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MASTER THESIS

Institutional Interplay in Global Environmental Governance

An Analysis and Assessment of the Rio Conventions' Interplay Activities

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Abstract (English)

The Rio Conventions stand at the centerpiece of international cooperation within the governance area of climate change, biodiversity, and desertification. Due to substantial environmental and political linkages, there are interrelations between the three regimes. This study seeks to examine the inter-institutional relationship between the *United Nations Framework Convention on Climate Change*, the *Convention on Biological Diversity* and the *United Nations Convention to Combat Desertification* by analyzing and assessing their horizontal interplay activities from the starting point of their genesis at *Earth Summit* in 1992 until today. In this research, I address the connections between the three conventions and identify the conflicting, cooperative, and synergetic aspects of inter-institutional relationship. While the overall empirical analysis suggests weak indications of a conflictive type, this research asserts that the interplay activities have thus far led to a cooperative relationship between the Rio Conventions. Moreover, increasing coordination and collaboration between the conventions' treaty secretariats signals characteristics of a synergetic relationship, which could open up a potential window of opportunity for these actors to further engage and progress in institutional management in the future. In a conclusion, this study explores the possibility of the formation of an overarching environmental institution as a result of joint institutional management within the complex of climate change, biodiversity, and desertification.

Abstract (Deutsch)

Die Rio-Konventionen stehen im Mittelpunkt internationaler Kooperation im Bezug auf den Governance-Bereich Klimawandel, Biodiversität und Desertifikation. Aufgrund von substantiellen ökologischen und politischen Verknüpfungen herrschen Wechselwirkungen zwischen den drei Regelungswerken. Die vorliegende Arbeit unternimmt den Versuch, die aus den institutionellen Interaktionen resultierende Relation zwischen der *Klimarahmenkonvention der Vereinten Nationen*, der *Biodiversitätskonvention* und dem *Übereinkommen der Vereinten Nationen zur Bekämpfung der Wüstenbildung* über einen Zeitraum von deren Entstehung 1992 bis heute zu analysieren und zu beurteilen. Diese Forschungsarbeit untersucht die interinstitutionellen Beziehungen zwischen den drei Konventionen und identifiziert dabei konfliktträchtige, kooperative und synergetische Aspekte. Während in einer empirische Analyse insgesamt nur schwache Indikatoren für einen konfliktträchtigen Beziehungstyp gefunden wurden, kann in der Gesamtbetrachtung konstatiert werden, dass die bisherigen interinstitutionellen Interaktionen zu einer kooperativen Beziehung zwischen den Rio-Konventionen geführt haben. Darüberhinaus weisen die zunehmende Koordinierung und Zusammenarbeit zwischen den Sekretariaten der Konventionen Charakteristika einer synergetischen Beziehung auf. Das intensive Zusammenwirken dieser Akteure könnte sich in

der Zukunft als Gelegenheit herausstellen, institutionelles Management aktiver zu gestalten und voranzubringen. In einem Fazit spielt die Arbeit das Szenario der Entstehung einer allumfassenden Umweltorganisation durch, die sich als Folgewirkung aus der gemeinsamen Steuerung des institutionellen Komplexes Klimawandel, Biodiversität und Desertifikation entwickeln könnte.

Contents

List of Abbreviations	V
1. Introduction	1
1.1. Problematization and Research Questions	1
1.2. Outline and Structure of the Study	2
2. Theoretical and Analytical Framework	3
2.1. Conceptualization	3
2.1.1. Global Governance: State of Research	3
2.1.2. International Institutions	4
2.1.3. Institutional Interplay, Management and Complexes	5
2.2. Research Design	10
2.2.1. Conceptual Assumptions and Theoretical Expectations	11
2.2.2. Case Selection – The Rio Conventions	14
2.2.3. Approach and Methodology	15
3. The Rio Conventions: UNFCCC, CBD, and UNCCD	16
3.1. Earth Summit 1992	16
3.2. The UN Framework Convention on Climate Change	17
3.3. The Convention on Biological Diversity	18
3.4. The UN Convention to Combat Desertification	19
4. Analysis of the Rio Conventions’ Institutional Interplay Activities	21
4.1. 1992-1997: Getting the Ball Rolling	22
4.2. 1997-2002: Turning the Tide	27
4.3. 2002-2007: Searching for Common Ground	30
4.4. 2007-2012: Setting a Course	34
4.5. 2012-2017: Breaking New Ground?	40
5. Assessment of the Rio Conventions’ Institutional Interplay Activities	42
6. Conclusions	48
6.1. Implications and Limitations of the Study	48
6.2. Outlook: A World Environment Organization?	49
6.3. Concluding Remarks	51
7. Bibliography	54

List of Abbreviations

CBD - Convention on Biological Diversity

COP – Conference of Parties

CRIC – Committee for the Review of the Implementation of the Convention

CST – Committee on Science and Technology

EU – European Union

IPCC – Intergovernmental Panel on Climate Change

JLG – Joint Liaison Group

MEA - Multilateral environmental agreement

SBSTA – Subsidiary Body for Scientific and Technological Advice

UN - United Nations

UNCCD - United Nations Convention to Combat Desertification

UNEP - United Nations Environmental Programme

UNFCCC - United Nations Framework Convention on Climate Change

UNCED - United Nations Conference of Environment and Development

UNGA - United Nations General Assembly

WEO – World Environment Organization

WTO - World Trade Organization

1. Introduction

1.1. Problematization and Research Questions

Scientists have identified climate change, biodiversity, and desertification among the most pressing environmental problems of the century (e.g., Rockström et al. 2009). Within the arena of international politics, the respective issues are principally addressed through three globally operating regimes, the *United Framework Convention Climate on Change* (UNFCCC), the *Convention on Biological Diversity* (CBD), and the *United Nations Convention to Combat Desertification* (UNCCD); all within the broader system of UN institutions. Due to their shared origin that derives from the *Earth Summit* in Rio de Janeiro in 1992, the UNFCCC, CBD, and UNCCD are commonly referred to as the *Rio Conventions*. As a result of the intricate connections that exist between climate change, biodiversity and desertification, that is, reciprocal causal factors that drive these environmental problems, there are interrelationships between the three regimes. At the time of their formation, however, the inherent complexity and scientific uncertainty about the effects of these interlinkages as well as the political and institutional dynamics of environmental governance have led contracting states to implement three separately focused conventions. In the years that followed, issue linkages soon became visible, which revealed a potential for synergies and conflicts as the Conventions moved towards implementation. Scholarly research on the nexus of climate change, biodiversity and desertification has predominantly focused on specific interlinkages between one regime to another. There is still no in-depth account on the Rio Conventions' interplay activities from the starting point of their genesis in 1992 until today.

In the past decades, International Relations theory has witnessed a shift from traditional state-centric approaches towards new theories such as the constructivist school of thought or the concept of global governance. As a result, the perception of international institutions as key actors in global politics became more prevalent, and its respective field of research has been continuously growing since the post-1945 period. Especially in global environmental politics, a policy domain that is perceived as "one of the institutionally most dynamic areas in world politics regarding the number of international institutions" (Biermann and Siebenhüner 2009), these agencies stand at the center of international cooperation in specific areas of governance. The ongoing scholarly discourse on international institutions has mainly shed light on the emergence and inner workings of these agencies, as well as the way international bureaucracies pursue certain policies in global environmental governance. This discourse has foremost enhanced our understanding of how institutions act in unilateral or bilateral ways. According to Young (1997: 2), dealing with environmental concerns, such as climate change, biodiversity, and desertification, also brings to attention the need to think about institutional linkages from a more systematic point of view, including ways in which individual regimes are embedded in larger institutional structures. Heeding the call from Zelli, Gupta and van Asselt (2012), and adopting a comprehensive

perspective on institutional interplay within the institutional complex of climate, biodiversity, and desertification, this study seeks to close a research gap and explore inter-institutional interaction that goes beyond the analysis of dyadic relations between distinct regimes. More specifically, this study evaluates the type of triadic institutional interrelationship - conflictive, cooperative or synergetic - between the respective regimes within this complex by analyzing their encounters on the basis of relevant reports and decisions.

Two central questions will guide this research: *to what extent and with what means do the three Rio Conventions engage in horizontal institutional interplay? From their genesis at the Earth Summit in 1992 until today: how can the relationship between the Conventions be characterized?* And, in an outlook in the concluding section of this study, I will address the question of *how future interactions between the Rio Conventions might develop?*

1.2. Outline and Structure of the Study

Resting upon international relations theory and studies on institutional interplay (e.g., Oberthür and Stokke 2011, Pattberg and Biermann 2012), I will successively introduce the different building blocks of the theoretical and analytical framework. After that, I will analyze and assess the triadic interplay activities between the Rio Conventions on the basis of a research design that draws on the concepts introduced in the theoretical framework.

This study will be structured as follows:

In section 2, I will establish the theoretical and analytical framework. First, I will briefly introduce the concept of global governance and its current state of research. I will define international institutions and provide examples. I will elaborate on the concepts of institutional interplay, management, and institutional complexes. Based on these conceptualizations, I will develop a research design by drawing conceptual assumptions and generating theoretical expectations, which will be employed in the subsequent analysis.

Section 3 will introduce the object of the study - the three Rio Conventions. I will provide a brief overview of their historical developments since their genesis at the *Earth Summit* 1992, and point out major developments. Moreover, I will shortly introduce their institutional structure and the functions of their constituent bodies.

In section 4, I will analyze the interplay activities of the three Rio Conventions in five separate time periods. At the end of each time period, I will briefly summarize the main interactions in respect to the conceptual assumptions and theoretical expectations formulated in the research design.

In section 5, I will compare the conceptual assumptions and theoretical expectations of section 2 with the results of the analysis, assess their overall interrelationship and draw an interim conclusion.

The concluding section will point towards implications and limitations of the study, summarize the results from the analysis and provide an outlook for possible future developments.

2. Theoretical and Analytical Framework

2.1. Conceptualization

2.1.1. Global Governance: State of Research

Global Governance has become a key concept in academic and policy debates since the late 1980s. Arguably, the end of the Cold War signaled a turn in the way scholars perceived international relations. Until then, traditional paradigms, such as the model of Westphalian sovereignty and the predominant corpus of literature with realist approaches in international relations theory, asserted nation states to be the principal and most legitimate actors in international politics. In the course of the next decade, the economical and technical globalization paved the way for more progressive schools of thought, such as neo-institutionalism and, later on, constructivism, as “new actors,” in particular international institutions and other sub- and non-state actors, entered the political limelight (Mathews 1997: 50 et seq.; Rosenau 1992; Rosenau 1997). Stemming from debates about the concept of governance at a national level, where it was understood as a new form of public management that differed from state-centric and hierarchical structures, at the time, the notion of *global* governance at the international level gained scholarly interest. (Biermann and Pattberg 2012: 3).

The term governance, by definition, extends the meaning of “governing” to the regulatory activities of sub- and non-state actors (Rosenau 1997: 145). The term “global,” in contrast to *inter-national*, emphasizes the importance of sub- and non-state actors next to nation states in world politics (Dingwerth and Pattberg 2006: 188). This encompasses, amongst others, new agencies set up by governments, including intergovernmental bureaucracies, regimes, or international institutions in general. Consequently, the concept of global governance stands for a “realistic” perception of world politics, in which nation states are not the only relevant actors; they are only part of a transnational multi-actor governance system (Messner and Nuscheler 2003: 6-8). However, a universal definition of *global governance* is still being debated, as it means “different things to different people” (Biermann and Pattberg 2012: 3; see also Biermann 2006, Dingwerth and Pattberg 2006; Young 1997, 1999). To bring conceptual clarity to a confusing research area, Frank Biermann and Philipp Pattberg (2012: 3) distinguish between two diverging understandings of global governance: (a) normative and (b) analytical.

In a nutshell, the normative understanding holds global governance as a solution or a tool that politicians need to develop and employ to solve problems caused by globalization. Scholars who employ this understanding call for new global governance architectures as a counterweight to the adverse impacts of a globalized world economy and its consequences for humanity and the environment. Therefore, they frequently propose new institutions, new and more effective international regimes and organizations, or new forms of financial mechanisms to balance the authority and political leverage of national governments (Biermann and Pattberg 2012: 4). This understanding is also closely associated with the *United Nations Commission on Global Governance* and its “Our Global Neighborhood” report (Commission on Global Governance 1995). In this report, the Commission underlined the need for enhanced cooperation in world politics generally, and advocated for a stronger United Nations (UN) system to cope with the challenges of the present and future. Heeding the call by the UN, several authors, such as Weiss and Gordenker (1996) or Woods (1999) have further developed positions on this matter.

In its analytical usage, the term emphasizes distinct qualities in world politics, such as nonhierarchical order and the inclusion of sub- and non-state actors. (Biermann and Pattberg 2012: 3f). In this regard, writers concerned with foreign policy conceive global governance as “the combined efforts of international and transnational regimes” (Young 1999: 11). To distinguish the novel concept from traditional notions of international relations, other writers have broadened the analytical understanding of this concept. James Rosenau (1995: 13), for example, sees global governance as a system that includes “all levels of human activity – from the family to the international organization – in which the pursuit of goals through the exercise of control has transnational repercussions.” In other words, the traditionally separated spheres of local, national, and international politics yield to a multi-level system, where decision-making processes of various actors may occur both *top-down* and *bottom-up*. In sum, both narrower and broader definitions of an analytical notion of global governance highlight the increasing participation of sub- and non-state actors and the interconnectedness of all relevant actors, which characterize world politics. Decision-making processes are thus dependent on the successful coordination of actors at different levels of politics. Traditional notions, such as power relations, interest-based intergovernmental bargaining and hierarchical order in international politics play a subordinate role (Börzel and Risse 2005). For the purpose of this study, I will focus on the analytical understanding of global governance as a conditioning framework for analyzing institutional interplay.

2.1.2. International Institutions

Institutions, generally defined as “persistent and connected sets of rules and practices that prescribe behavioral roles, constrain activity, and shape expectations” (Keohane 1989: 3), can be

conceptualized as agencies that have been created by governments or other public actors with some degree of permanence and coherence and beyond formal direct control of single national governments (cf. Biermann 2012: 28). International conventions, organizations, and regimes are considered major types of institutions in international politics.

Until the 1970s, globally operating organizations such as the *United Nations Food and Agriculture Organization*, the *United Nations Industrial Development Organization*, or the *International Maritime Organization* were major subjects of research on international institutions (Martin and Simmons 1998). Stimulated by the formation of the ozone regime and the negotiation and implementation of the Convention's respective protocol, the *Montreal Protocol on Substances that Deplete the Ozone Layer* in 1987, the focus shifted towards the study of international regimes, their formation, development, and effectiveness throughout the 1980s (e.g. Krasner 1982; Keohane 1984; Gehring 1994; Young 1999). While international organizations, defined by Huntington as large bureaucracies that perform specialized functions across international boundaries (cf. Huntington 1973), may, like regimes, govern specific issue areas, their distinctive features are "actor qualities" that contracting states have equipped them with, distinguished by a physical location, a staff of employees, and usually a legal personality (Young 1986: 110). International organizations can, therefore, form a part of the procedural components of an international regime. The *World Meteorological Organization*, for example, frequently provides services to numerous international environmental regimes, while still being part of the broader UN system of organizations. Thus, organizations and regimes can often complement each other.

