



**Regime complexes and national policy coherence:
Experiences in the biodiversity cluster**

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and Jouni Paavola

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Contents

Abstract	1
1. Introduction	2
2. Regime complexity, policy coherence and coherent governance: The case of biodiversity	4
2.1. Horizontal integration.....	7
2.1.1. Policy goals and objectives	8
2.1.2. Institutional and implementation arrangements	9
2.2. Vertical integration.....	10
2.2.1. Top-down pathways of influence.....	11
2.2.2. Bottom-up pathways of influence	11
3. The biodiversity-related conventions and their implementation in LAC countries	12
3.1. The case study	13
3.2. Horizontal integration.....	15
3.2.1. Policy goals and objectives	15
3.2.2. Institutional and implementation arrangements	18
3.3. Vertical integration.....	20

3.3.1. Top-down pathways of influence	20
3.3.2. Bottom-up pathways of influence	24
4. Discussion: The co-evolution of the biodiversity cluster and national biodiversity policy	26
5. Concluding remarks.....	29
References	31

Abstract

Regime complexes or overlapping regimes relating to a common subject matter create policy coherence challenges at the national level. Recent research has observed a positive correlation between regime complexes and policy coherence: improved regime integration enables greater policy coherence and vice versa. Policy coherence has nonetheless been approached as a problem of foreign policy and not yet as a problem of public policy. This paper examines the co-evolution of regime complexes and (public) policy coherence in the context of international biodiversity governance, with a focus on the cluster of biodiversity-related conventions and their implementation in countries of Latin America and the Caribbean. It shows that global synergies in the biodiversity cluster have advanced more rapidly than national co-ordination of implementation activities. Feedback loops between governance levels have not been strong enough to bridge that gap. The paper concludes that more symmetrical evolutions require deliberate cross-level management.

Key words: Regime complexes, horizontal integration, vertical integration, biodiversity governance, Latin America and the Caribbean.

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1. Introduction

Overlapping regimes create problems of management at international and national levels. Recent work by Morin and Orsini (2013a, 2013b) suggests that improved synergy in regime complexes enables enhanced governmental policy coherence and vice versa. Regime complexes and policy coherence co-evolve, each adapting to changes in the other. Morin and Orsini focus their analysis on national foreign policy, but not yet on national public policy where regime implementation occurs. Understanding whether, how, and under what conditions regime complexes and national public policies co-evolve is important from the perspective of governance: when the management of regime complexity at international and national level is mutually reinforcing, coherent governance is achieved.

This study explores the co-evolution of regime complexes and national policy coherence in the context of biodiversity governance. It focusses on the cluster of biodiversity-related multilateral environmental agreements (MEAs) (see Table 1) and their implementation in countries of Latin America and the Caribbean (LAC). Observers have noticed that co-ordination in the biodiversity cluster is stronger than co-ordination of implementation activities at the national level (see Jardin, 2010; Jóhannsdóttir et al. 2010). However, the nature and extent of that gap has not been examined, and its analysis appears particularly important in light of the international community's failure to achieve the global target of significantly reducing the rate of biodiversity loss by 2010 (the so-called 2010 Biodiversity Target).

The co-evolution of regime complexes and national policy coherence requires horizontal and vertical interaction. Accordingly, this study asks two questions: 1) how different are the horizontal linkages created in the biodiversity cluster from those emerging at the level of national implementation? 2) how do vertical linkages enable the co-evolution of the biodiversity cluster and national biodiversity policy? Synergies in the biodiversity cluster have been the subject of recent attention in the literature (e.g. UNEP-WCMC, 2012; Baakman, 2011; Caddell, 2011; Simon, 2011; Jóhannsdóttir et al. 2010; Jardin, 2010; Andresen and Rosendal, 2009; Urho, 2009). Conversely, synergies among biodiversity regimes at the national level have mostly been examined in the context of

implementation of the Rio Conventions and other MEAs (e.g. Chasek, 2010; Masundire, 2006; Van Toen, 2001). In this study, synergies in the implementation of the conventions of the biodiversity cluster are examined in 15 LAC countries. LAC is considered one of the most biologically diverse regions in the world (Bovarnick et al. 2010), and 9 LAC countries are members of the Group of Like-Minded Megadiverse Countries, a co-operation mechanism comprised of 19 countries rich in biological diversity and associated traditional knowledge. Empirical evidence is collected from interviews with CBD focal points and national biodiversity strategies.

Table 1. The cluster of biodiversity-related conventions			
	Convention	Date of adoption	Date of entry into force
First generation conventions	Convention on Wetlands of International Importance Especially as Waterfowl Habitat (the Ramsar Convention)	2 February 1971	21 December 1975
	Convention concerning the Protection of the World Cultural and Natural Heritage (WHC)	16 November 1972	17 December 1975
	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	3 March 1973	1 July 1975
	Convention on the Conservation of Migratory Species of Wild Animals (CMS)	23 June 1979	1 November 1983
Second generation conventions	Convention on Biological Diversity (CBD)	22 May 1992	29 December 1993
	International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)	3 November 2001	29 June 2004

The paper proceeds as follows. The next section discusses the co-evolution of regime complexes and policy coherence within the empirical area of focus. A third section examines the management of biodiversity-related conventions in LAC countries in the light of the co-evolution thesis. Discussion of findings and concluding remarks close the paper.

2. Regime complexity, policy coherence and coherent governance: The case of biodiversity

Regime complexes or collections of overlapping institutions relating to a common subject matter (Orsini et al. 2013) have emerged in several areas of international co-operation (Raustiala, 2013). Morin and Orsini (2013a) observe that regime complexity presents governments with a problem of policy coherence. They claim that regime complexes and policy coherence co-evolve together as a result of interaction of actors and institutions across levels of governance (cross-level interplay).

Morin and Orsini (2013a) conceive of policy coherence as a problem of foreign policy, but not yet as a problem of public policy arising from the implementation of overlapping commitments. Coherence is an ambiguous concept which is equated with and/or differentiated from other concepts such as consistency, compatibility and complementarity (see e.g. Höpner, 2005; Gauttier, 2004; Streeck, 2004). In this paper coherence is associated with complementarity of action (mutual reinforcement) and is distinguished from consistency or compatibility of action (absence of contradiction) (see also Jones, 2002). From a public policy perspective, coherence can be examined as a process (focussing on upstream policy-making procedures and associated institutional arrangements), an output (exploring policy objectives and associated implementation arrangements), or an outcome (assessing behavioural changes and impacts on the target of governance) (Nilsson et al. 2012). In a regime complexity context, these three aspects can be related to the density of the regime complex (upstream policy processes), the coherency of national policies and implementation arrangements (policy outputs), and the cohesiveness and effectiveness of governance as a whole (outcomes and impacts).

