Managing synergistic interplay: Experiences in the cluster of biodiversity-related conventions

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Abstract: *Regime complexes or networks of international institutions with overlapping mandates create a need for interplay management or deliberate efforts to enhance institutional interaction and its effects. Regime complexity studies have examined situations where conflict is managed to ensure internal consistency, but have paid less attention to cases where synergistic interplay is managed to achieve internal coherence. Examining how regime interplay is managed in these settings is important because potential for synergy is often left unexploited. This paper analyses the management of synergistic interplay in the cluster of biodiversity-related conventions. Based on a series of interviews with treaty secretariat officials and international experts conducted between September 2011 and January 2012, the paper identifies and discusses the factors that explain the extent and depth of co-operation in the cluster. The paper advances understanding of environmental policy integration among environmental institutions and contributes to debates on the reform of the system of international environmental governance, delivering insights into the value of interplay management vis-à-vis mainstream proposals promoting changes in institutional form.*

1 Introduction

Regime complexes or loosely coupled systems of institutions have emerged in several areas of international co-operation (Raustiala, 2013). They can be more flexible and adaptable than integrated regimes (Young, 2012; Keohane and Victor, 2011), but they need to be managed and fulfil certain normative standards to realise these advantages (Gehring and Faude, 2013; Keohane and Victor, 2011). Because a regime complex is not structured around hierarchical lines, its management requires decentralised co-ordination of the elemental institutions (Gehring and Faude, 2013). Efforts to enhance interaction between and among regimes have been described as interplay management, and differ from broader policy interventions targeting global governance architectures (see Oberthür, 2009). Studies examining interplay management in regime complexes have focussed on situations in which conflict is avoided through a functional division of labour (e.g. Gehring and Faude, 2013, 2010; Gehring, 2011; Stokke, 2011), devoting less attention to other more co-operative clusters displaying some degree of centralisation (Gehring and Oberthür, 2009). Examining these settings is important because when regime interplay is synergistic, potential for improvement is often left unexploited (Gehring and Oberthür, 2006b).

Co-operative clusters are common across the system of international environmental governance (IEG). Clusters of multilateral environmental agreements (MEAs) have developed spontaneously in areas such as the marine environment, biodiversity, maritime safety and liability, watercourses, atmosphere, hazardous wastes, plant protection, and nuclear energy (Kim, 2013). The management of regime interplay in MEA clusters should ideally result in environmental policy integration (EPI) or the balancing of environmental objectives and considerations with a view to maximising the aggregate level of environmental protection (Oberthür, 2009). Policy debates in IEG have long considered possibilities for institutional and/or organisational integration of compatible MEAs (see von Moltke, 2001a, 2001b). Such clustering proposals have gained momentum in the light of experiences within the cluster of chemicals and hazardous waste MEAs, where administrative functions have been streamlined and a joint head appointed in a process that is moving towards programme co-ordination and joint decision-making (see Perry, 2012; Wehrli, 2012). The broader replication of the chemicals approach in other MEA clusters is nonetheless disputed. The three conventions of the chemicals and hazardous waste cluster contain trade-restrictive measures that can potentially be in conflict with the global trade regime based on the World Trade Organization (WTO), an issue that most countries consider important enough to merit an integrated approach (Thomas, 2010). Policy interventions aimed at improving EPI should thus be preceded by an analysis of the opportunities and constraints created by existing structures.

This paper examines determinants of EPI in the cluster of biodiversity-related conventions. The biodiversity cluster comprises one framework convention, the Convention on Biological Diversity (CBD), and five specialist regimes: 1) the 1971 Convention on Wetlands of International Importance Especially as Waterfowl Habitat (the Ramsar Convention); 2) the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage (WHC); 3) the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); 4) the 1979 Convention on the Conservation of Migratory Species of Wild Animals (CMS); and 5) the 2001 International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). The cluster exhibits high levels of inter-treaty co-operation (Caddell, 2011) but opportunities for enhancing synergy remain untapped (Ministry of the Environment of Finland, 2010). Challenges facing co-operative processes in the cluster are the focus of this paper.

