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## Everyone's Solution? Defining and Redefining Protected Areas at the Convention on Biological Diversity

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### Abstract

For decades, conservationists have remained steadfastly committed to protected areas (PAs) as the best means to conserve biodiversity. Using Collaborative Event Ethnography of the 10<sup>th</sup> meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD/CoP), we examine how the PA concept remains hegemonic in conservation policy. We argue that, as a broadening base of actors frame their political objectives through PAs in order to further their agendas, they come together in a discourse coalition. In this coalition, actors do not necessarily have common interests or understandings; rather, it is through dynamic struggles over the meaning of the PA concept and the continual process of reshaping it that actors reproduce its hegemony. In this process, the CBD/CoP disciplines and aligns disparate actors who might otherwise associate with distinct discourse coalitions. As the concept accommodates a wider range of values, PAs are increasingly being asked to do more than conserve biodiversity. They must also sequester carbon, protect ecosystem services, and even promote human rights. These transformations reflect not only changes in how PAs are defined and framed, but also in the realignment of relationships of authority and power in conservation governance in ways that may marginalise traditional conservation actors.

**Keywords:** Convention on Biological Diversity, Conference of the Parties, market-based conservation, human rights, biodiversity, environmental governance, protected areas, conservation discourse, Nagoya

### INTRODUCTION

When protected areas were initially established, they were for ecological purposes, for conserving biodiversity.... Then we started talking about... community-conserved areas, the importance of people, and the relationship with these ecosystems. Then we started adding economic aspects, payment for ecosystem

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services [and] valuing ecosystem services. And now, we are asking protected areas to save us [from] climate change.<sup>1</sup>

Despite the “collective failure” (L. Gray 2010) to meet the majority of the Convention on Biological Diversity’s (CBD) 15 targets to reduce biodiversity loss by 2010, Parties to the CBD did make progress towards the subtarget to effectively conserve “at least 10% of each of the world’s ecological regions.”<sup>2</sup> By 2010, “more than half of terrestrial eco-regions” had met the 10% sub-target, and more than 12% of the global land area was “covered by protected areas.”<sup>3</sup> Building on this ‘success’ at the 10<sup>th</sup> Conference of the Parties (CoP) to the CBD in Nagoya, Japan (CBD/CoP10), Parties agreed to increase the 2020 target to conserve at least 17% of terrestrial areas and inland water and 10% of coastal and marine areas.<sup>4</sup>

This decision reflects the steadfast commitment among conservationists across the globe to expand protected area (PA) networks. The CBD identifies PAs as the “cornerstones for biodiversity conservation,”<sup>5</sup> and they have constituted a central component of the CBD’s conservation efforts since its 1992 inception.<sup>6</sup> Many conservation advocates see PA expansion as a critical indicator of conservation success (Chape et al. 2005) and “one of the greatest successes the conservation movement has had over the last decade” (Locke and Dearden 2005: 5). This enthusiasm persists even in the face of concerns about the distribution and effectiveness of expanding networks of PAs (e.g., Chape et al. 2005; Boitani et al. 2008) and the associated livelihood restrictions and human rights abuses (e.g., Chapin 2004; Dowie 2009; Igoe et al. 2010).

The production of PA ‘success’—encapsulated in its discursive and geographic expansion—reflects its ability to enrol and align, albeit in an asymmetrical manner, a broadening base of conservation supporters who frame and promote their political objectives through, and sometimes in tension with PAs in order to further their often conflicting agendas. Much like the concept of sustainable development, PAs have sustained a discourse coalition (Hajer 1995), in which actors can maintain their own conceptions of what constitutes a PA as they continually re-shape the form, function, and objectives of PAs in new ways. Yet, while most studies of environmental discourses emphasise *shared* understanding and agendas (e.g., Adger et al. 2005), our analysis, drawing on Hajer (1995), demonstrates how competing interests and understandings can also maintain a discourse. We argue that it is through the dynamic struggles over the meaning of the PA concept and the continual process of reshaping it that actors reproduce the hegemony of PAs as a conservation approach. In that process, the biennial CoP of the CBD, as a recurring site of global environmental governance, acts as a unifying physical and discursive site for otherwise disparate actors.

In this article, we use data collected as part of a Collaborative Event Ethnography (CEE) of CBD/CoP10 to examine how actors negotiate the form and function of, as well as rationale for, PAs in order to justify, build legitimacy, attract new financial support for, and question expanding PA networks. We

find that protected areas are no longer conceived of as spaces exclusively for biodiversity conservation. As the introductory quotation suggests, they are being put to work to sequester carbon, to protect ecosystem services, and in some cases, to protect and even promote human rights. In the twenty-first century, many conservationists are no longer articulating PAs as means to protect resources *from* people, but rather as means to protect resources *for* people. While in the 1980s and 1990s such reframings were related to concerns about community-based conservation and integrated conservation and development, in recent decades, they are increasingly linked to ideas about protecting ecosystem services. As advocates push, via extended networks, for PAs at larger scales and to meet higher targets, they are embracing global mapping systems as means to represent and justify these expanding networks—systems that also obscure local social complexities. At the same time, they are turning to the logics of carbon and ecosystem services to attract additional financial supporters, particularly from the private sector, to sustain the expanding networks. Even some indigenous and local communities’ (ILC) representatives, who have a long history of opposing the territorial expansion of PAs due to rights violations, are pushing for existing local management regimes to count towards newly established PA targets in hopes of maintaining indigenous and local control over resources. Other ILCs remain concerned that PA categorisation will undermine this control.