Under a conventional policy-analytical framework, policy outputs should be in line with policy processes to achieve coherent governance. In contrast, from a co-evolutionary perspective, policy processes and outputs influence each other and should advance in complementary ways for purposes of coherent governance. Thus, the co-evolution of regime complexes and national

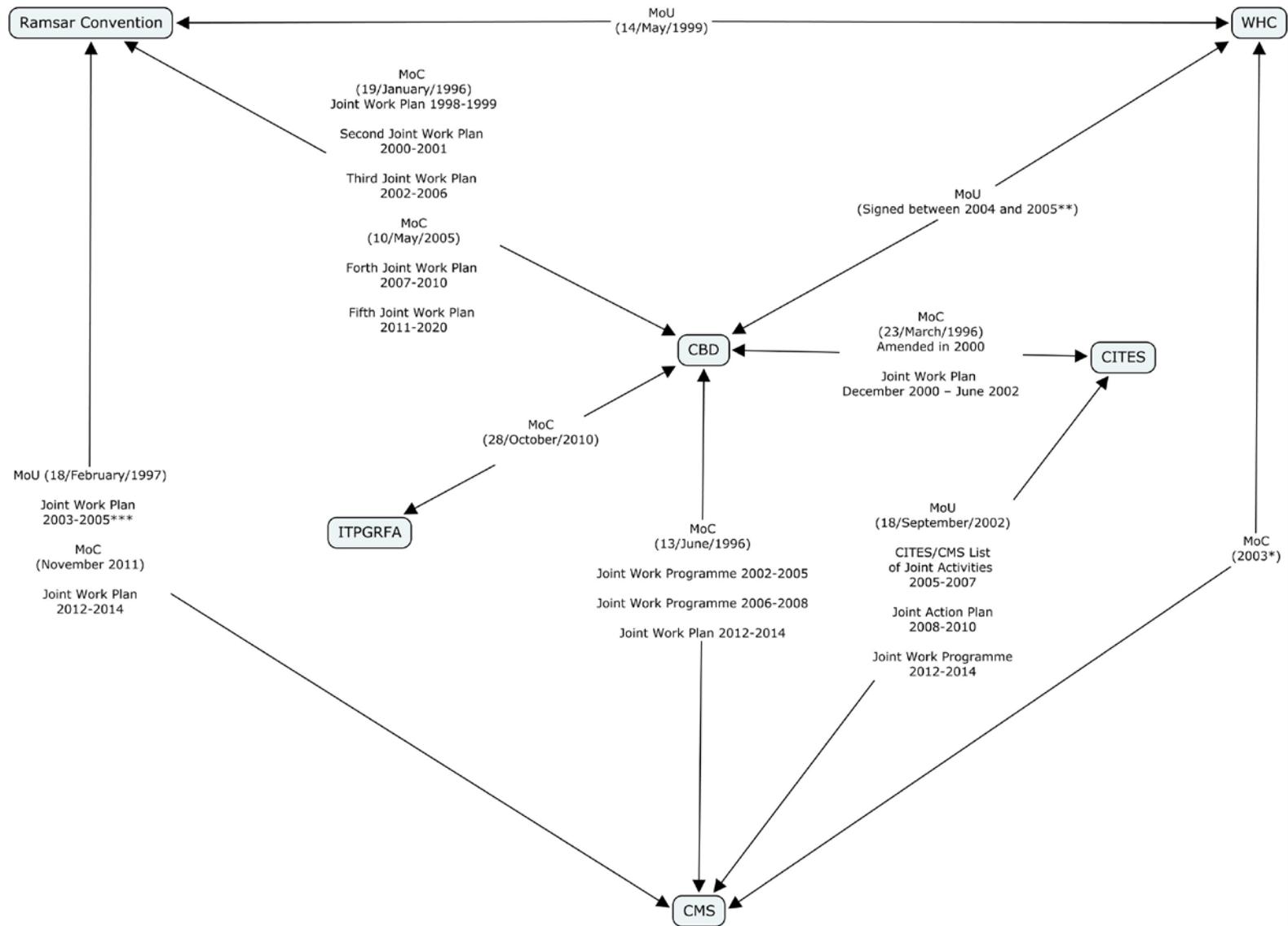
policy coherence (what here we call coherent governance as a process) determines the cohesiveness of governance as a whole (coherent governance as an outcome).

Coherent governance poses particular challenges in the field of biodiversity policy. There are at least 150 MEAs relating to biodiversity (Ministry of the Environment of Finland, 2010), and a number of inter-governmental organisations deal with issues that have relevance to biodiversity (see van den Hove and Chabason, 2009). Six major MEAs (the Ramsar Convention, the WHC, CITES, the CMS, the CBD and the ITPGRFA) are generally considered the elemental regimes of the biodiversity regime complex (see Ministry of the Environment of Finland, 2010), with the CBD standing at the centre as the framework convention (see McGraw, 2002). Figure 1 illustrates the structure of the complex as arising from the formal agreements between its constituent conventions.

The governing bodies of the biodiversity-related conventions have made regular calls for states to improve synergies in national implementation (see UNEP-WCMC, 2012), and have delegated inter-treaty co-operation tasks to treaty secretariats (Urho, 2009). Global co-ordination is assisted by various overarching organisations such as the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN), both of which also support domestic efforts to enhance integration of biodiversity-related MEAs (see Andresen and Rosendal, 2009; Urho, 2009). The biodiversity cluster has achieved partial integration in a number of areas. Examples include the joint preparation and/or endorsement of technical guidance, standardisation of taxonomy and nomenclature, joint field missions and projects, and joint capacity-building activities (see Jardin, 2010). While areas of substantive overlap remain under-exploited (see Ministry of the Environment of Finland, 2010), it is at the national level where co-ordination problems appear particularly acute (see Jardin, 2010; Masundire, 2006).

Problems of coherence in biodiversity governance became salient in the context of efforts to achieve the 2010 Biodiversity Target, adopted at the sixth meeting of the Conference of the Parties (CoP) to the CBD (The Hague, Netherlands, 7-19 April 2002). The Target was endorsed by world leaders at the

Figure 1. Inter-linkages in the biodiversity cluster as emerging from formal co-operative agreements



* The MoU was signed by UNESCO (covering both the WHC and the Man and the Biosphere Programme) and CMS (WHC, 2009).

** A note by the CBD Secretariat dated 10 December 2003 indicated that a MoC was being developed with the World Heritage Centre (CBD, 2003). At WHC 29COM (2005), the World Heritage Centre reported that a MoU had been signed with the CBD (WHC, 2005). A copy of the memorandum could not be obtained.

