-Term Cooperative Action established under the UNFCCC.

In short, throughout the last two decades of climate negotiations, forests have played an important role primarily because of their function as carbon sinks. This role came to the forefront in the aftermath of Kyoto, and especially in 2000-2001, when the use of sinks for compliance with the Kyoto targets became a critical issue in the negotiations. The 2001 Marrakesh Accords were not the end of the story, as the equally vexed question of whether and how to include forestry projects in the CDM was only tackled two years later. Since 2005, forests have become a key negotiating item following proposals to introduce a REDD mechanism. While negotiators have slowly started to address the non-mitigation aspects of forests, the potential mitigation benefits of forests still provide the main rationale for the mechanism. This is in contrast to the more holistic approach taken by the biodiversity regime, to which this Article will now turn.

## D. The Biodiversity Regime: Protecting Forests Holistically

The Convention on Biological Diversity is the first multilateral environmental agreement that approaches the protection of biological diversity, including forests, in a comprehen-

<sup>85.</sup> Id. ¶ 72 & app. I.

<sup>86.</sup> Kemen Austin et al., *The REDD+ Decision in Cancun*, WORLD RE-SOURCES INSTITUTE (Dec. 20, 2010), http://www.wri.org/stories/2010/12/ redd-decision-cancun.

<sup>87.</sup> See Rep. of the Conference of the Parties to the United Nations Framework Convention on Climate Change Decision 12/CP.17, Rep. of the Conference of the Parties, 17th Sess., Nov. 28–Dec. 11, 2011, U.N. Doc. FCCC/CP/2011/9/Add.2 (Mar. 15, 2012) (providing guidance for reporting requirements).

sive fashion, going beyond the piecemeal approaches that characterized international regulatory efforts before its adoption.<sup>88</sup> This more holistic consideration of the conservation and sustainable use of biodiversity is reflected in the "ecosystem approach," adopted by the CBD parties in 1995,89 and has been promoted by the convention since that time. Among others, the ecosystem approach embraces community-based ecosystem protection by encouraging decentralization of management to the lowest appropriate level.<sup>90</sup> It also points to the need for considering ecosystems in their economic context, meaning that economic incentives should be used in the management of ecosystems.91 Furthermore, interrelations between different ecosystems-for instance within and outside protected areas—are stressed.<sup>92</sup> The ecosystem approach can be seen as encompassing a variety of methods for the management and protection of biological resources; it does not prescribe a specific technique, as this will always depend on the prevailing conditions in a certain area.

Whereas the importance of forests under the climate treaties lies in their role as carbon sinks or sources, the CBD is rather aimed at a wide range of functions carried out by forests, including the conservation of biological diversity and habitat protection of flora and fauna, as well as the protection of natural heritage, and cultural and spiritual values.<sup>93</sup> The CBD has only slowly expanded its activities in the area of forests, even though parties have repeatedly acknowledged that

<sup>88.</sup> Patricia Birnie & Alan Boyle, International Law and the Environment 568-69 (2d ed. 2002).

<sup>89.</sup> Conference of the Parties to the Convention on Biological Diversity Dec. II/8, Rep. of the 2nd Meeting, Nov. 6–17, 1995, U.N. Doc. UNEP/CBD/COP/2/19 Annex II,  $\P$  1, at 55 (Nov. 30, 1995).

<sup>90.</sup> See Conference of the Parties to the Convention on Biological Diversity Dec. V/6, Rep. of the 5th Meeting, May 15–26, 2000, U.N. Doc. UNEP/CBD/COP/5/23 Annex III, Annex, § B, ¶ 6, princ. 2 (22 June 2000) (tying decentralization to greater community responsibility, accountability, and ownership).

<sup>91.</sup> Id. Annex, § B, ¶ 6, princ. 4.

<sup>92.</sup> Id. Annex, § B, ¶ 6, princ. 3.

<sup>93.</sup> For a discussion of the various forest functions, see Barbara M.G.S. Ruis, *No Forest Convention But Ten Tree Treaties*, 52 UNASYLVA 3 (2001), *available at* http://www.fao.org/DOCREP/003/Y1237e/y1237e03.htm.

this issue is covered by the CBD's mandate.<sup>94</sup> Indeed, while the treaty does not explicitly refer to forests, various provisions are directly or indirectly relevant for the protection of forests.<sup>95</sup> Forests, after all, form a part of and are a habitat for terrestrial biodiversity.<sup>96</sup> The relevant provisions of the CBD include obligations with regard to *in situ* and *ex situ* conservation of biodiversity. *In situ* conservation measures include "the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings,"<sup>97</sup> as well as the establishment of a system of protected areas or areas where special measures are needed.<sup>98</sup> *Ex situ* conservation measures include the establishment of facilities for research outside of their natural habitat.<sup>99</sup>

The CBD's activities on forests took off in 1996 when the parties requested that the CBD secretariat develop a work program for forest biodiversity.<sup>100</sup> The initial focus of the work program was to be on research and the development of technologies relevant for the conservation and sustainable use of forest biodiversity.<sup>101</sup> A three-year work program was subsequently endorsed at the fourth CBD COP in 1998.<sup>102</sup> In this decision, the CBD secretariat was also asked for the first time to liaise with secretariats of the other Rio Conventions, given

<sup>94.</sup> Philippe G. Le Prestre, *The CBD at Ten: The Long Road to Effectiveness*, 5 J. INT'L WILDLIFE L. & POL'Y 269, 276 (2002).

<sup>95.</sup> See generally Ruth Khalastchi & Ruth Mackenzie, The Conservation and Sustainable Use of Forest Biological Diversity: The Role of the Convention on Biological Diversity, in Assessing THE INTERNATIONAL FOREST REGIME 39 (Richard Tarasofsky ed., 1999) (describing ways in which the CBD touches on protection of forests). For a more recent analysis, see generally HUMPHREYS, *supra* note 44, at 191–204.

<sup>96.</sup> Khalastchi & Mackenzie, *supra* note 95, at 40. *See also* CBD, *supra* note 18, art. 2 (specifying that terrestrial ecosystems are aspects of biological diversity).

<sup>97.</sup> CBD, supra note 18, art. 8(d).

<sup>98.</sup> Id. art. 8(a).

<sup>99.</sup> Id. art. 9(b).

<sup>100.</sup> See Conference of the Parties to the Convention on Biological Diversity Dec. III/12, Rep. of the 3d Meeting, Nov. 4–15, 1996, U.N. Doc. UNEP/CBD/COP/3/38 Annex II, ¶ 6 (Feb. 11, 1997) (calling for a "focused work programme for forest biological diversity").

<sup>101.</sup> Id.

<sup>102.</sup> Conference of the Parties to the Convention on Biological Diversity Dec. IV/7, Rep. of the 4th Meeting, 4–15 May, 1998, U.N. Doc. UNEP/CBD/COP/4/27 Annex, ¶ 1, (June 15, 1998).

the "potential impact of afforestation, reforestation, forest degradation and deforestation on forest biological diversity and on other ecosystems."<sup>103</sup>

The scope of the work program on forest biodiversity was rather narrow and did not include concrete activities.<sup>104</sup> This was acknowledged four years later, in 2002, when parties adopted an expanded work program.<sup>105</sup> While this program does not include quantified, time-bound targets, it lists a wide range of possible activities that can be undertaken at the national level.<sup>106</sup> The expanded work program was aimed at more practical action at all levels as compared to the initial program.<sup>107</sup>

A review carried out by the CBD secretariat deemed the work program a "valuable tool."<sup>108</sup> The review drew attention to deforestation and forest degradation as important drivers of forest biodiversity loss and urged parties to incorporate climate change in their national strategies and programs.<sup>109</sup> In response to the review, the parties recognized that there is an "urgent need to strengthen implementation of the program of work on forest biodiversity . . . through sustainable forest management and the ecosystem approach."<sup>110</sup> Furthermore, the decision called for cooperation with the UNFCCC secretariat and the World Bank on REDD.<sup>111</sup>

<sup>103.</sup> Id. ¶ 9. See *infra* Part III.B.2 for further discussion of interactions between different treaty regimes.

<sup>104.</sup> See Khalastchi & Mackenzie, supra note 95, at 46 (noting that the work program focused "more on the gathering of information, institutional cooperation and collaboration, and the indentification of further research priorities than on concrete substantive output-orientated activities").

<sup>105.</sup> *See* Conference of the Parties to the Convention on Biological Diversity Dec. VI/22, Rep. of the 6th Meeting, Apr. 7–19, 2002, U.N. Doc. UNEP/CBD/COP/6/20 Annex I, ¶ 10 (May 27, 2002).

<sup>106.</sup> Id. Annex.

<sup>107.</sup> See HUMPHREYS, supra note 44, at 192.

<sup>108.</sup> See Subsidiary Body on Scientific, Technical and Technological Advice to the Convention on Biological Diversity, In-depth Review of the Expanded Programme of Work on Forest Biological Diversity, Note by the Executive Secretary, 13th Meeting, Feb. 18–22, 2008, U.N. Doc. UNEP/CBD/SBSTTA/13/3, at 1–2 (Nov. 13, 2007).

<sup>109.</sup> Id. at 2.

<sup>110.</sup> Conference of the Parties to the Convention on Biological Diversity Dec. IX/5, 9th Meeting, May 19–30, 2008, U.N. Doc. UNEP/CBD/COP/DEC/IX/5, pmbl. (Oct. 9, 2008).

<sup>111.</sup> *Id.* ¶ 3(b).

Overall, it can be seen that the depth and scope of the CBD's activities in the area of forest biodiversity have significantly expanded, especially after the launch of the expanded work program in 2002. The ecosystem approach provides general guidance for the CBD's activities related to forest biodiversity, resulting in the CBD's view of forests being generally broader in scope than that of the climate regime. This means, for instance, that the CBD considers how ecosystems relate to each other. Furthermore, this review shows that the CBD parties have drawn attention to the forest-related linkages between climate change and biodiversity, a development that will be discussed in more detail below.<sup>112</sup>

### III. OVERLAPPING TREATIES, CONFLICTING OUTCOMES?

Part II has shown that the climate and biodiversity treaties clearly overlap in terms of their substantive coverage, but that their perspectives on forests are quite different. This leads to the next question: to what effect? This Part shows how the decisions taken in the climate regime might have negative impacts on achieving the objectives of the CBD but argues that, at the same time, there is an untapped potential for synergies between the conventions on the issue of forests, particularly in light of the increasing prominence of REDD in the climate change negotiations.<sup>113</sup>

<sup>112.</sup> Infra Part IV.B.1.

<sup>113.</sup> For a discussion of the potential legal interactions between the climate and biodiversity treaties relating to forests, see generally WOLFRUM & MATZ, supra note 7, at 79-93; Frédéric Jacquemont & Alejandro Caparrós, The Convention on Biological Diversity and the Climate Change Convention 10 Years After Rio: Towards a Synergy of the Two Regimes?, 11 REV. EUR. COMMUNITY. & INT'L ENVTL. L. 169 (2002); Elisa Morgera, Far Away, So Close: A Legal Analysis of the Increasing Interactions Between the Convention on Biological Diversity and Climate Change Law, 2 CLIMATE L. 85 (2011); Concetta Maria Pontecorvo, Interdependence between Global Environmental Regimes: The Kyoto Protocol on Climate Change and Forest Protection, 59 Heidelberg J. INT'L L. 709 (1999); Sandrine Rousseaux, Carbon Sinks in the Kyoto Protocol's Clean Development Mechanism: An Obstacle to the Implementation of the Convention on Biological Diversity?, 7 ENVTL. L. REV. 1 (2005); Imke Sagemüller, Forest Sinks Under the United Nations Framework Convention on Climate Change and the Kyoto Protocol: Opportunity or Risk for Biodiversity?, 31 COLUM. J. ENVTL. L. 189 (2006); Annalisa Savaresi, Reducing Emissions from Deforestation in Developing Countries under the UNFCCC: Caveats and Opportunities for Biodiversity, 21 Y.B. INT'L EVTL. L. (forthcoming 2012, advance access version available Nov. 10, 2011); Jason Schwartz, Whose

## A. General Relationship Between the Climate and Biodiversity Treaties

Before discussing the potential conflicts and synergies related to forestry, this section shows that the objectives of the climate and biodiversity treaties are largely in line with each other, and highlights some of the provisions relevant for their general interrelations.

## 1. Provisions in the Climate Treaties

The objectives of the UNFCCC and the CBD can generally be said to be converging, as both are—at least in part concerned with the conservation of ecosystems.<sup>114</sup> Although the treaties do not explicitly refer to each other, the texts include indirect connections. The UNFCCC's objective of stabilizing greenhouse gas concentrations at non-dangerous levels is to be achieved "within a time-frame sufficient to allow ecosystems to adapt naturally to climate change."115 Parties to the ÚNFCCC are also committed to "promote and cooperate in the conservation and enhancement . . . of sinks and reservoirs ... including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems."116 Furthermore, in adopting climate change mitigation measures, parties need to "employ appropriate methods, for example impact assessments . . . with a view to minimizing adverse effects . . . on the quality of the environment."117

Unlike the UNFCCC, the Kyoto Protocol does not refer explicitly to biodiversity or ecosystems, but it calls on its parties to implement policies and measures, including the protection and enhancement of sinks, "taking into account [their] commitments under relevant international environmental agree-

115. UNFCCC, supra note 16, art. 2.

Woods These Are I Think I Know': How Kyoto May Change Who Controls Biodiversity, 14 N.Y.U. ENVTL. L.J. 421 (2006).

<sup>114.</sup> See Jacquemont & Caparrós, supra note 113, at 169 (describing the relationship between the UNFCCC and the CBD); see also Jeffrey A. McNeely, *Energy and Biodiversity: Understanding Complex Relationships, in* ENERGY LAW AND SUSTAINABLE DEVELOPMENT 40 (Adrian J. Bradbrook & Richard L. Ottinger eds., 2003) ("International cooperation is needed to address the linked problems of energy production, climate change and biodiversity....").

<sup>116.</sup> *Id.* art. 4,  $\P$  1(d). The UNFCCC refers to ecosystems on several other occasions. *See id.* pmbl.; arts. 1,  $\P$  1, and 4,  $\P$  8(g).

<sup>117.</sup> Id. art. 4, ¶ 1(f).

ments."118 Although this provision does not state which agreements need to be taken into account, it is reasonable to assume that, given the role of forests as sinks and sources of emissions on the one hand, and part and habitat of biodiversity on the other, the CBD can be considered "relevant."119 The same provision also calls on parties to implement measures for the "promotion of sustainable forest management practices, afforestation and reforestation,"<sup>120</sup> although parties have not defined what is meant by "sustainable" in this context.<sup>121</sup> The Protocol also demands that parties implement policies and measures in such a way as to minimize the effects, including environmental effects, on other parties.<sup>122</sup> Finally, the COP is instructed to assess the environmental impacts of measures taken pursuant to the Protocol.<sup>123</sup> While the environmental effects could refer narrowly to the effect on greenhouse gas emissions only, the more appropriate interpretation would broadly include all kinds of environmental impacts, including those on biodiversity and ecosystems.

#### 2. Provisions in the Biodiversity Convention

The objectives of the CBD are the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.<sup>124</sup> While the three broad objectives do not make a specific connection to climate change mitigation or adaptation, the preamble to the CBD states "that it is vital to anticipate, prevent and attack the causes of significant reduction or loss of biological diversity at [the] source."<sup>125</sup> As climate change is one of the major drivers of biodiversity loss, combating climate change could thus contribute to achieving

<sup>118.</sup> Kyoto Protocol, *supra* note 17, art. 2,  $\P$  1(a)(ii).