### Historical struggles to define protected areas

As we reflect on the history of PAs, we can see that these tensions appear to resolve in momentary ‘models’ or ‘approaches,’ which draw on, extend, and move beyond historical conceptualisations and implementations of protected areas as exclusionary zones of ‘pristine’ landscapes. Since the first national parks were established in the late 1800s, ideas about what should constitute a PA have evolved in concert with broader shifts in conservation policy and practice. Though an extensive review of this history is beyond the scope of this paper (but see Western and Wright 1994; Wilshusen et al. 2002; Brechin et al. 2002; Neumann 2004; Hutton et al. 2005; Adams and Hutton 2007; Büscher and Whande 2007), notable shifts include the rise of integrated conservation and development projects, community-based conservation, and people-oriented approaches to conservation in the 1980s and 1990s (Western and Wright 1994; Brosius et al. 1998; Berkes 2004). These initiatives challenged the Yellowstone model of exclusionary protection by advocating for community participation in, benefits from, and support for, conservation. This was followed, by the end of the twentieth century, with social critiques of community conservation (e.g., Brosius et al. 1998; Kellert et al. 2000; Agrawal and Gibson 2001; Berkes 2004; Dressler and Büscher 2008). Ecological critiques also questioned the efficacy of the model for conserving biodiversity (Oates 1999; Terborgh 1999; Ferraro and Kiss 2002; Kiss 2004), and often called for more ‘science-based conservation planning’ (e.g., Attwell and Cotterill 2000;

Margules and Pressey 2000). Associated with this push was the call for a return to exclusionary approaches that prioritised biodiversity conservation (Oates 1999; Terborgh 1999) and that revisited ‘back to barriers’ approaches (Hutton et al. 2005; see also Wilshusen et al. 2002).

Critics of community conservation also invoked the question of ‘scale.’ Using emergent technologies to measure, analyse, and represent biodiversity and its fragmentation, conservation organisations began to identify and prioritise large scale, globally valuable areas (e.g., Myers et al. 2000; da Fonseca et al. 2005).<sup>7</sup> Though community conservation has not disappeared, the scaling up of conservation has corresponded to a reduced focus on local control over natural resources (Brosius and Russell 2003; Wolmer 2003); a resurgence of moral justification for the use of violence in protecting biodiversity (Peluso 1993; Neumann 2004); and increased framings of biodiversity as a global good (McAfee 1999).

More recently, conservation policy and practice has begun to revolve around processes of commodification, privatisation, and reregulation of nature, where the value of nature is defined in monetary terms and conservation is achieved through a variety of market-based mechanisms, such as public-private partnerships, payment for ecosystem services, biodiversity offsets, carbon trading, ecotourism, corporate social and environmental responsibility, and green consumerism (e.g., Heynen et al. 2007; Igoe and Brockington 2007; Büscher et al. 2012; Roth and Dressler 2012; Corson et al. 2013). Related to the embrace of market-based conservation is the turn to public-private partnerships, as well as transfrontier and private parks, which has underpinned the rising presence of private sector actors and the resulting reconfiguration of complex new power relations among private/non-profit/state actors (e.g., Corson 2010; MacDonald 2010b; Büscher 2013), while further obscuring issues of local control. Finally, the ongoing tensions between locally-based, people-centred conservation and science-driven global conservation have been further complicated by the introduction of the concept of ecosystem services, which has dramatically transformed conceptualisations of the ‘value’ of nature and, again, pushed the goal of conservation beyond biodiversity (Redford and Adams 2009; Suarez and Corson 2013).

In the face of recentralised control over conservation and increasing privatisation of resource rights, ILCs and their advocates have continued to advance a human rights agenda within international environmental conventions (Brosius 2004; Doolittle 2010). Despite clear indication that conservation initiatives have evicted and excluded people from their ancestral lands, rendered their livelihoods illegal, and devalued their knowledge and experiences (e.g., Chapin 2004; Adams and Hutton 2007; Dowie 2009), and even as conservation non-governmental organisations (NGOs) have initiated more coordinated efforts such as the Conservation Initiative on Human Rights (Springer et al. 2011), progress in transforming the power asymmetries that prevent rights recognition in practice has been “painfully slow” (Kashwan 2013: 613; see also Colchester et al. 2008; Agrawal and Redford 2009).

By analysing how these and other actors frame their agendas through expanding PA networks, we see how the CBD/CoP disciplines and aligns disparate actors into a discourse coalition around PAs.

### Aligning around ‘protection’

Composed not only of language, discourses are “ensemble[s] of ideas, concepts, and categories through which meaning is given to social and physical phenomena, and which [are] produced and reproduced through an identifiable set of practices” (Hajer 2005: 300). Importantly, discourses “define problems, frame tensions and choices, and create orientations toward the world that, as the discourse grows successful, become embodied in institutional structures, legal doctrine, analytical techniques, informal norms, and standard operating procedures” (Hilgartner 2009: 201). They are reproduced, according to Hajer (2005: 302), through discourse coalitions, comprised of actors who share the “usage of a particular set of story lines over a particular period of time.” Here, story lines—“condensed form[s] of narratives in which metaphors are used”—are used as ‘short hand’ in discussions to create assumptions of mutual understanding, which hold coalitions together. Hajer argued that acid rain was both a story line, in that people assumed mutual understanding when invoking it, and a metaphor for the ills of industrialisation. While the political context in which protected areas are negotiated is clearly different, the way in which disparate actors come together to frame their arguments around a particular concept is similar. PAs serve as a storyline—shorthand for the various, often disparate ideas about conceptualisations of conservation—and as a metaphor for legitimate, as well as illegitimate, resource claims. For diverse actors, including both PA protagonists and antagonists, PAs have come to represent assumptions of mutual understanding of what conservation has been, how it should be pursued, and to what ends.

Importantly, actors in a discourse coalition do not necessarily advocate similar positions, but rather frame their divergent perspectives in relation to, and even in tension with, one another. Hajer (2005) underscores the assumption of mutual understanding with respect to story lines and metaphors as false. In fact, actors speaking at cross-purposes can be instrumental in constituting discourse coalitions:

A discourse coalition is not so much connected to a particular person... but is related to practices in the context in which actors employ story lines, and (re) produce and transform particular discourses. Thus, it becomes possible to come to terms with the fact that some actors might utter contradictory statements or indeed help reproduce different discourse-coalitions (Hajer 2005: 303).

The ‘breadth’ of the PA metaphor holds together a discourse coalition precisely because it can accommodate competing visions.