A regime, in turn, can be defined as a set of "implicit or explicit principles, norms, rules and decision-making procedures" (Krasner 1983: 2). Hence, a regime can consist of solely a single treaty, but more often it comprises a larger set of agreements as well as governing bodies constructed around the same legal framework. Regimes can be regarded as a subset of institutions that involve states and concern behavior within specific issue areas. (Levy, Young, and Zürn 1995). For instance, the UN climate regime consists not only of the UNFCCC, the Kyoto Protocol, the *Marrakesh* and *Paris Climate Agreement*, and the decisions taken by the conferences of parties (COPs) of member states, but also includes bureaucracies, such as scientific and governing bodies and a respective secretariat.

2.1.3. Institutional Interplay, Management, and Complexes

After the previous chapters investigated general concepts of global governance and international institutions, the following section describes the different modes of interaction between institutions that are relevant to the development of the research design and the subsequent analysis of the Rio Contentions' interplay activities.

Institutional Interplay

The phenomenon of institutional interplay has become of growing interest amongst scholars of global environmental governance since the analysis of international institutions has moved beyond the assumption that they solely exist in isolation from other institutions and without significant interferences (Keohane 1984; Rittberger 1993). Today, a significant number of research projects has focused on institutional interplay, its consequences, and effectiveness, as well as the development of tools for the systematic analysis of governance configurations that are affected by institutional interaction (see for example Oberthür and Gehring 2006; Young et al 1999; Biermann et al 2011; Oberthür and Stokke 2011; Zelli 2011).

In general, institutional interplay can be defined as all situations in which one institution affects the development or performance of another institution (Oberthür and Stokke 2011: 4). As such, institutional interplay may occur either with or without the knowledge of the actors concerned. Thus, institutional interplay can have various ramifications. For example, rules and procedures on free trade put forward by the *World Trade Organization* (WTO) can have a “chilling effect” on the willingness and ability of actors to negotiate multilateral environmental agreements (MEAs), as supporting collective environmental protection goals may, in return, result in trade restrictions (Axelrod 2011). Whereas this form of interplay is best characterized as disruptive, other relationships between institutions can also be synergetic. The global regime on transboundary movement of hazardous wastes, for instance, has been strengthened through the complementary work on the same environmental problem by various regional regimes (Meinke 2002; see also Oberthür and Stokke 2011: 4). Interactions between institutions may involve institutions at the same level of governance (horizontal interplay, i.e. interplay between the UNFCCC and CBD) or at the vertical dimension between international and national institutions (vertical interplay, i.e. interplay between the UNFCCC and the *Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety* (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit)) (Young 2002).

Institutional Management

Institutional management reflects particular forms of interaction, which are inherent in the concept of institutional interplay. Oberthür and Stokke (2011: 6) refer to interplay management as “a situation, in which *conscious* efforts by any relevant actor or groups of actors are made, in whatever form or forum, in pursuit of *improving* institutional interaction and its effects (emphasis added).” This type of interaction requires the knowledge of the actors involved. Hence, institutional management also implies a certain degree of awareness on and reflection of the institutions. In

short, the term refers to the governance aspect of inter-institutional relations and influence (Oberthür 2016: 95).

Institutional management differs from other closely related notions of institutional interaction, such as the concept of political linkages, or policy response to an interaction. First, institutional management encompasses situations both with or without cross-institutional coordination equally. In general terms, cross-institutional coordination is best conceived by the concept of political linkages. Build on Young's (1996) earlier notion of institutional clustering, a situation of political linkages may "arise when actors decide to consider two or more arrangements as parts of a larger institutional complex" (Young et al. 1999). In other words, the aggregation, or "clustering" of institutions describes a situation, in which actors combine different governance arrangements into institutional packages, without requiring any preceding or anticipated interactions, and even when there is no compelling need to do so. (Oberthür and Stokke 2011: 6-7) For example, states could decide to join the UNFCCC with the *Basel Convention* on hazardous waste under the umbrella of a World Environment Organization (WEO), even though there has been minimal interaction between the two regimes so far (Oberthür and Stokke 2011: 7). In this case, institutional interaction would solely be a result of aggregated clustering.

In other cases, actors may act without prior coordination between respective institutions. For instance, members of the UNFCCC who negotiated the compliance system of the Kyoto Protocol on climate change were hesitant to avoid substantive or procedural elements that might work against the international trade regime (Stokke 2004). In this instance, members of an institution might decide to "manage" interplay as a means to rejecting pressure from another institution by intentionally neglecting interaction. Here, institutional management also differs from the concept of policy response, which occurs as a *reaction*, in contrast to anticipation, to the effects of interaction (Gehring and Oberthür 2006: 314-316).

Second, unlike other notions of institutional interaction, institutional management implies a standard of evaluation, that is, a goal or objective for interaction (Oberthür and Stokke 2011: 7). Various standards may be applied. They can range from institutional interplay as means of enhancing the effectiveness of global environmental governance, cross-institutional synergy enhancement, and disruption mitigation, to sustainable development goals as standards. While studies that draw on the concept of institutional management must be clear about the standard they apply, Oberthür and Stokke (2011) notice that comparative findings on institutional management where the same standard has been applied are generally more powerful.

Third, relevant actors may precede interplay management at various levels of coordination. Oberthür (Oberthür 2016: 88-108) identifies and distinguishes three levels of interplay

management: At the first and highest level, institutional management could rely on *overarching institutional and legal frameworks*, which requires decision making beyond the interacting institutions. Given the absence of a hierarchical political authority at the international level, such overarching interplay management may become recurrent in sectoral governance. Specialized international institutions, organizations, or programs may evolve in particular policy fields, such as the *United Nations Environment Programme* (UNEP) or the UN at large (Oberthür 2016: 96).

At the second level, *joint interplay management* can be based on targeted efforts with regards to coordination of activities, or possibly the creation of joint rules for governing the interaction of the institutions involved. In basic terms, coordination between two entities requires a form of communication or dialogue. Thus, a joint interplay management situation involves horizontal structures for coordination between formally independent sectoral regimes within a specific field of governance. In particular, this could be fulfilled through the exchange of information between relevant secretariats, representation at each other's meetings, or the creation of special bodies at scientific, administrative, or political levels to take up issues of mutual concern (Oberthür and Stokke 2011: 9). Moreover, Oberthür and Stokke (*ibid*) note that *joint interplay management* may evolve into the establishment of a permanent institutional body, which approaches the level of coordination of an overarching institutional framework.

At the third level, *unilateral interplay management* involves independent action and decision making of individual institutions, which according to Oberthür (2016: 96), has thus far been the central place for governance of inter-institutional relations. Consequently, it is the formally independent decisions of individual institutions that determine whether the relationship to other institutions is of conflictive or synergetic nature. As an example, the often conflictive interaction between the WTO and MEAs, such as the 1987 *Montreal Protocol on Substances That Deplete the Ozone Layer*, has largely been shaped by independent decision-making within the respective institutions (Gehring 2011).

In summary, institutional management describes an expedient situation of institutional interaction that proceeds with or without cross-institutional coordination, in which the actors concerned are aware of possible inter-institutional effects. Moreover, institutional management can occur at various levels of coordination.

Institutional Complexes

International institutions not only interact with each other, but they also form parts of broader *institutional complexes*. Biermann and colleagues (2009: 14) perceive institutional complexes as larger systems of institutions and governance mechanisms in particular areas of world politics.

Contrary to international regimes, instructional complexes are rarely “negotiated,” and thus policymakers rarely define the boundaries of institutional complexes by “political linkages” or “clustering” (Oberthür and Stokke 2011: 12). Furthermore, the notion of institutional complexes, in contrast to the related but more narrowly defined term “regime complexes,” encompasses institutional interaction of both international regimes and organizations within a specific issue area of governance.

In general, the phenomenon of *institutional complexes* arises when two or more international institutions interact to co-govern issue areas and form interlocking structures of global governance in international relations (Oberthür und Stokke 2011: 10). To co-govern issue areas, functional overlaps of two or more institutions are a prerequisite for the development of institutional complexes. Gehring and Faude (2014: 474) identify two dimensions that constitute functional overlaps in institutional complexes: (a) their *institutional memberships* and (b) their *regulatory scopes*. The authors argue that overlap in only one of the two dimensions is unlikely to create enduring institutional interaction. As a consequence, international institutions with completely separate memberships are thus not directly related to each other, even if they perform approximate regulatory functions (ibid). Vice versa, institutional interaction is unlikely to endure if institutions perform completely different regulatory functions for a given group of actors. For example, the regulation of the law of the sea and the one of nuclear non-proliferation deal with substantively unrelated problems, and are therefore unlikely to engage in sustained interaction (Gehring and Oberthür 2009).

Functional overlap typically results from either the purposive action of state actors or the unintended by-product of such action (Gehring and Faude 2014: 474). In a case of purposive action, states may set up a competitive institution to challenge the regulatory dominance of an existing one (Schneider and Urpelainen 2013, van de Graaf 2013), or seek to shift, or rather divide regulatory functions and activities from one institution to another (Braithwaite and Drahos 2000: 564-577). Likewise, a case of functional overlap as an unintended by-product of state action could develop, if an international institution, as a consequence, expands to new regulatory terrain (Raustiala and Victor 2004: 301). The WTO, as an example of a situation of functional overlap, spans numerous matters of international trade. Due to its enormous regulatory scope, it often overlaps with other trade institutions, such as the *North American Free Trade Area*, the European Union (EU) and others (Bartels and Ortino 2006). In a situation of functional overlap, institutions may also interact concurrently and may influence and feed back to each other over time (Young 2002: 83-138). In sum, the interaction settings within an institutional complex indicate a high level of complexity, as they may produce new properties that are not inherent in the individual components but derive from their coexistence and coevolution (Oberthür and Stokke 2011: 11). It is therefore particularly interesting to study institutional interplay within institutional complexes. In

this way, we advance our understanding of institutional interaction from the analysis of the effects international institutions have on each other, to an exploration of its nature and evolution, and draw consequences of institutional interaction with respect to the dynamics and effectiveness of global environmental governance (Rustiala and Victor 2004).

The conceptual clarifications of the term institutional management as a form of institutional interplay as well as the subsection on the concept of institutional complexes provide the basis and starting point for the development of the research design of this study.

2.2. Research Design

The realization of the research design was guided by the following factors. First, in scholarly literature, an analytical framework for the assessment of institutional interplay that focuses on multiple institutions within an institutional complex and includes its effects that shape inter-institutional relationships was still missing. To this day, only a few scholars have attempted to design a framework for the analysis of institutional interplay. Research in this area has either focused on identifying types of institutional interaction and their inherent dynamics (Young 1996; Young et al. 1999; Oberthür and Gehring 2006), the efficiency of institutional interplay (Stokke 2000; Stokke 2001), regime conflicts as a result of institutional interaction (Zelli 2011; van Asselt 2011), or the effects of interplay on the fragmentation of governance architectures of a particular issue area in global environmental politics (Biermann et al 2009; van Asselt 2014). Despite the different empirical and analytical focus, the developed research design in this study has drawn on the conceptualizations and preliminary findings presented these contributions.

Second, a study by Thomas Hickmann (2016) about the intergovernmental effects of vertical interaction between international bureaucracies and sub and non-state actors in the area of climate change politics has had a significant influence on the structure, idea, and approach of the research design.

Based on the theoretical concepts introduced in section 2.1, I will now elaborate the analytical framework, which will be employed in the following empirical analysis of the Rio Conventions' interplay activities. As indicated above, this study aims to analyze institutional interplay activities within the nexus of climate, biodiversity and desertification. Prior to the introduction of the framework, I will point out a basic premise on this nexus: The dominant institutions within their area of governance, the UNFCCC, CBD, and UNCCD, are all integrated into the system of UN institutions. As mentioned in the introduction, the regimes govern issue areas with "fuzzy" boundaries, as changes in the climate, for instance, can impact biodiversity and desertification and vice versa (see also section 2.2.1 and 3). Given their institutional memberships and regulatory scopes, the three Rio Conventions inherently share some degree of institutional overlap; hence

they obligatorily co-govern these particular issue areas. The research design at hand thus formulates assumptions under the condition of functional overlaps, or rather an institutional complex, in respect to the three institutions in focus.

Against this background, this study aims to answer the two central research questions: *to what extent and with what means have the three regimes in focus engaged in institutional interplay and how can their relationship be characterized?*

2.2.1. Conceptual Assumptions and Theoretical Expectations

To systematically approach the guiding research questions, three conceptual assumptions are formulated that represent different aspects of the interrelationship between the three institutions in focus. These three assumptions conceive conjectured types of inter-institutional relationships, which will be applied and tested in the empirical analysis of this study.

The first conceptual assumption portrays a *conflictive relationship* between international institutions as a consequence of institutional interaction. Functional or rather jurisdictional overlaps are a prerequisite of this assumption. By contrast, knowledge about the interaction is not a requirement for this assumption. This perspective suggests that one institution *conflicts* with the norms and rules of another, because their activities can be seen as contradictory to other institutions. The first assumption about the implications of horizontal interplay with respect to the inter-institutional relationship reads as follows:

Conceptual Assumption 1 *Institutional interplay between two or more international institutions with jurisdictional overlaps results in a conflictive inter-institutional relationship that is characterized by contradicting norms and rules.*

The second conceptual assumption portrays a cooperative relationship between international institutions. Again, functional or rather jurisdictional overlaps are a prerequisite for this assumption. Knowledge about the interaction is not a requirement for this type of interrelationship. In contrast to assumption 1, this perspective implies that the norms and rules of two or more institutions are not conflictive. The second assumption about the implications of institutional interplay in respect to the relationship between international institutions reads as follows:

Conceptual Assumption 2 *Institutional interplay between two or more international institutions with jurisdictional overlaps results in a cooperative*

inter-institutional relationship that is characterized by largely compatible norms and rules.

The third conceptual assumption portrays a synergetic relationship between international institutions. Similar to assumptions 1 and 2, functional or rather jurisdictional overlaps are a prerequisite of this assumption. In contrast, knowledge about the interaction is a definite requirement of this type of interrelationship. In general terms, synergies describe combined effects of the interaction of two or more actors that are greater than the sum of their individual effects. This does not necessarily imply the consciousness of the actors involved *per se*. Synergetic effects can thus arise through the interaction of institutions, which have a cooperative inter-institutional relationship. On the contrary, the assumption about a synergetic inter-institutional as a result of institutional interaction aligns with the concept of institutional management, which requires (a) a degree of awareness on and reflection of institutions, and (b) implies a goal or objective for interaction (Oberthür and Stokke 2011: 7). This perspective also implies that the norms and rules of two or more institutions are not conflictive. The third assumption about the implications of institutional interplay with respect to the relationship between international institutions reads as follows:

Conceptual Assumption 3 *Institutional interplay between two or more international intuitions with jurisdictional overlaps is utilized to pursue collective objectives. This results in a synergetic inter-institutional relationship that is characterized by largely compatible norms and rules.*

Based of these conceptual assumptions, I will deduce respective theoretical expectations, which will be observable in the empirical analysis if the type of inter-institutional relationship is correct. These observable implications guide the conduction of both the subsequent data collection and empirical analysis of this study (cf. King, Keohane, and Verba 1994: 28-29).

If the first assumption of the conflictive inter-institutional relationship is true, I expect to observe in the empirical analysis that the interacting institutions in focus would have a “significant contradiction of rules and / or rule-related behavior” (Zelli 2008: 2). Incompatibilities could be visible through conceptual conflicts between different objectives, approaches, programs, obligations, or political conflicts (Wolfrum and Matz 2003). Furthermore, the institutions are expected to be hardly connected and / or have different, unrelated decision-making procedures. The primary goal of the institutions is to advance their own agenda within an area of functional

overlap, which may cause inter-institutional conflicts.