<sup>119.</sup> Sagemüller, *supra* note 113, at 208. During the Kyoto negotiations, the original proposal by the EU was to refer specifically to the CBD. *See* Joanna Depledge, *Tracing the Origins of the Kyoto Protocol: An Article-by-Article Textual History*, U.N. Doc. FCCC/TP/2000/2, ¶ 87 (Nov. 25, 2000), http://unfccc.int/resource/docs/tp/tp0200.pdf.

<sup>120.</sup> Kyoto Protocol, *supra* note 17, art. 2, ¶ 1(a)(ii).

<sup>121.</sup> Pontecorvo, *supra* note 113, at 731; Sagemüller, *supra* note 113, at 208.

<sup>122.</sup> Kyoto Protocol, *supra* note 17, art. 2, ¶ 3.

<sup>123.</sup> *Id.* art. 13, ¶ 4(a).

<sup>124.</sup> CBD, supra note 18, art. 1.

<sup>125.</sup> Id. pmbl.

the objectives of the biodiversity convention. Other provisions of the CBD are also arguably applicable to climate change. For instance, parties are to "[i]dentify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity."<sup>126</sup> Climate change could be said to be included in these processes.<sup>127</sup>

The CBD also contains a clause regulating the relationship with other treaties in general, specifying that the convention "shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity."<sup>128</sup> Given its potential to manage the relationship between the CBD and other treaties, this provision will be examined in more detail below.<sup>129</sup>

## B. Forest Carbon Sinks in the Kyoto Protocol: A Threat to Biodiversity?

Despite these indirect links and the potentially mutually supportive objectives, fears exist that the use of sinks in the Kyoto Protocol leads to conflicts between the climate and biodiversity treaties. Critics have argued that the rules developed under the Kyoto Protocol do not sufficiently safeguard biodiversity concerns and could frustrate the objectives of the biodiversity treaty.<sup>130</sup> The main concerns raised in this regard

130. See Pontecorvo, supra note 113, at 712 (highlighting issues of compatibility between the Kyoto Protocol and other forest-related instruments). For a critique of the use of sinks in the CDM specifically, see Malte Meinshausen & William Hare, SINKS IN THE CDM: AFTER THE CLIMATE, BIODIVERS-ITY GOES DOWN THE DRAIN (2003), http://www.greenpeace.org/international/Global/international/planet-2/report/2006/3/sinks-in-the-cdm-after-the-cl-2.pdf. The "conflict" referred to here is not a conflict in the strict legal sense (i.e. an incompatibility of two legal norms), but rather concerns a conflict in the implementation phase. See WOLFRUM & MATZ, supra note 7, at 6, 11 (distinguishing conflicts from incompatibilities and explaining how conflicts in environmental agreements can be reconciled in implementation). One would indeed be hard-pressed to find commitments in the cli-

<sup>126.</sup> Id. art. 7(c).

<sup>127.</sup> See McNeely, supra note 114, at 40 ("Since climate change has a significant ecological effect, it clearly falls under this Article [7].").

<sup>128.</sup> CBD, *supra* note 18, art. 22, ¶ 1.

<sup>129.</sup> Infra Part IV.A.2.

are that current rules could result in destructive large-scale, monoculture plantations, a lack of protection for existing oldgrowth forests, and an increase in the use of genetically modified trees and invasive alien species.

The impacts of forest-related climate change mitigation activities on biodiversity vary depending on the type and design of such activities.<sup>131</sup> Some activities, such as the preservation of natural forest ecosystems and species through the prevention of deforestation and forest degradation, can result in significant biodiversity benefits.<sup>132</sup> In contrast, using the wrong sites or species for afforestation and reforestation may lead to negative effects on biodiversity.<sup>133</sup> One of the main concerns in this regard is the replacement of old-growth forests by large-scale industrial plantations, which use fast-growing trees that sequester more carbon.<sup>134</sup> While the mitigation benefits are clear and can be significant-particularly in the short-term—the impacts on biodiversity associated with plantations can be negative. Especially monoculture plantations, by using only one tree species, can lead to adverse effects on both plant and animal biodiversity.<sup>135</sup> The detrimental effects on biodiversity may be aggravated if the plantation consists of genetically modified trees. There are risks that genetically modi-

mate and biodiversity treaties that could be interpreted in such a way as to constitute an outright normative conflict. *See also id.* at 91–92 ("[T]he potential conflicts to the instruments to prevent climate change do not consist of incompatible obligations between the respective instruments.").

<sup>131.</sup> Sagemüller, supra note 113, at 197.

<sup>132.</sup> *Id.* at 198; *see also* SECRETARIAT OF THE CBD 2009, REVIEW, *supra* note 24, at 102 (discussing the management guidelines for forestry and associated impacts on biodiversity).

<sup>133.</sup> See Sagemüller, supra note 113, at 198 ("[A]fforestation within intact non-forest habitats . . . will most likely have adverse effects.").

<sup>134.</sup> Id. at 198–99; see also Pontecorvo, supra note 113, at 723 (discussing parties' concerns about the conversion of primary forests into plantations).

<sup>135.</sup> Jacquemont & Caparrós, *supra* note 113, at 174. However, using various native species would reduce the impacts of plantations. *See* SECRETARIAT OF THE CBD 2009, REVIEW, *supra* note 24, at 104 (specifying that plantations of mixed native tree species will generally support more biodiversity than exotic monocultures). Furthermore, even monoculture plantations may lead to biodiversity benefits. *See* Sagemüller, *supra* note 113, at 199 (stressing the importance of choosing species with high genetic diversity to avoid adverse effects on biodiversity).

fied trees might be, or might create, invasive species that threaten other species in an ecosystem.<sup>136</sup>

The potential for conflict between the Kyoto Protocol and the CBD is thus shaped by the type of incentives provided by the rules on forest carbon sinks developed under the Protocol. The relationship depends on the extent to which these rules only seek to maximize the carbon sequestration potential of forests, or whether they limit such behavior given the associated biodiversity impacts.<sup>137</sup> The decisions on LULUCF and on the inclusion of afforestation and reforestation in the CDM provide various safeguards for biodiversity protection, but these incentives are rather weak.<sup>138</sup>

First, the principles for the implementation of LULUCF activities include ensuring "[t]hat the implementation . . . contributes to the conservation of biodiversity and sustainable use of natural resources."<sup>139</sup> However, the use of the weak phrasing "contributes to" arguably does not result in any concrete limitations for the benefit of biodiversity.<sup>140</sup>

A second way in which biodiversity considerations could pose a limit to LULUCF activities lies in the definition of "forest management." Forest management includes activities such as harvesting, forest fire management, pest management and regeneration, all of which may impact biodiversity differently.<sup>141</sup> In the Marrakesh Accords, it is defined as "a system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic, and social functions of the forest in a sustainable manner."<sup>142</sup> This formulation again lacks specificity. It is unclear, for instance, what is meant by "stewardship" or what "relevant"

<sup>136.</sup> Schwartz, *supra* note 113, at 435-36.

<sup>137.</sup> See also Rousseaux, supra note 113, at 3–4 (describing the decision to take part in carbon and biological diversity conservation as one of optimization).

<sup>138.</sup> Sagemüller, *supra* note 113, at 209–18. It can be noted that Decisions 5/CMP.1 and 16/CMP.1 also do not include any direct references to the CBD. Only the original version of Decision 5/CMP.1 indicates that Parties were "[c]ognizant of relevant provisions of international agreements that may apply to afforestation and reforestation project activities." Decision 19/CP.9, *supra* note 71, pmbl.

<sup>139.</sup> Decision 16/CMP.1, *supra* note 60, ¶ 1(e).

<sup>140.</sup> Jacquemont & Caparrós, supra note 113, at 171.

<sup>141.</sup> SECRETARIAT OF THE CBD 2003, supra note 24, at 65.

<sup>142.</sup> Decision 16/CMP.1, supra note 60, Annex, ¶ 1(f).

ecological functions comprise.<sup>143</sup> Moreover, the reference to biodiversity is found only in the definition of "forest management," and not in the definitions of "afforestation," "reforestation," or "deforestation," risking "the dangerous interpretation that biodiversity conservation is only necessary in the case of forest management."<sup>144</sup> Despite these shortcomings, the definition seems to at least preclude forest management activities that have clear adverse impacts on biodiversity.<sup>145</sup>

The third explicit reference to biodiversity in the Marrakesh Accords is that Kyoto parties, in their national reports, should describe the laws and administrative procedures in place to ensure that LULUCF activities contribute to biodiversity conservation and the sustainable use of natural resources.<sup>146</sup> While reporting is an important part of promoting compliance, there are no consequences attached to inaccurate or incomplete reporting on this aspect.<sup>147</sup>

The fourth limitation is specifically aimed at preventing the conversion of natural forests into plantations. The rules seek to achieve this by limiting "afforestation" to "land that has not been forested for a period of at least 50 years" and "reforestation" to "those lands that did not contain forest on 31 December 1989."<sup>148</sup> These provisions provide one of the most important general safeguards, even though they are not explicitly linked to biodiversity protection. However, some observers have warned that there is still a risk of conversion

<sup>143.</sup> Sagemüller, supra note 113, at 210-11.

<sup>144.</sup> Jacquemont & Caparrós, *supra* note 113, at 171–72. *But see* Kyoto Protocol, *supra* note 17, art. 2, ¶ 1(a) (ii) (requiring parties to take into account other "relevant international environmental agreements" in shaping their policies).

<sup>145.</sup> See Jacquemont & Caparrós, supra note 113, at 172 ("[T]he definition of forest management includes a direct reference to biodiversity, so that aggressive strategies should be prohibited."); Sagemüller, supra note 113, at 211–12 (claiming that "aggressive strategies with devastating consequences" would be included).

<sup>146.</sup> Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol Dec. 15/CMP.1, Rep. of the Conference of the Parties, 1st Sess., Nov. 28–Dec. 10., U.N. Doc. FCCC/KP/CMP/2005/8/Add.2, ¶ 38 (Mar. 30, 2006).

<sup>147.</sup> Jacquemont & Caparrós, supra note 113, at 172.

<sup>148.</sup> Decision 16/CMP.1, *supra* note 60, Annex, ¶ 1(b)–(c).

through forest management practices, rather than through afforestation or reforestation.  $^{149}$ 

Fifth, and specifically with respect to afforestation and reforestation projects in the CDM, it is necessary to carry out an analysis of the environmental impacts, including impacts on biodiversity and natural ecosystems.<sup>150</sup> If such an analysis points to significant impacts, an environmental impact assessment (EIA) is necessary if the host country so requires.<sup>151</sup> In theory, the requirement of conducting an EIA is another safeguard mechanism for biodiversity protection. In practice, however, the usefulness of this mechanism is again constrained. The determination of which impacts are "significant" is left completely up to the host country and project participants.<sup>152</sup> This is problematic because participants have an economic incentive to abstain from conducting an EIA to keep the costs of a project low,<sup>153</sup> whereas CDM host countries have incentives (financial or other) to attract CDM investments.<sup>154</sup> The decision also states that the EIA needs to be carried out "in accordance with the procedures required by the host Party,"155 but it fails to provide any guidance on how parties should establish standards for an EIA.<sup>156</sup> Moreover, the decision also does not account for impacts that might only manifest themselves over time.<sup>157</sup> Nevertheless, the EIA should allow for the identification-and possibly mitigation-of potential biodiversity impacts in some cases, and result in a basic level of transparency concerning the potential environmental impacts of CDM sink projects.<sup>158</sup>

Finally, the preamble of the decision on natural sinks in the CDM in the Marrakesh Accords provides a general state-

<sup>149.</sup> Jacquemont & Caparrós, *supra* note 113, at 172; Sagemüller, *supra* note 113, at 214–15.

<sup>150.</sup> See Decision 5/CMP.1, supra note 71, Annex, ¶ 12(c).

<sup>151.</sup> Id.

<sup>152.</sup> Meinshausen & Hare, supra note 130, at 6.

<sup>153.</sup> *See* Sagemüller, *supra* note 113, at 213 (describing the political and economic disparities between host parties and financing parties, which create economic incentives for host parties to avoid EIAs).

<sup>154.</sup> For a more general discussion of such "perverse incentives," see generally Van Asselt & Gupta, *supra* note 65, at 347–48.

<sup>155.</sup> Decision 5/CMP.1, supra note 71, Annex, ¶ 12(c).

<sup>156.</sup> Sagemüller, supra note 113, at 213.

<sup>157.</sup> Meinshausen & Hare, supra note 130, at 6.

<sup>158.</sup> Sagemüller, supra note 113, at 212.

ment instructing CDM host countries to evaluate the risks associated with the use of genetically modified organisms and potentially invasive alien species and instructs developed countries to evaluate the use of CDM credits resulting from project activities that make use of them.<sup>159</sup> Even if this general statement could be interpreted as an obligation to evaluate—which is already questionable—it could only be operationalized if parties know whether potentially invasive alien species or genetically modified organisms are being used. However, the rules on this point are not entirely clear.<sup>160</sup> Furthermore, given that projects using genetically modified trees tend to be cost-efficient,<sup>161</sup> there may be fewer incentives for a host country to block a project proposal.<sup>162</sup>

There is thus a potential for conflict between the Kyoto Protocol and the CBD in the implementation phase, primarily due to the relatively strong incentives under the Kyoto Protocol to achieve emission reductions cost-effectively, be it through the accounting of LULUCF activities for the purposes of achieving the Kyoto targets or through the CDM. In contrast, the incentives to protect biodiversity while implementing such activities are rather procedural or formulated broadly. The main exception lies in the definitions of "afforestation" and "reforestation," which reduce the incentive to convert natural forests into plantations.

## C. Tackling Deforestation: Everybody Wins?

The preceding discussion shows that rules providing the wrong incentives may result in tensions between the climate and biodiversity regimes. However, it may have painted an excessively bleak picture. Indeed, the emphasis on conflicts should not be exaggerated. For instance, actual practice shows that there have not been many forestry projects in the CDM, mainly due to financial constraints, a lack of knowledge

<sup>159.</sup> Decision 19/CP.9, supra note 71, pmbl.

<sup>160.</sup> Meinshausen & Hare, supra note 130, at 5.

<sup>161.</sup> Schwartz, supra note 113, at 469.

<sup>162.</sup> See Sagemüller, supra note 113, at 216 (drawing parallels between host countries' lack of incentive to enforce EIA requirements and GMO requirements).

and capacity in host countries,<sup>163</sup> and demand from key actors.<sup>164</sup> At the time of writing, only thirty-one reforestation and six afforestation projects were registered with the CDM Executive Board—the CDM's governing body—which is less than 1% of the total number of projects.<sup>165</sup>

More importantly for many observers, however, the emergence of REDD on the agenda of the climate negotiations provides an opportunity to exploit synergies between the climate and biodiversity treaties, since this may entail significant benefits for both biodiversity protection and climate change mitigation and adaptation.<sup>166</sup> Given the history of global forest governance, and the failure of the international community to provide for adequate protection of the world's forests, the biodiversity regime could possibly hitch a ride with the climate regime in a time where climate change is high on the agenda of policymakers. In this view, drawing attention to these overlapping issues could lead to prioritizing—and possibly also to funding—climate change activities with positive spillovers for biodiversity issues. Rather than viewing biodiversity loss and

165. See Jørgen Fenhann et al., *CDM Pipeline Overview*, UNEP RISØ CENTRE (Feb. 1, 2011), http://cdmpipeline.org/overview.htm (last visited Apr. 23, 2012). However, the role of forestry in the voluntary carbon market is much more substantial. *See infra* Part IV.C.2.