The empirical case of study and data sources are described next, followed by an analysis of six main challenges affecting EPI in the area of focus. Implications of empirical observations for the management of synergistic interplay and EPI among environmental institutions are discussed next. Concluding remarks close the paper.

2 EPI in the cluster of biodiversity-related conventions

2.1 An overview of co-operative activities

The biodiversity-related conventions have devoted significant time and resources to improve inter-treaty co-ordination, but the outcomes of these efforts are disputed (Caddell, 2011). The biodiversity cluster has undergone a process of "CBD-ification" or integration under the CBD (ibid.). The CBD is a sustainable development convention that pursues three objectives: the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising from the use of genetic resources (CBD Article 1). As a framework convention, the CBD has no legal ramifications for pre-existing biodiversity-related agreements (as an umbrella convention would), but only impacts on subsequent agreements (McGraw, 2002). Indeed, the ITPGRFA, adopted in November 2001, was drafted in harmony with the CBD and pursues its same objectives in the issue-area of plant genetic resources. But the CBD still provides a wider context for the implementation of pre-existing agreements (McGraw, 2002). Thus, the first-generation biodiversity-related conventions (the Ramsar Convention, the WHC, CITES and the CMS), traditionally associated with narrow conservation agendas focussed on the protection of species and habitats, have gradually embraced sustainability principles in their operations (Jardin, 2010).

Partial integration has been achieved in several areas. Examples include the joint preparation and/or endorsement of technical guidance; standardisation of taxonomy and nomenclature; knowledge management; outcome-oriented indicators; outreach activities; joint field missions and projects; and joint capacity-building activities (see Jardin, 2010). Nevertheless, co-operation opportunities have not been fully exploited and/or explored. A Nordic symposium on synergies in the biodiversity cluster (Helsinki, Finland, 8-9 April 2010), which brought together 50 experts in international biodiversity governance, including representatives of national governments, treaty secretariats and UN bodies, identified five areas where joint action is most needed: 1) the science-policy interface; 2) harmonisation of reporting; 3) streamlining of meeting agendas; 4) joint information management and awareness-raising; and 5) capacity building, compliance, funding and review mechanisms (Ministry of the Environment of Finland, 2010). Understanding why potential for synergy has gone unexploited is necessary to design effective management interventions.

2.2 Sources used to examine EPI

Empirical data to examine EPI processes in the biodiversity cluster comes from 25 interviews with treaty secretariat officials and international experts carried out between September 2011 and January 2012 as part of a research project examining the inter-connection of regime complexes and national implementation systems. International experts were selected from a sample of international organisations and agencies with active participation in meetings of the biodiversity-related conventions.

Interviews were conducted remotely via Skype (in the form of a Skype-to-Skype interview or a Skype-to-telephone interview) and recorded using Skype-recording software.

For confidentiality reasons, interviewees are identified here with distinctive tags composed of two letters and one random number. The two letters indicate the organisational affiliation of the interviewee (TS standing for a treaty secretariat; IG standing for an inter-governmental organisation (IGO); NG standing for a non-governmental organisation (NGO); and OT standing for other). Some quotes are not accompanied by a tag. This is done discretionally throughout the paper to ensure confidentiality in those cases where the use of a tag could lead to the identification of the interviewee.

3 Factors affecting EPI in the biodiversity cluster

3.1 Co-operative fragmentation

The biodiversity cluster displays properties of co-operative fragmentation, a type of fragmentation characterised by loose integration under a core institution, non-conflicting norms, and overlapping constituencies, with some major players outside the core institution but supporting co-operation (Biermann et al., 2009b). These conditions affect EPI processes in different ways.