If the second assumption on a cooperative inter-institutional relationship is valid, I expect to find in the empirical analysis that the interacting institutions in focus have largely compatible norms and rules. Moreover, the institutions are anticipated to follow largely conformable decision-making procedures in relation to other institutions within the institutional complex. Nonetheless, I expect that policies within the area of functional overlap are decided and monitored through different institutional bodies.

And if third and final conceptual assumption on a synergetic inter-institutional relationship is right, I expect to see in the empirical analysis that the institutions at hand pursue collective objectives to enhance synergies and mitigate conflicts within an area of functional overlap. This assumption consequently implies that the norms and rules of two or more institutions are not conflictive. The institutions are expected to coordinate their activities, or even provide for effective and detailed principles that regulate respective policies in distinct, yet substantially integrated institutional arrangements (Biermann et al. 2011: 20). In other words, the institutions are expected to have conjunct decision-making procedures integrated into their institutional design. They may even establish conjoint permanent institutional bodies. Coordination between the institutions is supposed to be visible by a horizontal structure of communication. The interacting institutions are expected to govern a specific issue area collectively.

Table 1 General conceptual assumptions and theoretical expectations for the empirical analysis

<i>Conceptual assumptions</i>	<i>Theoretical expectations</i>
Conflictive relationship	Institutions with conflicting norms and rules, objectives, or obligations have largely unrelated decision-making procedures and may interact concurrently to advance their own agenda
Cooperative relationship	Institutions with compatible norms and rules have largely conformable decision-making procedures. Policies are decided and monitored through different institutional bodies
Synergetic relationship	Institutions with compatible norms and rules formulate collective objectives. They coordinate their activities on a horizontal level and have conjunct decision-making procedures integrated into their institutional design. Permanent institutional bodies may be a result of a

synergetic inter-institutional relationship.

The institutions jointly manage their governance domain

In general, the formulated conceptual assumptions and theoretical expectations are meant as a conceptual tool for assessing and comparing institutional interplay in different issue areas in comparative research. From this perspective, the research design is not to be conceived of as a precise measuring system, because the conceptual assumptions and theoretical expectations are not “clear cut” to the extent that they share a number of overlapping features. For example, it may be difficult to differentiate between the second and third assumption in certain instances, because both the cooperative and synergistic type of inter-institutional relationship proceed from the assumption that institutions have compatible norms, rules, and conformable decision-making procedures. Therefore, the main function of the presented research design is to guide and structure empirical research. In Section 4, I will employ the analytical framework for the interplay activities between the institutions in focus. Subsequently, I will summarize and assess the main findings of the analysis on the basis of the presented conceptual assumptions and theoretical expectations.

2.2.2. Case Selection – The Rio Conventions

How do the three Rio Conventions account for the case selection of this study? As mentioned in the introduction, they have substantive linkages, meaning that changes in climate can lead to loss of biodiversity as well as land-degradation, and vice versa. Changing weather patterns and shifting climatic zones, for example, can have severe adverse effects on endangered species or accelerate desertification. From the perspective of science, these environmental problems have been identified among the most pressing at present times. The concept of planetary boundaries, for example, defines a safe operating space for humanity within the Earth system and its biophysical subsystems or processes (Rockström et al. 2009). Anthropogenic climate change has caused atmospheric carbon dioxide concentration to rise steadily, and species are becoming extinct at a rate that has not been seen since the last global mass-extinction event in the late Pleistocene (Mace et al. 2005). Therefore, Rockström and colleagues argue that several “boundaries” - climate change and biodiversity loss in particular - have exceeded critical levels (Rockström et al. 2009). In contrast, land degradation and desertification may not pose an *immediate* threat on the global scale, but it has become a severe problem in arid regions of the world, where the biological potential of the land and its ability to support populations has been severely diminished (Darkoh 1988).

As mentioned in the introduction, three separate regimes have emerged in global environmental politics to address and cope with the problems of climate change, loss of biodiversity, and desertification over the past twenty-five years. All stemming from the same parent organization, the UN, they are the *United Nations Framework Convention on Climate Change* (UNFCCC), the *Convention on Biodiversity* (CBD) and the *United Nations Convention to Combat Desertification* (UNCCD). Due to their genesis at the *UN Conference on Environment and Development* (UNCED) in Rio de Janeiro in 1992, the three Conventions are also referred to as the “Rio Conventions.” Measured by size, staff, budget, global recognition, and legitimacy, these regimes have the greatest institutional authority within their respective area of governance. So far, scholars have primarily focused on the dyadic interplay activities between each of the three Conventions, stating salience on dense interplay within the climate, biodiversity and desertification nexus (e.g., Morgera 2011; Zelli, Gupta and van Asselt 2012). No in-depth study has taken up the development of the triadic relationship between the UNFCCC, CBD, and UNCCD within the past 25 years of their coexistence.

2.2.3. Approach and Methodology

This research aims to analyze the horizontal interplay activities and the resulting relationship between the Rio Conventions. As indicated above, the empirical analysis of this study will cover the interplay activities between the institutions in focus within a period of twenty-five years. In order to determine dynamic changes within this overall period from 1992 to 2017, the analysis will be divided into smaller five-year time frames. Therefore, it stands to reason to apply means of both the constellation and the process analysis. According to Siedschlag (2001), the constellation analysis assesses the specific composition of actors at different levels within a system at a particular point in time or within a certain time frame. This will be helpful when analyzing the inter-institutional interaction in a setting of functional overlap, with respect to the inter-institutional relationships that are shaped through such interaction. Due to the scope of this study, I will only focus on horizontal institutional interaction. Besides, the process analysis takes dynamic changes into account, which will be addressed in the evaluation and discussion (section 5) of the results from the empirical analysis.

Three methods of data collection are employed in this project: (1) A systematic content-analysis of official documents, archives, and online resources put forward by the institutions will constitute a basis for the empirical analysis. This also includes the evaluation of reports issued by independent reporting services, such as the *Earth Negotiations Bulletin* for example. (2) An extensive literature review of existing scholarly work on institutional interplay of the three institutions in focus will serve as a complementary source of information. Due to the lack of research on the triadic inter-institutional relations within the complex of climate, biodiversity, and desertification, this will primarily consist of studies on dyadic interactions.

3. The Rio Conventions: UNFCCC, UNCCD, and CBD

In the following section, I will give a brief overview of the three Conventions in focus. This includes information on the historical background and major developments of each Convention as well as general information on the institutional structure and design.

3.1. Earth Summit 1992

As mentioned above, the UNCED, popularly known as the *Earth Summit*, was held in Rio de Janeiro from June 3rd – 14th, in 1992. The Conference attracted global media coverage and hype, as it was considered a milestone for development policy and global environmental politics. The conference was a product of a long preparation history, and its size, level of participation and scope of concerns was unprecedented. Twenty years after the first global environmental conference, the *United Nations Conference on the Human Environment* in 1972, the *Earth Summit* was expected to find universal solutions for the destruction of non-renewable natural resources, pollution, and climate change. Attending governments submitted reports to the conference on the state of their environment and development prior to the event; many even established national consultative committees and processes. In total, 178 representatives of national governments, with well over 100 heads of state, and a remarkable number of non-governmental groups attended the conference. At that time, the *Earth Summit* process acted as a catalyst in setting the agenda for environmental and sustainable development debates around the world (Grubb et al. 1993).

The official outcome of the UNECD resided in five agreements: the *UN Framework on Climate Change*, the *Convention on Biological Diversity*, an essential guideline document on sustainable development called *Agenda 21*, a declaration comprising the attempts to negotiate a convention of forests called *Forest Principles*, and the concluding *Rio Declaration*, which formulated further principles for guiding action on environment and development. The Conventions on climate change and biodiversity were legally binding agreements that were negotiated independently of and prior to the UNCED process. However, the agreements were scheduled for signature at Rio (Grubb et al. 1993: 13). Initially, a *Convention to Combat Desertification* was not agreed upon at the UNECD. Nonetheless, this Convention was part of several specific institutional recommendations by the UN General Assembly (UNGA), which were made in the course of the *Agenda 21* negotiations. On that note, an organizational session for the development of a *Convention to Combat Desertification* was scheduled for February 1993, with a view to finalizing the Convention in 1994 (UNGA 1992).

The UNFCCC, CBD, and UNCCD are commonly referred to as the *Rio Conventions*, in reference to the shared origin at the UNECD.

3.2. The UN Framework on Climate Change

In general, the UNFCCC provides a legal framework and process, which aims to address the problem of human interference with the earth's climate system.

Throughout the 1980s, scientists increasingly drew attention to the connection between rising atmospheric concentrations of CO₂ and human activities. UNEP and the *World Meteorological Organization* thereupon established the *Intergovernmental Panel on Climate Change* (IPCC) in 1988, in order to develop a deeper scientific understanding of climate change. The subsequent work of the IPCC has raised public awareness and the interest of hitherto uninterested countries in the debate on climate change, which laid the groundwork for the political negotiations on this issue in international politics. Negotiated and signed by 196 countries at the *Earth Summit* in 1992, the UNFCCC entered into force in 1994. Likewise the formation of the *Vienna Convention*, which later led to the adoption of the *Montreal Protocol on Substances that Deplete the Ozone Layer* in 1987, the UNFCCC negotiations managed to bind member states to act in the interests of human safety despite missing scientific consensus on a frequently debated issue. The Convention's objective is formulated in Article 2:

The ultimate objective of this Convention [...] is to achieve [...] stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner (UN 1992a).

A milestone that further advanced the Convention's objective marked the negotiation of the Kyoto Protocol in 1997, which legally bound developed countries to emission reduction targets. The Protocol's first commitment period started in 2008 and ended in 2012. The second commitment period, the Kyoto Protocol II, began on 1 January 2013 and will end in 2020. To this day, there are 197 member states to the FCCC and 192 member states to the Kyoto Protocol. The 2015 *Paris Agreement* can be regarded as the latest significant step in the evolution of the UN climate regime. As a central objective, the agreement aimed to strengthen the global response to climate change by keeping a global temperature rise below 2 degrees Celsius above pre-industrial levels and, moreover, pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. 153 of the 197 contracting states to the Convention have ratified or acceded to the agreement (UNFCCC 2017a).

As indicated in section 2 of this study, the Convention relates to a large number of constituent bodies. The supreme decision-making body consists of all states, so-called parties, to the

Convention. Moreover, the parties are represented at the annual *Conference of the Parties (COP)*, at which they review the implementation of the Convention and other legal instruments, including institutional and administrative arrangements (UNFCCC 2017b). Next to the COP, it comprises the *Conference of Parties serving as the Meeting of the Parties*, several subsidiary bodies for scientific and technological matters, such as the IPCC for instance, financial bodies, a number of working groups, and the UNFCCC Secretariat. The latter is considered to be the most important administrative organ in the UNFCCC process; thus it plays a significant role in providing organizational support and technical expertise to the Conventions' negotiations and institutions. Beyond that, the Secretariats' responsibilities include compiling and reviewing data and information, as well as coordinating with the bureaucracies of related international institutions (Yamin and Depledge 2004: 506-507).

3.3. The Convention on Biological Diversity

In basic terms, the CBD seeks to conserve the biological diversity of the planet. This objective entails the protection of species and ecosystem on the one hand, and laying down rules and terms for the uses of biological resources and technology on the other.

UNEP called upon national governments to consult the overwhelming scientific evidence of growing biological erosion and to consider implementing an international legal instrument on the conservation of biological diversity in 1987 (CBD 2017a). As a whole, the CBD built on a long history of agreements on specific species and extensive prior discussions of the need for a broader legal consideration of the issue of loss of biodiversity. The primary stages of the negotiation on a possible convention were marked by political discord amongst countries. While some - primarily developing countries with, coincidentally, the richest diversity of species - insisted on their sovereign rights over genetic resources within their territories, as well as potential benefits for biotechnology, others viewed biodiversity as a common heritage of humankind, and biotechnology to be a concern of industry in contrast to government. Yet, a final draft of the Biodiversity Convention was completed in 1992 and signed by 155 governments at the *Earth Summit* the same year. Being developed and negotiated under the auspices of the UNEP, the final agreement reflected a compromise for both sides (Munson 1993: 75).

Eventually, the Convention entered into force in late 1993. Article 1 of the Convention states its overall objectives:

The objectives of this Convention [...] 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, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding (UN 1992b).

As of today, the CBD features two main Protocols. The first Protocol, the *Cartagena Protocol on Biosafety*, is an international agreement which targets safe handling, transport, and use of “living modified organisms [...] resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health” (CBD 2017b). The protocol was adopted in 2000 and entered into force in 2003. Until today, 171 member states officially stand by the *Cartagena Protocol on Biosafety*.

The *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity* is the second major international agreement under the CBD. It aims to (a) establish predictable conditions for countries to access genetic resources, and (b) ensure fair and equitable benefit-sharing resulting from the utilization of genetic resources. Adopted in 2010 and taking effect since 2014, the *Nagoya Protocol* comprises 97 Parties, 100 ratifications and 92 signatures to this day (CBD 2017c; CBD 2017d).

Similar to the UNFCCC, the CBD comprises various constituent bodies. It brings together the parties in the biannual Conference of Parties (COP), which represents the Convention’s primary governing body. At the COP, the parties review progress in the implementation of the Convention, adopt programs of work and provide policy guidance in order to achieve its objectives. Next to the parties, a number of subsidiary bodies, for example the *Subsidiary Body on Scientific, Technical, and Technological Advice*, assist the COP process by providing recommendations and expertise in the field of science and technology. Furthermore, so-called “ad hoc open-ended Working Groups” have been established to deal with specific issues as they arise. “Ad hoc open-ended” thereby refers to a limited mandate, unrestricted accessibility to all parties and observers, and a specific period of time in which these working groups are deployed (CBD 2017e). A secretariat was established to further support the goals of the Convention. Primarily, its responsibilities lie with the organization of meetings, preparation of reports, assistance to member governments in the implementation-process of various programs of work, dissemination of information, and the coordination with other international organizations (CBD 2017f). In contrast to the more limited mandates of the UNFCCC or UNCCD Secretariats, the CBD Secretariat assists in the preparation of COP decisions and advises on scientific and technical issues (Koetz et al. 2008).

3.4. The UN Convention to Combat Desertification

In general, the UNCCD aims to improve the condition of ecosystems affected by desertification and mitigate the effects of drought in arid areas, especially in Africa.

Due to its distinctive political and geographical features, the negotiations about a final international agreement on the problem of desertification were a hard way to go: As a result of the inherent regional problem of desertification, the negotiations were fueled by rising North-South tensions in

the 1970s (Corell 1999: 200-202). Moreover, agreement had to be reached on cross-border issues, such as education, capacity development, public awareness, and various action programs on the national, sub-national, and regional level. In this respect, scholars have framed the UNCCD as a sustainable development treaty and an instrument to fight poverty rather than as an environmental treaty in the narrow sense (e.g., Bauer 2006; Bauer 2009). Actuated by the UNGA at the UNECD in 1992, final agreement could be reached amongst 115 member states, who adopted and signed the Convention in 1994. Two years later, the Convention entered into force in 1996. At present, the UNCCD has 196 Parties, including 195 member states and the EU. Article 2 of the CCD states its ultimate objective:

1. The objective of this Convention is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements [...]

2. Achieving this objective will involve long-term integrated strategies that focus simultaneously, in affected areas, on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level (UN 1994).