166. See SECRETARIAT OF THE CBD 2009, REVIEW, supra note 24, at 102 (for a discussion of the potential for interplay between biodiversity and climate change goals); see also Celia A. Harvey et al., Opportunities for Achieving Biodiversity Conservation through REDD, 3 CONSERVATION LETTERS 53, 53 (2010) (discussing how the scope of REDD proposals may impact conservation and biodiversity efforts). A difference with the discussion on the rules on forest carbon sinks under the Kyoto Protocol is that these rules may provide incentives to engage in behavior that may damage biodiversity, whereas a REDD mechanism is rather aimed at encouraging actors to *abstain* from such behavior. See David Brown et al., How Do We Achieve REDD Co-benefits and Avoid Doing Harm?, in MOVING AHEAD WITH REDD: ISSUES, OPTIONS AND IMPLICA-TIONS 107, 116 (Arild Angelsen ed., 2008) (indicating that REDD has several advantages for biodiversity protection over afforestation and reforestation schemes); see also Boyd, supra note 72, at 876-77 (discussing various reasons why deforestation was addressed in the climate regime despite previously existing concerns, including an increased sense of urgency and the emergence of improved accounting frameworks).

<sup>163.</sup> Sebastian Thomas et al., Why Are There So Few Afforestation and Reforestation Clean Development Mechanism Projects?, 27 LAND USE POL'Y 880, 881–84 (2010).

<sup>164.</sup> Notably, the European Union. See infra notes 327–328 and accompanying text.

climate change as separate problems, acknowledging the potential for synergies allows policymakers to move beyond the sectoral thinking that has characterized the initial responses to global environmental problems.<sup>167</sup>

As noted earlier, REDD negotiations are still ongoing, but the contours of a REDD mechanism—including the possible role of biodiversity considerations-are slowly emerging. However, the precise impacts on biodiversity will depend on the design details of such a mechanism as well as its implementation in practice. What, then, are the design features of a REDD mechanism that matter from a biodiversity perspective?<sup>168</sup> First, the scope is important: reducing emissions from deforestation and forest degradation, as well as forest conservation,<sup>169</sup> would generally lead to greater biodiversity benefits than the enhancement of carbon stocks and sustainable management of forests.<sup>170</sup> Related to the scope, it matters whether the definition of "forests" under REDD distinguishes between natural forests and plantation forests.<sup>171</sup> In particular, how forests are defined could determine whether a REDD mechanism provides incentives to convert natural forests into plantations. Second, how a REDD mechanism tackles leakage is relevant for biodiversity protection, especially if the prevention of deforestation in areas with low levels of biodiversity leads to an increase in deforestation in other areas with high levels of biodiversity.<sup>172</sup> Third, the use of a market-based approach to REDD—as opposed to a fund—is more likely to steer investments to areas with high carbon emissions, which do not nec-

<sup>167.</sup> See Laurence D. Mee et al., Evaluating the Global Environment Facility: A Goodwill Gesture or a Serious Attempt to Deliver Global Benefits?, 18 GLOBAL ENVTL. CHANGE 800, 808 (2010) (discussing the problem of "sectoral silos" in the context of the Global Environment Facility).

<sup>168.</sup> It is not the intention to provide an exhaustive overview of various ways *in which* REDD design matters for biodiversity protection. The main argument here is *that* REDD design matters.

<sup>169.</sup> The first element of "REDD+." *See supra* note 74 (describing the components of RED, REDD, and REDD+).

<sup>170.</sup> The other two elements of "REDD+." *Id; see also* Harvey et al., *supra* note 166, at 54–55 (contrasting the potential biodiversity impacts of the different elements of REDD+).

<sup>171.</sup> Id. at 55.

<sup>172.</sup> Id. at 54; see also Katia Karousakis, Promoting Biodiversity Co-Benefits in REDD, 13 (OECD Environment Working Papers No. 11, 2009).

essarily have the highest level of biodiversity.<sup>173</sup> Finally, the inclusion of monitoring obligations with respect to the biodiversity impacts of REDD activities could indirectly support biodiversity objectives by making it more transparent how REDD could benefit biodiversity.<sup>174</sup> While parties' positions on the details of these design features are still diverging, there is consensus on some basic elements.<sup>175</sup> For instance, parties seem to agree that REDD should now encompass forest conservation, the sustainable management of forests, and the enhancement of carbon stocks, even though the initial focus of REDD in practice may be on avoiding deforestation and forest degradation.<sup>176</sup>

The decisions on REDD taken so far provide some indication about how the climate regime will accommodate biodiversity objectives in REDD design.<sup>177</sup> In the first REDD decision, the parties provided indicative guidance for REDD demonstration activities, stating that such activities "should be consistent with sustainable forest management, noting, *inter alia*, the relevant provisions of . . . the Convention on Biological Diversity."<sup>178</sup> In the REDD decision taken in Copenhagen, parties noted "the importance of promoting sustainable management of forests and co-benefits, including biodiversity, that may

<sup>173.</sup> See Brown et al., supra note 166, at 117; see also Oscar Venter et al., Harnessing Carbon Payments to Protect Biodiversity, 326 Sci. 1368, 1368 (2009) (noting that "if REDD focuses solely on cost-effectively reducing carbon emissions, its benefits for biodiversity are low"). However, a fund-based approach may lead to significantly lower levels of funding for REDD. See Brown et al., supra note 166, at 117. It is in this context that Long has proposed a hybrid mechanism, with public funding being steered towards certifying non-carbon benefits, whilst using the market to ensure sufficient funding for REDD in general. See Andrew Long, Global Climate Governance to Enhance Biodiversity and Well-Being: Integrating Non-State Networks and Public International Law in Tropical Forests, 41 ENVTL. L. 95 (2011).

<sup>174.</sup> See Savaresi, supra note 113, at 24–26 (describing how mapping and monitoring can support maximized biodiversity co-benefits).

<sup>175.</sup> See generally Louis V. Verchot & Elena Petkova, The State of REDD Negotiations: Consensus Points, Options for Moving Forward and Research Needs to Support the Process, CENTER FOR INTERNATIONAL FORESTRY RESEARCH (2010), http://www.cifor.cgiar.org/Knowledge/Publications/Detail?pid=2870.

<sup>176.</sup> Id. at 8.

<sup>177.</sup> See generally Till Pistorius et al., Greening REDD+: Challenges and Opportunities for Forest Biodiversity Conservation 3 (2010), http://www.cbd.int/doc/ meetings/for/ewredd-01/other/ewredd-01-greeningredd-en.pdf.

<sup>178.</sup> Decision 2/CP.13, supra note 75, Annex, ¶ 8.

complement the aims and objectives of national forest programmes and relevant international conventions and agreements."<sup>179</sup> The Cancún Agreements contain a more specific formulation, indicating that parties undertaking REDD activities should promote and support safeguards. With respect to biodiversity, this means that

actions [need to be] consistent with the conservation of natural forests and biological diversity, ensuring that [REDD activities] are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.<sup>180</sup>

Another safeguard requires parties to ensure that "actions complement or are consistent with the objectives of . . . relevant international conventions and agreements."181 Similar to the more general provision in the Kyoto Protocol, there is a strong argument that the CBD is a relevant international convention for the purposes of this decision.<sup>182</sup> The decision also outlines several general principles for REDD activities. While not all of these are relevant from a biodiversity perspective, one of them states that REDD activities should "[b]e consistent with the objective of environmental integrity and take into account the multiple functions of forests and other ecosystems."183 This phrasing seems to confirm the shift away from the idea that forests are merely sources or sinks of carbon. The REDD decision adopted in Durban did not contain provisions specific to biodiversity safeguards. Although the decision instructs parties implementing REDD to enhance transparency

<sup>179.</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change Dec. 4/CP.15, Rep. of the Conference of the Parties, 15th Sess., Dec. 7–18, 2009, U.N. Doc. FCCC/CP/2009/11/Add.1 pmbl. (Mar. 30, 2010). This text echoes a similar statement in the first REDD decision. *See* Decision 2/CP.13, *supra* note 75, pmbl.

<sup>180.</sup> Decision 1/CP.16, *supra* note 81, app. I, ¶ 2(e).

<sup>181.</sup> *Id.* app. I, ¶ 2(a).

<sup>182.</sup> See supra Part III.A.1 (discussing the convergence of these treaties).

<sup>183.</sup> Decision 1/CP.16, *supra* note 81, app. I, ¶ 1(d).
on how safeguards are addressed and respected, it does not offer a strong accountability mechanism.<sup>184</sup>

The decisions show that parties pay attention to the potential impacts of REDD on biodiversity, but that they have mainly dealt with these impacts in terms of "co-benefits" or "safeguards," implying that the primary objective is to maximize the reduction of carbon dioxide emissions. Indeed, for some observers, the inclusion of biodiversity considerations in the design of REDD poses a barrier to the implementation of the mechanism.<sup>185</sup> The co-benefits approach is one of the ways in which biodiversity issues could be integrated in REDD.<sup>186</sup> However, one can also argue that biodiversity concerns should be seen as more than just auxiliary benefits, but rather as separate objectives for a REDD mechanism, for which complementary funding mechanisms would be required.<sup>187</sup> Or, going one step further, one could argue that REDD should deliver biodiversity benefits even if this might be at the expense of the cost-effective achievement of its climate change mitigation goals.188

In this regard, various proposals on how to include biodiversity concerns in rules developed in the climate regime have been put forward.<sup>189</sup> The most far-reaching would be the

186. For a discussion of three broad approaches to accommodating biodiversity concerns in REDD, see Harvey et al., *supra* note 166, at 57–59.

187. Id. at 57; see also Conference of the Parties to the Convention on Biological Diversity, 10th Meeting, Nagoya, Japan, Oct. 18–29, 2010, Proposals on Ways and Means to Achieve Co-Benefits for Biodiversity, Combating Desertification/Land Degradation, and Climate Change, Note by the Executive Secretary, U.N. Doc. UNEP/CBD/COP/10/22 ¶ 6 (Aug. 17, 2010) (noting the difference between "co-benefits" and "multiple benefits"). See also id. ¶ 53 (arguing to move towards a discussion of multiple benefits).

188. Harvey et al., supra note 166, at 59.

189. See, e.g., Johannes Ebeling & Jan Fehse, Challenges for a Business Case for High-Biodiversity REDD Projects and Schemes: A Report for the Secretariat of the CBD, 35–40 (2010), http://www.cbd.int/forest/doc/other/ecosecurities-report-2009-02-en.pdf (discussing potential solutions to the challenges of inte-

<sup>184.</sup> See Decision 12/CP.17, supra note 87,  $\P$  2 (laying out a framework which emphasizes transparency and flexibility, but contains no accountability mechanism).

<sup>185.</sup> See, e.g., Conference of the Parties to the Convention on Biological Diversity, Nagoya, Japan, 10th Meeting, Oct. 18–29, 2010, Outcomes of the Global Expert Workshop on Biodiversity Benefits of Reducing Emissions from Deforestation and Forest Degradation, U.N. Doc. UNEP/CBD/COP/10/INF/20 16 (Oct. 1, 2010) (mentioning the risk of overburdening REDD).

establishment of binding biodiversity standards.<sup>190</sup> However, such standards would likely meet with the same developing country opposition that blocked the possible use of sustainable development criteria under the CDM.<sup>191</sup> Another measure is the exclusion of specific forestry activities that may have negative biodiversity impacts, such as reforestation, from the scope of REDD.<sup>192</sup> Other options include the requirement of mandatory EIAs for REDD projects or, more broadly, the use of strategic environmental assessments.<sup>193</sup> Furthermore, monitoring and reporting on biodiversity impacts of REDD projects could make the relationship between climate change and biodiversity more transparent. While a host of options is thus available to parties, it remains to be seen whether their adoption is politically feasible.

Looking back, one can discern two narratives summarizing the relationship between the climate and biodiversity treaties with respect to forests. The narrative of conflict highlights

grating biodiversity into the design and operation of REDD); Donna Lee et al., *Maximizing the Co-Benefits of REDD-Plus Actions* (2011), http://www.climatefocus.com/documents/maximizing\_the\_cobenefits\_of\_\_\_reddplus\_actions (providing an overview of some of the options available for REDD+ strategy development); Pistorius et al., *supra* note 177, at 19–23 (examining policy options for pending issues in the REDD+ framework). *See also* Sagemüller, *supra* note 113, at 224–32 (discussing options in the context of the discussion of sinks under the Kyoto Protocol).

<sup>190.</sup> Ebeling & Fehse, *supra* note 189, at 35–36; Sagemüller, *supra* note 113, at 224–25. Under a crediting mechanism, the options to differentiate between "normal" and "high quality" projects are myriad. For an overview of these options in the context of the CDM, see Harro van Asselt et al., *Differentiation in the CDM: Options and Challenges for Reform, in* Improving the Clean Development Mechanism: Options and Challenges Post-2012 27 (Michael Mehling et al. eds., 2011).

<sup>191.</sup> See Ebeling & Fehse, supra note 189, at 36 (positing that developing countries may see such criteria as an infringement on their sovereignty and oppose them as a result). As the notion of "sustainable development" is inherently context- and country-specific, developing countries have opposed the imposition of externally-defined criteria for sovereignty reasons. See Christina Voigt, Is the Clean Development Mechanism Sustainable? Some Critical Aspects, 8 SUSTAINABLE DEV. L. & POL'Y 15, 17 (2008) (noting that host country development needs to be taken into account when considering sustainable development).

<sup>192.</sup> See Ebeling & Fehse, supra note 189, at 38–39 (examining whether reforestation should be eligible under REDD).

<sup>193.</sup> See Sagemüller, supra note 113, at 225–30 (discussing mandatory EIAs); see also infra Part IV.C.1 (discussing autonomous management).

and criticizes the ambiguities and lack of safeguards in the rules developed in the climate regime. Similarly, the narrative of synergies emphasizes the potential co-benefits that could be achieved through implementing forestry activities, particularly through a REDD mechanism. These narratives do not exclude each other, but rather serve to illustrate that the relationship between the two regimes can be both conflictive and synergistic, depending on how actors within and outside the regimes choose to manage the interactions.

# IV. MANAGING INTERACTIONS BETWEEN MULTILATERAL ENVIRONMENTAL AGREEMENTS

The previous Part has shown that there are both potential conflicts and synergies between the climate and biodiversity regimes. This Part moves on to the inevitable follow-up questions: how to avoid the conflicts or resolve them when they have emerged and how to exploit the synergies. It seeks to address these questions of "interplay management,"<sup>194</sup> starting with an assessment of several of the legal techniques discussed by the ILC Study Group report on fragmentation. This is followed by an indication of the effectiveness of institutional efforts to address interactions by the regimes' treaty and administrative bodies. Lastly, it discusses autonomous efforts by state and non-state actors that may enhance synergies between the climate and biodiversity treaties. The objective of this discussion is twofold. On the one hand, it seeks to explore different strategies for enhancing the mutual supportiveness of the climate and biodiversity regimes. On the other hand, by doing so, it seeks to assess more generally the possibilities and limitations of legal and institutional approaches to managing interactions between multilateral environmental agreements.

<sup>194.</sup> See Olav Schram Stokke, The Interplay of International Regimes: Putting Effectiveness Theory to Work 11–12, THE FRIDTJOF NANSEN INSTITUTE (2001), http://www.fni.no/doc%26pdf/FNI-R1401.pdf (defining interplay management as "deliberate efforts by participants in tributary or recipient regimes to prevent, encourage, or shape the way one regime affects problem solving under another" and examining different forms of interplay); see also Sebastian Oberthür, Interplay Management: Enhancing Environmental Policy Integration Among International Institutions, 9 INT'L ENVTL. AGREEMENTS: POL. L. & ECONO. 371 (2009) (for a general discussion of interplay management).

## A. Legal Techniques: Promises and Pitfalls

The ILC Study Group report offers international lawyers a toolbox to address many of the challenges arising from the fragmentation of international law.<sup>195</sup> This section provides a concise overview of some of these tools, with a view to assessing their (in)applicability to the relationship between the climate and biodiversity treaties. It starts with a discussion of the techniques aimed at avoiding a conflict and is followed by an assessment of the tools to resolve conflicts between norms. The last two sub-sections argue that, in addition to some well-known limitations of the usefulness of legal techniques, there are two characteristics of international environmental law that inherently restrict the application of legal techniques in this field of international law, namely overlapping objectives and the increasing importance of treaty body decisions.