*** The Joint Work Plan also committed the Secretariat of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA), one of the CMS Regional Agreements

2002 World Summit on Sustainable Development (Johannesburg, South Africa, 26 August-4 September) and subsequently incorporated in the strategic plans and/or programmes of the biodiversity-related conventions (with the exception of the ITPGRFA, which came into force in June 2004 and provided more nominal support). However, the constituencies of the non-CBD conventions failed to take ownership of the Target (BLG, 2006). Moreover, few countries established national targets as required by the CBD CoP (CBD, 2010). The CBD's Global Biodiversity Outlook concluded that the 2010 Target was not achieved (see CBD Secretariat, 2010), a serious failure considering that biodiversity loss is one of the three planetary boundaries which have been overstepped (see Rockström et al. 2009). Understanding problems of coherent governance is of utmost importance as the international community makes renewed efforts to address the biodiversity crisis through the new Aichi Biodiversity Targets established at CBD CoP10 (Nagoya, Japan, 18-29 October 2010).

To address problems of coherence in areas of regime overlap, it is necessary to examine whether, and to what extent, regime complexes and national policy coherence co-evolve. In other words, a focus on coherent governance as a process becomes imperative. In European Union (EU) studies, coherent governance as a process has two dimensions: a horizontal one concerning interactions at the same level of social organisation; and a vertical one relating to cross-level interactions (Portela and Raube, 2008). The co-evolution of regime complexes and policy coherence (coherent governance as a process) is thus based on horizontal and vertical integration. Consequently, the degree to which co-evolution occurs can be established by 1) comparing horizontal management processes (horizontal integration); and 2) exploring vertical linkages between them (vertical integration). These two elements are next discussed in relation to the empirical area of focus.

2.1. Horizontal integration

To establish whether, and to what extent, regime complexes and national policy coherency display similar evolution patterns, criteria of comparison need

to be defined. Achieving integration in a regime complex and coherence in the implementation of its elemental regimes requires interplay management. Interplay management are deliberate efforts to improve regime interplay and its effects (Oberthür, 2009). The literature has examined interplay management along different dimensions, including the goals and modes of management (see Stokke and Oberthür, 2011). These categories can be used to examine the management of biodiversity-related conventions at global and national levels. Available information from the literature is nonetheless insufficient for a critical comparison: while there is a general understanding of co-operation activities in the biodiversity cluster, synergies at the level of national implementation are not well known (studies examining co-ordination in MEA implementation have not examined specific developments within the ambit of the conventions of the biodiversity cluster, and, in many cases, are outdated). The ensuing discussion thus focusses on horizontal integration in the biodiversity cluster, making some empirical observations on regime inter-linkages at the national level. Synergies at global and national levels are later on compared building on the analysis of national experiences in LAC countries.

2.1.1. Policy goals and objectives

The management of regime interplay may be geared towards goals such as avoiding conflict, enhancing synergy, achieving efficiency, and promoting justice and equity (Oberthür, 2009). Those goals may be pro-actively pursued or arise in response to specific cases of interaction (Stokke, 2009; Gehring and Oberthür, 2006). Improving synergistic interplay is the main goal of interplay management in the biodiversity cluster. The Liaison Group of Biodiversity-related Conventions (BLG) was established in 2004 for enhancing coherence and co-operation in the implementation of the conventions (CBD Decision VII/26 par. 2). A pro-active approach to improving synergy can be established from strategic documents, resolutions and decisions promoting co-operation in the biodiversity cluster (see UNEP-WCMC, 2012); even though in practice synergies have been created in an ad hoc fashion and few synergistic solutions to common challenges have been implemented (Urho, 2009).

Inter-linkages in national implementation often lack strategic direction. Lack of co-ordination is a recurrent theme in studies looking at synergies in the national implementation of MEAs. Co-ordination sometimes exists at the project level, but not at the political and institutional levels (Chasek, 2010; Van Toen, 2001).

2.1.2. Institutional and implementation arrangements

Modes of interplay management range from hierarchical control to co-ordination through markets and networks (Stokke and Oberthür, 2011; Oberthür, 2009; Provan and Kenis, 2008). Interplay management in the biodiversity cluster involves decentralised political co-ordination. While various overarching organisations support synergy processes in the cluster (see Andresen and Rosendal, 2009), none of them has powers to centrally manage regime interplay. Until the recent adoption of the Strategic Plan for Biodiversity 2011-2020 at CBD CoP10, there were no common frameworks underpinning co-operation in the biodiversity cluster.

Co-ordination unfolds within two different networks: a core network comprising the six conventions of the cluster and a number of peripheral networks supporting interaction between the biodiversity-related conventions and other agreements and organisations. Policy co-ordination occurs primarily through bilateral and multilateral channels (UNEP-WCMC, 2012). Bilateral co-ordination is based on a range of Memoranda of Understanding and Co-operation (MoU/MoC) and joint work programmes (see Figure 1). Multilateral co-ordination unfolds in the context of mechanisms such as the BLG and the Chairs of the Scientific Advisory Bodies of Biodiversity-related Conventions (CSAB) group. Collaboration beyond the biodiversity cluster involves generic (e.g. the UN Environment Management Group) and thematic (e.g. the Inter-Agency Liaison Group on Invasive Alien Species) mechanisms for inter-institutional co-operation.

At the national level, overarching management of MEAs seems uncommon. Chasek (2010) found that there was no central co-ordination of MEAs in the Pacific Islands. In many countries, ministries of foreign affairs are

responsible for negotiating MEAs and are thus in a position to co-ordinate implementation processes (usually under the purview of different agencies). Problems of inter-agency co-ordination, however, sometimes prevent this. Van Toen (2001) observed that ministries of foreign affairs in countries of the Asia Pacific region often failed to involve national focal points in negotiations over plans to be implemented at the national level.

Synergies in national implementation develop more informally. In many countries there are no mechanisms promoting joint actions among MEA officers (Mouat et al. 2006). However, some African countries (e.g. Guinea Bissau and Kenya) have established reference groups, which are intended to support the work of national focal points and focal institutions for some conventions (Masundire, 2006). Overlap of experts involved in these reference groups allow the emergence of informal networks of MEA officers where opportunities for synergy arise (ibid.).

2.2. Vertical integration

Vertical linkages between governance levels should flow both in a top-down and bottom-up direction (Karlsson-Vinkhuyzen, 2012). Top-down approaches may appear illegitimate and irrelevant to everyday lives, whereas bottom-up management may prioritise short-term national goals at the expense of long-term global concerns (ibid.). Studies examining synergies in the biodiversity cluster have thrown light on the different pathways through which global governance seeks to influence national implementation. Nevertheless, both the way in which these pathways affect domestic behaviours and the avenues through which national actors seek to affect governance in the biodiversity cluster are difficult to assess from the available information. In what follows, two scholarly works are discussed that provide a basis for exploring how global and national governance influence each other. The frameworks are applied, where possible, to the biodiversity case. The paper returns to these frameworks when domestic synergy processes in LAC countries are examined.