Unlike its “sister conventions,” the UNCCD has no official protocols to the Convention. Yet, a significant landmark marks the adoption of the *10-year strategic plan and framework to enhance the implementation of the Convention* in 2007. With the program starting in 2008, the strategy is laid out for ten years and aims to strengthen global partnerships to meet the Convention’s key challenges “through scientific and technological excellence, raising public awareness, standard setting, advocacy and resource mobilization, thereby contributing to poverty reduction” (UNCCD 2007). In order to achieve its overall objective, the strategy contains a number of “operational objectives” for all UNCCD stakeholders that guide the actions of short and medium term effects.

The institutional structure of the UNCCD encompasses various organs. The highest decision-making body, the Conference of Parties (COP), reviews the entire UNCCD process and takes decisions on all relevant matters. A *Committee on Science and Technology* (CST) provides information and advice on scientific and technological matters relating to the Convention. The idea of establishing a CST was largely driven by the institutional structure of similar bodies in the Climate Change and Biodiversity Conventions (ENB 1995). Other subsidiary bodies incorporate the *Committee for the Review of the Implementation of the Convention* (CRIC), several ad-hoc bodies and the UNFCCC Secretariat. Next to the COP, the Secretariat is of significant importance to the UNCCD process, as it prepares substantive documentations and organizes the sessions of the COP. Moreover, it assists affected parties of developing countries in helping to facilitate the UNCCD process at a national level. Acting as a custodian for the UNCCD, the Secretariat also

coordinates the Convention's activities with the secretariats of other relevant international bodies (UNCCD 2017). Due to the attributed status of a UN Convention, the UNCCD, much like the UNFCCC, enjoys a somewhat high status within the UN organizations system compared to other institutions, such as the CBD, which is formally appurtenant to UNEP (Johnson, Mayrand and Paquin 2006: 75). This is predominately recognizable in its budget and funding (Ortiz and Tang 2005).

4. Analysis of the Rio Conventions' Institutional Interplay Activities

In the following chapter, I will analyze the horizontal interactions of the Rio Conventions and their respective bodies in five separate time frames that each span five years. At the end of each time frame, I will briefly summarize the most significant interactions in light of the conceptual assumptions formulated in the research design of this study. I will then assess, in chapter 5, the results of the analysis and evaluate the overall developments that constitute the inter-institutional relationship between the Rio Conventions.

Preface - Thematic and Inter-institutional Interaction in the Final Convention Texts

As a starting point and prior to the analysis of the institutional interactions between the three Conventions, it stands to reason to analyze the final texts of each Convention in respect to the possibilities of inter-institutional interplay and cooperation based on common themes. The UNFCCC acknowledges cooperation for both the COP and the SBSTA. Article 7 of the FCCC orders the COP to seek and utilize, where appropriate, the services and cooperation of, and information provided by, competent international organizations and intergovernmental and non-governmental bodies. Similarly, in Article 9d of the UNFCCC, the SBSTA is called upon to provide advice on scientific programs and cooperate in matters related to climate change in research and development with relevant international institutions. Furthermore, in Article 4e the UNFCCC commits to cooperate in in the area of climate change adaption, as well as develop appropriate integrated plans for, among others, the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification (UN 1992a).

In a paragraph of Article 5 of the CBD, which is specially dedicated to "Cooperation," the Convention text stipulates each contracting party to cooperate, as far as possible and appropriate, with "other Contracting Parties, directly or, where appropriate, through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable use of biological diversity" (UN 1992a). With regards to its relationship with other international conventions, the CBD affirms in Article 22 that the Convention will not interfere with any other existing international agreements, "except where the exercise of those rights and obligations would cause a serious damage or threat to biological

diversity” (ibid).

In its preamble, the UNCCD recognizes the importance and necessity of international cooperation and partnership and the urgent need to improve effectiveness and coordination of international cooperation in reaching its objectives. Here, the CCD particularly notices potential connections between desertification and “other environmental problems of global dimension facing the international and national communities,” especially biodiversity and climate change, as “combating desertification can [contribute to] achieving the objectives of the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity and other related environmental conventions” (UN 1994). Among its core principles, the CCD further urges contracting parties in Article 3 to “develop, in a spirit of partnership, cooperation among all levels of government, communities, non-governmental organizations and landholders to establish a better understanding of the nature and value of land and scarce water resources in affected areas and to work towards their sustainable use” (ibid).

The Conventions formulate mostly similar tenors on international cooperation and share commonalities in the wording of the convention text. Whilst the UNFCCC and CBD both mention international organizations and intergovernmental bodies as potential partners for cooperation, the UNCCD mentions non-governmental organizations next to governments and communities only, but is nonetheless amenable to international cooperation “at all levels.” In contrast to its “sister conventions,” the UNCCD notices inherent linkages between desertification and other environmental problems of global scale, which can have potential positive feedback effects when concerned international institutions engage in cooperation. In this regard, the UNCCD makes direct reference to the FCCC and CBD.

4.1. 1992-1997: Getting the Ball Rolling

A First Stance on the Interrelationships Between the Rio Conventions: Meetings of the COPs and the UNGA

Within the first years of the Rio Conventions being in force, institutional cooperation was not on the agenda of the Rio Conventions. The *Intergovernmental Negotiating Committee*, a subdivision of the UNGA that served as delegate and representative of the parties prior to the implementation of the CCD, has not pointed to the interrelationship between the Desertification Convention and other MEAs until its eight session in 1996. The delegates were in agreement about the fact that the CCDs rules of procedure and financial rules cannot “overtake” negotiations on similar subjects in the climate and biodiversity regime, which is why matters of common interest should be resolved “across the treaties” (ENB 1996a). In this regard, some attendees even doubted the equal status of the Desertification Convention in comparison to the other two Rio Conventions. This assumption

could relate to the fact that the Climate and Biodiversity Conventions were already in force at the time of the INC meeting.

At COP 3 of the CBD in 1996, the parties discussed the relationship of the CBD with other related international institutions for the first time. Some countries, such as France, Poland, Norway, and Australia, suggested a synergetic approach towards other biodiversity-related instruments to prevent fragmentation of financial resources, strengthen regional cooperation of biodiversity-related conventions, and avoid duplication with other agreements. In this discussion, several African countries, such as Cape Verde, Tanzania, and Tunisia explicitly, called for cooperation with the Climate Change and Desertification Conventions (ENB 1996b).

Up until this point in time, the UNFCCC did not elaborate on the interrelationship between the Rio Conventions apart from the implicit indications on institutional cooperation made within the final convention text. Nevertheless, cooperation between the Rio Conventions was discussed within the UNGA. At the nineteenth special session of the UNGA, the parties gathered to review the progress achieved over the time since the UNECD in 1992. The parties pledged to “recommit to working together – in the spirit of global partnership” (UNGA 1997b). Creating greater coherence of various intergovernmental institutions under the UN system of organizations was a major priority. The heads of state and respective government delegates recognized the “increasing number of decision-making bodies concerned with various aspects of sustainable development, including international conventions” and reasoned for “an ever greater need for better policy coordination at the intergovernmental level, as well as for continued and more concerted efforts to enhance collaboration among the secretariats of those decision-making bodies [of UN conventions]” (UNGA 1997b). Scientific assessment of ecological linkages between conventions, the identification of programs that have multiple benefits, and raising public awareness were some of the areas specified for enhanced international cooperation (UNGA 1997b).

At a different session the same year, the UNGA identified a number “challenges ahead” in the process of the implementation of Agenda 21. Thereby, the Parties proposed “new approaches” to international policy-making, which also focused on regional cooperation. On this point, the parties recognized the necessity to “intensify [cooperation] of the three Rio Conventions, namely, the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity and the United Nations Convention to Combat Desertification [...], particularly through undertaking initiatives aimed at linking activities and projects in the areas of drought and desertification, climate change, forests and biodiversity” (UNGA 1997c).

As stated on the current website of the CBD, the outcomes of these UNGA meetings have been “repeatedly recognized and noted in the conclusions and decisions of the governing bodies to the Rio Conventions, and in the articles of the Conventions themselves” (CBD 2017g). Yet, in the

short-term perspective, the notice for enhanced collaboration did not prevent rather contrary encounters among the Rio Conventions.

The Kyoto Protocol, the Rio Conventions and Forests – a Contentious Issue

A significant landmark in environmental politics marks the Kyoto Protocol in 1997. The negotiations of the Protocol were built around one major goal: the reduction of greenhouse gas emissions to five percent below 1990 levels. Some activities under the Kyoto Protocol proposed to meet this objective by creating carbon sinks through afforestation – a topic of common interest among all Rio Conventions, as they all serve important and complementary functions in global forest management.

In general, UNFCCC Article 4, paragraph 1 (d) calls for all parties to “promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, *forests* and oceans as well as other terrestrial, coastal and marine ecosystems (emphasis added)” (UNFCCC 1992). In reference to the overall objective of the UNFCCC, which is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, it becomes clear that forests, as well as all other means that contribute to carbon sequestration, are of vital importance.

Article 2 of the 1997 Kyoto Protocol makes reference to forest-related policies as *domestic* measures, which stakeholders are called upon to implement in order to achieve their emission reduction commitments.

“[Parties are called upon to] implement and/or further elaborate policies and measures in accordance with its national circumstances, such as [...] protection and enhancement of sinks and reservoirs of greenhouse gases [...], taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, afforestation and reforestation [and] encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases” (UNFCCC 1998).

Here, each party may decide freely on the kind of national policies and measures they want to implement in order to reach its emission reduction targets. Amongst the proposals for policies, the Kyoto Protocol encourages stakeholders to protect and enhance natural sinks. According to Pontecorvo (1999: 719), the final formulation resulted over a long and controversial debate during the negotiation process of the Protocol. While some parties, for example, all European countries, favored mandatory *as well as* coordinated policies, others, such as the USA, Canada, and Australia, called for a more flexible formulation, leaving the elaboration of adequate policies and

measures up to the member parties and national governments. Although the Protocol does not explicitly request the parties to adopt specific afforestation and reforestation practices, it does “promote” all kinds forestry measures without further specification, allowing for the establishment of carbon fixing plantations, for example. Above all, forests can be regarded as “hot spots” for carbon sequestration and biodiversity and therefore inherent a high potential for conflict or synergy amongst the CBD and UNFCCC (Brown 1998: 7).

The issue of forests is also part of the agenda of the CBD. In Article 8 under its Convention, the CBD explicitly requires parties to “regulate or manage biological resources important for the conservation of biological diversity [...] with a view to ensuring their conservation and sustainable use, promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings [and] prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species [,] which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity“ (UN 1992b). Decision II/9 of the CBD explicitly deals with the topic of forests and biological diversity. In this decision, the COP acknowledged the significance of tropical, temperate and boreal forests, which together “provide the most diverse sets of habitats for plants, animals, and micro-organisms, holding the vast majority of the world's terrestrial species. This diversity is the fruit of evolution, but also reflects the combined influence of the physical environment and people” (CBD 1995). Furthermore, the parties emphasized that “the diversity of forest ecosystems (in both physical and biological features) results in high levels of adaptation, a feature of forest ecosystems which is an integral component of their biological diversity. [...] Loss of biological diversity within individual ecosystems can result in lower resilience” (ibid.). Consequently, the Kyoto Protocol raised issues of compatibility with the objectives of the Biodiversity Convention. The leeway in the wording of the Kyoto Protocol was feared to provide economic incentives allowing for destructive large-scale and fast growth monoculture forestry, a lack of protection for existing old-growth forests, and the use of genetically modified trees and invasive alien species (van Asselt 2011).

On this matter, the parties specifically discussed the “contentious” topic of forest biodiversity at COP 4 in 1997. A *forest contact group*, which set out to develop the CBDs *programme of work on forest biodiversity*, was instructed to consider the relationship between the work on forest biodiversity under the CBD and other processes, such as the UNFCCC (CBD 1998a). The language of a draft version of the program noting the potential impact of afforestation, reforestation, and deforestation on biological diversity was debated at length. As a result, the respective paragraph on the issue was changed from an “instruction to a request, and language on achieving the objectives of the Kyoto Protocol of the UNFCCC was dropped” (ENB 1998a). Consequently, a number of countries stressed the need for closer cooperation and synergy with the UNFCCC to ensure the Kyoto Protocol’s support of the CBD (ibid.). This proposal was

reflected in the official COP 4 report, where the Parties called for a strengthened relationship with the UNFCCC, its Kyoto Protocol, and the CCD (CBD 1998a).

As to the CCD, one of its major objectives is to prevent soil erosion and impoverishment with a view to combating desertification. Thereby, in Article 4.2, it promotes an integrated approach for addressing the physical, biological, and socio-economic aspects of the processes of desertification (UN 1994). On the topic of forests, the CCD recognizes in Article 1f the link between land-degradation and the reduction or loss of forests and woodlands, which may result from “land uses or from a process or combination of processes, including processes that arise from human activities” (ibid). In light of its sustainable development goals, the CCD specifically requires the parties in Article 1 to combat the causes of desertification through the prevention and reduction of land degradation (ibid). In the regional Annex for Africa (i), Latin America and the Caribbean (Article 4 (c)), and the Northern Mediterranean (Article 6 (b)), the CCD calls for the adoption of national action programs to manage natural resources including forests in an integrated and sustainable manner (UNCCD 1994a; UNCCD 1994b; UNCCD 1994c). Moreover, in its preamble, the CCD acknowledges its cross-institutional responsibilities in respect to desertification and other problems of global dimension, which require contracting parties “to other relevant international agreements, particularly to the UN Framework Convention on Climate Change and the Biodiversity Convention [to coordinate] in order to derive maximum benefit from activities under each agreement” (UN 1994). It stands to reason to conclude that the CCD recognizes the global dimension of forests and its relevance to both the UNFCCC and the CBD.

Summary

The period from 1992 to 1997 is characterized by contradictory events. On the one hand, there are the final convention texts and first meetings of the parties to the CBD, UNCCD, and the UNGA, which all recognize the need for cooperation with other relevant organizations and institutions on matters of shared interest. These efforts towards further engagement across institutions indicate a cooperative relationship between the Rio Conventions. On the other hand, the negotiations around the Kyoto Protocol have highlighted the existing policy interdependence in the nexus of climate, biodiversity, and desertification, which bears potential for discord and conflict. In this case, the incentives put forward by the Kyoto Protocol to create fast-growing monoculture forest plantations and use them as carbon sinks point out a norm, or rather policy conflict between the three Rio Conventions. The Kyoto Protocol thereby dissents from the objectives of the CBD, which is to maintain and create biodiversity and promote its sustainable use, rather than encourage the spread of nonindigenous species, which may cause considerable adverse effects on biodiversity. In addition, the creation of monoculture forest plantations may also diminish the quality of land, especially with respect to the problem of soil impoverishment and erosion. Therefore, the Kyoto

Protocol conflicts the objectives under both the CBD and CCD. The unwillingness of the parties who negotiated the Kyoto Protocol to coordinate with other relevant environmental treaties, particularly the CBD and UNCCD, “minimizes,” rather than “maximizes” the global benefit of forest-related measures as an issue of global dimension. At last, scholars also noted a breach of the “spirit” of sustainable development on this matter (e.g., Pontecorvo 1999: 735-736). The “unsustainable use” of forests that the Kyoto Protocol incentivizes runs counter to the *Earth Summit’s Rio Declaration* and *Agenda 21*, which both stipulate the sustainable use of natural resources (e.g., Rio Declaration Principle 4; Agenda 21 9.21.d). The dispute over sustainable forest management was resumed within the UNGA in a special session on the implementation of *Agenda 21* the same year. Several speakers called for the establishment of a legally binding agreement on forests to further “buttress existing Conventions on biodiversity, climate change and desertification” and thereby constitute a third party to balance “rigid conservation and over-exploitation, providing for sound forest management that [is] predictable, rule-based and transparent” (UNGA 1997a). Other speakers argued that a convention on forests was premature due to the existing diversity of opinion. An official agreement on a forest convention was not reached at this stage. In consideration of the developments indicated above, it can be concluded that the relationship between the Rio Conventions is of rather conflictive nature at the end of the period from 1992 to 1997.