#### 1. Conflict Avoidance Techniques

The easiest way to "manage" a conflict is to prevent it from happening in the first place.<sup>196</sup> This can be done, first of all, at the drafting and negotiation stage of a treaty.<sup>197</sup> Before adopting a new treaty or amending an existing one, negotiators can make a list of all international legal instruments that may have an impact on the treaty under negotiation or may be affected by it.<sup>198</sup> The drafting techniques include devising "conflict clauses," which are discussed below, or other provisions making implicit or explicit references to other treaties.<sup>199</sup> While drafting treaty texts can be viewed as a legal

<sup>195.</sup> See ILC Study Group Report, supra note 3, ¶ 492 (emphasizing the application of "the rules of the VCLT, customary law and 'general principles of law recognized by civilized nations'.").

<sup>196.</sup> Borgen, supra note 7, at 584.

<sup>197.</sup> PAUWELYN, *supra* note 7, at 237–40.

<sup>198.</sup> See Jenks, supra note 7, at 452 (noting the importance of consulting related instruments); WOLFRUM & MATZ, supra note 7, at 210 (suggesting that "existing international norms" should be "exhaustively list[ed]" before new instruments are negotiated); see also Hicks, supra note 11, at 1669, 1671–73 (arguing for a "stop and think approach" to coordinating environmental treaties).

<sup>199.</sup> See PAUWELYN, supra note 7, at 237 (for a general overview of conflict prevention).

technique, it is at least equally a matter of politics.<sup>200</sup> The current negotiations on an international framework for future climate policy present an opportunity to apply this technique, but the discussions on including biodiversity considerations in a REDD mechanism provide an indication of the political sensitivities that surround this issue.<sup>201</sup> Moreover, even if negotiators make use of this window of opportunity, it is more likely that they will do so by addressing biodiversity issues in a treaty body decision, rather than in an amendment to one of the climate treaties or as part of a new climate treaty.<sup>202</sup> In other words, the scope of this legal technique is limited by political realities.

A second legal technique to avoid the existence of a conflict is treaty interpretation. While treaty interpretation is often discussed as if it were an activity solely undertaken by international adjudicators, the actors most frequently using this technique include government officials, legal advisers, and domestic courts.<sup>203</sup> Indeed, it is difficult to envisage a dispute relating to the climate-biodiversity overlap being brought before an international court or arbitrator.<sup>204</sup> Alternatively,

203. RICHARD GARDINER, TREATY INTERPRETATION 110 (2008). See also ANTHONY AUST, MODERN TREATY LAW AND PRACTICE 230 (2007) (discussing how different actors are involved in dispute resolution); Nele Matz-Lück, Harmonization, Systemic Integration, and 'Mutual Supportiveness' as Conflict-Solution Techniques: Different Modes of Interpretation as a Challenge to Negative Effects of Fragmentation?, 17 FIN. Y.B. INT'L L. 39, 50–52 (2008) (discussing various actors involved in treaty interpretation).

204. This is not to say that international judicial bodies cannot engage in interpreting the climate and biodiversity treaties at all, or that treaty interpretation by such bodies is inappropriate or undesirable. However, it has often been argued that international environmental law is better served by non-confrontational, managerial approaches to improving compliance than by an adversarial system of judicial enforcement. *See* Joost Pauwelyn, *Judicial* 

<sup>200.</sup> See WOLFRUM & MATZ, supra note 7, at 210 ("The implementation of this recommendation may turn out to be politically more controversial as one may expect.").

<sup>201.</sup> See supra Part III.C.

<sup>202.</sup> Indeed, the very issue of the legal form of a future climate agreement remains to be settled. For an examination of the various options, see Daniel Bodansky, *Legal Form of a New Climate Agreement: Avenues and Options*, CENTER FOR CLIMATE AND ENERGY SOLUTIONS (2009), http://www.pewclimate.org/docUploads/legal-form-of-new-climate-agreement-paper.pdf. Furthermore, negotiating the legal form while at the same time determining its substance will lead to inevitable trade-offs. *See* Kal Raustiala, *Form and Substance in International Agreements*, 99 AM. J. INT'L L. 581, 614 (2005).

interpretation may take place if parties to a treaty jointly agree on an authentic interpretation of provisions, taking into account other treaties.<sup>205</sup> Such an activity resembles an amendment,<sup>206</sup> and will hence be limited by the political considerations noted above.<sup>207</sup>

Nevertheless, treaty interpretation has the potential to harmonize seemingly inconsistent norms. This quest for harmony "results from the presumption that actors with a legislative or norm-creating function do not wilfully establish contradictory rules in a legal system."<sup>208</sup> Basic rules for the interpretation of treaties are provided by the Vienna Convention on the Law of Treaties (VCLT), which stipulates that the ordinary meaning, object and purpose, and context of a treaty are to be taken into consideration.<sup>209</sup> For instance, given the overlaps between the objectives of the climate and biodiversity treaties, a teleological interpretation could support the harmonization of the different agreements.<sup>210</sup> In addition, the VCLT provides more dynamic interpretation rules, specifying that inter-

209. VCLT, *supra* note 205, art. 31, ¶ 1.

Mechanisms: Is There a Need for a World Environment Court?, in REFORMING IN-TERNATIONAL ENVIRONMENTAL GOVERNANCE: FROM INSTITUTIONAL LIMITS TO INNOVATIVE REFORMS 150, 151 (W. Bradnee Chambers & Jessica F. Green eds., 2008).

<sup>205.</sup> Vienna Convention on the Law of Treaties, art. 31, ¶ 3(a), *open for signature* May 23, 1969, 1155 U.N.T.S. 331 (entered into force Jan. 27, 1980) [hereinafter VCLT].

<sup>206.</sup> See generally GARDINER, supra note 203, at 110 (discussing how parties may amend the meaning of a treaty).

<sup>207.</sup> See WOLFRUM & MATZ, supra note 7, at 140 (noting that the consensus requirement for adopting an authentic interpretation "is the main obstacle on a practical level").

<sup>208.</sup> Matz-Lück, *supra* note 203, at 45. On this "presumption against conflicts," see ILC Study Group Report, *supra* note 3, ¶ 37; PAUWELYN, *supra* note 7, at 240–44; Jenks, *supra* note 7, at 427. This presumption can be questioned, however, if one acknowledges that "states are not unitary actors" but "complex entities, with many constituent parts, often with very different interests and beliefs of their own." BODANSKY, *supra* note 20, at 112.

<sup>210.</sup> See WOLFRUM & MATZ, supra note 7, at 135–37 ("The teleological aspect of interpretation may help harmonize different agreements because different agreements in the same field. . .may be said to share the same object and purpose in accordance with which they must be interpreted."). However, the utility of teleological interpretation should also not be exaggerated: the wording of the objectives of the climate and biodiversity treaties is quite general, and does not necessarily help to clarify the meaning of the specific provisions on sinks. *Id.* at 137.

pretation should account for any subsequent agreement between the parties on interpretation of the treaty (the aforementioned authentic interpretation),<sup>211</sup> any "subsequent practice in the application of the treaty,"<sup>212</sup> and "any relevant rules of international law applicable in the relationships between the parties."<sup>213</sup>

The latter provision has received a great deal of attention in the scholarly literature,<sup>214</sup> with the ILC Study Group report assigning particular importance to this "principle of systemic integration" in dealing with fragmentation.<sup>215</sup> For Maria Pontecorvo, the principle confirms "a specific duty for Parties to interpret the provisions of the Kyoto Protocol relating to sinks potentially conflicting with pre-existing commitments under other treaties in such a way as to make them compatible with these commitments."<sup>216</sup> One of the key questions is whether the relevant rules of international law must be in place at the time of the adoption of a new treaty or at the time of interpretation. The latter allows for a more "evolutionary approach" to treaty interpretation, and is arguably appropriate when interpreting terms that are likely to evolve over time.<sup>217</sup> This is also the case for the Kyoto Protocol. For instance, the term "sustainable forest management practices" is prone to

- 212. Id. art. 31, ¶ 3(b).
- 213. Id. art. 31, ¶ 3(c).

214. It is beyond the scope of this Article to discuss the many issues raised by Article 31, ¶ (3) (c) of the VCLT. For in-depth discussions, see GARDINER, supra note 203, at 250–91; PAUWELYN, supra note 7, at 263–74; Duncan French, Treaty Interpretation and the Incorporation of Extraneous Legal Rules, 55 INT'L & COMP. L.Q. 281 (2006); Ulf Linderfalk, Who Are The Parties'? Article 31, Paragraph 3(c) of the 1969 Vienna Convention and the 'Principle of Systemic Integration' Revisited, 55 NETH. INT'L L. REV. 343 (2008); Campbell McLachlan, The Principle of Systemic Integration and Article 31(3)(c) of the Vienna Convention, 54 INT'L & COMP. L.Q. 279 (2005); Mélanie Samson, High Hopes, Scant Resources: A Word of Scepticism about the Anti-Fragmentation Function of Article 31(3)(c) of the Vienna Convention on the Law of Treaties, 24 LEIDEN J. INT'L L. 701 (2011).

215. ILC Study Group Report, supra note 3, ¶ 480.

216. Pontecorvo, supra note 113, at 741.

217. See ILC Study Group Report, supra note 3,  $\P$  478 (rejecting a single rule about temporal frames for the interpretation of treaties in favor of a case-by-case analysis); PAUWELYN, supra note 7, at 264–68 (discussing the temporal scope of Article 31).

<sup>211.</sup> VCLT, supra note 205, art. 31, ¶ 3(a).

changing scientific insights, stemming from both within and outside the climate regime.<sup>218</sup>

While there is therefore potential for using treaty interpretation as a technique to avoid conflicts between the climate and biodiversity treaties, some general limitations to its use should be noted. Most importantly, interpretation can only be used to give meaning to terms of a treaty that are insufficiently clear.<sup>219</sup> This means that the provision in another treaty must, in some way, be related to the ambiguous provision.<sup>220</sup> It also means that the interpreted rule cannot simply be replaced by another provision.<sup>221</sup> Nevertheless, treaty interpretation by domestic actors provides an important avenue to pursue a "harmonizing approach" in the implementation phase even if there is no agreement on a specific treaty term at the international level.<sup>222</sup>

#### 2. Conflict Resolution Techniques

In case a normative conflict has emerged,<sup>223</sup> international lawyers can avail themselves of several other tools to resolve it. The starting point in addressing conflicts is to examine whether states have sought to regulate these through conflict (or savings) clauses. The use of such clauses is already common practice in international affairs.<sup>224</sup> Their purpose generally is to prevent treaties from contradicting one another.<sup>225</sup>

223. As indicated above, it is unclear whether such a normative conflict could be established in the first place. *See supra* note 130 (describing the reasons why normative conflicts are unlikely in the sphere of international environmental treaties).

224. For an overview, see ILC Study Group Report, *supra* note 3, ¶¶ 267–94 (describing the types of conflict clauses and their function in environmental treaties and the constituent instrument of the European Community); PAUWELYN, *supra* note 7, at 328–61; SADAT-AKHAVI, *supra* note 7, at 85–97 (defining "conflict-resolving clauses" and describing the ways in which they can take priority over or give priority to other treaties).

225. WOLFRUM & MATZ, supra note 7, at 121.

<sup>218.</sup> Kyoto Protocol, *supra* note 17, art. 2, ¶ 1(a)(ii).

<sup>219.</sup> WOLFRUM & MATZ, supra note 7, at 146; PAUWELYN, supra note 7, at 245.

<sup>220.</sup> PAUWELYN, supra note 7, at 245;

<sup>221.</sup> Id.

<sup>222.</sup> See WOLFRUM & MATZ, supra note 7, at 147 (noting that parties' discretion in implementing environmental treaties enables them to reduce conflicting interpretations); see also infra Part IV.C.1 (describing the specific steps available to states in the exercise of this discretion).

This can be achieved, for example, by providing that existing treaties prevail or by providing that a new agreement prevails over existing ones.<sup>226</sup> If phrased unambiguously and clearly, they have the potential to resolve conflicts.<sup>227</sup>

For the purposes of this Article, the question then becomes: do the climate and biodiversity treaties contain any such provisions? Turning first to the climate treaties, it can be argued that the Kyoto Protocol's reference to "relevant international environmental agreements"<sup>228</sup> constitutes a conflict clause. However, the provision is unclear about which commitments in other agreements it refers to, and also merely states that such commitments should be "taken into account."<sup>229</sup> It is difficult to see how this formulation could subordinate the commitments in the Kyoto Protocol to those contained in the CBD.<sup>230</sup>

The CBD contains a more clearly identifiable conflict clause. The provision gives priority to any existing agreement, "except where the exercise of those rights and obligations would cause serious damage or a threat to biological diversity."<sup>231</sup> In effect, this formulation reverses the conflict clause<sup>232</sup>: The clause arguably serves to limit climate change mitigation activities that would cause serious damage or a threat to biodiversity. However, there are several limitations to its use. The clause applies only to treaties *existing* at the time of the CBD's adoption, and is thus not applicable to the subsequently adopted Kyoto Protocol. As a result, this avenue for addressing the potential conflict between the two treaties is "legally minimal and practically non-existent."<sup>233</sup> Furthermore, the phrase "serious damage or threat to biological diversity" is nowhere defined or elaborated upon, meaning that the

<sup>226.</sup> As in the VCLT, *supra* note 205, art. 30, ¶ 2.

<sup>227.</sup> See SADAT-AKHAVI, supra note 7, at 85–86 (warning that "ambiguous and unclear texts create more problems than they resolve").

<sup>228.</sup> See supra note 118, and accompanying text.

<sup>229.</sup> Pontecorvo, *supra* note 113, at 739-40.

<sup>230.</sup> See Jacquemont & Caparrós, *supra* note 113, at 178 (explaining how the Kyoto Protocol's conflict clause will be too vague for the international rules of treaty interpretation to resolve a conflict with the CBD).

<sup>231.</sup> CBD, *supra* note 18, art. 22 ¶ 1.

<sup>232.</sup> WOLFRUM & MATZ, supra note 7, at 124.

<sup>233.</sup> Meinhard Doelle, Linking the Kyoto Protocol and Other Multilateral Environmental Agreements: From Fragmentation to Integration?, 14 J. ENVTL. L. & PRAC. 75, 86 (2004).

practical application of the clause remains uncertain. It is therefore "doubtful that this clause can prevent or solve conflicts."  $^{234}$ 

In addition to conflict clauses, there are various conflict resolution rules that serve to guide the determination of which norm should prevail if two norms are in conflict, which are, in part, codified in the VCLT.<sup>235</sup> These conflict resolution rules include the maxims of *lex posterior*—the newer norm prevails over the older one—and *lex specialis*—the more specific norm prevails over the more general one.<sup>236</sup> The limitations of these maxims—and of the VCLT—in resolving conflicts have been well-documented,<sup>237</sup> and will only be briefly summarized here.

Article 30 of the VCLT only applies to "successive treaties relating to the same subject matter." If this subject matter is broadly seen as "environmental protection," the VCLT could apply to conflicts between the climate and biodiversity treaties.

<sup>234.</sup> WOLFRUM & MATZ, *supra* note 7, at 125; *see also* ILC Study Group Report, *supra* note 3, ¶ 280 ("The weakness of the strategy of seeking a 'mutually supportive' interpretation lies in its open-endedness."); MALGOSIA FITZ-MAURICE & OLUFEMI ELIAS, CONTEMPORARY ISSUES IN THE LAW OF TREATIES 344-45 (2005) (noting that the conflict clause of the CBD has the potential to cause problems).