In the previous section it was noticed that the biodiversity cluster has undergone a process of "CBD-ification" or integration under the CBD as the framework convention (Caddell, 2011). This process has evolved naturally because any action undertaken in the context of the non-CBD conventions contributes to the objectives of the CBD (Interviewee NG4). Minor unilateral adaptations can strengthen that synergy. As described by a treaty secretariat official, "we can slot some of our work under different objectives and recommended activities of the CBD. We are not necessarily doing anything different, but what we are doing is that we are able to demonstrate that some specific actions… are being implemented under a particular CBD programme".

Rosendal (2001) suggests that rules and norms in the biodiversity cluster are compatible, but others have noticed internal tensions between "anthropocentric and ecocentric principles, conservationist and preservationist norms, ecosystemic and species-specific rules, as well as voting and consensus-seeking procedures" (Morin and Orsini, 2013, p.42). These tensions have not translated into conflict, but have posed problems to inter-treaty co-operation. According to one interviewee, some of the non-CBD conventions "have not been very comfortable about liaising with the CBD and its broad, abstract concepts and themes which are not as concrete as, for example, designation of wetlands or selection of species requiring protection" (Interviewee OT1). In the view of another participant, "it is not so easy to directly relate the site-based work or the species-based work carried out by the non-CBD conventions to the higher policy discussions taking place within the CBD" (Interviewee TS3). A third interviewee observed, for instance, that "CMS delivers ground-level conservation for specific targeted

species and habitats; it is sometimes tricky to link this up to the broader goals and policies of the CBD". Within the WHC, the CBD is seen as "a general policy convention" and therefore "it is very difficult to relate immediately what is decided there" to the management of World Heritage sites. One participant noticed the "cultural differences" affecting co-operation between CITES and the CBD: CITES has strong compliance provisions, negotiations address very practical aspects of implementation, and contentious elements of draft decisions are put to the vote; conversely, the CBD has soft compliance mechanisms, negotiations involve arduous policy discussions, and rules of procedure privilege consensual decision-making.

Memberships and constituencies of the elemental regimes of the biodiversity cluster are not entirely coincident. State accession to the biodiversity-related conventions has progressed differently over the years and, to date, "the biodiversity-related conventions are not an equal set of overlapping member nations" (Interviewee OT2). Advancing the CBD-ification process in the biodiversity cluster would face opposition from states that are not parties to the CBD, most notably, the United States, which has always been antagonistic towards that convention (ibid.). The biodiversity-related conventions also have their own constituencies (Interviewee IG1). Meetings of the CBD, the Ramsar Convention, CITES and the CMS are normally attended by representatives of environmental ministries, whereas WHC and ITPGRFA meetings have representation from educational/cultural and agricultural ministries, respectively. In addition, the conventions are supported by specific sets of NGOs that can influence the way in which one convention links to another. A number of conservationist NGOs participating in CITES meetings, for instance, have opposed initiatives to insert the CBD's sustainability principles into CITES' processes (Interviewee NG5). Political constituencies sometimes perceive linkage initiatives as threatening their own existence (von Moltke, 2001a).

3.2 Autonomous institutional arrangements

From an organisational perspective, integration in the biodiversity cluster faces similar challenges to those encountered in other settings of MEA interplay (see Oberthür, 2002; von Moltke, 2001b; Briceño, 1999): the conventions are administered by different agencies and operate according to their own organisational elements and functions. In other words, co-operation is affected by what Churchill and Ulfstein (2000) refer to as autonomous institutional arrangements. As some participants noted, the biodiversity-related conventions have evolved independently of each other and, as a result, their processes and operations cannot be easily streamlined or harmonised (Interviewees IG2, NG11). A clustering process akin to that launched by the chemicals and hazardous waste-related conventions seems unrealistic. Streamlining international bureaucracies would be an uphill task. Administrative consolidation within the chemicals cluster has been achieved through the United Nations Environment Programme (UNEP), which hosts the secretariats of its three elemental regimes (Interviewee TS7). In the case of the biodiversity-related conventions, only three of them are administered by UNEP, and there are suspicions that UNEP would seek to position itself as the co-ordinator of an institutional cluster of biodiversity-related conventions to strengthen its power and authority in IEG (Interviewees

TS2, NG10). Moreover, the secretariats of the chemicals-related conventions are based in the same building in Geneva, Switzerland; whereas the secretariats of the biodiversity-related conventions are geographically dispersed (Interviewees TS5, TS7, IG6, OT1). Re-location to a common site would be resisted by both the host countries, which would lose a source of income, and the secretariats themselves, which would lose some independence (Interviewee IG4).