2.2.1. Top-down pathways of influence

Bernstein and Cashore (2012) identify four different pathways through which global governance arrangements can influence national policy:

1. International rules, including the binding obligations contained in treaty texts and the policy prescriptions of powerful international organisations.
2. International norms and discourse setting general standards of behaviour of non-binding character.
3. Markets, which can be created or intervened to alter incentive structures.
4. Direct access to domestic-policy making processes in the form of education, training, assistance, capacity-building and/or co-governance via partnerships.

International rules have marginal relevance as a means of promoting synergies in the implementation of biodiversity-related conventions. The texts of the conventions of the biodiversity cluster do not create obligations to achieve synergy in their implementation (Caddell, 2011). In contrast, several resolutions and decisions (soft-law norms) have encouraged countries to co-ordinate activities pursuant to different biodiversity-related agreements. Markets have been used marginally to foster synergies on the ground due to the fragmentation of existing financial mechanisms. However, UNEP and the United Nations Development Programme (UNDP) are implementing agencies of biodiversity-related projects financed by the Global Environment Facility (GEF) and can influence the way in which external resources are used to achieve global biodiversity goals (see Andresen and Rosendal, 2009). Direct support to domestic synergies has come through capacity-building activities, including joint field missions and projects (Jardin, 2010).

2.2.2. Bottom-up pathways of influence

In a recent study, Goodwin (2013) examined what he calls the “internal modalities” of national delegations attending international meetings. Internal

modalities comprise the set of norms and routines governing how national delegations prepare for meetings and how they will participate in the actual working sessions (ibid.). Because the evolution of international regimes depends, in principle, on decisions adopted in inter-governmental fora, preparation and participation in those meetings is crucial to shape global governance.

Little is known of the internal modalities of national delegations attending meetings of the biodiversity-related conventions. Goodwin himself makes an initial contribution by examining how the United Kingdom prepares for, and participates in, Ramsar CoP meetings. But no studies have yet explored whether and how countries create linkages between biodiversity regimes when they undertake these stages (preparation and participation). Empirical observations suggest that some countries have been more pro-active than others in promoting synergies between biodiversity-related conventions. The EU, for instance, was the main proponent of a global partnership on biodiversity in support of the 2010 Biodiversity Target (CBD, 2003a). Goodwin notices that inter-CoP experience in national delegations is essential to ensure that activities under associated regimes are complementary. Co-ordination of national positions across biodiversity-related venues has similarly been regarded an important aspect of improved inter-treaty co-operation (UNEP-WCMC, 2012). Research on bottom-up influence on governance arrangements in the biodiversity cluster is nonetheless poor.

3. The biodiversity-related conventions and their implementation in LAC countries

This section examines inter-linkages in the implementation of the biodiversity-related conventions in LAC countries with a view to exploring whether, and to what extent, the biodiversity cluster and national biodiversity policies in the region have co-evolved. Following a description of the research methods, the horizontal and vertical aspects of national management processes

are discussed as informed by the theoretical framework presented in the previous section.

3.1. The case study

LAC was selected as the focal region in which to explore synergies among biodiversity-related conventions because it is considered one of the most biologically diverse regions in the world (Bovarnick et al. 2010), and LAC countries are important players in international biodiversity policy: 9 out of 19 state members of the Group of Like-Minded Megadiverse Countries (as of June 2011) are from LAC.

National experiences were examined in 15 countries of the region on the basis of a multi-stage selection process. Countries that are parties to at least four biodiversity-related conventions (as of April 2011) were first identified. These (25) states were then ranked according to their wealth of biological diversity (as measured by the GEF Benefits Index for Biodiversity) (see Table 2). The primary national focal points of the CBD in the first 15 countries of the sample were contacted to arrange interviews. This was possible in all countries but Venezuela. To stay within the 15-country target, contact was successfully made with CBD authorities in Jamaica (the sixteenth country of the sample).

A total of eighteen interviews with CBD officials (most of them technical focal points) were conducted between December 2011 and April 2012. Of these, fifteen were audio interviews and three were questionnaire-based. Audio interviews were recorded and transcribed.

Matrix analysis was used to examine interview transcripts. Matrix analysis is a distinct type of thematic analysis where units of analysis (e.g. individuals and groups) are tabulated against concepts or issues relevant to the research questions (King and Horrocks, 2010). The framework for the analysis of regime complexes and national policy coherence (presented in section 2), which incorporates two main elements (horizontal and vertical integration) associated with the two research questions, was the basis for creating an analytical matrix. Interview transcripts were tabulated against it.

Limitations of the methodological approach need to be acknowledged. The analysis of national experiences relies heavily on subjective accounts and is not based on a systematic review of management processes. As a result, comparisons between countries are difficult to make. Indeed, the analysis focussed on identifying general trends and challenges rather than on delving into specific national circumstances. In some countries, the co-evolution of international and national biodiversity policies displays characteristics that deviate from the regional trends, but this is not assessed here.

Table 2. LAC countries which are contracting parties to four or more biodiversity-related conventions (as of April 2011)

Country	GEF Benefits Index (GBI) for Biodiversity ¹	Number of conventions adopted	Conventions not yet adopted
Brazil	663.7	5	CMS
Mexico	503.1	4	CMS and ITPGRFA
Colombia	380.0	4	CMS and ITPGRFA
Peru	241.0	6	--
Ecuador	199.4	6	--
Venezuela	178.2	5	CMS
Argentina	122.9	6	--
Chile	107.3	6	--
Bolivia	91.9	5	ITPGRFA
Cuba	89.8	6	--
Panama	78.0	6	--
Costa Rica	73.6	6	--
Guatemala	58.9	5	CMS
Honduras	52.7	6	--
Dominican Republic	45.0	4	CMS and ITPGRFA
Jamaica	32.8	5	CMS
Nicaragua	23.7	5	CMS
Paraguay	22.2	6	--
Suriname	20.2	4	CMS and ITPGRFA
Trinidad & Tobago	16.0	5	CMS
Belize	12.4	4	CMS and ITPGRFA
Uruguay	9.5	6	--
Santa Lucia	6.5	5	CMS
El Salvador	5.5	5	CMS
Antigua & Barbuda	3.0	5	ITPGRFA

For purposes of confidentiality, the names and positions of interviewed CBD authorities are kept anonymous and only linked to the country they

¹ GEF, 2008

represent. In cases where two participants were from the same country, they are distinguished by letters A and B.

3.2. Horizontal integration

Implementation of the biodiversity-related conventions in LAC countries has advanced through separate processes rather than in an integrated manner. Implementation of all treaties requires adjustments in existing institutional frameworks: “it is a process which develops in incremental steps; progress is swift in some cases, but not in others” (Argentinian Interviewee). Countries employ distinct procedures and instruments to implement biodiversity-related conventions. In Chile, for instance, implementation of the CBD relies on technical guidance available from the CBD Secretariat; CITES activities have been assisted by capacity-building workshops; and CMS-related operations are based on regional co-operation (Chilean Interviewee A). Different implementation arrangements often imply different human, scientific, technological, and institutional capacity requirements (Honduran Interviewee).