<sup>235.</sup> VCLT, *supra* note 205, art. 30. It is widely agreed that the rules in this provision codify customary law, and should be seen as residual. *See* ILC Study Group Report, *supra* note 3, ¶ 252 (stating that Article 30 generally "captures the state of general law"); AUST, *supra* note 203, at 227–28 (asserting that the rules in Article 30 are residual); WOLFRUM & MATZ, *supra* note 7, at 147 ("The [VCLT] represents the international community's provision of some general, codified rules on treaty making.").

<sup>236.</sup> The following is not an exhaustive overview of all possible conflict resolution rules. For instance, conflicts may also be resolved by reference to the *lex superior* maxim—the hierarchically superior norm prevails. This would be the case if a norm conflicts with *jus cogens*—peremptory norms from which no derogation is possible. *See* ERICH VRANES, TRADE AND THE ENVIRONMENT: FUNDAMENTAL ISSUES IN INTERNATIONAL LAW, WTO LAW, AND LEGAL THEORY 51–53 (2009) (explaining *lex superior*); *see also* ILC Study Group Report, *supra* note 3, ¶¶ 343–409 (discussing conflict resolution rules of customary international law and *jus cogens*).

<sup>237.</sup> For a discussion of some of the problems that are not sufficiently addressed by Article 30, see, e.g., Chambers, *supra* note 14, at 49–57; Wolfrum & Matz, *supra* note 7, at 147–59; Christina Voigt, Sustainable Development as a Principle of International Law: Resolving Conflicts Between Climate Measures and WTO Law 293-304 (2009); Borgen, *supra* note 7, at 603–06.

Alternatively, "if two different rules or sets of rules are invoked in regard to the same matter,"<sup>238</sup> it could be argued that the conflict resolution rules can be applied. However, it is far from clear whether such a broad interpretation is appropriate.<sup>239</sup>

Even if one assumes that two treaties relate to the same subject matter, it is not straightforward to establish which treaty is later in time.<sup>240</sup> This makes it difficult to apply article 30 of the VCLT-which refers to "successive treaties"-but also constrains the usefulness of the *lex posterior* maxim in general.<sup>241</sup> Even if it would be possible to agree on the "date" of a treaty (for instance, the time of its adoption, the date of entry into force, or the date of ratification or accession by a party), using the *lex posterior* rule would seem inappropriate in the case of treaties that were negotiated in parallel, as is the case for the UNFCCC and the CBD.<sup>242</sup> Moreover, application of the conflict rules on successive treaties is difficult to envisage in the case of "living treaties," where "treaty norms are part of a regulatory framework or legal system that was created at one point in time but continues to exist and evolve over a mostly indefinite period."243 Multilateral environmental agreements,

241. Expressions of the *lex posterior* maxim are codified in the VCLT. VCLT, *supra* note 205, art. 30,  $\P\P$  3–4(a).

<sup>238.</sup> ILC Study Group Report, *supra* note 3,  $\P$  23; *see also id.*  $\P$  254 (noting that the interests covered by and the intents of treaties may be taken into account when determining whether they relate to the "same subject matter").

<sup>239.</sup> See WOLFRUM & MATZ, supra note 7, at 150 (arguing that such a "broad basis of analysis would be unreasonable, rendering the qualifying preconditions of article 30 VCLT pointless."); see also Borgen, supra note 7, at 603 ("[T]he VCLT is not applicable to the thornier issues of what happens when treaties have different foci but overlapping issue areas."). But see ILC Study Group Report, supra note 3, ¶ 22 (warning that, conversely, a narrow interpretation would lead to a "reductio ad absurdum").

<sup>240.</sup> See generally E.W. Vierdag, The Time of the 'Conclusion' of a Multilateral Treaty: Article 30 of the Vienna Convention on the Law of Treaties and Related Provisions, 60 BRIT. Y.B. INT'L L. 75 (1989) (discussing how the lack of clarity about what is meant by the "conclusion" of a treaty may make determining which treaty came later in time difficult); see also PAUWELYN, supra note 7, at 367–84 (discussing the difficulty of ascribing a time to when a treaty is concluded). The key question in this regard is whether the later treaty reflects the latest "legislative intent." *Id.* at 368–70.

<sup>242.</sup> WOLFRUM & MATZ, supra note 7, at 155.

<sup>243.</sup> PAUWELYN, supra note 7, at 378.

such as the climate and biodiversity treaties, are clear examples of such "living treaties," where parties continue to develop the general rules agreed upon in the treaty through the treaty bodies.<sup>244</sup>

The applicability of the *lex specialis* maxim is also questionable. Again, even under the assumption that two treaties have the "same subject matter," they do so from a different angle, and they deal with different aspects of an overlapping issue.<sup>245</sup> Under such circumstances, the determination of which norm is more specific in terms of subject matter—i.e. norms in the climate treaties or norms in the biodiversity treaty—is inherently in the eye of the beholder.<sup>246</sup>

This overview of legal techniques to resolve conflicts has highlighted the limitations of these techniques in addressing conflicts in international law, including the potential conflict between the climate and biodiversity treaties. I argue, however, that there are two more general reasons why the usefulness of legal techniques to resolve conflicts is limited in managing interactions between multilateral environmental agreements. While important, these reasons have received little attention in the debate on fragmentation. First, conflict resolution techniques primarily concern conflicts stemming from treaties and treaty obligations, whereas the origins of interactions in the case of the climate and biodiversity treaties is rather to be found in decisions by treaty bodies, a reflection of their mounting importance in international environmental lawmaking. Second, the conflict resolution rules imply that there is a need to prioritize one norm or the other. However, given the overlapping objectives of environmental treaties, including the climate and biodiversity treaties, this assumption should be questioned.

#### 3. Tracing the Origins of Interactions: The Role of Treaty Bodies

The discussion on the rule development on sinks under the Kyoto Protocol and the impacts on the CBD shows that this

<sup>244.</sup> See infra Part IV.A.3 (discussing treaty bodies).

<sup>245.</sup> Anja Lindroos, Addressing Norm Conflicts in a Fragmented Legal System: The Doctrine of Lex Specialis, 74 NORDIC J. INT'L L. 27, 48 (2005).

<sup>246.</sup> See also WOLFRUM & MATZ, supra note 7, at 157–158 (arguing that the *lex specialis* rule cannot be applied in the case of the CBD and the Kyoto Protocol because of their distinct objectives and the limited overlap).

potential conflict has its origins in the decisions made by the treaty bodies of the climate regime. However, the debate on the fragmentation of international law is primarily concerned with conflicts stemming from treaties as such (as well as the rights and obligations set forth therein). This is in line with historical discussions on the subject of conflicts in international law, which have focused primarily on treaties and treaty obligations as the source of conflict. For instance, Jenks' classic definition states that a "conflict in the strict sense of direct incompatibility arises only where a party to the two *treaties* cannot simultaneously comply with its *obligations under both treaties*."<sup>247</sup> And, as the preceding discussion clearly indicates, various legal techniques to avoid or resolve conflicts are based on, or linked to, the law of treaties.

But, as Jenks himself admitted, a narrow definition of "conflict" might not cover all the divergences and inconsistencies between treaties that have negative effects.<sup>248</sup> Later definitions of "conflicts of norms" indeed aim to ensure that certain obvious conflicts are not "defined away,"<sup>249</sup> but even such definitions may be insufficient to cover the various kinds of incompatibilities that may appear in international environmental law.<sup>250</sup> This leads to a blind spot in the fragmentation debate: namely, the largely ignored question of how to deal with cases where the texts of two treaties are perfectly compatible, but subsequent rule development under one of the treaties leads to a conflict.

Whether such a situation is captured by the ongoing fragmentation discussions depends on the legal status assigned to the decisions of the treaty bodies of multilateral environmental agreements. In other words, to what extent do the decisions adopted by these bodies constitute international lawmaking in a traditional sense?<sup>251</sup> There is no clear-cut answer to

<sup>247.</sup> Jenks, supra note 7, at 426 (emphasis added).

<sup>248.</sup> Id.

<sup>249.</sup> See VRANES, supra note 236, at 20 ("[I]ntroducing. . .a strict definition runs counter to the basic principle that norms have to be interpreted in a way that does not reduce them to inutility.").

<sup>250.</sup> Wolfrum and Matz distinguish other types of conflict that do not fall under traditional definitions. *See* WOLFRUM & MATZ, *supra* note 7, at 7–13.

<sup>251.</sup> On this question, see generally Jutta Brunnée, COPing with Consent, Law-Making under Multilateral Environmental Agreements, 15 LEIDEN J. INT'L L. 1 (2002) [hereinafter Brunnée, COPing with Consent] (examining interna-

this question, but it has been argued that, while COP decisions are not devoid of normative substance, their legal force is intrinsically connected to the treaty obligation upon which they are based.<sup>252</sup> Indeed, it is difficult to see how the decisions on sinks in the CDM could exist without the treaty provision in the Kyoto Protocol establishing the mechanism in the first place. However, it is also difficult to argue that conflicts arising from a particular COP decision are caused by the treaty provision upon which such decisions are based, if this provision is formulated generally. Even if it can be successfully argued that there are intricate linkages between COP decisions and underlying treaty provisions, this does not mean that the decisions are, or should be covered by the law of treaties.<sup>253</sup>

The increasing relevance of treaty body decisions in international environmental lawmaking, hence, limits the usefulness of conflict resolution techniques. This does not mean

252. See Wiersema, supra note 251, at 245 (concluding that "consensusbased COP activity . . . cannot be seen as giving rise to stand-alone legal or even political obligations" and that COP decisions "hold little meaning but for their connection to the treaty"); see also FITZMAURICE & ELIAS, supra note 234, at 262–63 (referring to the Kyoto Protocol provisions on flexible mechanisms as "enabling clauses" for subsequent COP/MOP decisions); Brunnée, *COPing with Consent, supra* note 251 (referring to "enabling provisions"). It should be noted that not all COP activity has the same effect on parties' substantive obligations. See Wiersema, supra note 251, at 237–45 (distinguishing between internal and external effects).

253. See Wiersema, supra note 251, at 247 (pointing out that COP decisions cannot easily be categorized under the treaty heading). COP decisions could also be regarded as subsequent practice under Article 31(3)(b) of the VCLT. Churchill & Ulfstein, supra note 251, at 641. Equally, they could be included under the "relevant rules of international law" under Article 31(b)(c) of the VCLT. See Wiersema, supra note 251, at 279–81. Recognition of the normative relevance of COP decisions would increase the opportunities to manage the fragmentation of international law through interpretative techniques.

tional law-making as an interactional process); Jutta Brunnée, Reweaving the Fabric of International Law? Patterns of Consent in Environmental Framework Agreements, in DEVELOPMENTS OF INTERNATIONAL LAW IN TREATY MAKING 101 (Rüdiger Wolfrum & Volker Röben eds., 2005) (examining the role of treaty bodies in law-making and the implications of state consent); Robin R. Churchill & Geir Ulfstein, Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law, 94 AM. J. INT'L L. 623 (2000) (discussing the scope of treaty bodies' decision-making power); Annecoos Wiersema, The New International Law-Makers? Conferences of the Parties to Multilateral Environmental Agreements, 31 MICH. J. INT'L L. 231 (2009) (discussing consensus-based COP activity).

that any conflicts arising from such decisions cannot be dealt with, but rather points to the need to think about alternative means to manage them.

## 4. Conflicts and Synergies: The Limits of Legal Techniques

The notion of conflict resolution leads to the second explanation of why legal techniques are not necessarily the most appropriate means to manage regime interactions: it is not always desirable that one norm prevails over another. From the "structural bias"<sup>254</sup> of actors involved in a specific legal regime, it is perhaps preferable to let one norm—"their" norm—prevail. Yet such a view ignores the notion that different treaties may pursue similar or overlapping objectives.<sup>255</sup> This is particularly pertinent in the field of international environmental law.

There is, for instance, a strong argument for using the concept of "sustainable development" as an overarching objective for international environmental law, and perhaps even international law more generally.<sup>256</sup> Of course, one could argue

<sup>254.</sup> See MARTTI KOSKENNIEMI, FROM APOLOGY TO UTOPIA: THE STRUCTURE OF INTERNATIONAL LEGAL ARGUMENT 607 (2005) ("[T]here is a structural bias in the relevant legal institutions that makes them serve typical, deeply embedded preferences, and that something we feel that is politically wrong in the world is produced or supported by that bias."); see also Khrebtukova, supra note 2, at 67–71 (illustrating through specific examples that "[d]ifferent reasoning yields different conclusions. And dispersed international regime-specific decision-making bodies, operating on the basis of distinct value-systems and unique systematic approaches to harmonizing diverse interests, are thus likely to arrive at multiple, and sometimes incompatible, resulting outcomes.").

<sup>255.</sup> *See* Pontecorvo, *supra* note 113, at 740 (noting with respect to the climate and biodiversity treaties that "there seems to be no way to establish a hierarchical order among the treaties involved in the conflict, neither according to their content nor according to their purpose").

<sup>256.</sup> See generally VOIGT, supra note 237, at 145–86 ("The classification of sustainable development as a general principle of law is legitimized by its widespread use in many national legal systems and in international law, and the jurisprudence of international courts and tribunals."). While Voigt elevates the concept to the legal status of a principle, others have been more critical. Vaughan Lowe, for instance, has criticized the argument that sustainable development has become a binding norm of international law. Vaughan Lowe, Sustainable Development and Unsustainable Arguments, in INTERNATIONAL LAW AND SUSTAINABLE DEVELOPMENT: PAST ACHIEVEMENTS AND FUTURE CHALLENGES 19 (Alan Boyle & David Freestone eds., 1999). However, Lowe also sees potential for the concept to address the relationship between

that the generality of this concept, as well as uncertainty about its precise contents or legal status, reduce its usefulness.<sup>257</sup> However, even if one does not accept that there are such allencompassing goals, or that the identification of such goals is impossible,<sup>258</sup> it can still be argued that management of interactions should aim to enhance the effectiveness—or at the very least avoid reducing the effectiveness—of both regimes in question. In the context of the interactions between the climate and biodiversity regimes, this would mean that any satisfactory resolution needs to result in further greenhouse gas emission reductions, while simultaneously ensuring the conservation and sustainable use of biodiversity.<sup>259</sup> My main point is that the focus on normative conflict has overshadowed the idea that norms may also reinforce each other.

The ILC Study Group report has not completely ignored this critique. In its discussion of conflict clauses, the report acknowledges that in some cases it is necessary to put in place a clause that "avoids a straightforward priority and instead seeks to coordinate the simultaneous application of the two treaties as far as possible."<sup>260</sup> In particular, when treaties

different norms. *Id.* at 31 (arguing that sustainable development should be seen as "a meta-principle, acting upon other legal rules and principles—a legal concept exercising a kind of interstitial normativity, pushing and pulling the boundaries of true primary norms when they threaten to overlap or conflict with each other").

<sup>257.</sup> For a discussion of the concept of sustainable development in international law, see Daniel Barstow Magraw & Lisa D. Hawke, *Sustainable Development, in* THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 613 (Daniel Bodansky et al. eds. 2007).

<sup>258.</sup> For instance, Koskenniemi argues that the notion of sustainable development is merely one of the "regime hybrids . . . through which the experts representing the respective regimes may wage their struggle for influence". Martti Koskenniemi, *Hegemonic Regimes, in* REGIME INTERACTION IN INTERNATIONAL LAW: FACING FRAGMENTATION 305, 319–20 (Margaret A. Young ed., 2012) (hereinafter REGIME INTERACTION IN INTERNATIONAL LAW). Still, Dunoff makes a convincing argument to search for an overarching "redemptive narrative" through which different regimes could be integrated. Jeffrey Dunoff, *A New Approach to Regime Interaction, in* REGIME INTERACTION IN INTERNATIONAL LAW, *ibid.* 136, 155.