3.3 Integration costs unequally distributed

Relationships between the conventions of the biodiversity cluster are characterised by discord rather than harmony. Discord has been managed through organisational strategies of mutual adjustment. However, mutual adjustment has been asymmetrical due to power disparities between the framework and the specialist conventions.

Discord in the biodiversity cluster has both a substantive and an organisational component (see Abbott et al., 2013, 2012). On a substantive level, tensions derive from the CBD's position as the core institution of the biodiversity cluster (see section 5.1). Clashes occur because the CBD "addresses all of the issues that form the mandate of the other conventions such that someone could ask 'why do even we need these other conventions?'" (Interviewee OT2). In the opinion of one interviewee, the CBD's far-reaching mandate allows the CBD's Parties to take action in areas that fall under the strict jurisdiction of other biodiversity-related conventions: the CBD's Parties may ultimately delimit the CBD's mandate "as broadly or narrowly as they wish. This is not always driven by a logical rationality, but is contingent upon the interests of the Contracting Parties at any point in time" (Interviewee TS8).

In the view of one interviewee, the CBD sometimes "sees itself as the 'big brother' or the umbrella convention", whereas the other conventions are keen to assert their independence and individuality (Interviewee NG3). The latter sometimes perceive that the CBD takes advantage of its leadership role to impose something on them (Interviewee OT1). As one interviewee observed, there is "a feeling of mandate creep, i.e., that the CBD is steamrollering through their territory and telling them what they should do".

Discord also involves other more organisational aspects. Turf battles and competition for resources and attention are common (Interviewees TS5, TS8, OT2). The conventions "do not always want to share their power or money" (Interviewee TS5) and the need to achieve individual success undermines co-operation (Interviewee NG6). Distrust between the secretariats of the CBD and the other conventions of the biodiversity cluster has previously been noticed (see Andresen and Rosendal, 2009).

The CBD enjoys the largest funding in the cluster and its ever-growing work creates a constant demand for further resources (Interviewee OT2). The other conventions "are looking at this in a rather apprehensive way. They think: 'If all this effort is going into the CBD, how can we make sure that we

are going to continue to get our fair share of the cake?'" (ibid.). The non-CBD conventions "tend to feel a bit underprivileged" and "there is some jealousy of the CBD and the attention it gets" as the framework convention (Interviewee NG2). One treaty secretariat official, for instance, bemoaned that the CBD has much more funding and capacity than the other conventions despite it being more focussed on strategy than on on-the-ground action (Interviewee TS6).

Tensions have been managed through adverse asymmetric adjustment. This occurs when organisations with disparate power adjust their rules and policies to manage discord, with the weaker organisations making more extensive changes and bearing greater adjustment costs (Abbott et al., 2013, 2012). The centrality and authority of the CBD as the framework convention on biodiversity places it in a position of dominance in the biodiversity cluster. This is reflected in the Liaison Group of Biodiversity-related Conventions (BLG), a co-ordination mechanism established in 2004 at the behest of the Conference of the Parties (CoP) to the CBD (see CBD Decision VII/26). In its early days, the BLG was criticised for being a forum to discuss items of the CBD's agenda and not issues of common interest across the conventions (Interviewees TS2, TS7). BLG meetings would witness absence or low-profile representation from some secretariats as "there was the assumption that the BLG was going to address CBD-related issues and that was a waste of time" (Interviewee TS7). Input from some interviewees suggests that some friction remains. An impression prevails that the BLG is the CBD's instrument and that the BLG forum is not a meeting of equals (Interviewees TS1, TS3). The secretariats of the non-CBD conventions "feel that quite often they are just being asked to participate in something that the CBD has already pre-cooked" (Interviewee TS1). A CBD Secretariat official acknowledged that the CBD has managed to advance its goals into the agendas of other conventions "in a way that has generated a little bit of tension" and not through "a truly synergistic process".