Duplication of efforts in the implementation of biodiversity-related conventions is uncommon. However, in most cases, opportunities for streamlining implementation activities remain under-exploited. Participants recognised potential for enhancing synergy (Chilean, Colombian, Dominican, Jamaican and Panamanian Interviewees), improving complementarity (Costa Rican and Ecuadorian Interviewees), strengthening joint work (Argentinian Interviewee), and achieving greater co-ordination and alignment (Mexican Interviewee A).

On-going co-ordination processes are examined next along the interplay management dimensions discussed in section 2. Comparisons with global inter-linkages established in the biodiversity cluster are made.

3.2.1. Policy goals and objectives

The strategic plans and/or programmes of the conventions of the biodiversity cluster contain provisions on co-operation with other biodiversity-

related conventions. In LAC countries, however, synergies are not generally conceived of from a strategic perspective. Requirements for coherent implementation of biodiversity-related conventions are missing from policy planning. An Ecuadorian participant observed that “we do not have a working programme that encourages national focal points to create synergies... and allows a systematic monitoring of co-ordinated work”. A CBD officer in Panama commented that integrated implementation of biodiversity-related MEAs has only recently been considered in the context of the Strategic Plan for Biodiversity 2011-2020. Honduras is exploring approaches for a more integrated implementation of MEAs. Participants from other countries did not bring up similar initiatives.

Strategic frameworks for coherent implementation of biodiversity-related agreements are not only absent, but also the inclusion of synergies in national biodiversity strategies and action plans (NBSAPs) is marginal. NBSAPs are the principal instruments for implementing the CBD and considered a key mechanism for improving integration of biodiversity-related conventions (see UNEP-WCMC, 2012). First-generation NBSAPs (most of them in effect throughout the 2000-2010 decade) in 14 countries of the sample were examined to determine whether they incorporated commitments from biodiversity-related conventions other than the CBD and/or synergies among biodiversity-related agreements (a copy of the Dominican NBSAP could not be obtained). The Brazilian NBSAP was the only strategy that explicitly incorporated objectives related to MEA inter-linkages. The Argentinian, Bolivian and Cuban strategies did not address synergies between MEAs directly, but considered implementation requirements under other biodiversity-related conventions. International commitments were virtually neglected in the rest of the NBSAPs (see Table 3).

In the biodiversity cluster, a number of thematic mechanisms (e.g. Inter-Agency Liaison Group on Invasive Alien Species) and joint initiatives in areas of regime overlap (e.g. sustainable use, environmental impact assessment and site-based conservation) enable co-ordinated work (UNEP-WCMC, 2012). Thematic co-operation is also common at the level of national implementation. For example, synergies have been established around international events and

in the pursuit of external resources. In most LAC countries, biodiversity focal points take part in internal consultation meetings in preparation for high-level meetings of biodiversity-related agreements (see section 3.2.2). Participants from Panama and Honduras reported co-ordinated action to elaborate national reports. CBD focal points in Peru have attended CMS meetings. Both Panamanian and Bolivian interviewees indicated that national focal points co-operate in the context of GEF project proposals. In Jamaica, national CBD and Ramsar authorities collaborated on the organisation of the Fifth Pan-American Regional Meeting of the Convention on Wetlands in Jamaica in December 2011 (Jamaican Interviewee A).

Table 3. NBSAPs and synergies between biodiversity-related conventions in LAC countries		
Synergies explicitly addressed		
Country	NBSAP and date of adoption	Comments
Brazil	Política Nacional da Biodiversidade August 2002	The strategy features three objectives in the area of international co-operation, one of which is to create synergies in the implementation of international environmental agreements adopted by the country.
Explicit references to implementation of biodiversity-related MEAs other than the CBD		
Country	NBSAP and date of adoption	Comments
Argentina	Estrategia Nacional sobre Diversidad Biológica February 2003	In section XVI of the strategy, Argentina commits to implementing international environmental agreements and enhancing the country's capacity to participate in international environmental fora.
Bolivia	Estrategia Nacional de Biodiversidad 2001	One of the priorities of the strategy is to improve implementation of international environmental agreements, in particular, the CBD, the Climate Change Convention, the Indigenous and Tribal Peoples Convention, CITES and the Ramsar Convention.
Cuba	Estrategia Nacional para la Diversidad Biológica y Plan de Acción en la República de Cuba 1999	One of the goals of the strategy is to strengthen international co-operation, including through an active involvement in the implementation of the CBD and other related instruments.
Synergies and/or implementation of non-CBD conventions are not explicitly considered		
Chile - Estrategia Nacional de Biodiversidad (December 2003) Colombia - Política Nacional de Biodiversidad (1995) Costa Rica - Estrategia Nacional de Biodiversidad (2000) Ecuador - Política y Estrategia Nacional de Biodiversidad del Ecuador 2001-2010 (concluded in 2000 and officially endorsed in 2007) Guatemala - Estrategia Nacional para la Conservación y Uso Sostenible de la Biodiversidad y Plan de Acción (1999) Honduras - Estrategia Nacional de Biodiversidad y Plan de Acción (2001) Jamaica - National Strategy and Action Plan on Biological Diversity (July 2003) Mexico - Estrategia Nacional sobre Biodiversidad de México (2000) Panama - Estrategia Nacional de Biodiversidad (2000) Peru - Estrategia Nacional sobre Diversidad Biológica (2001)		

Inter-linkages between biodiversity-related MEAs have also been developed in the formulation and implementation of national policies and programmes on biological diversity. In Panama and Honduras, national MEA authorities participate in the review of policy and normative frameworks for biodiversity. A CBD officer from Panama highlighted the recent involvement of biodiversity focal points in the development of a REDD+ strategy (a mechanism for reducing greenhouse gas emissions from deforestation and forest degradation, as well as through sustainable management of forests, conservation of forest carbon stocks and enhancement of carbon stocks). MEA focal points are collaborating on the updating of the NBSAP and the national policy on wetlands (Panamanian Interviewee). Chilean MEA officers for CBD and Ramsar have been involved in the drafting of a strategy for the conservation of Andean highlands (Chilean Interviewee). On the implementation side, CBD authorities in Panama have supported their WHC counterparts in holding capacity-building workshops for protected area managers. In Honduras, there has been collaboration on awareness raising workshops.

3.2.2. Institutional and implementation arrangements

Synergies in the biodiversity cluster result from decentralised co-ordination. Overarching organisations, most notably UNEP, support inter-treaty co-operation but have no legal mandate to pursue centralised management. Decentralised co-ordination is also prevalent at the national level. In countries where various conventions fall under the roof of the same agency (the Costa Rican National System of Conservation Areas, for example, was reported to oversee eight biodiversity-related MEAs at the time when the interviews were conducted), some centralised planning can be expected. Nevertheless, the conventions of the biodiversity cluster are usually administered by different ministries and/or agencies. The national focal points to the CBD, the Ramsar Convention, CITES and the CMS are generally based in environmental ministries and/or agencies, whereas WHC and ITPGRFA authorities are housed by non-environmental ministries. Synergies arise in the context of mechanisms

for sectoral and inter-ministerial co-ordination, but not through centralised planning.