In highlighting their processual nature, we contend that discourse coalitions are constantly evolving as new actors

join them and as established actors reframe their positions. It is through the process of articulating competing interests and the continual negotiation of both complementary and contradictory narratives that divergent actors create and then reproduce a discourse coalition. The way in which a coalition transforms is both produced by and productive of the power relations among the actors that comprise it. Discourses “embody power in the way they condition the perceptions and values of those subject to them” (Dryzek 2005: 9). Drawing on Gramsci’s (2010[1971]) concept of hegemony as the product of coercion and consent, we assert that these disparate actors—including the ILCs who contest PA expansion, well as those who use it as a vehicle through which to advocate for human rights—reproduce the concept’s discursive hegemony as they frame their efforts in terms of PA network expansion. The struggle among these actors to shape and/or contest PAs is never actually resolved, and the maintenance of hegemony requires constant work. In this process, some actors are better able than others to shift the political terrain on which negotiations take place toward their interests, often at the expense of competing interests. The historically and politically specific context in which these negotiations take place conditions this process, and international conferences offer critical platforms for the construction and maintenance of hegemonic environmental discourses, as well as the shifting of political terrain (MacDonald and Corson 2012; Suarez and Corson 2013).

### **A site of struggle over resources and authority**

We contend that the venue of the CBD CoP brings together and aligns disparate actors who might otherwise associate with distinct discourse coalitions. This temporary alignment also has permanent impacts as the policy decisions and the narratives that coalesce at the CoP transcend the time and place of the meeting. Here, the disciplining actions of the CBD incentivise actors to consent to hegemonic discourses in ways that may not be true of other venues. International environmental meetings maintain a sanctioning authority that directs material resources upon which national and local organisations depend, and they provide legitimacy for associated organisations, “which encourage[s] the alignment and articulation of related actors with sanctioned political projects” (Corson et al. 2013: 8). Hegemonic discourses become institutionalised through environmental agreements that reference the CBD’s targets; National Biodiversity Action Plans; the use of PA categories to guide national park networks expansions; and projects funded by the financing arm of the CBD, the Global Environment Facility (GEF).

These conferences also provide stages for the framing of resources as part of a global commons, thereby justifying global claims to resources, as well as the authority of international actors to manage them. In this sense, the ways in which different actors frame PAs legitimise certain rights while diminishing others, and they create new avenues for changing conservation practice on-the-ground, while

foreclosing others. For example, the push for PA coverage of critical biodiversity habitat and the counting of carbon reductions at a global scale—such that emissions in one locale can offset those in another—all legitimise global claims to resources. Similarly, the embrace of market logics, market-like institutional arrangements, or markets themselves as the best means of achieving conservation de-legitimises claims for subsistence use, aesthetic, and spiritual connections, and a range of other difficult-to-quantify non-market values in biodiversity (Redford and Adams 2009). In short, the discursive debates in international policy over PAs reflect and reshape larger struggles over access to, and control of, natural resources around the world—struggles over material resources that also entail struggles over meaning (e.g., Li 1996; Moore 1998).

Negotiations over PA definitions, forms, functions, and rationales are entangled not just with struggles over rights to resources, but also with struggles over the authority to decide who gets access to, and control of, these resources (e.g., Sikor and Lund 2009; Corson 2011), and shifting meanings are mutually constitutive with shifting relations of governance. As disparate actors reshape the PA concept, they realign, reconfigure, and reinforce dynamic alliances, producing changes in relationships of authority and power in international conservation governance. The rise of international conservation policy and increasing involvement of transnational actors since the 1990s has been both reflective and productive of increasing efforts to map PAs at a global scale and to articulate biodiversity as a global resource (McAfee 1999). Likewise, the increasing outreach to the private sector in order to attract private financing has also underpinned growing influence by the private sector in defining what conservation is and should be (MacDonald 2010a, b; Corson and Macdonald 2012). These relations of governance become institutionalised through categories of PA types, programs of work, funding priorities, strategic targets, and emphases on particular types of scientific knowledge. By studying struggles among diverse actors to define PAs at the CBD/CoP—a critical site for negotiating programming and available financing for PAs—we can observe not just the creation of a transitory PA discourse coalition, but also the transformation of the terrain of conservation governance as produced by and through the discursive construction of PAs and the institutionalisation of associated narratives and practices.

## **MATERIALS AND METHODS**

### **CBD/CoP10**

The CBD was launched at the 1992 United Nations Conference on Environment and Development (also known as the Rio Earth Summit). At the biennial CBD/CoP meetings, 193 Parties come together to review progress, to identify priorities, and to establish work plans toward its objectives. The CBD/CoP meetings encompass the formal plenary; two main working groups in which delegations state their positions on various



decisions before the CoP; smaller contact groups or ‘friends of the chair’ sessions in which selected delegations negotiate specific text for presentation to the working groups; ‘side events’, or topical workshops, often organised by NGOs and intergovernmental organisations; press briefings; and high-level, closed door meetings, open primarily to Parties. In addition to official Parties, a variety of actors, including ILCs, investors, celebrities, and representatives of states, private companies, and NGOs, among others, attend the CoP meetings. CBD policy develops not only via negotiation over official decisions and the political positions of Parties, but also through the more informal discussions that transpire among all of these actors in side events, hallway corridors, and cocktail parties, as well as via the showcasing of ‘case studies’ in press conferences, poster displays, and pamphlets. These informal processes of information sharing, coalition building, and negotiation that take place at the CoP meetings are as important to understand as are its official outcomes.

In this article, we present collaborative analysis of side events, official negotiations, and working groups that related specifically to PAs. We focus in particular on side events, which, as in the climate change meetings (Hjerpe and Linner 2010), attract a surprising number of Party delegates as well as representatives of business, scientific institutions, inter-governmental organisations, and NGOs. Collectively, these events, which took place over 12 days and often in parallel sessions, constitute an active political space where private, public, not-for-profit, indigenous, academic, and other actors come together to produce—through decisions, interpersonal relationships, information-sharing, and other actions—global conservation governance.