4.2. 1997-2002: Turning the Tide

A Second Stance on the Interrelationships Between the Rio Conventions: COP Meetings

At the COP 4 meeting of the CBD in 1998, the parties requested its Secretariat to “strengthen relationships” with the UNFCCC, its Kyoto Protocol and the UNCCD, “with a view to making implementation activities and institutional arrangements mutually supportive” (CBD 1998b). Furthermore, the Secretariat was ordered to “liaise and cooperate” with its sister conventions on forest biodiversity issues (CBD 1998c), and discuss the possibility of future “joint and harmonized approaches” towards the UNFCCC and UNCCD (CBD 1998d).

At the first formal post-Kyoto FCCC meeting at COP 4 in 1998, the subsidiary bodies agreed to draft conclusions on, *inter alia*, cooperation with relevant international organizations and institutions. Although no specific institutions were mentioned in the official summary of COP 4, Ecuador spoke up for closer coordination with other UN Conventions, particularly the CBD (ENB 1998b). At the following tenth session in 1999, the UNFCCC’s SBSTA requested the Secretariat to “explore possible ways of cooperating with the secretariats of other conventions, in particular the UNCCD and the CBD, in order to strengthen cooperation on issues of common interest” (UNFCCC/SBSTA 1999).

This request was echoed at the UNCCDs COP 3 the same year, when the parties discussed reviewing the activities for promoting and strengthening relationships with other relevant conventions, following several memoranda of understanding, including a tripartite work program with the Climate Change and Biodiversity Conventions, which were issued by the UNCCD Secretariat. Delegates further encouraged linkages between the Rio Conventions due to their interrelated objectives (UNCCD 2000). The parties noted that “no one convention could coordinate the other, but [...] they could benefit from each other through secretariat interactions” (ENB 1999). Hence, the official decision on collaboration with other conventions and international bodies at COP 3 requested the UNCCD Executive Secretary to cooperate with the executive secretaries of other conventions to facilitate the exchange of scientific and technical information (ibid).

The efforts for enhancing cooperation solidified at workshops on the “Commitments” (Article 4) under the UNFCCC, where a delegate from the Netherlands expressed the need to further coordinate with the Desertification and Biodiversity Conventions in a rather distinct manner. He stated that “the period following a disaster should be used as a window of opportunity to promote the integration of climate change policies [...] and raise awareness” (ENB 2000).

The Establishment of a Joint Liaison Group

Initiated through an a proposal on a “liaison group” by the CBDs SBSTTA, the UNFCCC “welcomed the proposal [...] on potential areas of collaboration and coordinated action between the CBD and the UNFCCC. It encouraged parties to promote the involvement of climate change expertise [and explore] interlinkages between climate change and biological diversity” (UNFCCC/SBST 2001). Since the proposal by the CBDs SBSTA initially turned towards the climate regime only, the Secretariat of the UNFCCC requested to “invite the Secretariat of the United Nations Convention to Combat Desertification to participate in this liaison group” (ibid). As a result, the Rio Conventions established the so-called Joint Liaison Group (JLG) in 2001: a key development in advancing institutional cooperation among the climate, biodiversity and desertification regimes. In terms of its structure, the JLG was designed to encompass the Executive Secretaries of each Convention, along with officers of their subsidiary bodies and other relevant staff members. In addition, officers of the IPCC as well as representatives of other relevant instruments and bodies were invited to join sessions “as appropriate” (ibid). Regarding its meetings, a set periodicity was not initially specified. Based on a rotating chair-principle, it was decided that each session would be organized and hosted by one of the Rio Conventions’ secretariats. At the UN, the JLG received recognition by the General Assembly, which encouraged cooperation “to promote complementarities among the three Secretariats while respecting their independent legal status” (UNGA 2003).

As a first objective, the SBSTA of the Climate Convention requested the JLG at COP 7 in 2001 to collect information on the work programs and operations of the three Conventions and, in addition, proposed a joint workshop, which should be held within the next year (ENB 2001). Furthermore, the IPCC reported on the development of a technical paper on interlinkages between climate change, biodiversity, and desertification. In a later response, the CBD welcomed “further the establishment of the joint liaison group among the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification and the Convention on Biological Diversity and [urged] the joint liaison group to become fully operational in order to facilitate cooperation between the conventions“ (CBD 2002).

In the aftermath of the *World Environment Summit on Sustainable Development* in 2002, the UNFCCC Executive Secretary Joke Waller-Hunter reaffirmed the importance of sustainable development on the international agenda. In this respect, she mentioned the “enhancement of synergies between the CBD, UNCCD and UNFCCC as a highlight for sustainable development” at the opening for the COP 8 plenary (ENB 2002). Also at COP 8, the UNFCCC Secretariat presented a scoping paper on cross-cutting thematic areas under the UNFCCC, CBD, and UNCCD. However, the parties did not agree on the terms of reference for a joint workshop on this matter (ibid).

Summary

Above all, the period from 1997 to 2002 indicates an overall cooperative relationship with synergistic tendencies between the three Rio Conventions. Although the conflict sparked by the Kyoto Protocol could not be resolved yet, the Conventions took a significant step towards future mitigation of conflicts by establishing the JLG. In this context, the parties to the Conventions managed to “turn the tide,” as to committing to coordinate and cooperate through their secretariats on issues of common interest. Besides its function to explore and enhance synergies among the Conventions, the JLG had not been equipped with a clear mandate. First requests by the UNFCCC COP and SBSTA to collect information on potential work programs, joint operations, cross-cutting thematic areas, and the development of a potential workshop outline first steps towards the JLGs potential role and function in the future. Due to its status as a permanent institution, the JLG furthermore denotes synergistic elements in the relationship between the Rio Conventions. With the endorsement from all Conventions including the UNGA, the JLG has mutual recognition by all relevant actors at a horizontal level. The strong initiative actions taken by the UNFCCC towards inter-institutional coordination and a liaison group also seems remarkable. In that sense, the emergence of the JLG adheres to, and to some extent restores the “spirit of partnership” between the Conventions.

4.3. 2002-2007: Searching for Common Ground

UNFCCC COP and SBSTA Meetings

The UNFCCC's COP 9 at Milan in 2003 was attended by delegates from both the CBD and UNCCD. A representative of the Biodiversity Convention reported on key findings of its SBSTA and ad hoc subsidiary bodies on biological diversity and climate change. An official from the desertification regime stated a recent decision of the parties that encouraged the JLG to identify further areas for joint activities, for instance a joint approach on forests. Moreover, the EU announced a forthcoming workshop co-organized by the CCD and CBD on identifying and promoting synergies through forest and forest ecosystems (ENB 2003a). COP 9 was also chosen to host the nineteenth meeting of the SBSTA. In the concluding report of the meeting, members noted the distinct mandates and independent status of each Convention and reiterated the importance of promoting synergies "at the national and local levels where implementation of the various conventions occurs, recognizing that this can lead to increased efficiency and can help avoid duplication, and encouraged Parties to strive for coherence in the implementation of the conventions" (UNFCCC/SBSTA 2003).

Workshops on Synergies, Cooperation, and Forests

At the UNFCCC *Workshop on Synergies and Cooperation with other Conventions* in 2003, attending parties and organizations, including delegates from the CBD and UNCCD, elaborated on further options for cooperation amongst the Rio Conventions. Under the central question of what principles should guide efforts to achieve synergies, the participants identified sustainable development as an overall guiding principle, together with transparency, subsidiarity, and efficient resource use. On operational principles, the delegates agreed on capacity building, compliance, coherence, and coordination. Moreover, the need to adopt an "ecosystem approach" - a conservation and sustainability strategy for management of land, water, and living resources - avoidance of duplication of activities, and guarantee of the environmental integrity of the Rio Conventions while maintaining legal distinctiveness, were some of the talking points highlighted in the discussion. Creating synergies should thereby further contribute to the efficient and effective implementation of all three Conventions. In this regard, participants noticed that opportunities for synergies primarily exist at the local level and the international community should, therefore, augment national-level awareness and capacity. In a follow-up debate on options and practical ways to achieve such synergies, the delegates underscored the importance of incentives to focus on the long-term goals of the Rio Conventions, opposed to more immediate objectives. In addition, they agreed that creating synergies at different levels of international, national, regional, and local require different approaches. At last, the parties recognized the need for improvements in donor

funding, the development of strong legal frameworks, building political will, and raising awareness as important features for successful future cooperation between the Rio Conventions (ENB 2003b).

In 2004, the UNCCCD, together with the CBD, organized a thematic *Workshop on Forests and Forest Ecosystems: Promoting Synergy in the Implementation of the Three Rio Conventions* in cooperation with the UNFCCC. The primary objective of the workshop was to encourage implementation of specific actions within the complex sector of forestry. Primarily, the participants concentrated on actions targeting the local level of forest ecosystems, forest use, and conservation, to further develop synergistic processes within this interface. After various presentations, case studies, and workshops on the topics of synergy potential through forest landscape management and soil conservation, ecosystem services and poverty reduction, the Secretariats released a list of the assessed issues of common concern to all three Conventions. While a “high potential for synergy” was identified on goals such as the protection, recovery, and restoration of forest biodiversity, a potential area of “negative synergy” was conjectured in the reduction of threats and mitigation of threatening processes on forest biodiversity, with the UNFCCC as the only party to not consent. According to the CBD objective on this goal, delegates called for the enhancement of information and knowledge in respect to the impacts of invasive alien species on forest ecosystems and adjacent ecosystems (UNCCD 2004).

A Sequel to the Workshops: CRIC and UNCCD COP Meetings

At the third session of the CRIC in 2005, the parties debated the linkages and synergies with other environmental conventions at length, particularly in respect to the three Rio Conventions. Africa, for example, called for the integration of *National Coordination Bodies* to improve efficiency and proper functioning of the Rio Conventions. Gambia suggested joint implementation procedures for the UNCCD, UNFCCC, and CBD, including specific action programs. On the topic of adaptation to climate change, France stressed the need for a collective system for sharing information and data, which can be used for the development of early warning systems. Adding to this proposition, Canada favored further harmonization of the reporting activities and the development of an information system as *central* to achieving synergies. Algeria claimed that synergies among the three Rio Conventions had not been achieved in Africa, stressing the need for further research on synergies and the potential prospects of future projects. El Salvador highlighted water as a key issue of common interest of the Rio Conventions, which, according to their delegate, seemed underrepresented in the discussions. The EU emphasized the need for stronger recognition of desertification as a cross-cutting issue, which, if coordination amongst the Conventions could be improved, would likely bring together different stakeholders. Argentina and Tanzania pointed out that synergies between the climate, biodiversity, and desertification regimes should be considered

from the viewpoint of specific objectives and within the mandate and responsibilities of the focal points of the Conventions. Cuba, on the contrary, expressed the need for a broader stance on synergies, addressing, for example, global issues such as poverty, food security, sustainable use of natural resources, as well as the ramifications of pollution and climate change. In response to the debate, the Secretariat listed present activities of the Rio Conventions to enhance synergies, including the JLG, a joint work program, an action paper on common activities, and the workshop on forests. (ENB 2005). Prior to UNCCDs COP 7 in 2005, the delegates reviewed the outcomes of the *Workshop on Forests and Forest Ecosystems: Promoting Synergy in the Implementation of the Three Rio Conventions*, without reaching a decision on this matter. In its final decision, again, the COP committed to promoting synergy between the Rio Conventions and suggested a synergetic approach towards sustainable forest management (UNCCD 2005).

Joint Liaison Group Meetings

At its fourth meeting in 2004, the Joint Liaison Group identified three issues as priorities for future discussion and joint collaboration: *adaption*, *capacity building*, and *technology transfer*. The Chair of this JLG meeting once again stressed the interconnectedness of the three Conventions and the need for cooperation and synergies in order to achieve the overall objectives. Regarding *adaption*, the JLG recognized important opportunities for synergy, but “these will not be realized through *business as usual*” (JLG 2004). This includes a common understanding of the terminology related to adaption, a review of funding needs, the incorporation of existing strategy plans for realizing synergies, such as the *Ecosystem Approach*, or the *Poverty Reduction Plan Strategy* for example, and promoting synergies through *National Adaption Programmes of Action*. Moreover, the JLG recognized *capacity building* to have to be country-driven and to meet the specific needs of all three Conventions. Existing capacity building frameworks should be reviewed and analyzed for mutual learning and a strategic approach to this identified priority. On the topic of *technology transfer*, the group agreed on the need for additional financial resources, training activities, and a technical scoping study on adaption technologies. Furthermore, the Secretariats conveyed a statement on the status of ongoing collaborative activities within the JLG. These activities included common approaches on the abovementioned topics of *adaption*, *technology transfer* and *capacity building*, but also joint activities on information, education, awareness, research, and systematic observation. The realization of the approaches featured a possible development of a joint informational strategy, an online portal for accessing national communications and reports, and a web-based joint-calendar. There were plans for future workshops and expressed desire to explore the possibility of exchanging staff among the convention secretariats - in order to promote collaboration and contribute to staff development (JLG 2004).

Following a reviewed action paper for enhanced cooperation among the three Rio Conventions

submitted to its Secretariats by the FCCCs SBSTA in 2007, the JLG discussed a number of next steps and main areas for future collaboration at its seventh meeting in Bonn 2007. These steps revolved around two central issues: *reducing deforestation* and *adaption to climate change*. In relation to *reduction of deforestation*, the JLG attributed deforestation and its implications for climate change, biodiversity, and desertification as “the core of the environmental problems being addressed by the Rio Conventions” (JLG 2007a). As stated in the summary report, an improved management of the world’s forests could provide opportunities for concrete cooperation amongst the Conventions, for example, through the development of management tools. As a first step towards closer collaboration on the topic of deforestation, the JLG agreed to draft an information note on the links between forests and the objectives of the Conventions. On the issue of *adaption to climate change*, the JLG recognized the importance of assisting countries to improve their understanding, assessment, and actions in respect to the impacts, vulnerability, and adaption on climate change consolidated under the FCCCs *Nairobi work programme on impacts, vulnerability and adaption to climate change*. In addition, the delegates agreed to exploring opportunities under the program for both the CBD and UNCCD. In response, the JLG also agreed to draft an informational note on adaption activities, plans, and programs adopted within the framework of each Convention. Further undertakings of the JLG included progress on the interoperability of databases, a joint calendar, and enhanced communications strategies. Moreover, the delegates suggested the JLG as a space hold exhibits during major environmental events, including the COPs of each Convention (ibid).