3.4 Bureaucratisation of inter-treaty co-operation

Co-operation in the biodiversity cluster occurs mostly through the secretariats of the conventions (Caddell, 2011; Urho, 2009), and treaty secretariat officials play important roles in shaping regime inter-connections. Interviewees noticed that "this is a very personality-rich environment" (Interviewee OT2), and "at the end of the day it is individuals who determine how well the conventions and secretariats work together" (Interviewee TS8). Until recently, there was an "enormous personality conflict between the heads of the secretariats themselves and certainly between some of the heads of the secretariats and the head of UNEP" (Interviewee OT2). Those conflicts impinged upon synergy processes. For instance, personality issues between the two former Executive Secretaries of the CBD and the former head of the CITES Secretariat contributed to the relatively low levels of co-operation between the two conventions (Interviewee NG5). Conversely, recent efforts within CITES fora to strengthen synergy with the CBD have been partially driven and facilitated by the appointment of a new CITES Secretary-General in 2010. Coming from a UNEP background, the new CITES Secretary-General "has a real desire to work better with other MEAs" (Interviewee NG1) and has a particular interest in improving co-operation with the CBD in the expectation that this would allow CITES Parties

to access GEF funding (Interviewee NG5). Leadership can make a difference in how treaty secretariats influence regime interplay. Jinnah (2010), for instance, observed that the charismatic leadership of Ahmed Djoghlaf, former CBD's Executive Secretary, was critical in the CBD Secretariat's marketing campaign to reframe the biodiversity-climate change linkage in a way that portrays biodiversity conservation as a climate change adaptation strategy, making it more attractive to biodiversity rich countries.

State actors have so far had limited involvement in inter-treaty co-operation. One interviewee suggested that BLG meetings should be mirrored by regular meetings of the heads of the bureaux of the conventions to raise the political profile of co-operation and synergy in the biodiversity cluster (Interviewee OT2). Political actors should provide leadership and set the tone of BLG meetings (ibid.). In the same vein, a treaty secretariat official acknowledged that "we would like the parties to be more engaged with the BLG to move things forward. Ultimately, the process of improving synergies and coherence needs to be party-driven". Scholars have already noticed that the effectiveness of the BLG is undermined by the lack of involvement of member states of the conventions (Jóhannsdóttir et al., 2010).

3.5 Limited ownership of broader policy goals

Global targets have become popular instruments for mobilising international and national action (see White and Black, 2004; Jolly, 2003). The CBD embraced this soft-law approach through the 2010 Biodiversity Target (Harrop and Pritchard, 2011). Adopted by the CBD CoP at its sixth meeting (The Hague, Netherlands, 7-19 April 2002), the Target aimed at significantly reducing the rate of biodiversity loss by 2010. It was endorsed by world leaders at the World Summit on Sustainable Development (Johannesburg, South Africa, 26 August-4 September 2002) and became a central priority of the BLG since its first formal meeting (see CBD Doc BLG-2).

The 2010 Target fostered co-operation in the biodiversity cluster (Interviewees IG2, IG4), but did not motivate changes in the *modus operandi* of the specialist regimes. CITES' Parties did not perceive the need to revise the operation of the Convention in the light of the 2010 Target. The CBD's framework of goals and sub-targets to assess progress towards the Target (adopted at CBD CoP7 through Decision VII/30) included one sub-target on wildlife trade "which was compatible with CITES' core work since 1973" (Interviewee NG5). "The convention could therefore carry on pursuing its mandate as usual while contributing to the 2010 Target" (ibid.).