### The collaborative event ethnography process

Given the size and nature of a CoP meeting, capturing the diversity of ways in which PAs were represented at CoP meetings would pose prohibitive logistical challenges for the lone researcher. Developed to address this specific challenge, the CEE method entails the collaborative conduct of participant observation and key informant interviews at a specific event (Brosius and Campbell 2010). Refining the approach used at the 2008 4<sup>th</sup> World Conservation Congress (and described in the *Conservation and Society* special issue Volume 8 Issue 4), our CEE of the CBD/CoP10 encompassed an approach in which faculty, post-doctoral fellows, and students worked together; we developed research questions, cooperated in data collection, collectively analysed the data, and wrote up the results. We formed sub-groups to track specific topics and themes across the events that took place during the 2 week long CBD/CoP10.

The PA group worked collaboratively on research design, data analysis, and writing. While we formulated collective research questions before the event, we collected data individually and at separate events. We met daily to schedule ourselves such that we covered, as a group, the largest possible range and number of events relevant to PAs. As each of us followed

different themes and drew on our own experiences studying PAs in locations that span South-East Asia, East and Southern Africa, the Caribbean, Central America, Oceania, and the US Pacific Northwest, we developed individual analyses. Because we attended different events and drew on varied backgrounds and theoretical training, our respective ‘fields of study’ were distinct. After the meeting, through further team interactions, we endeavoured to transform this ‘dispersed consciousness’ into a more ‘collective’, albeit dynamic, consciousness. As we challenged each other’s observations and interpretations, we continually renegotiated our conclusions. For example, we tempered a collective observation by some members of the group about the pervasiveness of the ecosystems services paradigm across the CBD with counter-observations by other members that the theme did not emerge in human rights events. As we negotiated our analysis, we produced a more encompassing, nuanced, and powerful analysis of the CBD/CoP10 than a single individual could have achieved.

In the remainder of the article, we identify the dynamic negotiations entailed in the processes of setting PA targets for, as well as financing, justifying, representing and contesting the expansion of PA networks. As we trace the discursive construction of PAs in negotiations over targets, representations as large-scale networks of science-based protected areas, sites for the protection of ecosystem services, and opportunities to solidify the rights agendas of indigenous and local communities, we reveal how diverse actors are framing and reframing PAs so as to attract and enlist expanding networks of supporters.

## RESULTS

### What ‘counts’ as a protected area?

While the shaping of PA policy occurs officially through the CBD programme of work on PAs (POWPA), one of the most high profile ways that actors contested and legitimised ideas about conservation at the CBD/CoP10 was through the setting of the new PA target (Campbell et al. 2014). At CoP7 in 2004, Parties to the CBD set the goal of achieving 10% of Earth’s ecological regions in protected status by 2010.<sup>8</sup> The 2010 Global Biodiversity Outlook (GBO3) assessment reported that this overall goal was not met at the global level, as nearly half (44%) of terrestrial ecoregions [fell] below 10% protection (and only 57% of governments reporting to the CBD claimed to have at least 10% of land areas listed as protected areas).<sup>9</sup> Yet, optimistically, as mentioned at the beginning of this article, the assessment also reported that “more than half of terrestrial eco-regions” had met the 10% sub-target,<sup>10</sup> and more than 12% of the global land area in 2010 was “covered by protected areas.”<sup>11</sup> Parties ultimately agreed to increase the PA target to 17% of terrestrial and inland water, and 10% of coastal and marine areas (target 11 in the 2020 version).<sup>12</sup>

The push for higher targets catalysed a related discussion about what would count as ‘protected’ and who could manage the resulting areas. This discussion focused on the potential inclusion of the phrase ‘other means’ in the CBD PA target.<sup>13</sup>

This language aligned the CBD PA definition, previously, “a geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives,” with that of the International Union for Conservation of Nature (IUCN): “A clearly defined geographical space, recognised, dedicated and managed, through legal or *other effective means*, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” (Dudley 2008: 8; author emphasis). The IUCN has maintained the phrase “legal or other effective means” in multiple iterations of their PA definition in an effort to encompass “the potential for different governance models” (Dudley et al. 2010: 487). The phrase broadens the definition of what counts as a PA, and legitimises the involvement of non-state actors in conservation governance, as well as the establishment of PAs through means other than state legislation.

The final language agreed to in the new 2020 target—‘other effective area-based conservation measures’—emphasised ‘effective conservation,’ rather than ‘other means’ in an attempt to ensure that conservation remained a central goal even as it embraced alternative forms of PA governance (Campbell et al. 2014). Even as some saw the proposed increased target as an opportunity to count alternative forms of governance—such as Locally Managed Marine Areas (LMMAs) and Indigenous and Community-Conserved Areas (ICCAs) toward the PA target, others argued that since many types of PAs would be included in the target language, a higher, more ambitious target would be necessary.<sup>14</sup> In the negotiation over this phrase, we see the reconfigured hegemony of PAs at the CBD/CoP10 made manifest. Even as Parties ultimately agreed to include conservation areas protected by ‘other means’ toward the CBD PA target, thereby opening the door to count ICCAs, they also negotiated higher targets as a result and reinstated the dominance of effective conservation as the fundamental goal. In turn, by promoting the benefits of, and calling for, ICCAs to be counted towards targets as conservation in the ‘other means’ category, some ICCA advocates consented to the hegemony of the PA approach.

### **New representations of expanding networks**

Different actors employed a range of novel representations and rationales in the hopes of achieving an increased target for PAs. At CBD/CoP10, scientific and technical arguments to justify the expansion of PAs were particularly prominent in sessions devoted to the technicalities of measuring, locating, and expanding PA networks. Participants at these sessions often included conservation biologists and representatives of larger conservation organisations (e.g., Conservation International [CI], World Wildlife Fund [WWF], BirdLife International), international scientific collaborations (e.g., Biodiversity Initiative Partnership, Census of Marine Life), and United Nations agencies and affiliates (e.g., United Nations Environment Programme (UNEP)-World Conservation Monitoring Centre (WCMC). Using the tools of science-based conservation planning (e.g., gap analysis, carbon-calculators, and estimates of

carbon sequestered), they mobilised both conventional biological arguments (conservation for ecological representativeness) and relatively novel ecosystem services-based arguments (conservation for the protection of ecosystem services including carbon storage) to assert the relevance of, and justify, the need for more PAs. But these examples also reveal the tendency of global scientific representations to grossly simplify the complexities of conservation in local contexts and to use science to justify *a priori* policy decisions.