The same year at the eighth meeting in 2007, the JLGs laid its main focus on the analysis of activities for cooperation among the Secretariats. Thereby, the group of participants compiled a list of (a) activities that were already going on and did not require further action at that point and (b) priority activities that the Secretariats could start implementing in the short term. The first type of activities included sharing of information and experience among staff members, especially with respect to relevant discussions and decisions on synergetic activities or programs, and continuation on inputs and views on forest issues and adaption. In turn, priority activities included drafting and distributing of an annual newsletter on synergies between the Conventions, setting up a web page on synergies in order to ensure parties are kept informed of relevant activities, and, at last, collaborating on the development of educational materials and developing joint web based communication tools (JLG 2007b).

Summary

The debates revolving around the JLG and achieving further synergies between the Rio Conventions highlight the fact that equilateral agreement on specific tasks and functions of such inter-institutional collaboration had not yet been reached at the end of the period from 2002 to

2007. In particular, the CRIC 3 meeting of the UNCCD and both workshops on *Synergies and Cooperation with other Conventions* and *Forests and Forest Ecosystems* reveal the pluralism of interests and ideas of all relevant actors, especially the parties, regarding the areas of overlap of the Rio Conventions. Although exploring “synergies” is repeatedly stated as a common goal, the path to *actually* achieving synergies seems a long way. Interestingly enough, the meetings of the Secretariats within the JLG group convey a different picture. Despite the lack of a clear mandate, the delegates intensify cooperation. This is evident from the agreement over priorities within the institution, its role as a mediator to the Conventions on the topic of forests and adaptation, and the exploration of future options for collaboration between the Secretariats. Although the efforts undertaken within the JLG point towards a more synergetic relationship between the Secretariats, in sum, the relationship between the three Conventions can be best described as cooperative within the 2002 to 2007 period. Taking the abovementioned developments into account, the “search for common ground,” in terms of conjunct objectives of the three Conventions, especially in respect to finding adequate solutions for topics of mutual interest, such as forest management, as well as a clear mandate of the JLG carries on.

4.4. 2007-2012: Setting a Course

Different Positions: the Perception of the JLG Under Each Convention

At the ninth meeting of the JLG in 2009, Mr. Ahmed Djoghlaif, Executive Secretary of the CBD, made aware of the “unique opportunity to exchange information” prior to the CBD COP 10 and UNCCD COP 9 meetings to be held the same year (JLG 2009). Central to the meeting was the debate on the coordination of a roster of experts of the Conventions and, as a matter of prudence, how the JLG can best be positioned to respond to the different expectations under each Convention. On a roster of experts, the delegates agreed to discuss technical options for sharing expert information. Although a joint roster of experts was regarded as difficult to develop, the participants agreed to refine search criteria that could render such rosters in a way that sharing of relevant information between technical staff and the respective secretariats could be improved. Regarding the implementation of specific decisions, documents provided by the CBD Secretariat showed that processes under both the UNCCD and CBD, as well as the UNFCCC and CDB had adopted specific procedures concerning matters of reporting, science, and technology. In this respect, the JLG noted a disconnect between its given roles and mandates by each Convention, with this disconnect resulting in limitations when it comes to implementation of requests. According to the report of the meeting, “only activities that are mandated by *all the governing bodies of each convention* could be effectively implemented by the JLG (emphasis added)” (ibid). As one possible option to address this issue, the JLG weighed the possibility to include relevant subsidiary bodies under each Convention for advice and input (ibid).

At CBDs COP 10 later the same year, many delegates welcomed enhanced cooperation between the Rio Conventions. In the final decision on cooperation with other conventions, the COP requested the Secretariat to prepare proposals to strengthen the effectiveness and linkages of the JLG and noted the substantial benefits to be gained from the coherent implementation of the three Rio Conventions. Furthermore, the parties requested its *Working Group on Review of Implementation* to determine form and content of a process that aims to enhance coordination, coherence and national level synergies among the cooperating Conventions (CBD 2009). The parties to the UNCCD decided at COP 9 in 2009 to further coordinate with the Secretariats of the UNFCCC and CBD, in order to harmonize and facilitate parties' reporting requirements through the JLG. The call by the JLG to align the overall mandate given by each of the three Rio Conventions was not acknowledged by either COP 10 of the CBD or COP 9 of the UNCCD at that point.

A Subsequent JLG Meeting and the Establishment of the Rio Conventions Pavilion

According to the opening remarks of the Executive Secretary of the CBD, Mr. Ahmed Djoghlaif, at the tenth meeting of the JLG in 2010, a meeting with the UN Secretary General revealed the importance of the three Rio Conventions to all countries. He further informed the participants that enhanced collaboration of the Rio Conventions “is at the top of many agendas and [...] a number of countries have expressed support for a joint work programme or action plan” (JLG 2010). By congratulating Christina Figueres, the newly elected UNFCCC Executive Secretary, Djoghlaif moreover depicted the JLG as a “vehicle for further collaboration” for the three Conventions (ibid). With the support from several parties of the CBD, Djoghlaif then proposed of an extraordinary meeting of the Rio Convention *Conferences of Parties*, in order to move collaborative activities forward in a “transparent manner with clearly defined objectives and expected outcomes” (ibid). In response, Ms. Figueres expressed concerns about the proposal and reminded the participants that the mandate of the UNFCCC Secretariat is focused on “servicing negotiations [,] not in supporting implementation” (ibid). Further points on the agenda were the planning and development of joint exhibitions and meetings at the upcoming events, such as the UNFCCC COP in Cancun, and preparations for the *Rio+20 Earth Summit* in 2012. At last, the participants noted that focusing on specific topics may move the “synergies agenda” of the JLG forward. Further development of specific *National Adaption Plans*, *National Adaption Programmes of Action*, and *National Biodiversity Strategies and Action Plans* were proposed as options to promote such synergies (ibid). Moreover, the Rio Conventions' secretariats agreed to establish a so-called Rio Conventions Pavilion (RCP), a platform used for raising awareness, highlighting issues of common interest, and sharing information between the Rio Conventions' secretariats, in order to further explore linkages between biodiversity, climate change, and sustainable land management. Funded by the *European Commission*, the *United Nations Development Programme*, *Local Governments for Sustainability*,

UNEP and several national and regional governments, the Pavilion was intended to provide a space for exchange amongst delegates, representatives from non-governmental organizations, and business and civil society, in respect to discussing solutions and approaches to the challenges of enhancing national synergies between the Rio Conventions. In his remarks at the opening session of the RCP, CBD Executive Secretary Mr. Ahmed Djoghlafl recognized the Pavilion as “a key outreach tool” for achieving the Conventions’ objectives (Djoghlafl 2010). Mr. Luc Gnacadja, Executive Secretary of the UNCCD, noted that the Pavilion reflects the “long-standing collaborative relationship among the three Rio Conventions on biodiversity, climate change, and desertification,” and “showcases the potential for synergy on one dimension – awareness raising, information sharing and outreach” (Gnacadja 2010).

COPs of the UNFCCC and UNCCD

At UNFCCC’s Climate Change Conference in Cancun at the end of 2010, the COP formally adopted REDD+, a mechanism, which aims at mitigating climate change through the reduction of greenhouse gases through enhanced forest management in developing countries. Regarding the conservation of biodiversity and the reproach of incentives towards ‘unsustainable’ afforestation under the Kyoto Protocol, the parties affirmed in decision 1/CP.16 that the implementation of REDD+ should be “consistent with the conservation of natural forest and biological diversity,” including the avoidance of the “conversion of natural forests” (UNFCCC 2010). Instead, the mechanism should “incentivize the protection and conservation of natural forests and their ecosystem services and [...] enhance other social and environmental benefits (ibid).

At the UNFCCC Bonn Climate Change Conference in 2011, the parties took note of the CBD Secretariat’s proposal for a joint meeting of the three Rio Conventions, but no further decision was reached on this matter (ENB 2011a).

At the UNCCD COP 10 in 2011, the Secretariat introduced documents on enhanced scientific cooperation and knowledge exchange between the CST and the scientific subsidiary bodies of the Climate and Biodiversity Conventions. Although some countries recognized the importance of improving cooperation on this matter, other countries stressed the need to ensure that the UNCCD’s activities remain primarily focused on its own objectives. In conclusion, no agreement was reached on this item (ENB 2011b).

A Mandate for the JLG

At the eleventh meeting of the JLG in 2011, the three Secretariats and their delegates discussed a number of issues, including a rehearsal on the purpose and function of the JLG as well as significant interrelated themes. At the opening of the session, CBD Executive Secretary Mr. Ahmed Djoghlafl shared his views on the “full engagement that parties have envisaged for the JLG and the

great progress [that has been made] over the past years on coordinated approaches” (JLG 2011a). In the subsequent debate on the purpose of the JLG, Ms. Figueres remarked the need to define a “common framework, common purpose and guiding principles” for the JLG (ibid.). She then outlined five principles as potential cornerstones for a common framework. She thereby argued that the “JLG is not an implementation body” (ibid). According to her view, its purpose is to exchange information and aim to support the parties - primarily by addressing the Conventions’ objectives at the national level, as “it is at the national level where synergies can best be implemented” (ibid). Moreover, she noted the need for “fundamental respect for the existing differences in the modus operandi among the Conventions secretariats,” which could be expressed by respecting the different mandates given to the secretariats (ibid). In addition, she advocated decreasing the level of bureaucracy at the secretariats, reducing transaction costs among the Conventions, and aiming at collaboration through actions that “need to be realistic in terms of time implications and funding” as significant functions for a JLG framework (ibid). Both Executive Secretaries from the CBD and UNCCD endorsed the principles spelled out by Ms. Figueres. Mr. Djoghlaif agreed to the JLG not being an “implementing body, not the representative, and not a substitute to the Parties,” nevertheless adding that the JLG, in his view, may “provide advice to governments [...] by highlighting progress in the implementation of the conventions” (ibid). In response, Mr. Gnacadja, who indicated his agreement, proposed the development of such framework “in a cooperative fashion among the three secretariats “ (ibid).

Furthermore, Ms. Figueres called for cooperation on the topic of *gender* through a joint political commitment, thematic workshops and events. The delegates agreed to gender being an important future focal point of the three Conventions and approved the development of a work plan and publication on this issue. In a later discussion, a member of the UNCCD Secretariat proposed further joint publications on issues such as forests and adaption under the Rio Conventions.

On the topic of preparations for the *Rio+20 Earth Summit*, Mr. Djoghlaif recalled his proposal for a simultaneous “Extra-Ordinary Meeting of the Conferences of the Parties” at the event. In response, Ms. Figueres argued that the proposal to organize such meeting was “not realistic, [...] since the mandate and procedures of the Bureaus [of the Conventions] are very particular and differ from Convention to Convention, with the UNFCCC Bureau having a focus largely on procedural issues” (ibid).

At a debate on potential exchanges between the scientific subsidiary bodies of the Conventions, which was based on documentation prepared by the UNCCD Secretariat, Ms. Rocio Lichte of the UNFCCC supported collaborative efforts, but suggested avoiding “involving institutional structures or creating additional mechanisms, thereby keeping the low level of bureaucracy” (ibid). As a result, the delegates agreed on taking an issue-based approach as a basis for cooperation on

scientific matters, instead of placing institutional cooperation as a premise (ibid).

At last, the CBD Secretariat put forward a joint workshop proposal on synergies in the area of technology, adaptation to climate change, sustainable land management, and conservation and sustainable use of biodiversity. The JLG welcomed the proposal (ibid).

In sequel to the meeting, the Rio Conventions' secretariats drafted a framework on the terms of reference and modus operandi for the JLG the same year. The proposed mandate encompassed the aim to enhance coordination between the Conventions, including the exchange of relevant information on work programs and operations, and explore opportunities for further cooperation, along with a joint work plan (JLG 2011b). The five guiding principles proposed by Ms. Figueres at the JLG meeting in 2011 were largely adopted with minor changes in wording. Moreover, prioritized areas of activity for the JLG included sharing information and raising awareness, providing information on interlinkages, developing technical papers to clarify and elaborate on specific policy and technical issues, contributing to relevant workshops mandated by pertinent bodies under each Convention, and encouraging and promoting better coordination among national focal points and stakeholder groups. Regarding future meetings, the JLG now agreed to ordinary meetings taking place "at least once a year" (ibid).

Joint Publications Under the Rio Conventions

On the occasion of the *Rio+20* Conference in 2012, the Rio Conventions issued three significant joint publications: *Rio Conventions – Action on Adaptation*, *Rio Conventions – Action on Forests*, and *Rio Conventions - Action on Gender*. As their titles suggest, these three publications aim at a collaborative approach on *adaptation*, *forests* and *gender*, as these topics were identified as being of mutual interest to the Conventions. All publications are structured similarly, introducing general information on the topic and the work of the JLG first, then illustrating each Conventions' contribution and interest on the topic, and summarizing key challenges and main opportunities for synergies among the Rio Conventions. On the subject of forests, the UNFCCC states that its afforestation and reforestation projects "support sustainable development and benefit biodiversity and environmental conservation" (CBD, UNCCD and UNFCCC 2012: 8). As to the UNFCCC's REDD+ mechanism, actions on forests "are to be consistent with conservation of natural forests and biological diversity and are to incentivize the protection and conservation of natural forests and their ecosystem services" (ibid).

Summary

In summary, the period from 2007 to 2012 signals an overall cooperative relationship between the three Rio Conventions, although various interactions indicated tensions as well as synergetic

features of interrelationships. A pivotal point of institutional interaction is, once again, the JLG. Its meeting in 2009 revealed a disconnect between its given roles and mandates under each Convention, highlighting different understandings about the exact role and function of the group. While the parties to both the CBD and UNCCD recognized the need to strengthen the overall effectiveness of the JLG at their COP meetings in 2009, agreement over the harmonization of its overall mandate could not be reached yet. Moreover, a subsequent JLG meeting in 2010 highlighted not only the different understandings about the group's purpose under each Convention but even disclosed discrepancies between the mandates of the Rio Conventions' secretariats themselves. While the Secretariats of the CBD and UNCCD actively pushed towards a special meeting of the COPs in order to move collaborative activities forward, the UNFCCC Secretariat reminded its counterparts of its obligation to only service negotiations and focus on procedural issues, not support, and thereby potentially influence any form of implementation. Whether instructed by the parties to the UNFCCC or not, the UNFCCC Secretariat thereafter proactively introduced a common framework and guiding principles for the JLG, which were equally endorsed by the other Rio Conventions' secretariats, with the exception of CBD Executive Secretary Mr. Ahmed Djoghlaif, who came out in favor for the JLG to pursue a more active role in providing advice to governments by highlighting progress in the implementation of the Conventions. In addition, UNCCD Executive Secretary Mr. Luc Gnacadja proposed further collaboration between the scientific subsidiary bodies of the Rio Conventions, which the UNFCCC Secretariat supported, but also suggested avoiding the creation of new institutional structures and mechanisms.

Considerable synergetic actions within the JLG group were taken through the establishment of the RCP, a permanent platform for raising awareness and sharing information at important events, joint workshop proposals, and a collective stance on taking action on linking issues between the Conventions, such as gender, forests, and adaption, which resulted in a joint publication series.

As to the COPs, a rather passive position of the parties to all Rio Conventions towards further inter-institutional collaboration was noticeable in the period from 2007 to 2012. As indicated above, both COPs of the UNCCD and CBD failed in taking decisive action on improving the effectiveness of the JLG through enhanced coordination and coherence on national level focal points, or on aligning the parties' reporting requirements. Furthermore, the request for both an extraordinary joint COP meeting, and the proposal for enhanced scientific cooperation between the Rio Conventions was noticed by the parties at the UNFCCC and UNCCD COPs, but no further decision was adopted on these matters.