In the case of the WHC, a secretariat official suggested that the 2010 Target allowed the convention to communicate and market its work as contributing to the achievement of global biodiversity goals, enriching the panoply of arguments offered to donors when seeking funding. Nevertheless, the 2010 Target did not affect the way in which the convention was implemented. On-going work to protect natural heritage was seen as contributing to the Target. Similarly, one interviewee suggested that,

within the Ramsar Convention, endorsement of the 2010 Target did not lead to decisions requiring changes in the operation of the convention.

3.6 Capacity constraints

The conventions of the biodiversity cluster have not been immune to the international governance dilemma in which increasing tasks are faced amid limited capacity (Eberlein and Newman, 2008; Keohane, 2001). The World Heritage Centre has found it particularly challenging to get involved in co-operative activities. An interviewee noticed that there are "three to four people dealing with natural heritage" who have to monitor over 200 sites. To the extent that most of the work of the World Heritage Committee focusses on the inscription of sites on the World Heritage List and the review of the conservation status of listed sites, monitoring activities become a priority for the World Heritage Centre's natural heritage section. As the same participant mentioned, the Centre has a limited capacity to participate in co-ordination activities in the biodiversity cluster, and the issue of co-operation with other biodiversity-related conventions cannot be tabled at every meeting of the World Heritage Committee due to the latter's overloaded agenda.

Indeed, co-operation in the biodiversity cluster has been increasingly affected by the enlargement of institutional processes within the conventions and the consequent problems of organisational management. Convention bodies and state parties are overwhelmed with implementing the multiple decisions adopted by the governing bodies at their regular meetings. Inter-institutional collaboration has been undermined as a result. As one secretariat official described, "all secretariats have already so much work to do within their own conventions that the time that they can assign to additional co-ordination with other conventions is relatively limited" (Interviewee TS3).

Time constraints have forced the secretariats to prioritise internal governance processes over inter-institutional co-ordination initiatives (Interviewee IG3). Co-operative activities represent a small fraction of the work carried out by treaty secretariats and their relevance might sometimes be overestimated. When co-operation reports are prepared, secretariats try to "make the best possible picture of something that has been relatively small" (Interviewee TS1). Opportunities for collaboration were greater in the past "because we had not created so much institutional machinery, and relationships and joint operations could happen almost spontaneously without having to be fully negotiated, fully agreed, fully funded, etc." (ibid.).

4 Discussion: Synergies and EPI among environmental institutions

Co-operation in the biodiversity cluster has been shaped by a number of institutional, political and cognitive factors. At an institutional level, conditions of co-operative fragmentation have had mixed effects on EPI. On the one hand, the presence of a core institution has facilitated policy alignment: the

1970s agreements traditionally associated with conservation agendas (see McGraw, 2002) have become more receptive to sustainable development principles that lie at the core of the CBD's mission (Jardin, 2010). On the other hand, the specialist regimes of the cluster have found it hard to relate their technical work to the broader principles and policies of the CBD. Moreover, the authoritativeness of the CBD as core institution of the cluster is undermined by the reluctance of one major player, the United States, to become part of the convention. The United States has been, instead, a good international partner within CITES (Snape III, 2010), which occupies itself a central position among wildlife conservation treaties (Lanchbery, 2006) and across the IEG system more generally (see Kim, 2013).

Institutional overlap in the biodiversity cluster has triggered turf battles between its constituent conventions. Discord derives, essentially, from the unequal distribution of costs of integration. Corning (1998) points out that synergies can have eufunctional and dysfunctional effects depending on context. Synergies in the biodiversity cluster have arguably allowed the CBD to activate additional means of implementation through the specialist regimes (see Gehring and Oberthür, 2006a). In contrast, the objectives of the specialist conventions have not made significant inroads into the CBD's policies. These asymmetrical linkages (see Young, 2002) constrain opportunities for EPI, understood as an exercise of balancing and respecting different environmental objectives (Oberthür, 2009).