Under the POWPA, CBD Parties are encouraged to conduct gap analyses of their PA systems to ensure ecological representativeness and to designate protected areas to fill identified gaps.<sup>15</sup> A CBD technical guide for conducting gap analysis argues that “developing an ecologically-representative network of PAs requires an approach to selection that is rooted more in the sciences (both biological and social science) than in chance or politics” (Dudley and Parish 2006: 1). Side events at CBD/CoP10 highlighted how gap analyses could help meet PA targets by providing a ‘scientific basis’ for identifying new PAs.<sup>16</sup> Yet, presentations such as those on the results of gap analysis exercises in Indonesia, Thailand, the Philippines, and southeast Asia focused exclusively on data related to species (e.g., sea turtles, dugongs), habitats (e.g., coral reefs) and elided social contexts. Furthermore, even when results of gap analysis identified PAs that could be degazetted based on scientific criteria, the idea was rarely picked up. For example, when a representative of the United Nations Development Programme (UNDP)-Philippines argued that 45 PAs in the Philippines (both marine and terrestrial) could be “considered for other uses,”<sup>17</sup> the comment was ignored. In short, the invocation of science by conservationists represented PAs in ways that justified and facilitated expanding PAs.

The science of carbon mapping provided particular support for the expansion of PAs. In one side event, UNEP-WCMC, with collaborators from the World Resources Institute and the German Federal Agency for Nature Conservation, highlighted their global Carbon Calculus mapping program,<sup>18</sup> a tool used to estimate the carbon content within PAs. Users were invited to virtually expand polygons on digital maps in order to reveal how much additional carbon they could sequester by expanding PA boundaries. These maps lacked any overlays of people or resources use: the polygons were simply expanded into ‘empty space.’ The significance of this and other carbon-based framings is not only the ways in which various actors sought to demonstrate carbon overlap in PAs as a justification for additional PAs, but also the virtual erasure of local context and potential social impacts of conservation activities (see also Hagerman et al. 2012).

### **Reframing protected areas to attract new financing**

The increase in the PA target was intertwined with a discussion about the need to solicit financing from the private, as well as public, sector. Many argued that reframing PAs in terms of ecosystem services rather than biodiversity was necessary in order to attract this new financing—a narrative that was

encapsulated in the emergence of terms like ‘ecosystem finance’ and ‘PA financing gap.’<sup>19</sup> A research associate with the Global Canopy Programme (GCP) cited the need for USD 10–45 billion per year to finance the targeted PA expansion. He further argued that, “unless we can find ways to tap into domestic transfers of money more effectively, and also to the international trade system then it’s unlikely that we can get into the amount of resources that are really, really needed.”<sup>20</sup> The GCP’s *The little biodiversity finance book: a guide to proactive investment in natural capital*, which was released and heavily promoted at the CBD/CoP10, includes estimates of the PA financing gap and offers a menu of different tools to fill that gap. A related initiative, *LifeWeb*, created at the CBD/CoP9’s invitation, comprises an electronic clearinghouse for funding needs, as prioritised by national governments. Targeting potential funders, LifeWeb has organised financing roundtables on POWPA implementation.

These large numbers were echoed by the study leader of The Economics of Ecosystems and Biodiversity (TEEB) initiative, who argued that quantifying ecosystem services could be a way of securing the necessary funds for PAs around the world:

Protected areas provide many benefits, which we have talked about: the ecosystem services. And the economic calculations suggest that these are good investments if you invest in protected areas. Today, we clearly don’t do enough... for the spending that *is* required [is] more like 45 billion, whereas the actual spending is more like 6.5 to 10 billion.<sup>21</sup>

Numerous presenters cited the importance of framing PAs in terms of their ecosystem services in order to engage previously unengaged and critically important stakeholders who were not yet enraptured by the idea of saving nature for its own sake. Those targeted to help raise funds ranged from apathetic publics to potential private financiers to reluctant finance ministers. As the Deputy Director General of IUCN summarised:

New [financing] opportunities... are going to require us to learn... to be able to speak to economists, not in the language of biodiversity but in the language of what works for finance ministers, what works for business leaders, what works for consumer associations so that we can convince them that there is greater value. We need to broaden and deepen the scope of financial mechanisms for conservation in general but protected areas in particular and we need to think how can we link what we’re trying to do here with the broader movement on the green economy.<sup>22</sup>

Again, just as the scientific representation of PAs through various measurement and mapping technologies rationalises further PA expansion, this reframing of PAs according to the valuable ecosystem services they generate explicitly and strategically enrolls new actors and enlists new resources to the cause of more and larger PAs. As these initiatives together stretch and remould the PA concept to accommodate new paradigms, actors, and financial resources, they also produce changes in relationships of authority and power in international conservation

governance, as PAs are reformulated to appeal to private sector actors and finance ministers (Suarez and Corson 2013).

### New justifications for expanding protected area networks

As reframing PAs around ecosystem services became the means to secure financial support for PA expansion, it simultaneously became a more persuasive rationale for that expansion. The head of IUCN’s Global Economics and Environment Programme offered a glimpse of a newly conceptualised PA type, which he characterised as a kind of an ecosystem services optimising ‘farm’ that maximised the delivery of a suite of ‘crops,’ one of which would be biodiversity:

This [ecosystem services accounting] is actually another way to look at managing a landscape, in an agricultural sense, toward multiple values. Not only corn, not only wheat, but corn, wheat, water, carbon, wildlife, any of the potential services that are being created for the benefit of you and for the rest of mankind, or personkind, are in fact valued....<sup>23</sup>