On the thus far conflicting issue of forest management, the UNFCCC managed to coordinate its policies on afforestation with the CBD through the newly implemented REDD+ mechanism. In contrast to the wording of the UNFCCC's Kyoto Protocol, REDD+ incentivizes the protection and conservation of natural forests and their ecosystem services. Although scholars, for example

Harvey, Dickson, and Kormos (2010), have warned of potential complications regarding the financial design of the mechanism, which could have negative effects on biodiversity, this development, including the drafting of an overall framework and mandate for the JLG, nonetheless, signals a “new course” for future cooperation between the Rio Conventions.

4.5. 2012-2017: Breaking New Soil?

Advancing the RCP and the Development of Joint Indicators Under the Rio Conventions

In 2013, the JLG officially adopted its framework on the terms of reference and *modus operandi*. At this session, the three Secretariats moreover discussed the future role of the RCP. Up to this point, the RCP was mainly used as a moniker for jointly organized side-events along thematic clusters at the Rio Conventions’ COPs. At the JLG meeting, CBD Executive Secretary Mr. Braulio Dias noted the RCP was a “positive endeavor,” but asked for reconsideration of the Pavilion’s future objectives. In this regard, he requested a new concept for its continuation, “including [events] *outside* the COPs of the three Conventions (emphasis added)” (JLG 2013). Mr. Luc Gnacadja, Executive Secretary of the UNCCD, agreed to a “possible expansion of the Pavilion activities” (*ibid*). On this matter, the UNCCD Secretariat suggested consultations with current and future partners, including increased private sector involvement. In conclusion, the Secretariats agreed to nominate focal points on logistics and substance for the RCP and explore possibilities, options, and formats for potential events for an RCP presence. During a short meeting of the JLG in 2014, the delegates discussed potential lines of cooperation within the JLG context for the year 2014 and 2015. In general, it was agreed that the JLG should focus on “issues where collective advances can be made while bearing in mind the respective independent legal status and mandates of the three Rio Conventions” (JLG 2014). Initiated by UNCCD Executive Secretary Ms. Monique Barbut, the JLG discussed the topic of joint environmental indicators under the three Rio Conventions. It was agreed to put forward a proposal at the succeeding COPs of each Convention for three biophysical indicators developed under the UNCCD Secretariat (*ibid*).

Heeding the JLGs call for the adoption of joint environmental indicators, the parties debated about the topic of leveraging synergies among the Rio Conventions at COP 12 of the UNCCD in 2015. In this discussion, the CBD Secretariat referred to common indicators as “low hanging fruit” for collaboration and noted that the use of such indicators could potentially reduce the reporting burden on parties (UNCCD 2015). In a final decision, the COP welcomed the initiatives undertaken by the Rio Conventions’ secretariats to develop common indicators, and, in this respect, proposed the use of three land-based progress indicators, namely *trends in land cover*, *land productivity* and *carbon stocks above and below*, for reporting under the Rio Conventions (UNCCD 2015). At the subsequent nineteenth meeting of the CBDs SBSTTA, the parties expressed approval of the

indicators and requested its Secretariat to continue to collaborate with the UNCCD on the proposed land-based progress indicators (ENB 2015).

Latest Developments Within the JLG

At the latest JLG meeting in 2016, the participants discussed potential lines of cooperation with the JLG context for 2016 and 2017. In a follow-up debate on the development of common indicators, UNCCD Executive Secretary Ms. Monique Barbut recommended the Rio Conventions' secretariats to further promote the adoption of common indicators relevant to their respective reporting process, and align these with the global indicators being developed under the *Sustainable Development Goals*. Furthermore, the delegates suggested the formation of a new permanent working group among the three Secretariats to make recommendations on issues such as national level synergies. This proposal also included the obligation of the working group to “stay updated on significant intersessional processes and to *anticipate decisions* to be taken at future COPs (emphasis added)” (JLG 2016). In this respect, Ms. Dias, Executive Secretary of the CBD, raised the issue of the RCP as an area for enhanced collaboration. Ms. Barbut added that the Pavilion “could become a more valuable tool if moved away from being a platform for information-sharing towards a more forward-looking role, *enabling pre-negotiation* of potential areas of common action (emphasis added)” (ibid).

At last, the participants of the fourteenth session of the JLG agreed to a possible joint publication on the bearing of the Rio Conventions to the *2030 Agenda for Sustainable Development*, and to work together with the IPCC for the upcoming report on climate change and land degradation (ibid).

Summary

The latest period from 2012 until today points towards an overall cooperative relationship with synergistic future tendencies between UNFCCC, CBD, and UNCCD. All relevant inter-institutional interactions were thus far initiated by the secretariats of the Rio Conventions within the JLG. This included the development of joint environmental indicators, which were approved at later meetings of the UNCCD and CBD in 2015. For potential lines of cooperation with the JLG context for 2016 and 2017, the delegates planned a reconsideration of the RCP, with the aim to elevate the platform into a more forward-looking role, thus enabling pre-negotiation of potential areas of common interest and action. In addition, the Secretariats discussed the formation of a permanent working group, which should make recommendations on issues such as national level synergies and, beyond, anticipate decisions to be taken at future COPs. Based on the decisions at and reports of the meetings of the relevant bodies of the Rio Conventions, remarkably, further collaborative

efforts, especially in respect to the COPs, were rather scarce within the respective period.

5. Assessment of the Rio Conventions' Institutional Interplay Activities

This section assesses the results of the analysis of the Rio Conventions' interplay activities. In a first step, I will summarize and arrange the results of each period in view of the conceptual assumptions and theoretical expectations formulated in the research design of this study. I will show that the relationship between the three Conventions in focus features all of the assumed types – synergistic, cooperative, and conflictive - but that the overall triadic connection is best characterized as a cooperative relationship. In a second step, I will draw an interim conclusion by revisiting some of the guiding questions of this study and by summarizing the main findings of this study.

Assessing the Analysis Within the Conceptual Framework

With the first conceptual assumption about a conflictive relationship between institutions within an institutional complex, I expected to observe conflicting norms and rules, largely unrelated decision-making procedures, and different objectives and obligations, which may result in concurrent interaction with the other institutions. Interestingly, a collision of objectives between the Rio Conventions was only noticed in the first period from 1992 to 1997, when each Convention was still at an early stage of development. The economic incentives put forward by the UNFCCC's Kyoto Protocol, which allowed for the creation of fast-growing monoculture forest plantations and its use as carbon sinks, signaled a norm conflict on the topic of forest management, as afforestation and reforestation and its potential negative repercussions on biological diversity and land quality represent an issue of common interest and policy interdependence between the three Rio Conventions. At the time, the principal objective negotiated under the Kyoto Protocol was the substantial reduction of greenhouse gas emissions, which could be advanced through increased carbon sequestration. Through the implementation of the Protocol, which followed extensive discussions over its final wording and thus suggests some degree of awareness over the potential implications of incentivizing such creations of monoculture forest plantations, the Kyoto parties acted concurrently with the CBD and UNCCD by not taking the aims of their objectives into consideration. In this regard, it should be noted that no documented instance was found, in which a contracting party to the Kyoto Protocol made use of this incentive and, as a consequence, verifiable impaired biodiversity or land quality. In that sense, scholars, such as Wolfrum and Matz (2003: 172ff), have argued that a "real" conflict between regimes will only materialize, if relevant actors implement climate mitigation measures that have visible and measurable adverse effects on biodiversity or land-degradation. In contrast, others, for example van Asselt (2014: 216), asserted that a "policy conflict *already* exists simply because the rules agreed upon by the Kyoto parties

provide [such] economic incentives.” The CBD and UNCCD’s continuous efforts in urging the UNFCCC to reconsider the counterproductive incentives under its Kyoto Protocol and align with the objectives of the other Rio Conventions and *Agenda 21*, furthermore underscore the topicality of this affair and highlight the contrary positions of the three Conventions at the time. In line with the latter assumption about an *already existing* policy conflict, and justifiably so, the subject matter of forest management reveals a conflictive relationship between the Rio Conventions in respect to the UNFCCC’s Kyoto Protocol.

In a broad sense, conflicting obligations could be observed in view of the Rio Conventions’ secretariats since the formation of the JLG in 2001. Meetings within the JLG revealed different behaviors of the Secretariats and their Executive Secretaries towards the possibilities of taking action under the given mandates. While the Secretariats of both the CBD and UNCCD frequently pushed towards taking a more active part in the implementation process of the Conventions through the work of the JLG, the UNFCCC Secretariat reminded its counterparts that this approach would breach with the obligations under its mandate, hence, taking a more passive role. Due to the duties imposed, or behavior required by the provisions of the UNFCCC, this rather passive role aligns with the thinking that the leeway of the UNFCCC Secretariat to take action can be perceived as rather limited compared with other intergovernmental treaty secretariats (e.g., Busch 2009). Although the wording of each Secretariats’ mandate has, quite similarly, restricted these actors to informational duties, and organizational and technical support to the parties of the Conventions, a considerable amount of research has pointed out how these Secretariats have yet in many cases found enough leeway to depart on an own agenda (e.g., Corell 1999; Biermann and Siebenhüner 2009; Jinnah 2014). The findings of the analysis indicate support for this position in view of the ambitions of the CBD and UNCCD Secretariats to test the boundaries of their rather vaguely formulated mandates. On this issue, no “real” conflict between the Conventions, or, more precisely, the Secretariats materialized, as the individual actors were nonetheless able to agree on terms of reference for the JLG. Further indications of conflicting objectives or obligations that constitute a conflictive relationship between the Rio Conventions was not found in the empirical analysis.

With the second conceptual assumption about a cooperative inter-institutional relationship within an institutional complex, I expected to observe institutions with largely compatible norms, rules, and decision-making procedures. In contrast to the assumption about a synergistic relationship, the institutions in focus were expected to decide and monitor policies through different institutional bodies. This assumption had strong indications in the empirical analysis, as most of the time periods analyzed showed predominantly features of a cooperative relationship between the Rio Conventions. Foremost, although the Conventions have substantial environmental and political linkages and analog decision-making procedures due to their similar institutional design as UN Conventions, climate change, biodiversity, and desertification have been continued to be

addressed through separate regimes. In addition, within the past 25 years of coexistence, the Conventions' threefold institutional design, including the COPs, Secretariats and scientific subsidiary bodies, remained principally unchanged. Cooperation between the UNFCCC, the CBD, and UNCCD has been primarily pursued within these separate bodies under the common identity as Rio Conventions. Efforts to increase coordination and collaboration began in earnest following the adoption of the Kyoto Protocol in 1997, which for the first time revealed the potential of cooperation on issues of mutual interest between them. Since then, all three Conventions and their institutional bodies have become active in promoting and initiating cooperation with their counterparts. The UNFCCC, for example, welcomed a proposal initiated by the CBD to enhance cooperation and proposed the formation of the JLG, including not only the CBD and UNFCCC but all three Rio Conventions. Further cooperative efforts included a scoping paper on cross-cutting thematic areas under all Conventions in 2002 and the initiation of a *Workshop on Synergies and Cooperation with other Conventions* in 2003. Despite these efforts, the parties repeatedly noted the distinct mandates and independent status of each Convention. Whereas the adoption of the FCCC's REDD+ mechanism in 2010, to some extent, eased the tensions between the institutions by incentivizing the protection and conservation of natural forests, this decision underlined that policies are best to be implemented cooperatively, within each individual Convention. Moreover, the UNFCCC took a rather reactive than proactive position on cooperation with other conventions, and, in general, responded to initiatives, rather than instigating them itself. This is, among other instances, best visible through the rather reluctant stance of the parties to the UNFCCC, including its Secretariat, on the matter of a joint meeting of the main decision-making bodies of the Rio Conventions.

The CBD, for its part, abode by its terms to cooperate, as far as possible and where appropriate, with other contracting parties and institutions on matters of mutual interest. Already in 1998, shortly after the implementation of the Kyoto Protocol, the parties to the CBD recognized the need to strengthen relationships with the other Rio Conventions and make implementation activities and institutional arrangements mutually supportive. Furthermore, the CBD was the first of the Rio Conventions to propose the formation of a special platform for adequately addressing areas of cooperation and future synergies, which later resulted in the establishment of the JLG. Next to the parties of the CBD, its Secretariat has been recognizably active in promoting cooperation with the other Conventions' Secretariats, by taking a stance on the harmonization of reporting matters, a joint work program, or the proposal for an extraordinary meeting of the parties to each Convention.

As to the UNCCD, the only Convention that explicitly mentions institutional cooperation with the other Rio Conventions in its final convention text, its efforts to foster coordination and collaboration with other conventions can be compared to those undertaken by the CBD. In 1998, prior to the proposal for a liaison group, the UNCCD recognized the potential benefit from coordinating the

different secretariats. Moreover, in 2004, the UNCCD organized a *Workshop on Forests and Forest Ecosystems*, to reach agreement on the rather contentious subject of forest management. In addition, the UNCCD Secretariat has been similarly active in promoting coordination. This is evident through the proposal and preparation of various joint publications on issues of mutual interest, as well as the development of joint environmental indicators.

In consideration of the many examples mentioned in the analysis and assessment above, the assumption about a cooperative relationship between the Rio Conventions has the strongest indications of the three conjectured types of inter-institutional relationships.

As to the third conceptual assumption about a synergistic relationship within an institutional complex, I expected to observe institutions with compatible norms and rules, which coordinate their activities on a horizontal level and have conjunct decision-making procedures integrated into their institutional design, in order to jointly manage their governance domain. Moreover, I expected to observe the emergence of permanent institutional bodies as a result of such type of synergistic relationship. This assumption was found to have several indications in the analysis of the Rio Conventions' interplay activities. First and foremost, in the aftermath of the Kyoto Protocol in 2001, the establishment of the JLG as a permanent institutional body can be seen as a strong signal for a synergistic relationship between the Conventions. In this regard, the parties took a crucial step towards future mitigation of conflicts by liaising their respective secretariats in pursuit of exploring possibilities for cooperation and potential synergies, in particular with a focus on joint implementation at a national level. In spite of the fact that the parties to each Convention continually stated the importance of enhancing linkage management over the years, the willingness to *sincerely* advance in these endeavors has been relatively weak. This becomes apparent in the parties' reluctance for joint meetings of the Conventions, their unwillingness to provide necessary input to the JLG, or the disregard of a high number of inquiries and proposals put forward by the Secretariats or subsidiary bodies of the Conventions. In sum, these behaviors, including the recurrent calls for distinct mandates and the independent status of each Convention, suggest that the parties have an overall restrained stance towards *joint* management of their governance domain. Conversely, the work of the Rio Conventions' secretariats, particularly within the context of the JLG, paints a different picture at large. Regardless of the lack of congruency regarding their mandates, these agencies have intensified their cooperative efforts over time. This is evident from a number of cases: first, the Secretariats attended and participated in important events of each Convention, such as the COPs for example. Second, by providing in-depth information in the form of scoping papers and issuing a number of joint publications, these agencies have considerably advanced in their role as mediators to the Conventions on matters of common interest. Third, the Secretariats attempted to streamline scientific assessment through the development of joint environmental indicators, or the proposal of enhanced cooperation between

the scientific and technical subsidiary bodies of each Convention. Moreover, the Secretariats have more recently pushed towards a more active role, especially in areas of awareness-raising and decision-making. Since 2010, for example, the formation of the RCP as a permanent platform for sharing information and discussing solutions and approaches to the challenges of enhancing national synergies among important stakeholders has been a crucial tool for outreach and raising awareness. As for decision-making, there are recent proposals for a new working group. The group would make recommendations for synergies and anticipate decisions to be taken at future COPs, as well as consider enabling pre-negotiation on potential areas of common action at the RCP. The creation of such group would underline the Secretariats' endeavor to engage in institutional management not only within the boundaries of their mandates (i.e. servicing negotiations), but also at higher levels of decision-making.