Co-operation in the biodiversity cluster unfolds within a core governance network comprising the six conventions and other overarching organisations; and within a number of peripheral networks where interaction with regimes in other policy areas takes place. The core network has its most visible expression in the BLG and the CSAB but is also based on formal mechanisms for co-operation such as MoUs/MoCs and joint work programmes. At the national level, the core governance network becomes blurred. This is because many LAC countries have a loose conception of biodiversity-related agreements which extends beyond the boundaries of the biodiversity cluster, encompassing for example the climate change and desertification conventions. An Ecuadorian interviewee even considered that “when we talk about synergies, we talk about co-ordination among MEAs in general”.

It is mainly within peripheral networks that national-level synergies among biodiversity-related conventions emerge. In some countries, inter-institutional committees have been established to oversee the implementation of specific conventions and to address specific issues under a co-ordinated approach. These committees resemble the global task forces and working groups promoting co-operation between biodiversity-related conventions and other MEAs and organisations (e.g. the Heads of Agency Task Force on the 2010 Biodiversity Target and the CBD’s Liaison Group on Non-timber Forest Resources).

In Chile, there are national committees responsible for following up the implementation of the Ramsar Convention, CITES and the CMS. National focal points of biodiversity-related MEAs are represented in these committees. This facilitates the creation of synergies between the conventions (Chilean Interviewee B). Similar committees have been set up in Jamaica (Jamaican Interviewee A). Cuba has a national commission which co-ordinates the implementation of the WHC. In Costa Rica, the National Commission on Plant Genetic Resources promotes synergistic implementation of conventions such as the CBD and the ITPGRFA related to plant genetic resources. A committee was recently established in Mexico to identify priority areas for the

implementation of the Rio Conventions with a view to developing GEF project proposals (Mexican Interviewee A). Honduras has set up a working group which seeks to co-ordinate civil society activities contributing to the implementation of biodiversity-related conventions and other MEAs.

Synergies in domestic settings tend to follow a less formalised approach than synergies in the biodiversity cluster. In most cases, synergies arise through regular dialogue and communication between national focal points. Good levels of collaboration sometimes obviate the need for a deliberate integration of synergies in policy planning. A Panamanian participant observed, for example, that “synergies sometimes do not have to be explicitly mentioned” when projects are designed. In a similar vein, another interviewee noticed that “if local institutions display high levels of integration and collaboration, synergies arise on the ground” (Mexican Interviewee B).

3.3. Vertical integration

Global governance has influenced the management of biodiversity-related conventions in LAC countries. In contrast, national governance has not actively shaped regime interplay in the biodiversity cluster. Top-down and bottom-up pathways of influence are discussed below.

3.3.1. Top-down pathways of influence

Global influence on national implementation has come less from normative means (international norms and discourse) than from utilitarian and cognitive instruments (markets and direct access to domestic policy-making).

International norms and discourse are a main mechanism for influencing domestic regime interplay. Normative avenues through which global governance has sought to affect national implementation include: 1) resolutions and decisions of governing bodies promoting co-ordination of MEAs implementation activities; 2) state-level actions envisaged in MoUs/MoCs and

joint programmes of work; and 3) high-level political commitments (e.g. global biodiversity targets).

The 2010 Biodiversity Target provides a good benchmark to explore the effects of normative pathways of influence. As mentioned earlier, the 2010 Biodiversity Target was established by the CBD CoP at its sixth meeting and supported by the other biodiversity-related conventions. At its second meeting (16 August 2004), the BLG made the 2010 Target one of its two policy priorities. The Target prompted increased inter-treaty co-operation. Nevertheless, as explained below, it hardly encouraged substantive action in national arenas.

NBSAPs were considered a primary mechanism for implementing the CBD's Strategic Plan 2002-2010 and achieving the 2010 Biodiversity Target (CBD Decisions VI/26 and VII/30). The CBD's Parties were encouraged to develop or review their NBSAPs in light of the CBD's strategic goals and to set national targets taking into account the framework of goals and sub-targets to facilitate the assessment of progress towards achieving the 2010 Target (adopted at CBD CoP7 through Decision VII/30). The eighth meeting of the CBD CoP (Curitiba, Brazil, 20-31 March 2006) endorsed voluntary guidelines to Parties for the review of NBSAPs, which were intended to serve as a practical tool to assess NBSAPs' implementation (CBD Decision VIII/8). The guidelines asked Parties to consider whether biodiversity concerns were being integrated into non-CBD processes, including into activities undertaken in the framework of other biodiversity-related conventions (CBD Decision VIII/8, Annex).

Few LAC countries reviewed their NBSAPs and/or set national targets as required by the 2010 Target process. In 4 of the 15 LAC countries examined in this research (Argentina, Brazil, Chile and Jamaica), NBSAPs were developed following the adoption of the 2010 Target. Only the Brazilian and Chilean NBSAPs included national targets. In the rest of the countries, NBSAPs predated the 2010 Target and did not feature outcome-oriented targets. However, Costa Rica adopted in 2009 national conservation targets linked to the 2010 Biodiversity Target. Interviews suggest that in most LAC countries NBSAPs were reviewed as part of the preparation of the fourth national reports to the CBD (due on 30 March 2009), rather than as part of on-going monitoring of NBSAP implementation. More importantly for assessing normative influence

on domestic synergy processes, of all the NBSAPs prepared or reviewed after the adoption of the 2010 Target, the Brazilian strategy was the only one where MEA inter-linkages were purposefully addressed (see Table 3).

Influence along the markets pathway relates primarily to the financial incentives created by the GEF. The GEF is the largest public funder of projects to protect the global environment (GEF, 2013). It funds the additional costs “associated with transforming a project with national benefits into one with global environmental benefits” (ibid.), with biodiversity being one of its main focal areas. This funding approach makes project proposals addressing synergies between biodiversity-related MEAs more appealing than issue-specific proposals. Indeed, financial incentives created by the GEF have triggered efforts to synergise implementation of biodiversity-related MEAs, most notably the Rio Conventions. For example, projects that Ecuador has submitted to the GEF Secretariat have considered factual linkages between MEA issue-areas in an integrated way (Ecuadorian Interviewee A). In Bolivia and Panama, the national focal points to the Rio Conventions were collaborating on the preparation of GEF project proposals when the interviews were done. In Mexico, a special committee was set up to identify needs and priorities in the implementation of the Rio Conventions and to streamline the project portfolio (Mexican Interviewee A).