Carbon maintained a special place in this suite of ‘crops,’ as many CBD/CoP10 participants articulated the rationale for PA expansion in terms of their contributions to mitigating the effects of climate change and adapting to its impacts (see also Hagerman et al. 2012). Representatives of organisations such as UNEP, IUCN, The Nature Conservancy, UNDP, the Wildlife Conservation Society, the World Bank, and the WWF argued that PAs were the best means to address climate change on the basis that they both mitigate climate change (e.g., by preventing carbon emissions through averted deforestation, afforestation or reduced degradation) and enable adaptation to climate change (e.g., by fostering ecological resilience, providing migration corridors and helping people cope with biophysical changes such as droughts, floods, and landslides).<sup>24</sup> This logic of PA expansion for carbon was made specific in the case of Peru, where a carbon-based rationale for PAs combined narratives around biotrade and poverty alleviation with emergent themes of carbon sequestration and ecosystem services:

Peru launched an initiative for climate change... called the Peruvian Conservation Initiative for Climate Change... The purpose of this initiative is to contribute climate change mitigation through the conservation of 54 million hectares of tropical forests and their environmental services [to] benefit... human well-being... to protect forests for carbon sequestration, for watershed protection, for biodiversity conservation, [to give] opportunities for local communities for biotrade... [and to] contribute to poverty alleviation [for] more than 25,000 indigenous people... We have succeeded in the goal of establishing at least 10% of [our] territory as national protected areas.<sup>25</sup>

Likewise, at a CI-hosted side event—*Achieving the 2020 targets: protecting the right areas*<sup>26</sup>—the President of CI declared that PAs were the “single most important tool for



conserving biodiversity,” and he suggested that once the value of all ecosystem services—not just carbon storage—is accounted for, CI would eventually justify a target of 50% of total terrestrial surface area. In its 2010 campaign to protect 25% of global terrestrial land through CBD target 11, CI argued that, “at least 17% of Earth’s land needs to be protected to conserve known biodiversity. Roughly, an additional 6–11% needs to be protected to ensure adequate storage of biomass carbon in natural ecosystems.”<sup>27</sup>

However, the embrace of ecosystem services valuation and accounting was not pervasive, as panellists and audience members alike questioned the ability to measure biodiversity’s non-monetary values. The former IUCN Chief Economist reminded the audience in a panel on biodiversity offsets that “biodiversity provides ecosystem services but it cannot be summarised in terms of the ecosystem services.”<sup>28</sup> Likewise, delegates from African member countries in the audience of a side event on financing argued that economic valuation fails to include social criteria that cannot be quantitatively measured.<sup>29</sup> Even the leader of the TEEB initiative admitted that, “forests are not just sticks of carbon.”<sup>30</sup>

Furthermore, as these conservationists sought to ensure the centrality of biodiversity in the emergent ecosystem services discourse, ILCs also struggled to keep a focus on human rights in the face of increasing efforts to represent biodiversity at a global scale. As these high-profile initiatives reframed PAs as stores of services-generating natural capital assets important not to just local ‘stakeholders,’ but to the world, they reinforced global claims to resources.

### Emerging consent and enduring resistance in order to protect local resource rights

At CoP10, an established network of indigenous groups, who often organised themselves under the banner of the International Indigenous Forum on Biodiversity, continued their ongoing efforts to hold the CBD accountable to international human rights protocols including the African Charter on Human Rights, the International Labour Organization Convention 169 on rights of indigenous and tribal peoples, and especially the United Nations Declaration on the Rights of Indigenous Peoples (Witter et al. In prep).<sup>31</sup> These actors pointed to a legacy of human rights infringements enacted in PA contexts, including 1) the lack of respect for traditional lifestyles of residents; 2) government failures to obtain Free Prior and Informed Consent, and even their failure to inform residents that they were living in PAs;<sup>32</sup> 3) restrictions of sustainable resource use practices;<sup>33</sup> and 4) evictions.<sup>34</sup> However, we also found that while many continue to resist PA expansion, others are increasingly acquiescing to alternative forms that they believe could secure their rights.

Recall that the inclusion of the aforementioned phrase ‘other effective means’ in the PA target, was a hotly debated issue at CoP 10. Over the last decade, IUCN has increasingly pushed for some of the oldest sustainably managed, but not officially conserved, land and seascapes throughout the world to be

recognised as PAs (Dowie 2009). Among a growing typology of these indigenous and locally conserved areas at the COP meeting, 10 ICCAs (also called Community Conserved Areas or CCAs) and LMMAs, were among the most debated and discussed, particularly in relation to the PA target. As pointed out by Dowie (2009: 236), if these “unchartered [areas] were included under the rubric of ‘Protected Area,’ they would come close to doubling the surface area of the planet under conservation.” In order to meet CBD targets, some sought to expand definitions of ‘what counts’ as protected and to enrol these alternatively governed systems as PAs. The diverse ILC sector faced tensions between the prominent conviction that continuing to expand PAs would undermine indigenous rights and a less predominant but apparently growing opinion (see Dowie 2009) that expanding PA networks could offer opportunities to secure resource rights.

Marine protected areas (MPAs) have historically taken a backseat to terrestrial lands in international conservation policy, yet they figured prominently in the CoP10 negotiations.<sup>35</sup> While there was relatively strong backing for community-based MPAs in the 1990s (Walley 2004; Levine 2007), the twenty-first century has witnessed the embrace of large-scale ‘no take’ MPAs (N. Gray 2010; Sievanen et al. 2013). Many ILC advocates are contesting this trend by articulating alternative approaches that prioritise sustainable use, maintain local tenure systems, and include local participation in the design and management of marine areas.