In conclusion, although an overall synergistic relationship between the Rio Conventions cannot be observed since, at this stage, the Secretariats are largely dependent on their given mandates and in consideration of the parties' reluctance to liaise the Conventions on levels of decision-making, it seems possible that the extensive efforts of the Secretariats could maneuver the Conventions towards such a relationship in the future.

Interim Conclusion: Research Questions and Summary of the Main Findings

Through the analysis and assessment, this study aimed to answer the following guiding research questions: *to what extent and with what means do the three Rio Conventions engage in horizontal institutional interplay? From their genesis at the Earth Summit in 1992 until today: how can the relationship between the Conventions be characterized?* In the following paragraph, I will revisit these two questions by summarizing the main findings of this research. Afterwards, I will briefly point towards potential implications and limitations and, at last, answer the question of *how future interactions between the Rio Conventions might develop* in the concluding section of this study.

On the whole, horizontal interaction between the Rio Conventions has increased within the past 25 years. Interplay activities since the *Earth Summit in 1992* throughout the decade were rather low, as institutional interlinkages between the three regimes have emerged mainly in the implementation stages of the Kyoto Protocol. As a reaction to the policy conflict revolving around the common interest of forestry on the one hand, and the endeavor to generally enhance cooperation and seek synergies between the Rio Conventions on the other hand, interplay activities increased at the turn of the century. Since then, the Rio Conventions have primarily been engaged in cooperative relations, while deciding and monitoring policies through separate institutional bodies. The encounters of these institutional bodies, namely the COPs, Secretariats, and subsidiary bodies, have thereby been the primary way of engagement between the

Conventions. To date, the three regimes have largely compatible norms and rules. Although issues of common interest, as well as incompatible duties of the different institutional bodies of each Convention have yielded potential for conflict, further indications denoting a conflictive relationship are overall weak. Elements of a synergistic relationship could be observed through the establishment of a permanent institutional body among the Secretariats, the JLG, which was delegated to enhance collaboration and synergies between the Rio Conventions, especially regarding implementation at a national level. Moreover, the Secretariats have continuously pushed towards a more active role in areas of awareness-raising (e.g., the establishment of the RCP), decision-making (e.g., proposals for a working group to anticipate COP decisions; enabling pre-negotiation at the RCP) and, more generally, institutional management *per se*. These constant efforts of the Secretariats could be interpreted as first stirrings of an overall more synergistic relationship between the Conventions in the future. On the contrary, although the parties to the Conventions have reinforced the importance of institutional management, in their view, distinct mandates and the independent status of each Convention remain imperative. Taking the developments mentioned above into account, at present, an overall cooperative relationship between the Rio Conventions seems most plausible. Table 2 provides an overview of the main findings identified through the empirical analysis and the assessment undertaken in section 4 and 5 of this study.

Table 2 Main findings from the analysis of the Rio Conventions' interplay activities

<i>Conceptual assumptions</i>	<i>Main findings</i>
Conflictive relationship	Overall weak indication. Issues of common interest (e.g., forestry) and incompatible duties across the different institutional bodies (e.g., the mandates of the Secretariats of the Rio Conventions) have yielded potential for inter-institutional conflict
Cooperative relationship	Overall strong indication. At large, the Rio Conventions have compatible norms and rules, and they decide and monitor policies through separate institutional bodies (i.e., the COPs, Secretariats and subsidiary bodies). Although the parties to the Conventions have reinforced the importance of institutional management, in their view, distinct mandates and the independent status of each Convention remain imperative
Synergetic relationship	Relative indication. The establishment of the JLG as a

permanent institutional body and the continuous joint efforts of the Rio Conventions' secretariats regarding joint management denote signs of a synergistic relationship, which could potentially intensify in the future

6. Conclusions

6.1. Implications and Limitations of the Study

Implications of the Study

As is reflected by in the many reports and decisions on cooperation and enhanced synergies of the parties to each of the Rio Conventions examined in this study alone, states seem to continue to reinforce the importance of institutional management in areas of jurisdictional overlap and, to some extent, demonstrate willingness to take rather small steps forward. However, as Jinnah (2014: 186) notes, active and organized management of overlapping regimes is a relatively new phenomenon in international affairs. For that reason, interlinkage management efforts of the parties to the Rio Conventions have yielded little effect thus far. One possible reason for this could be the fact that memberships of the parties and mandates under each Convention are not *completely* congruent, thereby limiting any efforts made by actors in one regime to influence rule development in another. For example, although being a contracting party to both the UNFCCC and UNCCD, the United States has not ratified the CBD yet. Another possible reason could be that states are lacking experience and expertise in the area of interplay management thus far. As a consequence of the increasingly synergistic relationship between the Conventions' Secretariats, this study implies that, in return, there could be a potential window of opportunity for these actors to explore how to best govern situations of overlap within the institutional complex. In practice, this would require the parties to each Convention to reconsider the mandates of the Secretariats and potentially also the JLG, which will likely enhance their influence and ability of decision-making. Up to this point, it has depended on the willingness and efforts of mainly individuals, such as the CBD and UNCCD Executive Secretaries Mr. Ahmed Djoghlaif, Mr. Luc Gnacadja, Ms. Monique Barbut and their staff, to subtly influence the course of the Conventions, especially with regard to higher levels of decision-making. In this respect, scholars have depicted the Secretariats to influence states on policies from behind a "veil of legitimacy," that is, staying behind the curtains of decision-making and steering political negotiations indirectly without necessarily taking credit for their engagement (Depledge 2007). In sum, the analysis and assessment of the Rio Conventions' interplay activities suggest that there is a high potential for the Secretariats to further advance in interlinkage

management. In this context, this study has not only contributed to the literature on institutional interplay but, to some extent, also contributes to research on secretariat influence in global environmental governance.

Limitations of the Study

Restricted by time and resources available for this study, this research has several shortcomings as well. First, due to the scope of this study, this research is limited to the interplay activities that affect the triadic relationship of the three Rio Conventions. Consequently, only activities concerning the UNFCCC, CBD, and UNCCD were analyzed, leaving out dyadic inter-institutional relations. In the wider context, further dyadic interplay situations that may have had effects on the overall relationship between the regimes, such as the agreement between the CBD and UNFCCC on the topic of coral bleaching, a joint work program on *Biodiversity on Dry and Sub-humid Lands* and the *Millennium Ecosystem Assessment* launched by the CBD and UNCCD, or the collective stance of the UNCCD and UNFCCC on the special situation of least developed countries, were all not included in this research. Second, external factors, that is, influences that derive from vertical interactions between the institutions and external sources, which may have potentially affected the outcome of the interplay situations analyzed, were also disregarded. Lastly, restricted by the accessibility of some of the resources, a number of documents on meetings or decisions of the Rio Conventions, including reports on the first meetings of the JLG, could not be included in this research. In consideration of these limitations, future research should take these limitations into account to provide a more accurate reflection of the institutional interrelationship between the Rio Conventions.

6.2. Outlook: A World Environment Organization?

In light of the results of this study, the question arises: could the tendencies towards a more synergetic relationship between the three Rio Conventions become manifest in the emergence of further permanent institutional bodies or, possibly even, in an overarching environmental institution as a result of joint institutional management? Could this be a possible scenario of how future interactions between the Conventions may develop?

Debates revolving around the formation of such an overarching environmental institution are not new. In fact, various actors have advocated for such an institution. With the support of several governments, German chancellor Helmut Kohl, for example, submitted a proposal for a WEO at a special session of the UNGA in 1997. At a time of ongoing negotiations for the Kyoto Protocol, Kohl addressed the pressing environmental problem of increasing greenhouse gas emissions, while demanding the protection of forests by internationally binding agreements at the same time.

At the meeting, he stated the need for improved cooperation among various environmental organizations, “leading to a global umbrella organization for environmental issues” (UN 1997). Moreover, many scholars, such as Charnovitz (1993), Runge (1994), Esty (1994), or more recently Biermann and Bauer (2005), and Young (2010) have discussed this possibility, and weighed the ‘pros’ and ‘cons’ of such an overarching institution in respect to the reformation and development of environmental governance. However, these studies have rarely considered the prospect of a WEO as a “progressive” result of a long-term synergetic relationship between well-established institutions in environmental politics, which is implied through this study’s conjectured theoretical expectations of such a relationship. Against this background, I will shortly discuss the likelihood of an overarching environmental organization as a potential outlook for future developments between the Climate Change, Biodiversity, and Desertification Conventions.

In theory, the foundation of such an organization could entail various significant benefits over the current state of a highly fragmented institutional governance landscape: with an adequate finance mechanism in place, transaction costs between institutions could be considerably reduced, a clear foundation for cooperation could provide legal clarity as well as constitute political authority and leadership, interlinkages between MEAs could be dealt with more effectively, matters on science could be addressed by a comprehensive scientific body, and, at last, both the political and implementation process might be improved. Although these benefits would very likely enhance the current state of environmental governance in terms of overall efficiency, in reality, the foundation of a WEO encounters several problems. First, how would such an organization be constructed? As registered by Bauer and Biermann (2004), different proposals for a WEO ranged from the organization as a subsidiary organ of the UN, a UN-independent organization with UNEP as a major pillar, to a more ambitious new global agency outside the UN system. Either way, the emergence of a WEO that results from the synergetic relationship between the Rio Conventions would predominately cluster around the issue of climate, biodiversity, and desertification. However, it would also have to include other areas, such as marine issues, atmosphere, and chemical pollution, including the already existing regimes operating within these areas of governance. Although a WEO would likely be profitable from the point of view of financial savings and overall coherence in the long term, existing “big” institutions, like the Rio Conventions, would be hard to cluster: too much progress has been made within these institutions over time. As scholars pointed out, the UNFCCC, for example, has played a pivotal role in global environmental governance (e.g., Zelli 2011). Matters are complicated further by the fact that, for the time being, the UNFCCC has no legal responsibility to cooperate with UNEP or others, and therefore views itself as relatively independent (Chambers 2009). Further problems may be of political nature: while the memberships of the Rio Conventions roughly overlap, there might be instances where membership is not entirely congruent, as indicated in the previous section on possible implications of this study. As a result, this may cause technical problems and resistance, and, beyond, it will likely be argued

that coordination mechanisms already exist in the current system of global environmental governance (e.g., the JLG), which will further complicate the fusion of distinct institutions within an overarching framework. Considering the reasons mentioned above, it is therefore unlikely that the climate, biodiversity, and desertification regimes would expand, or rather demerge, in order to form a WEO. Although the theoretical benefits appeal to be worthy of keeping the debate alive, it cannot be foreseen whether such an institution, once established, would address and solve the diverse environmental problems at a global scale more efficiently. Moreover, it seems very unlikely that national governments would equip such an institution with authority and power that will potentially limit their autonomy and political sovereignty on matters related to the environment. The latest developments in international climate politics underscore this notion, as the USA, currently the world's second largest emitter of CO₂ emissions, abandoned the *Paris Climate Agreement* under newly elected President Trump in early 2017. Consequently, the opposite seems to be true: in the absence of an overall institutional framework and the current state of considerably increased institutional proliferation, the future trend towards policy within the system of global environmental governance is likely to carry on with "sticking-plaster solutions," that is, finding compromises and mitigating conflicts through the establishment of new institutions and MEAs. Within the institutional complex of climate, biodiversity, and desertification, the JLG of the Rio Conventions is a fitting example of this approach. Constituted at a time of potential conflict among the Conventions and lacking a clear function and mandate for over ten years, the JLG has been described as a "toothless information-sharing mechanism," whose "function could be better served by coordination at more strategic levels of decision-making" (Chambers 2009). To date, the JLG is at most another body to make recommendations to the UNFCCC, UNCCD, and CBD, which they may take into consideration, but there is no legal obligation for the states to respond to the JLGs' positions. Although this study revealed an increasingly active role of the JLG and the Rio Conventions' secretariats within the institutional complex of climate, biodiversity, and desertification in the past years, which, to some extent, aligns with recent studies recognizing the increasing authority of such international bureaucracies in global environmental governance (e.g. Barnett and Finnmore 2004; Biermann and Siebenhüner 2009; Trondal et al. 2010; Jinnah 2014; Hickmann 2016), the emergence of a new overarching permanent institutional body at the center of environmental governance, regulating all areas where coordination is required, seems rather naive and improbable. In conclusion, the independent operation of the Rio Conventions is likely to continue.

6.3. Concluding Remarks

This study has sought to analyze and assess the horizontal interplay activities between three major institutions in global environmental governance, namely the UNFCCC, CBD, and UNCCD. Against the backdrop of international relations theory and studies on institutional interplay, I developed an

analytical framework based on conceptual assumptions and theoretical expectations on three types of inter-institutional relationships - conflictive, cooperative and synergistic. Based on the evaluation of official decisions and reports on meetings of the Rio Conventions' main institutional organs, the empirical analysis resulted in the following findings: A conflictive relationship between the Rio Conventions has overall weak indications, although issues of common interest have continued to have a high potential for conflict (and synergies), such as the contentions revolving around forest management have exposed. In addition, incompatible duties across the different institutional bodies, such as discrepancies in the mandates of the Conventions' Secretariats, have complicated coordination across regimes. Nonetheless, an overall cooperative relationship between the Conventions has the strongest indications, as they have generally intensified institutional cooperation within the past 25 years of their coexistence. This is particularly evident through largely compatible norms, rules, and decision-making procedures. In addition, policies concerning the nexus of climate change, biodiversity and desertification are decided and monitored through different institutional bodies. Although the parties to the Conventions have reinforced the importance of institutional management in respect to the inherent linkages between the Conventions, in their view, distinct mandates and the independent status of each Convention remain imperative. At last, a synergistic relationship between the Rio Conventions has relative indications. The establishment of the JLG as a permanent institutional body and the continuous joint efforts of the Rio Conventions' secretariats regarding joint management denote signs of this type of relationship. As a consequence, these efforts have prospects of opening a window of opportunity for the Secretariats to move the Conventions in the direction towards a more synergistic relationship in the future. In this regard, further research could take up on the findings of this study and focus on the role and influence of these environmental treaty secretariats in global environmental governance.

At last, based on the conjectured theoretical expectations of a synergistic inter-institutional relationship, this study also explored the possibility of such type of relationship between the Rio Conventions resulting in the formation of an overarching environmental institution as a consequence of joint institutional management. Contrary to the current state of increased institutional proliferation, I weighed arguments both in favor and against the formation of a WEO. In theory, there are considerable theoretical benefits from the formation of such institution, such as an adequate finance mechanism, reduced transaction costs, or stronger political authority and leadership. In practice, a WEO would require the entanglement and fusion of the wide array of active institutions in global environmental politics on the one hand, and nation states to equip such an institution with a mandate that would likely limit their own autonomy and political sovereignty on matters related to the environment on the other hand. In addition, there is no guarantee that a WEO, once established, would address and govern its diverse problems at a global scale more efficiently. Therefore, the prospects for the formation of an overarching institution on the

environment seem very limited and, in conclusion, the independent operation of the Rio Conventions is likely to continue.

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