Overarching organisations and treaty secretariats have supported LAC countries in their efforts to improve synergy in the implementation of biodiversity regimes. Support has come mainly from the GEF, UNDP, UNEP and the secretariats of the biodiversity cluster. The GEF has assisted national management of MEAs through the National Capacity Self-Assessment (NCSA) programme. The initiative was launched in January 2000, with UNDP and UNEP as implementing agencies. It aimed to assist countries in evaluating their capacities to achieve the objectives of the Rio Conventions and other MEAs. Participating countries were expected to identify priority issues, capacity constraints, and opportunities for capacity-building, particularly in the areas of biological diversity, climate change and land degradation (Bellamy and Hill, 2010). A total of 152 countries were involved in the programme between 2002 and 2006 (GEF, 2013). NCSA projects were initiated in 14 countries of the

sample (Bolivia being the only exception), but only 10 of them (Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Jamaica, Mexico and Peru) were completed (ibid.).

Interviewees from Jamaica, Peru and Panama referred to the NCSA as an initiative that helped national efforts to manage MEA implementation processes. At the time when the interviews took place, the Costa Rican government was working on a project to synergise implementation of MEAs, in particular the Rio Conventions, along the lines of the Costa Rican NCSA project (Costa Rican Interviewee A). The NCSA programme has had less visible effects in Ecuador, where the recommended policies and actions have not been operationalized (Ecuadorian Interviewee A).

UNEP has provided training and capacity-building to support MEA implementation in domestic arenas. Two initiatives have been especially relevant to the LAC countries: 1) a joint UNEP/European Commission programme which seeks to build and enhance the capacity of African, Caribbean and Pacific (ACP) countries to implement and enforce MEA obligations; and 2) a joint UNEP/IUCN initiative to promote a coherent implementation of the biodiversity-related conventions through web-based reference tools that structure biodiversity-related commitments in a logical framework (the so-called TEMATEA project). In 2011, a Caribbean workshop on national MEA commitments was organised in Paramaribo, Surinam under the auspices of the UNEP/European Commission capacity-building programme (see CARICOM, 2011). TEMATEA national workshops were held in Cuba and Peru in 2008 to test the applicability of TEMATEA issue-based modules.

Treaty secretariats in the biodiversity cluster have made efforts to bridge the gap between global and domestic synergy processes through workshops, field missions, joint projects and other capacity-building activities. The effects of these actions sparked mixed views among interviewees. Participants from Cuba, the Dominican Republic, Ecuador and Peru believed that convention bodies and treaty secretariats have not provided substantive assistance. CBD officers from Cuba and Panama acknowledged that the CBD Secretariat has supported national implementation through capacity-building workshops. They observed, however, that synergies between biodiversity-related MEAs are

hardly discussed in those workshops. This is because the issue is not a major concern to funding institutions (Cuban Interviewee). A Panamanian participant considered that CBD workshops could be a platform for creating synergies between biodiversity-related conventions, provided that other national focal points were able to attend. This is often not possible due to lack of funding.

Other participants were more positive about the assistance from treaty secretariats. In Honduras, technical, institutional and logistical capacities to implement MEAs have been strengthened through capacity-building. Projects sponsored by treaty secretariats have enabled improved inter-agency coordination (Honduran Interviewee). In Chile, secretariats have supported projects where different MEA processes converge (Chilean Interviewee A). CBD officers from Bolivia and Colombia reported that treaty secretariats have helped in the design of GEF projects proposals addressing MEA inter-linkages. Both Bolivian and Chilean officers considered, however, that the support received has been only modest.

CBD officers from Brazil and Mexico affirmed that treaty secretariats have assisted national management of MEAs to the best of their ability. Conversely, participants from Costa Rica, the Dominican Republic and Argentina believed that treaty secretariats could offer better assistance to countries. A CBD officer from Costa Rica considered that the burden of creating synergies between MEAs at the national level has been placed on state parties: “I understand that this is an issue of national sovereignty, but the secretariats could, at the request of countries, offer improved support for the development of synergies at the national level”.

3.3.2. Bottom-up pathways of influence

Synergies are an elemental, but not always visible, aspect of the internal modalities of preparation and participation of national delegations attending meetings of the biodiversity-related conventions. In many LAC countries, internal working meetings are held in preparation of international biodiversity meetings. In Bolivia, national positions presented in biodiversity-related fora are

negotiated and agreed at workshops attended by officers from environment and non-environment agencies and civil society representatives. Jamaican national positions result from internal discussions among governmental and non-governmental agencies (Jamaican Interviewee A). Chilean positions in biodiversity-related venues are discussed in the inter-institutional committees overseeing implementation of specific conventions (see section 3.2.2). CBD focal points from Colombia, Costa Rica and Ecuador noticed that MEA officers attend domestic meetings organised in advance of CBD negotiations. Similarly, a Peruvian interviewee noticed the recent participation of UNFCCC and UNCCD focal points in internal CBD meetings. In Guatemala, domestic consultation processes ahead of CBD deliberations occurred only recently in the context of CBD CoP10.

Efforts to ensure that national positions presented in one forum are upheld in another were explicitly mentioned by some interviewees. In Mexico, the National Commission for Knowledge and Use of Biodiversity ensures that national positions at CBD and CITES meetings are coherent. Cuba has managed to defend congruent positions across biodiversity policy venues because the government has historically held principle-based positions. In Argentina, attempts have been made to achieve coherence in the national positions defended at CBD and UNFCCC venues. Co-ordination of national positions may not be occurring in other countries. A CBD officer in Peru, for instance, did not know whether national positions at CBD meetings were reinforced at meetings of other biodiversity-related conventions.

Some participants noticed that synergies between biodiversity-related agreements have been promoted at MEA meetings. The Chilean government has supported national positions calling for greater synergy between conventions, although the country itself has not advanced concrete proposals for enhancing MEA integration. Cuba has encouraged issue-based co-operation among MEAs provided funding for other implementation activities is not compromised. Other countries have been more proactive. Colombia has promoted MoUs/MoCs as instruments for synergising MEA implementation processes. Colombian delegations at CBD's meetings have been vigilant in ensuring that issues which other conventions address are transferred to the

relevant venues or, else, are discussed within CBD arenas taking into account the input provided by actors from the conventions involved (Colombian Interviewee). This counteracts cross-institutional political strategies and prevents mandate creep. The Mexican government has advocated for increased synergy between the CBD and CITES in line with national interests (Mexican Interviewee A). Recently, on occasion of the twentieth meeting of the CITES Plants Committee (Dublin, Ireland, 22-30 March 2012), Mexico submitted a draft resolution promoting co-operation between the CBD and CITES in the implementation of the CBD's Global Strategy for Plant Conservation.