<sup>259.</sup> This suggestion is in line with the notion of a "dual effectiveness" test introduced in the context of the forest and climate discussions. See Kelly Levin et al., The Climate Regime as Global Forest Governance: Can Reduced Emissions from Deforestation and Forest Degradation (REDD) Initiatives Pass a 'Dual Effectiveness' Test?, 10 INT'L FORESTRY REV. 538 (2008).

<sup>260.</sup> ILC Study Group Report, supra note 3, ¶ 272.

"share a similar object and purpose or carry a parallel 'ethos,'" those clauses aimed at mutual supportiveness are considered useful.<sup>261</sup> However, following these observations, the report proceeds to argue that such clauses may not achieve their goals in case of conflicts, as "an open-ended conflict clause will come to support the primacy of the treaty that is part of the law-applier's regime."<sup>262</sup> While this conclusion may be sound in terms of dealing with conflicts between environmental treaties, it closes the discussion too quickly on legal techniques to enhance the positive outcomes of regime interactions.<sup>263</sup>

Instead, the case of the climate and biodiversity regime shows that there is ample scope for drafting rules that promote the objectives of both treaties, especially in the area of REDD.<sup>264</sup> For instance, unambiguously drafted "interaction clauses" could expressly reflect the intention that the two environmental treaties support each other and could give a mandate to treaty bodies on how such mutual supportiveness might be better achieved.<sup>265</sup> This is in line with Chambers, who suggests that "[t]here is a need to create a positive rule of cooperation . . . which promotes treaty negotiators and treaty interpreters to maintain consistency between treaties."<sup>266</sup> A mandate for treaty bodies to continue to consider the linkages with other agreements provides a dynamic element, which is crucial in a field where scientific insights and political develop-

264. With this, I mean that there is scope for *legal* techniques to do so. This does not mean that there is sufficient *political* will to draft such clauses. Nevertheless, political will can be created because "the positive effects of mutually supportive clauses should benefit both regimes, and thus . . . be in the interest of parties on either side." Van Asselt et al., *supra* note 5, at 432.

265. Id. at 431. There is a slight difference between the conflict avoidance techniques discussed above. The point here is that drafting could seek to promote the *reinforcement* of norms in different treaties, as opposed to avoiding normative conflict.

266. CHAMBERS, *supra* note 14, at 247–48. Chambers suggests operationalizing this principle through Article 31 of the VCLT. *Id.* at 248.

<sup>261.</sup> Id. ¶ 277.

<sup>262.</sup> Id. ¶ 280.

<sup>263.</sup> In a study examining a wide range of interactions in international environmental governance, one of the key conclusions was that synergies are more prevalent than conflicts. Thomas Gehring & Sebastian Oberthür, *Comparative Empirical Analysis and Ideal Types of Institutional Interaction, in* INSTITUTIONAL INTERACTION IN GLOBAL ENVIRONMENTAL GOVERNANCE: SYNERGY AND CONFLICT AMONG INTERNATIONAL AND EU POLICIES 318 (Sebastian Oberthür & Thomas Gehring eds., 2006).

ments are ever-changing and regimes need to be adaptable to new circumstances.

These calls to reconsider legal techniques for the management of interactions between environmental regimes reflect that the debate on the fragmentation of international law and the solutions proposed—has too narrowly focused on conflicts. Conflict resolution rules resulting in a hierarchical relationship of norms may still be useful in conflicts between legal regimes with incompatible objectives, but management of interactions between environmental treaties more generally may be better achieved through conflict avoidance techniques, as well as institutional cooperation and coordination.

#### B. Institutional Cooperation and Coordination: The "Soft" Alternative

While the legal toolbox for dealing with the interactions between the climate and biodiversity regimes is limited by the nature of the relationship between multilateral environmental agreements and the way international environmental law is made, there is an alternative for policymakers in both regimes - to manage the mutual relationship by fostering institutional cooperation and coordination. Such cooperation could take place simply through information exchanges between treaty bodies, or in a more ambitious form comprising "joint planning of programmes or even the coordination of substantive decision-making or implementation activities."267 This section explores the ways in which various actors have sought to address interactions between the two regimes and shows that there is increasing awareness of the interactions, as well as a growing response to them. However, it argues that this "soft" alternative also has its limitations, which can be explained by incongruent memberships and limited legal mandates.

### 1. The Conferences of the Parties: Passive/Active

Given that many of the existing interactions between the climate and biodiversity regimes stem from the decisions of treaty bodies, it makes sense to examine how the respective COPs have sought to manage these interactions. From the va-

<sup>267.</sup> Stokke, *supra* note 194, at 12; *see also* YAMIN & DEPLEDGE, *supra* note 59, at 510 (describing various types of inter-institutional cooperation).

rious decisions addressing the mutual relationship between the two regimes, it appears that while the treaty bodies of the UNFCCC and the Kyoto Protocol have been rather passive on the issue of the relationship with the biodiversity convention, the CBD COP has actively sought to manage the interactions between the regimes.

The story of the climate change treaty body decisions on promoting cooperation and coordination with the CBD is a relatively short one. Both the UNFCCC COP and the Kyoto Protocol COP/MOP are mandated to "[s]eek and utilize, where appropriate, the services and cooperation of, and information provided by, competent international organizations and intergovernmental and non-governmental bodies."268 However, the first activities were only in response to calls by the CBD COP. Cooperation with the CBD received its first mention in a 2000 report by the UNFCCC's Subsidiary Body on Scientific and Technological Advice (SBSTA),269 following a note by the CBD's Executive Secretary.<sup>270</sup> Since then, cooperation with the CBD has been discussed under the agenda item of "cooperation with relevant international organizations." There has been only one (brief) COP decision on cooperation, which generally affirms the need for enhanced cooperation "with the aim of ensuring the environmental integrity of the [Rio Conventions] and promoting synergies under the common objective of sustainable development, in order to avoid duplication of efforts, strengthen joint efforts and use available resources more efficiently."<sup>271</sup> This decision also for-

<sup>268.</sup> Kyoto Protocol, supra note 17, art. 13,  $\P$  4(i); UNFCCC, supra note 16, art. 7,  $\P$  2(l).

<sup>269.</sup> See Rep. of the Subsidiary Body on Scientific and Technological Advice to the United Nations Framework Convention on Climate Change, 13th Sess., Nov. 13–18, 2000, U.N. Doc. FCCC/SBSTA/2000/14 ¶ 60 (Dec. 20, 2000) (stating that the SBSTA appreciated some of the work done by the CBD).

<sup>270.</sup> Subsidiary Body on Scientific, Technical and Technological Advice to the Convention on Biological Diversity, 6th Meeting, Mar. 12–16, 2001, *Biological Diversity and Climate Change, Including Cooperation with the United Nations Framework Convention on Climate Change, Note by the Executive Secretary*, U.N. Doc. UNEP/CBD/SBSTTA/6/11 Annex I (Dec. 21, 2000).

<sup>271.</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change Dec. 13/CP.8, Rep. of the Conference of the Parties, 8th Sess., Oct. 23–Nov. 1, 2002, U.N. Doc. FCCC/CP/2002/7/Add.1, ¶ 1 (Mar. 28, 2003).

mally endorses a Joint Liaison Group between the secretariats of the Rio Conventions.<sup>272</sup> Since the adoption of this decision, however, there have been no major efforts to manage interactions between the two treaties.

The CBD parties, in contrast, have adopted various decisions on biodiversity and climate change.<sup>273</sup> These decisions have been instrumental in highlighting biodiversity concerns in UNFCCC decisions<sup>274</sup> but have not led to strong references to biodiversity in the climate regime's decisions on forests.<sup>275</sup> The first decisions highlighting the link between the two regimes were adopted in 2000, when the discussion on sinks in the climate regime was high on the climate agenda.<sup>276</sup> One of these decisions "urged" parties to the UNFCCC "to ensure that future activities of the [UNFCCC], including forest and carbon sequestration, are consistent with and supportive of the conservation and sustainable use of biological diversity,"277 and asked the CBD's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) to provide advice on how to integrate biodiversity considerations in the implementation of the climate treaties 278

The first separate decision on biodiversity and climate change was adopted in 2004, arguing that there are opportuni-

274. *See* YAMIN & DEPLEDGE, *supra* note 59, at 523–24 (referring to the Marrakesh Accords and modalities and procedures regarding afforestation and reforestation).

275. See supra Part III.

276. See YAMIN & DEPLEDGE, supra note 59, at 522 (listing and briefly discussing the 2000 decisions).

277. Conference of the Parties to the Convention on Biological Diversity Dec. V/4, 5th Meeting, May 15–26, 2000, U.N. Doc. UNEP/CBD/COP/5/23 Annex III, ¶ 16 (June 22, 2000).

278. Id. ¶ 18.

<sup>272.</sup> Id.  $\P$  3. See also infra Part IV.B.2 (for further discussion of the Joint Liaison Group).

<sup>273.</sup> Like the climate treaties, the CBD COP is mandated to "[c]ontact, through the Secretariat, the executive bodies of conventions dealing with matters covered by [the CBD] with a view to establishing appropriate forms of cooperation with them." CBD, *supra* note 18, art. 23, ¶ 4(h). See also id. art. 24, ¶ 1(d) (stating that the Secretariat shall "coordinate with other relevant international bodies" and "enter into such administrative and contractual arrangements as may be required for the effective discharge of its functions").

ties for synergies between the treaties.<sup>279</sup> The decision points to a CBD-specific approach to addressing the climate-biodiversity interactions, noting that the ecosystem approach "could facilitate the formulation of climate change mitigation and adaptation projects that also contribute to biodiversity conservation and sustainable use at the national level."<sup>280</sup> The decision also requests the SBSTTA to develop further guidance for promoting synergies and invites the UNFCCC to collaborate to this end.<sup>281</sup>

Another decision on biodiversity and climate change, adopted in 2006, calls on the CBD parties and other countries to integrate biodiversity considerations into their climate policies.<sup>282</sup> The ninth CBD COP, in 2008, decided that climate change considerations should be integrated in future programs of work, taking into account, *inter alia*, the ecosystem approach.<sup>283</sup> The decision also invited the UNFCCC to "take full account of opportunities for its work to provide benefits for biodiversity."<sup>284</sup> Parties were further invited to implement various activities with a view to promoting synergies among the Rio Conventions.<sup>285</sup>

The attention to the climate and biodiversity interactions in the CBD reached a climax at the most recent CBD COP, held in October 2010 in Nagoya, Japan. This was in part because a review of the work on biodiversity and climate change was due,<sup>286</sup> but likely also because of the ongoing discussions

283. Conference of the Parties to the Convention on Biological Diversity Dec. IX/16, 9th Meeting, May 19–30, 2008, U.N. Doc. UNEP/CBD/COP/DEC/IX/16, ¶ A.1(h) (Oct. 9, 2008).

284. Id. ¶ B.11(b).

285. Id. ¶ B.8, Annex II. These activities include collaboration among national focal points, cooperation on national level planning, cooperation in forest sector planning, etc.

286. See Subsidiary Body on Scientific, Technical and Technological Advice to the Convention on Biological Diversity, 6th Meeting, May 10–21, 2010, *In-Depth Review of the Work on Biodiversity and Climate Change*, U.N. Doc. UNEP/CBD/SBSTTA/14/6, ¶ 1 (Feb. 10, 2010) [hereinafter CBD In-Depth

<sup>279.</sup> Conference of the Parties to the Convention on Biological Diversity Dec. VII/15, 7th Meeting, Feb. 9–20, 2004, U.N. Doc. UNEP/CBD/COP/7/21, ¶ 7 (Apr. 13, 2004).

<sup>280.</sup> Id. ¶ 8.

<sup>281.</sup> Id. ¶¶ 14-15.

<sup>282.</sup> Conference of the Parties to the Convention on Biological Diversity Dec. VIII/30, 8th Meeting, Mar. 20–31, 2006, U.N. Doc. UNEP/CBD/COP/DEC/VIII/30, ¶¶ 1–2 (June 15, 2006).

on REDD in the climate negotiations. The parties adopted a lengthy decision on biodiversity and climate change, which contains some novel elements, as well as proposals that link the CBD more strongly to the REDD discussions under the UNFCCC. For instance, the decision suggests that parties should consider streamlined reporting with respect to overlapping issues.<sup>287</sup> Furthermore, it invites parties and other governments to consider specific guidance related to ecosystembased approaches for climate change mitigation and adaptation.<sup>288</sup> More specifically, it provides several carefully formulated recommendations with a view to minimizing the biodiversity impacts of forestry activities.<sup>289</sup> The decision also requests the CBD secretariat to collaborate with various other international bureaucracies and with CBD parties to contribute to the discussion on, and possible development of, biodiversity safeguards.<sup>290</sup> The secretariat is also asked to identify possible indicators for monitoring how REDD could contribute to the objectives of the CBD.<sup>291</sup> Lastly, the decision proposes to develop joint activities with the other Rio Conventions.<sup>292</sup>

Review] (asking the participants to take the Second Ad Hoc Technical Expert Group's report into consideration).

<sup>287.</sup> Conference of the Parties to the Convention on Biological Diversity Dec. X/33, 10th Meeting, Oct. 18–29, 2010, U.N. Doc. UNEP/CBD/COP/DEC/X/33, ¶ 7 (Oct. 29, 2010) [hereinafter Decision X/33].

<sup>288.</sup> Id. ¶ 8.

<sup>289.</sup> Id.  $\P$  8(p). These include, for instance, avoiding the use of invasive alien species and promoting the use of native tree species. Id.

<sup>290.</sup> Id. ¶ 9(h). The provision stays away from instructing the UNFCCC COP to make use of CBD expertise. Parties at the Nagoya COP were very aware of their precarious position, a month before the COP in Cancún. See Morgera, supra note 113, at 101–102 (noting the unease of the parties during the negotiations).

<sup>291.</sup> See Decision X/33, supra note 287, ¶ 9(k).

<sup>292.</sup> Id. ¶ 13(a). The CBD SBSTTA had originally proposed a more farreaching joint work program on the basis of a suggestion by the CBD secretariat. Subsidiary Body on Scientific, Technical and Technological Advice to the Convention on Biological Diversity, 6th Meeting, May 10–21, 2010, Proposed Elements for a Joint Work Programme Between the Three Rio Conventions on Biodiversity, Climate Change and Land Degradation, Note by the Executive Secretary, U.N. Doc. UNEP/CBD/SBSTTA/14/6/Add.2 (Feb. 16, 2010). The CBD has developed joint work programs with respect to several other multilateral environmental agreements. See CHAMBERS, supra note 14, at 67.

While the recommendation to streamline reporting is aimed at improving operational inefficiencies, other suggestions can be viewed as efforts to influence the design of climate change measures at the international and national levels. To some extent, these suggestions may have had an effect, given the various references to biodiversity in the Cancún Agreements.<sup>293</sup> However, it remains to be seen whether and how the CBD will get involved in the operationalization of the biodiversity safeguards. One possibility is that it will play a role in monitoring the biodiversity impacts of REDD. While the Cancún Agreements do not foreclose this possibility, they also do not specify a role for the CBD in this regard.<sup>294</sup>

#### 2. The Secretariats: Integration by Stealth

The CBD parties delegate many of the actual cooperation and coordination activities to the CBD secretariat. Indeed, secretariats and bureaucracies can be regarded as key actors behind the scenes when it comes to managing regime interactions.<sup>295</sup> The CBD secretariat, in particular, has played an important role in terms of knowledge generation and awareness raising about the potential interactions, even though most of its activities were triggered by COP decisions. The secretariats' activities avoid the cumbersome political decision-making processes in the COPs, and could thus provide a valuable informal way of integrating environmental regimes. However, it

<sup>293.</sup> See supra Part III.C (for a discussion of what these agreements entail).