For example, rather than challenging the expansion of MPAs at the CBD/CoP10, political elites, NGO conservationists, and academics working in Oceania—a context characterised by local marine tenure and a ‘renaissance’ of community-based management (Johannes 2002)—confronted the idea of no take, imposed MPAs by pushing for official recognition for LMMAs as a key means to reach the new PA targets. LMMAs are “[areas] of nearshore waters and coastal resources that [are] largely or wholly managed at a local level by the coastal communities, land-owning groups, partner organisations, and/or collaborative government representatives who reside or are based in the immediate area” (Govan 2009: 28). Echoing arguments made elsewhere by representatives of the United Nations’ University Institute of Advanced Studies that traditional marine managed areas should count toward CBD targets (Vierros et al. 2010: 52-53), a presenter from IUCN noted that LMMAs occur in more than 500 communities spanning 15 independent countries and territories in the South Pacific, and argued that they “have a central role to play in reaching national, regional and international biodiversity and MPA targets.”<sup>36</sup> Even a representative from Fonds Français pour l’Environnement Mondial described LMMAs as “more participatory marine protected areas,”<sup>37</sup> in an attempt to broaden, if not redefine, the meaning of an MPA to include an alternative form that emphasised the participation of, and benefits to, ILCs.

As they endeavoured to extend their own network of supporters, LMMAs proponents also strategically drew on both social and biodiversity benefits in their rationales:

Many concepts that we would think of as being relatively new and science-based that we are actively discussing here at the CBD, such as... marine protected areas, have in fact been traditionally used in the Pacific Islands for a long time.... What it is really important to know.... is these practices have generally been successful in bringing benefits to communities and to biodiversity.... communities have established networks of locally managed marine areas, or LMMAs. These are marine areas actively managed by communities or the resource owners. They were based on traditional tenure and knowledge. It also makes sense to strengthen and build upon these kinds of local management systems that have been very successful and that provide culturally appropriate methods of implementing the CBD.<sup>38</sup>

As these actors seek to expand the MPA concept to include new forms, agendas, and participants, they build an increased base of support for the international effort to expand MPAs, and ultimately consent to, and become aligned with, the global MPA expansion agenda.

The issue of formally counting ICCAs toward the PA targets was more openly contentious. ICCAs are defined as natural and modified ecosystems with long-standing, traditional management systems that include significant biodiversity, ecological services, and cultural values (Borrini-Feyerabrand et al. 2004; Kothari 2006; Berkes 2009). Importantly, and unlike many community conservation initiatives, which have often fallen short of the objective of devolving resource control to local people, a definitive characteristic of ICCAs is indigenous, local, or mobile community control, ensured through customary law or, again, other effective means. Despite their longevity, ICCAs were not formally categorised or promoted at the global scale until the 5<sup>th</sup> World Parks Congress in Durban in 2003, which recommended that Parties recognise diverse forms of conservation governance (Berkes 2009).<sup>39</sup> The 2008 IUCN *Guidelines for applying protected area management categories* explicitly state that ICCAs should be included in protected area systems (Dudley 2008).

In two ICCA side events at the CBD/CoP10,<sup>40</sup> ICCA Consortium members promoted the formal recognition of ICCAs toward the CBD target<sup>41</sup> in an effort to mobilise political and financial resources to protect ICCAs, many of which, "... are now in profound jeopardy."<sup>42</sup> However, other ILC representatives have argued that including ICCAs in the database and counting towards the CBD PA targets would invite greater interference from governments and outsiders, undermining indigenous and local control (see Dudley et al. 2010: 29). A representative of the Indigenous Peoples' International Centre for Policy Research and Education explained:

Even for ICCAs... just the very type of categorization seemed to be reducing the territory of multiple use and indigenous governance to a narrow category of conservation while giving a big expansion to protected areas, because they would be legally recognized... effectively it would mean that conservation will continue to take over indigenous territory.<sup>43</sup>

The repeated devaluing of indigenous rights in PA contexts has not only undermined the credibility of conservation organisations' and states (e.g., Colchester et al. 2008), but has also contributed to a situation in which indigenous advocates are increasingly calling for the recognition of their rights as a *precondition* for engaging external actors on issues related to PA conservation. Thus, many ILC actors oppose situations wherein their sovereignty is, as described by Kashwan (2013: 623) "contingent on specific conservation outcomes."<sup>44</sup>

Notably the predominantly communicated objective of most ICCA advocates at CoP10 was *not* PA expansion by conventional or any other means, but rather was maintaining local and indigenous control over resources in conservation. However, several actors did see being counted as a clear opportunity for greater financial support and legitimacy. Our observations suggest that the relationship between PAs and ILCs was the most complex component of the coalition in embodying both internal dissent and discord with other interpretations. While members of conservation organisations frame even rights based approaches to serve the conservation agenda (Kashwan 2013), ILCs frame their engagements with conservation, first and foremost, in the service of advancing rights. We note, however, that both those who resisted and those who supported ICCA categorisation framed their agendas (albeit competing ones) in terms of PAs, thereby reproducing its discursive hegemony.

## DISCUSSION/CONCLUSION

These ethnographically-informed results reveal diverse understandings of what counts as conservation, how it should be pursued, and to what ends. As we watched various actors debate the framing of, and rationales for, PAs—to promote rights, sequester carbon, filter water, and prevent erosion and mitigate floods—we observed the ongoing production of PAs' discursive hegemony. As Parties negotiated and carefully crafted the 2020 target language—'other effective area-based conservation measures'—to simultaneously embrace alternative governance models and to reassert conservation's primacy, they institutionalised policy that offered sufficient ambiguity for disparate actors to use it to pursue their own incongruent agendas. Likewise, while some conservationists questioned the ability of the ecosystem services approach to measure biodiversity's non-monetary values, many continued to articulate PAs in global terms and to use ecosystem services-based arguments to attract, enlist, and coerce expanding networks of supporters. As actors representing influential organisations (such as the GEF and the UNDP) justified the framing of PAs in terms of their ecosystem services as the only way to attract financial support for PAs, they created a context in which there appeared to be no alternative but to embrace ecosystem services. Finally, as ILCs continued their struggle to prioritise human rights—with some ILCs pushing to count LMMAs and ICCAs toward the PA targets and others continuing to argue that such inclusion would undermine

indigenous and local control—they framed their arguments in relation to other debates about the form, function, and rationale of PAs that were taking place at the CBD.