Past research has observed that the personalities of political actors can influence international decision-making (see Kaufmann, 1980) and can thus affect how international agreements interrelate with one another. Political actors, however, do not usually have direct involvement in inter-treaty co-ordination processes. Synergies between international regimes are increasingly created through liaison diplomacy among the secretariats of IGOs (Orsini et al., 2013), which can affect regime interplay within their zones of discretion (see Jinnah, 2011, 2010). Individual leadership is an important aspect of secretariat governance of overlap management (see Jinnah, 2011). It was noticed here that the relationship between the CBD and CITES was improving following the appointment of a new CITES Secretary-General. Nevertheless, individual personalities can also block inter-treaty co-operation. Personality clashes between heads of agency have, at times, invigorated organisational discord in the biodiversity cluster.

Oberthür and Stokke (2011) have highlighted the importance of building cross-institutional knowledge for enhancing regime inter-linkages, noticing that knowledge building usually rests with the assessment bodies of individual institutions. Such unilateral approaches, however, may not always lead to EPI. The CBD's 2010 Biodiversity Target attempted to raise awareness and synergy within the international community to address the biodiversity crisis. The Target was formally supported in the biodiversity cluster without necessarily bringing internal cohesion. The 2010 Target resulted from a political process aimed at improving CBD's implementation (see CBD Doc UNEP/CBD/COP/6/5; CBD Doc UNEP/CBD/MSP/2; CBD Doc UNEP/CBD/WS-StratPlan/5) and was not clearly endorsed by a epistemic community beyond the CBD's constituency. Unsurprisingly, the Target triggered limited policy change in the biodiversity cluster.

Cognitive interaction is recognised as a key mechanism for enhancing EPI (see Nilsson et al., 2009), but it might have no practical consequences if the capacity to act upon learning is lacking (Spillane et al., 2002). The international governance dilemma of insufficient organisational capacity to address ever-growing tasks (Eberlein and Newman, 2008; Keohane, 2001) was found to impinge upon EPI processes. Treaty secretariats in the biodiversity cluster have faced human, organisational and physical impediments to further co-operation. Debates on capacity-building for the environment have acknowledged the capacity needs of international agencies in supporting national implementation (see Sagar and VanDeveer, 2005) but not yet their capacity requirements to advance EPI in global policy. This is crucial to ensure a cohesive approach to IEG challenges.

5 Conclusions

Integration of IEG structures is said to offer the most potential for EPI (see Biermann et al., 2009a). Its political feasibility has been demonstrated within the cluster of chemicals and hazardous waste conventions, where a joint head of the three conventions was appointed to strengthen synergies (see Thomas, 2010). However, the clustering of chemicals and hazardous-waste related MEAs unfolds in particular institutional and organisational conditions. The secretariats of the three conventions are administered by the same organisation (UNEP) and hosted by the same country (Switzerland). Moreover, the three conventions incorporate trade-related provisions at the core of their mandates, which Thomas (2010) sees as a factor of cohesion. These conditions will hardly be found in other regime complexes and are certainly not present in the biodiversity cluster.

Rather than pursuing a top-down clustering approach, the biodiversity-related conventions are seeking to advance integration through national-level synergies (see Caddell, 2011). Such a focus on national implementation assumes that institutional and organisational arrangements in the cluster are difficult to change in the short term. Other variables nonetheless need to be tackled as synergies in national implementation are supported. This paper can be of assistance to policy-makers and practitioners in identifying those variables.

Understanding the challenges facing EPI processes in regime complexes is key to designing effective IEG responses. This paper did not attempt to offer specific management solutions, but modestly outlined some of the factors affecting interplay management in MEA clusters. Future policy-oriented research could build on this paper to develop specific guidance for EPI interventions in MEA clusters and regime complexes more generally.

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