<sup>294.</sup> The Cancún Agreements state that developing country parties "in accordance with national circumstances and respective capabilities," need to develop "[a] system for providing information on how the safeguards . . . are being addressed and respected throughout the implementation of [REDD activities], while respecting sovereignty." Decision 1/CP.16, *supra* note 81, ¶ 71(d). Further details were agreed upon in Durban, but are still silent about a possible role for the CBD. Decision 12/CP.17, *supra* note 87, ¶¶ 1–6.

<sup>295.</sup> On the role of the Secretariat of the World Trade Organization in addressing trade and environment interactions see, for instance, Sikina Jinnah, Overlap Management in the World Trade Organization: Secretariat Influence on Trade-Environment Politics, 10 GLOBAL ENVTL. POL. 54 (2010). On the role of the CBD secretariat, see Sikina Jinnah, Marketing Linkages: Secretariat Governance of the Climate-Biodiversity Interface, 11 GLOBAL ENVTL. POL. 23 (2011). On the influence of bureaucracies in global environmental governance more generally, see MANAGERS OF GLOBAL CHANGE: THE INFLUENCE OF INTERNATIONAL ENVIRONMENTAL BUREAUCRACIES (Frank Biermann & Bernd Siebenhüner eds., 2009) [hereinafter MANAGERS OF GLOBAL CHANGE].

is difficult to pinpoint the precise influence exerted by the secretariats.

One of the main developments that involved the bureaucracies of the climate and biodiversity regimes was the creation of the Joint Liaison Group at the request of the CBD SBSTTA.<sup>296</sup> The Joint Liaison Group comprises the secretariats of the CBD and the UNFCCC, who were later joined by the secretariat of the UN Convention to Combat Desertification. Its mandate is to "enhance coordination between the three conventions, including the exchange of relevant information" and "[t]o explore options for further cooperation between the three conventions, including the possibility of a joint work plan and/or a workshop."<sup>297</sup>

At the time of writing, the Joint Liaison Group has convened eleven times, focusing on crosscutting issues such as research and monitoring, information exchange, technology transfer, capacity building, financial resources, education and public awareness, and adaptation to climate change. Its activities primarily consist of information exchange and coordination between the administrative bodies of the different regimes.<sup>298</sup> In 2004, the three secretariats drafted a joint paper identifying options for enhanced cooperation.<sup>299</sup> Whereas some of the options identified in the paper (for instance, joint workshops or the sharing of information among secretariat staff) are relatively easy to implement, others (such as harmonized reporting) require much more preparation and consensus.

<sup>296.</sup> See Subsidiary Body on Scientific, Technical and Technological Advice to the Convention on Biological Diversity Rec. VI/7, 6th Meeting, Mar. 12–16, 2001, U.N. Doc. UNEP/CBD/COP/6/3 Annex, ¶ 9 (Mar. 27, 2001) [hereinafter Recommendation VI/7] (requesting the formation of the Joint Liaison Group).

<sup>297.</sup> Rep. of the Subsidiary Body on Scientific and Technological Advice to the United Nations Framework Convention on Climate Change, 14th Sess., July 24–27, 2001, U.N. Doc. FCCC/SBSTA/2001/2, ¶ 42(d) (Sept. 18, 2001); *see also* Recommendation VI/7, *supra* note 296, ¶ 9 (stating the Joint Liaison Group should be formed for "the purpose of enhancing coordination" between the secretariats of the CBD and UNFCCC).

<sup>298.</sup> CHAMBERS, supra note 14, at 69.

<sup>299.</sup> Subsidiary Body on Scientific, Technical and Technological Advice to the CBD, 8th Meeting, Feb. 7–11, 2004, *Options for Enhanced Cooperation Among the Three Rio Conventions*, U.N. Doc. UNEP/CBD/SBSTTA/10/INF/9 Annex (Dec. 15, 2004).

In addition to its activities as a member of the Joint Liaison Group, the CBD secretariat has also undertaken various activities delegated to it by the CBD COP.<sup>300</sup> For instance, it has sought to integrate climate change considerations into the programs of work developed under the CBD.<sup>301</sup> Furthermore, the secretariat has been involved in the work of several ad hoc technical expert groups established to provide scientific and technical advice on issues at the intersection of climate change and biodiversity.<sup>302</sup> Finally, as noted above, the decision on biodiversity and climate change adopted in Nagoya puts the CBD secretariat in charge of various important issues related to the interactions with the climate regime, including the development of a proposal for joint activities.<sup>303</sup> It is perhaps through the latter—i.e., the preparatory work for policy proposals-that the secretariats could contribute most significantly to integration of the climate and biodiversity regimes.

# 3. Memberships, Mandates and Legitimacy: The Limits of Institutional Cooperation and Coordination

Although the institutional cooperation efforts to address the interactions between the climate and biodiversity regime are clearly intensifying, their effects are as of yet uncertain: at best, they can be seen as creating mutual awareness and building capacity at various levels; at worst, they can be viewed as an exercise in rhetoric. There are several explanations for this.

First, any effort by actors in one regime to influence rule development in another will be limited by the extent to which memberships are congruent. In this case, an important barrier is that the United States is a party to the UNFCCC, but not to the CBD. A broad mandate for the climate regime's treaty or administrative bodies to cooperate with the CBD could lead to the perception that state sovereignty is eroded by "import-

<sup>300.</sup> See CBD In-Depth Review, supra note 286,  $\P$  6–16 (reviewing the activities undertaken by the secretariat).

<sup>301.</sup> Id. ¶ 11.

<sup>302.</sup> See SECRETARIAT OF THE CBD 2003, supra note 24 (discussing the potential of integrating biodiversity considerations into implementation of the UNFCCC); SECRETARIAT OF THE CBD 2009, supra note 24 (discussing climate change and biodiversity interactions and how to mitigate their effects).

<sup>303.</sup> See Decision X/33, supra note 287, ¶ 13(a) (by vesting the authority of conveying a proposal in the Executive Secretary).

ing" concepts or rules from the CBD.<sup>304</sup> A submission by the United States to the UNFCCC seems to confirm this fear. Commenting on the paper concerning options for enhanced cooperation prepared by the Joint Liaison Group in 2004, the United States notes that the Rio Conventions "have a distinct legal character, mandate and membership."<sup>305</sup> Although this limitation may not have to hold for the Kyoto Protocol—to which the United States is not a party after all—the secretariat's mandate for cooperation is determined by the UNFCCC COP rather than the Kyoto Protocol's COP/MOP.

A second limitation of institutional cooperation and coordination—related to the first—is that the treaty and administrative bodies do not always have clear legal authority to develop rules on overlapping issues.<sup>306</sup> While it may seem "commonsensical that a secretariat would not engage in activities against the will of its member states," for reasons mentioned above, parties will tend to interpret the secretariats' mandates restrictively, and secretariats will need to walk on eggshells when engaging in activities with other international actors.<sup>307</sup> Referring to the work of the Joint Liaison Group, for instance, Australia argues that "[t]he CBD and the UNCCD do not have a legitimate role in greenhouse mitigation, which is clearly the

<sup>304.</sup> *Cf.* WOLFRUM & MATZ, *supra* note 7, at 163 (stating that institutional cooperation may be hindered by a perceived threat against state sovereignty).

<sup>305.</sup> See Subsidiary Body on Scientific and Technological Advice to the United Nations Framework Convention on Climate Change, 24th Sess., May 18–26, 2006, Views on the Paper on Options for Enhanced Cooperation Among the Three Rio Conventions, Submissions from Parties, U.N. Doc. FCCC/SBSTA/ 2006/MISC.4, at 16 (Mar. 23, 2006).

<sup>306.</sup> CHAMBERS, *supra* note 14, at 70–71. A related question is whether COPs or secretariats have the legal capacity to enter into external cooperation agreements in the first place. This question has been examined indepth by Churchill & Ulfstein, *supra* note 251, at 647–55. With respect to regime interactions, Chambers concludes that while the legal personality of secretariats may not be entirely clear, their power "would certainly include entering into agreements of collaboration with other [multilateral environmental agreements] where there is a clear overlap or interest." CHAMBERS, *supra* note 14, at 66.

<sup>307.</sup> This is especially the case for the UNFCCC secretariat, which has been said to be "living in a straitjacket" imposed by the parties. Per-Olof Busch, *The Climate Secretariat: Making a Living in a Straitjacket, in* MANAGERS OF GLOBAL CHANGE, *supra* note 295, at 245.

work of the UNFCCC."<sup>308</sup> Australia's response shows how arguments about the mandate can be used to limit the potential consequences of further integration. More generally, it shows that parties in the climate regime may not be ready to give biodiversity conservation a more prominent place at the expense of achieving cost-effective emission reductions.

Cooperation is even more difficult if the mandates of the cooperating bodies differ in their scope. For instance, at its fifth meeting, the Joint Liaison Group argued for consistent guidance from the various COPs, indicating that it can only facilitate, but not guarantee, this consistency.<sup>309</sup> Furthermore, at its ninth meeting, the Group lamented that "there remains a disconnect between the roles and mandates given to the [Joint Liaison Group] by each convention with this disconnect resulting in limitations when considering the implementation of the requested activities."<sup>310</sup> Because of these limitations, the Joint Liaison Group acts primarily as a forum to facilitate information exchange and to encourage harmonizing implementation of the Rio Conventions at the national level.<sup>311</sup>

Third, and related to the previous two points, the secretariats' involvement in the development of rules at the international level gives rise to questions about their legitimacy and accountability.<sup>312</sup> The mandate for cooperation—and how it

311. CHAMBERS, supra note 14, at 69.

<sup>308.</sup> Subsidiary Body on Scientific and Technological Advice to the United Nations Framework Convention on Climate Change, *supra* note 305, at 5.

<sup>309.</sup> Subsidiary Body on Scientific and Technological Advice to the United Nations Framework Convention on Climate Change, 12th Sess., June 16–25, 2004, Report of the Fifth Meeting of the Joint Liaison Group, U.N. Doc. FCCC/SBSTA/2004/INF.9,  $\P$  4(1) (June 15, 2004).

<sup>310.</sup> Rep. of the Joint Liaison Group of the Convention on Biological Diversity, the United Nations Convention to Combat Desertification, and the United Nations Framework Convention on Climate Change, 9th Meeting, May 14, 2009, ¶ 11 (2009), http://www.cbd.int/doc/reports/jlg-09-report-en.pdf. See also CBD In-Depth Review, supra note 286, ¶ 8 (stating that the effectiveness of the Joint Liaison Group has been hampered by "significant differences in the mandates" of the conventions).

<sup>312.</sup> These questions are related to ongoing discussions about global administrative law and international public authority. For some of the on-going discourse on this issue, see, e.g., THE EXERCISE OF PUBLIC AUTHORITY BY INTERNATIONAL INSTITUTIONS: ADVANCING INTERNATIONAL INSTITUTIONAL LAW (Armin von Bogdandy et al. eds., 2010); Benedict Kingsbury et al., *The Emergence of Global Administrative Law*, 68 L. & CONTEMP. PROBS. 15 (2005).

is interpreted-will form an important part depending on parties' willingness to construct linkages with other regimes. There is thus a risk that states "may be unwillingly drawn into regimes that they are not party to or affiliated with, and implicitly become subject to obligations under those regimes, by vir-tue of cooperative arrangement."<sup>313</sup> If one adopts a traditional legal perspective emphasizing the importance of state consent (and state sovereignty) in international lawmaking, it is difficult to see where the legitimacy of enhanced institutional cooperation comes from, particularly in the case of incongruent memberships. These concerns relate back to the "structural bias" of each regime.<sup>314</sup> Can cooperation really take place in a fashion that gives equal weight to the norms of each regime? When "stronger' and "weaker" regimes are concerned, it could result in the prioritization of one regime over another, meaning that cooperation "may become dominated by procedures, principles and concepts that are prevalent within one regime at the expense of [others]."<sup>315</sup> Another matter is whether the norms of each regime *should* be given equal weight. In this regard, Margaret Young argues that cooperating bodies should "scrutinise and review the 'sources' of external regimes."316 Only in this way, she posits, can institutional cooperation be made accountable.

#### C. Autonomous Management as an Interim Solution?

The legal techniques and institutional efforts discussed above are by no means without effect, but they are also no panacea for managing interactions between the climate and biodiversity regimes. However, there are options for interplay management that bypass these limitations because they can be adopted unilaterally by individual parties or by non-state actors. Such "autonomous interplay management"<sup>317</sup> can address interactions in the implementation phase, but at the same time it leaves the overall relationship between treaties

<sup>313.</sup> Karen N. Scott, International Environmental Governance: Managing Fragmentation Through Institutional Connection, 12 MELB. J. INT'L. L. 177, 211 (2011).

<sup>314.</sup> See supra note 254 and accompanying text.

<sup>315.</sup> Scott, supra note 313, at 213.

<sup>316.</sup> Margaret A. Young, Trading Fish, Saving Fish: The Interaction between Regimes in International Law 277 (2011).

<sup>317.</sup> Oberthür, supra note 194, at 376.

unclear. To display the potential for autonomous interplay management, this section provides a short overview of various options available to state and non-state actors to manage the overlap between the climate and biodiversity regimes on forests.

# 1. Autonomous Management by States

While the rules developed under the climate treaties may provide incentives that result in harm to biodiversity, they are also general enough to allow states to adopt policies and measures that seek to prevent such harm. Indeed, various policy instruments could specifically address the biodiversity impacts of climate change mitigation measures, although domestic circumstances and politics may influence the feasibility of such measures.<sup>318</sup>

The domestic policymakers' toolkit is substantial.<sup>319</sup> For instance, in terms of regulation, states could adopt mandatory biodiversity standards for forestry activities within their jurisdiction.<sup>320</sup> Furthermore, even though the requirements to conduct EIAs at the international level are rather weak,<sup>321</sup> states may wish to adopt stringent EIA procedures or more broadly promote the use of strategic environmental assessments.<sup>322</sup> Whereas EIAs are normally used at the project level, strategic environmental assessments are rather aimed at assessing the environmental impacts of policies and measures.<sup>323</sup>

<sup>318.</sup> For instance, policies and measures restricting the use of low-cost forestry projects that do not contribute to biodiversity protection may lower the overall cost-effectiveness of a country's climate policy. Whether a government is willing to make this trade-off will depend on many factors, including the country's financial situation, the other available mitigation options, and the strength of environmental and industrial lobbies. *See also* Ebeling & Fehse, *supra* note 189, at 50 ("At the end of the day, most governments have eventually resorted to low-cost compliance options . . . rather than focusing on small-scale activities or projects with particular co-benefits.").

<sup>319.</sup> For an overview of possible measures, see Pistorius et al., *supra* note 177, at 24–26; Sagemüller, *supra* note 113, at 232–40.

<sup>320.</sup> See Ebeling & Fehse, supra note 189, at 35–37 (discussing how international mechanisms create incentives for states to comply with these standards, whether mandatory or voluntary).

<sup>321.</sup> See supra Part III.B.

<sup>322.</sup> See Sagemüller, supra note 113, at 234 (calling for mandatory EIAs and strategic environmental assessments at the national level).

<sup>323.</sup> SECRETARIAT OF THE CBD 2003, supra note 24, at 90.

Strategic environmental assessments, therefore, could lead to more structural integration of biodiversity concerns in mitigation policies at the national level.<sup>324</sup> Policymakers could also complement their regulatory and procedural policies with informational measures, for example, by creating awareness among forest managers about the biodiversity impacts of mitigation activities, or by introducing a mandatory certification scheme.<sup>325</sup> Another option that would enhance the transparency of the biodiversity impacts of REDD activities is to establish legislation that would make the implementation of such activities contingent on appropriate monitoring and reporting on specific biodiversity indicators.