4. Discussion: The co-evolution of the biodiversity cluster and national biodiversity policy

The paper now returns to the two questions guiding this research. First, the study asked whether global and national arrangements for the implementation of biodiversity-related conventions display similar evolution patterns. Observers have noticed a gap between global and national integration (Jardin, 2010; Masundire, 2006), but have fallen short of exploring the nature and extent of the gap. This study made an empirical comparison of horizontal integration processes revealing that inter-treaty co-operation does display a more advanced development both in terms of the goals pursued and the means for their achievement.

Synergies at both levels of governance usually arise in connection with specific issues and themes. However, while co-operation in the biodiversity cluster is often a pro-active exercise intended to synergise implementation activities, co-ordination among national focal points appears to emerge in response to particular needs. The strategic plans and programmes of the biodiversity-related conventions acknowledge the importance of synergies in the biodiversity cluster (UNEP-WCMC, 2012). While co-operation might have evolved haphazardly (Urho, 2009), there have been attempts at joint implementation through the adoption of common technical guidance, the

standardisation of nomenclature, and joint capacity-building. This has not occurred at the national level, where synergies in policy frameworks are absent or left implicit at best. As is the case in the Pacific Islands (see Chasek, 2010), national focal points co-operate in relation to specific projects, but not at more programmatic and strategic levels.

Network governance forms are a preferred avenue to co-ordinate implementation activities. Only at the international level, however, has a core network of biodiversity-related agreements emerged. This network is based on bilateral (e.g. MoUs/MoCs and joint work programmes and plans) and multilateral (e.g. the BLG and the CSAB) mechanisms (see UNEP-WCMC, 2012) promoting co-operation among the elemental conventions of the biodiversity cluster. A core network of biodiversity-related MEAs is less visible in domestic arenas, where mechanisms deliberately intended to synergise implementation of the conventions of the biodiversity cluster are lacking, and co-operation between focal points involves more informal exchanges. This often occurs in the context of national committees supporting implementation of specific conventions and/or inter-ministerial working groups addressing cross-cutting issues. Similar mechanisms operate in some countries of Africa (see Masundire, 2006) and the Asian Pacific region (see Van Toen, 2001).

The second research question asked whether vertical linkages have enabled the co-evolution of global and national governance. Morin and Orsini's (2013a) co-evolution thesis suggests that increased regime density should facilitate improved national policy coherence. Indeed, the present study found evidence of global influence on domestic policy. Based on Bernstein and Cashore's (2012) framework (see section 2), we identified two main pathways of influence: markets and direct access to domestic policy-making. However, both appear underexploited. The GEF's influence on national co-ordination is not the result of an active policy to promote synergies among biodiversity-related agreements (the CBD is the only convention of the biodiversity cluster which can access GEF funds), but is rather a side effect of resource allocation frameworks supporting projects conducive to the achievement of global environmental goals. Overarching organisations and treaty secretariats have made deliberate efforts to strengthen national capacities for the implementation

of biodiversity-related conventions, but, in the view of some interviewees, the assistance provided has been insufficient.

Recent policy discussions and research looking at ways in which global co-operation can encourage greater integration of biodiversity-related conventions at the national level have devoted much attention to capacity-building (see Ministry of the Environment of Finland, 2010; UNEP-WCMC, 2012). The strategic manipulation of markets, however, could also bring about positive change. A number of LAC countries have considered synergies in GEF project proposals in the expectation of attracting external resources. The inter-linkages created usually unfold in the context of implementation of the Rio Conventions, mainly because other biodiversity-related MEAs operate under different financial arrangements. Improved co-ordination of financial mechanisms in the biodiversity cluster (or their consolidation under the GEF's umbrella) can result in positive incentives for improving domestic integration of its constitutive regimes. Experiences in forest governance indicate that market mechanisms, when carefully designed, can be effective instruments to align international and national agendas (see Leplay and Thoyer, 2011).

The modest influence of global governance on domestic policy suggests that synergies in LAC countries have been mostly driven by national processes. Such an inward-looking approach is reflected in a low profile involvement in international biodiversity governance. The empirical evidence suggests that most LAC countries do not take an active stance in promoting greater integration in the biodiversity cluster as they prepare and participate in meetings of the biodiversity-related conventions. This might be because countries have derived little benefit from inter-treaty co-operation, but also because they might be wary about raising the profile of biodiversity conservation in the international agenda at the expense of, for example, economic development (Jinnah (2011) has noticed that developing country parties to the CBD do not usually consider biodiversity conservation a priority). Greater engagement with synergy processes in the biodiversity cluster is nonetheless important to re-orient inter-treaty co-operation towards providing increased support to national implementation in line with countries' interests.

Overall, vertical linkages between global and national governance in areas where the mandates of the biodiversity-related conventions overlap appear under-developed. This prevents governance systems from interacting in complementary ways and sustains the gap between global and national implementation.

5. Concluding remarks

Morin and Orsini (2013a, 2013b) have observed that the degree of integration in a regime complex is positively correlated with the degree of coherency of foreign policies. They fall short of examining whether that connection extends to the ambit of public policy. Such a focus is important from the perspective of international governance as it is in the ambit of public policy where national implementation occurs. This research explored the co-evolution of regime complexes and (public) policy coherence in the context of biodiversity governance. It examined whether, and to what extent, the biodiversity cluster and national implementation arrangements in LAC countries have moved forward in complementary ways.

When global and national governance systems co-evolve in a mutually supportive manner, coherent governance is achieved. A general gap between global and national implementation of the biodiversity-related conventions is recognised by scholars and practitioners alike, which suggests that co-evolution is happening to a limited extent. This gap can be presumed to be wider in the developing world. Bridging the gap is in the interest not only of those countries lagging behind (a more integrated implementation would reduce costs of administration and compliance), but of those which are leading the way towards improved integration of biodiversity-related agreements (the case for biodiversity conservation cannot be made stronger without the active involvement of countries which have been wary about and/or opposed to diverting resources away from national implementation to inter-treaty co-operation).

Morin and Orsini's (2013a) co-evolution model anticipates greater alignment of global and national governance systems through iterative processes of interaction. However, because co-evolution is founded on weak vertical linkages, more deliberate cross-level management is needed to bridge the implementation gap. Until recently, synergies among biodiversity-related conventions at the global level and within LAC countries have developed in the absence of strategic frameworks for co-ordination. As a result, potential complementarities in areas of substantive overlap have been overlooked and/or appear under-exploited. Recent events reveal positive attempts to improve the situation. The Strategic Plan for Biodiversity 2011-2020 is intended to provide common focus in the biodiversity cluster. Implementation of the Plan at the national level is expected to occur through revised NBSAPs which should take into consideration synergies among biodiversity-related agreements. Both the Strategic Plan for Biodiversity 2011-2020 and the NBSAPs provide flexible frameworks for horizontal and vertical integration in areas where substantive coherence is particularly needed. It remains unclear, however, whether the momentum created at CBD CoP10 in response to the failure to achieve the 2010 Biodiversity Target will be maintained throughout the decade to advance more coherent biodiversity governance.

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