In addition, states could construct their domestic emissions trading schemes in a way that accounts for the biodiversity impacts of forestry projects. With regard to credits from CDM afforestation and reforestation projects (and perhaps also REDD credits in the future), states buying credits could decide whether they want to use such credits in their trading schemes and, if so, to which extent.<sup>326</sup> For example, the European Union—one of the most vocal opponents of the inclusion of sinks in the CDM<sup>327</sup>—decided to fully exclude credits from LULUCF from its emissions trading scheme.<sup>328</sup> Likewise, the scheme does not include any provisions on the use of credits from REDD projects, although this may change in the future if the European Union decides to adopt more ambitious emission reduction targets.<sup>329</sup> While no federal emissions

<sup>324.</sup> Id. at 93-94.

<sup>325.</sup> Sagemüller, supra note 113, at 238.

<sup>326.</sup> Ebeling & Fehse, *supra* note 189, at 49 (mentioning the option of purchase quota).

<sup>327.</sup> See Boyd et al., supra note 67, at 106 (discussing the EU position on sinks).

<sup>328.</sup> See Council Directive 2003/87/EC, 2003 O.J. (L 275/32), as amended in 2004 by Council Directive 2004/101/EC, 2004 O.J. (L 338/18), art. 11a, ¶ 3(b). The Directive was amended in 2009 by Council Directive 2009/29/EC, 2009 O.J. (L 140/63) for the period beyond 2012. The exclusion of LULUCF credits was not based on environmental considerations alone, but was also motivated by the risk of a carbon price collapse. Rousseaux, *supra* note 113, at 10.

<sup>329.</sup> See Pedro Piris-Cabezas, The European Union's Position on REDD Financing, in DEFORESTATION AND CLIMATE CHANGE: REDUCING CARBON EMISSIONS FROM DEFORESTATION AND FOREST DEGRADATION 39, 47 (Valentina Bosetti & Ruben Lubowski eds., 2010) (discussing the Directive provision allowing ad-

trading scheme has been adopted in the United States, proposed bills included detailed provisions on the use of REDD offsets in a domestic trading scheme. For instance, the Waxman-Markey bill, which was passed by the House of Representatives—but never saw a counterpart bill make it through the Senate—includes provisions that require the U.S. Environmental Protection Agency to ensure that REDD offsets fulfill certain minimum standards.<sup>330</sup>

Finally, states wishing to fund forestry activities through bilateral or regional initiatives could tie their funding to the achievement of certain biodiversity benefits, or the inclusion of biodiversity safeguards. Projects seeking funding from the World Bank's Forest Carbon Partnership Facility, for instance, need to undertake a strategic environmental and social assessment in order to be eligible for funding.<sup>331</sup> Although such conditions may be controversial, they could lead to investments that result in multiple benefits for the environment.

# 2. Autonomous Management by Non-State Actors

While government action could provide incentives for domestic actors to change their behavior in order to contribute to the objectives of the climate and biodiversity regimes, those incentives may also be offered by private actors. In other words, autonomous interplay management is also possible *beyond* the state.

One of the key developments in this regard has been the growing number of voluntary standards for forestry projects.<sup>332</sup>

ditional measures, including REDD, to be considered in light of future international agreements).

<sup>330.</sup> For instance, REDD activities needed to be "designed, carried out, and managed . . . in accordance with widely accepted, environmentally sustainable forest management practices," and needed "to promote or restore native forest species and ecosystems where practicable," and "avoid the introduction of invasive non-native species." American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009), Sec. 754 (d) (5). See also Andrew Long, Tropical Forest Mitigation Projects and Sustainable Development: Designing U.S. Law for a Supportive Role, 36 WM. MITCHELL L. REV. 101, 121–23 (2010) (advocating biodiversity standards more stringent than those proposed in the bills before Congress).

<sup>331.</sup> Pistorius et al., supra note 177, at 10.

<sup>332.</sup> See generally Katherine Hamilton et al., Carving a Niche for Forests in the Voluntary Carbon Markets, in CLIMATE CHANGE AND FORESTS, supra note 64, 292, at 297–305 (discussing the role of carbon verification standards).

Forestry projects have a large share in the voluntary market,<sup>333</sup> a situation that is in stark contrast with the regulatory market where they have not yet taken off. The prominence of forests in the voluntary carbon market has been accompanied by a number of standards that address the biodiversity impacts of forest mitigation projects.

Perhaps the most well-known standard that specifically requires projects to result in biodiversity benefits is the Climate, Community, and Biodiversity Standards developed by the Climate, Community, and Biodiversity Alliance. The standards focus exclusively on land-based mitigation projects and do not result in tradable certificates.<sup>334</sup> Recently, special standards have been developed for REDD activities.<sup>335</sup>

Voluntary standards have been increasingly linked to the regulatory market. The CDM Gold Standard, for example, started as an initiative by a non-governmental organization, but has become an important instrument for promoting sustainable development—including the integration of environmental and social concerns—in the CDM.<sup>336</sup> Forestry projects are, however, currently not eligible for receiving Gold Standard certification.

While the scale of the voluntary market—compared to the current and the potential regulatory market—is relatively small, it is notable that for reputational or other reasons, the demand for biodiversity benefits in forest carbon projects is significant.<sup>337</sup> Moreover, there seems to be some willingness of buyers to pay a higher price for credits resulting from

<sup>333.</sup> Id. at 292 ("forestry projects remain the most widely used source of offsets in the marketplace"). But see KATHERINE HAMILTON ET AL., BUILDING BRIDGES: STATE OF THE VOLUNTARY CARBON MARKETS 2010 29 (2010) (indicating in an update that landfill gas is the predominant project type, followed by afforestation and reforestation).

<sup>334.</sup> HAMILTON ET AL., supra note 333, at 61.

<sup>335.</sup> REDD+ SOCIAL & ENVIRONMENTAL STANDARDS, *available at* http://www.redd-standards.org/ (last visited Apr. 18, 2012).

<sup>336.</sup> See generally Kelly Levin et al., Can Non-State Certification Systems Bolster State-Centered Efforts to Promote Sustainable Development Through the Clean Development Mechanism?, 44 WAKE FOREST L. REV. 777 (2009) (reviewing the "emergence of the Gold Standard").

<sup>337.</sup> *See* Karousakis, *supra* note 172, at 20 (citing a 2009 survey finding that generating biodiversity benefits is one of the three most important factors for potential purchasers of forestry credits).

projects that have been certified.<sup>338</sup> In other words, there are incentives to integrate biodiversity and climate concerns in the voluntary market. However, the drawback is that, for the time being, the voluntary market may not deliver these biodiversity benefits on a large scale.<sup>339</sup>

# 3. The Need for a Structural Solution

The preceding discussion shows that there are several options available to address the interactions between the climate and biodiversity regimes without resorting to legal techniques or institutional cooperation and coordination. This brief overview is not exhaustive and does not evaluate the effectiveness of the various options. Instead, it aims to show that the constraints that plagued the legal and institutional management strategies are less prominent in the case of autonomous management.

Does this render other options for managing interactions futile? The short answer is "no." First, autonomous management efforts by states party to a multilateral environmental agreement already implicitly use the technique of interpretation. By adopting certain measures with a view to implementing the climate and biodiversity treaties simultaneously, parties—assuming they act in good faith and in line with the principle of *pacta sunt servanda*<sup>340</sup>—are interpreting the margin of discretion they have under both agreements. This re-emphasizes the importance of interpretation and also underlines that interpretation is not just a task for judicial bodies but takes place on a regular basis by government officials and legal advisers.

Second, autonomous interplay management alone does not solve underlying systemic tensions, and does not necessarily result in an enhancement of the effectiveness of both regimes simultaneously. As Oberthür argues, "[a]utonomous interplay management is least conducive for efforts aimed at sys-

<sup>338.</sup> See, e.g., ECOSECURITIES, THE FOREST CARBON OFFSETTING REPORT 2010 28 (2010) (describing the results of a survey where nearly half of the respondents indicated their willingness to pay a small premium for projects implemented according to CCB standards).

<sup>339.</sup> Ebeling & Fehse, supra note 189, at 49.

<sup>340.</sup> See Pontecorvo, supra note 113, at 741–42 (arguing that there is a "moral obligation" for states to interpret the climate and biodiversity treaties in this way).

tematically and structurally improving inter-institutional influence in [international environmental governance]."<sup>341</sup> In other words, autonomous management efforts do not address the relationship between different treaties in the long-term. They do, however provide invaluable experiences that could help determine how two regimes could work together in practice. Ideally, such practical experiences would be integrated with the intergovernmental efforts.<sup>342</sup> In the absence of structural solutions at the global level, autonomous management lays the groundwork for mutually supportive environmental treaties.

#### V. CONCLUSIONS

A decade ago, a Study Group of the International Law Commission took on the daunting task to address increasing concerns about the fragmentation of international law. While its report provides an insightful overview of the role of legal techniques to address challenges resulting from the diversification and expansion of international law, this Article has argued that its relevance for managing interactions in international environmental law so far has been limited. It has done so by examining in detail the interactions between the climate and biodiversity regimes on the issue of forests.

In the absence of a comprehensive international legally binding instrument on forests, both the biodiversity convention and the climate regimes have sought to fill a niche in global forest governance, but they have done so primarily from their own perspective. Whereas the biodiversity regime has emphasized an ecosystem-based approach, the climate regime has viewed forests first and foremost as sinks or sources of carbon dioxide emissions. The climate regime has dominated rule development on aspects which concern both regimes, primarily through various decisions on sinks. The resulting rule complex may lead to conflicts between the objectives of the

<sup>341.</sup> Oberthür, supra note 194, at 376.

<sup>342.</sup> *Cf.* Levin et al., *supra* note 336, at 791 (discussing the possibility of integrating non-state initiatives like the CDM Gold Standard with governmental programs). *See also* Long, *supra* note 173 (on integration). Whereas these authors discuss the possibility of integrating private and public initiatives, it is also conceivable that practical experiences at the government level are transferred to the international level.

different treaties, especially in the implementation phase, but it is clear that there is also a large potential for synergies that is left unexploited. Therefore, this Article has sought to assess various legal and institutional approaches through which the biodiversity and climate treaties could achieve the often-mentioned "mutual supportiveness."

With respect to legal techniques, it has been shown that there are inherent limitations to the use of conflict resolution rules and the law of treaties—which are primarily related to the focus on conflicts between treaty norms—and to the disregard for interactions triggered by treaty body decisions. Furthermore, the usefulness of some legal approaches is restricted, given that their purpose is to establish a normative hierarchy, an objective that can be questioned in the context of international environmental law. Nevertheless, the discussion of legal techniques has also shown that there is potential for using the international lawyer's toolbox in an innovative fashion, for instance, through devising new treaty provisions that dynamically reflect the relationship with other treaties or through harmonized interpretation.

"Soft" institutional efforts can potentially complement the "hard" legal approaches to manage regime interactions. In the climate and biodiversity context, these efforts have mainly been undertaken by actors in the biodiversity regime, including its COP and its secretariat. While these initiatives have been important in creating awareness of climate-biodiversity interlinkages, synthesizing research on this issue, and generally fostering cooperation, they have so far failed to address the tensions surrounding the use of sinks in climate change mitigation activities. This can be partly explained by the unwillingness of parties in one regime to allow parties in another regime to influence rule development, especially when memberships are not entirely congruent. A related limitation to institutional cooperation is that states are generally reluctant to cede too much authority to bureaucracies. These two explanations can be linked to broader concerns about the accountability and legitimacy of institutional cooperation; concerns that will need to be addressed if this form of interplay management is to be effective.

In the absence of effective interplay management by means of legal techniques or institutional cooperation and coordination, it is still possible to mitigate conflicts and enhance synergies through autonomous management by state and nonstate actors. The Article has identified various existing and proposed initiatives in this regard, all of which hold potential to tackle the problems of climate change and biodiversity simultaneously. Only time will tell whether such efforts can realize this potential and, if so, whether and how they can be "uploaded" to the international level.

Before moving on to the final conclusions, three caveats should be made explicit. First, this Article has not sought to promote an ideal solution for managing the interactions between the climate and biodiversity regimes, for instance, by providing design recommendations for a REDD mechanism. While biodiversity is clearly an important issue for successful REDD design, it is but one of the many issues with which international policymakers need to be concerned. Instead, this Article has outlined various options for how the climate regime could take into account biodiversity issues, and assessed the opportunities and limitations of legal techniques and institutional cooperation to achieve this objective. Rather than provide an ideal solution, which probably does not exist, the goal of this exercise has been to illustrate the challenges in managing interactions between environmental regimes and identify issues for further analysis.

Second, this Article has specifically focused on the relationship between two specialized regimes. This should not be understood as an indication that these are the only two relevant initiatives for protecting the world's forests.<sup>343</sup> A true understanding of how global forest governance works (or does not work) will need to assess the "regime complex"<sup>344</sup> in this area in its entirety, including the various initiatives within and outside of the UN context. The modest aim of this Article has been to further understanding on the interactions of two elements in such a regime complex and, by doing so, to contribute to the ongoing debate on the fragmentation of international law. How the regime complex for forests functions as a

<sup>343.</sup> See supra note 45, and accompanying text.

<sup>344.</sup> On the "regime complex" concept, see Kal Raustiala & David G. Victor, *The Regime Complex for Plant Genetic Resources*, 58 INT'L ORG. 277, 279 (2004).
whole, and how the various elements interact with each other, is an appropriate area for further inquiry.<sup>345</sup>

Third, this Article has yielded insights on how the fragmentation of international law has manifested itself in the field of international environmental law. However, further lessons may also be learned from examining interactions within other areas of international law. For instance, to what extent might the "more favorable" provision used in human rights law be useful in other situations of conflict in international law?<sup>346</sup> Or, more generally, do interactions *within* specific branches of international law require a different response than interactions *between* different branches?<sup>347</sup> And how could we define the boundaries of these branches in the first place? These are just some of the questions that require more reflection. Hopefully, this Article has provided a contribution by showing that the nature of contemporary international environmental lawmaking and the determination of the objectives of environmental treaties warrant careful consideration.

In conclusion, this Article has shown that the debate on the fragmentation of international law—and the strategies to deal with this phenomenon—need to be widened to account for the diversity of international legal regimes. International environmental law challenges the use of traditional legal techniques for resolving conflicts, and instead calls for tailored approaches that reflect the ecological interdependencies that characterize the field, as well as approaches that acknowledge the potential for synergies—and, hence, the potential for normative reinforcement—between different international legal instruments. The case of climate change and biodiversity

<sup>345.</sup> Some recent contributions provide initial frameworks for assessing the outcomes of "regime complexes" and "fragmented global governance architectures." See Frank Biermann et al., The Fragmentation of Global Governance Architectures: A Framework for Analysis, 9 GLOBAL ENVTL. POL. 14 (2009); Robert O. Keohane & David G. Victor, The Regime Complex for Climate Change, 9 PERSP. ON POL. 7 (2011). Such studies could be combined with existing studies on the structure and effectiveness of global forest governance. See supra note 45.

<sup>346.</sup> For a discussion of this type of provision, see SADAT-AKHAVI, *supra* note 7, at 213–32.

<sup>347.</sup> This is suggested by Ralf Michaels & Joost Pauwelyn, *Conflict of Norms or Conflict of Laws: Different Techniques in the Fragmentation of International Law, in* MULTI-SOURCED EQUIVALENT NORMS IN INTERNATIONAL LAW 19, 42 (Tomer Broude & Yuval Shany eds., 2011).

reveals some of the limitations of the current debate, but other cases within the large body of international environmental law may provide further insights into the effectiveness of legal techniques and institutional cooperation. To paraphrase the ILC Study Group report: what we need now is increasing attention to the interactions of norms and regimes within international environmental law, as well as the rules, methods, and techniques for mitigating conflicts and enhancing synergies.<sup>348</sup>

<sup>348.</sup> ILC Study Group Report, supra note 3, ¶ 493.