We argue that as these actors advocate contradictory agendas, they come together in a discourse coalition in which they frame their political objectives through, in relation to, and sometimes in tension with, those of its other members. Our analysis builds on Hajer (2005) to challenge the assumption of shared understanding and agendas within discourse coalitions and to demonstrate how competing interests and understandings can also maintain the hegemony of a global environmental discourse. We emphasise the importance of institutional context in structuring and maintaining the coalition, and we argue that it is precisely through the dynamic struggles over the meaning of the PA concept and associated policies and programs that actors reproduce the hegemony of PAs as a conservation approach. In that process, the biennial CoP meeting of the CBD brings together and aligns actors with diverse agendas through the sanction and circulation of particular forms of knowledge, the establishment of regulatory devices and programmatic targets, and the structuring and aligning of public-private-nonprofit relationships (see also Brosius and Campbell 2010; MacDonald and Corson 2012). This context coerces even PA antagonists to articulate their positions in relation to sanctioned (officially or otherwise) agenda items. It also condones—by providing official spaces for the representation of PA networks via global maps and as ecosystem services—the erasure of local contexts and non-monetary biodiversity values.

Through the continual process of framing their positions in relation to PAs, conservationists reproduce the hegemony of PAs. As the PA concept begins to accommodate a wider range of values, the balance of how these values are prioritised shifts toward the more powerful interests. As ILCs and their representatives are drawn into the PA discourse as a way to pursue their interests, they also become ensconced in it. They are forced to navigate a shifting political terrain moving beneath them in ways that may diverge from their original interests.

In turn, the policies and narratives that coalesce in this context—such as the language of targets and the reformation of biodiversity as ecosystem services—transcend the time and place of the meeting itself as they become institutionalised through policies and programs that are cross-referenced by other conventions, GEF funding priorities, and informal discussions. Moreover, the translation of these decisions into projects are again subject to complex power relations and political interests. These transformations reflect not only changes in how PAs are defined and framed, but also realign relationships of authority and power in conservation governance in ways that still do not address the negative consequences of PAs for vulnerable groups. For example, in practice, we find examples of LMMAs trending toward more traditional, science-based MPAs, with increasing decision-making authority transferred to non-local actors (Gruby and Basurto 2013). Furthermore, as biodiversity becomes increasingly framed in terms of its

services, represented on the global scale, and reformulated to be exchanged via markets, traditional conservation actors may find their historically influential role in shaping PAs destabilised, in both concept and practice, as financial interests emerge as powerful players in global conservation policy.

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## NOTES

1. Side Event, IUCN-WCPA Global Protected Area Programme: Implementing the POWPA. October 19, 2010.
2. 2010 Target 1.1, Global Biodiversity Outlook (GBO3). <http://www.cbd.int/gbo3/>. Accessed on March 19, 2013. P. 18
3. 2010 Target 1.1, Global Biodiversity Outlook (GBO3). <http://www.cbd.int/gbo3/>. Accessed on March 19, 2013. P. 35.
4. See CBD/CoP10 Decision X/2.
5. CBD. Protected Areas. <http://www.cbd.int/protected>. Accessed on April 4, 2013.
6. Article 8 a–e of the original convention call for the: a) establishment of PA systems; b) development of guidelines for their selection and management; c) management of biological resources both within and adjacent to PAs; d) protection of ecosystems, habitats and populations; and e) promotion of sustainable development in areas adjacent to PAs (CBD Article 8 of original convention, <http://www.cbd.int/convention/articles/?a=cbd-08>. Accessed on 5 August, 2011).
7. See World Wildlife Fund (WWF)'s eco-regions and Conservation International (CI)'s hotspots.
8. CBD/CoP7, Decision VII/30.
9. 2010 Target 1.1, Global Biodiversity Outlook (GBO3) <http://www.cbd.int/gbo3/>. Accessed on March 19, 2013. P. 35–36.
10. 2010 Target 1.1, Global Biodiversity Outlook (GBO3) <http://www.cbd.int/gbo3/>. Accessed on March 19, 2013. P. 18.
11. 2010 Target 1.1, Global Biodiversity Outlook (GBO3) <http://www.cbd.int/gbo3/>. Accessed on March 19, 2013. P. 35.
12. See CBD/CoP10 Decision X/2.
13. Side Event, Protected Areas—Maintaining Their Values and Functions: The Role of CBD/POWPA. October 19, 2010.
14. Contact group for the CBD strategic plan. October 21, 2010.
15. See CBD Decision VII/28 Goal 1.1.5 and 1.1.6.
16. Side Event, Presentation of the Marine Protected Areas Gap Analysis. October 18, 2010.
17. Side Event, Presentation of the Marine Protected Areas Gap Analysis. October 18, 2010.



18. Side Event, Carbon, Biodiversity and Ecosystem Services: Exploring Co-benefits. October 20, 2010.
19. Side Event, Role of Protected Areas in Climate Change: New Financing for Protected Areas, Rio Conventions Ecosystems Pavilion. October 19, 2010.
20. Side Event, Role of Protected Areas in Climate Change: New Financing for Protected Areas, Rio Conventions Ecosystems Pavilion. October 19, 2010.
21. Side Event, TEEB Key Findings and Synthesis. October 20, 2010.
22. Side Event, Role of Protected Areas in Climate Change: New Financing for Protected Areas, Rio Conventions Ecosystems Pavilion. October 19, 2010.
23. Side Event, Global Partnership for Ecosystem Valuation and Wealth Accounting: Learning from other Initiatives and Country Experiences. October 25, 2010.
24. See Natural Solutions [http://cmsdata.iucn.org/downloads/natural\\_solutions.pdf](http://cmsdata.iucn.org/downloads/natural_solutions.pdf). Accessed on August 7, 2012.
25. Side Event, Role of Protected Areas in Climate Mitigation Side Event, Rio Conventions Ecosystems Pavilion. October 19, 2010.
26. October 20, 2010.
27. CI, technical rationale doc. [http://www.conservation.org/Documents/CI\\_CBD\\_technical\\_brief\\_PA\\_target.pdf](http://www.conservation.org/Documents/CI_CBD_technical_brief_PA_target.pdf). Accessed on August 7, 2012.
28. Side Event, Business and Biodiversity Offsets Programme. October 27, 2010.
29. Side Event, Economic Values for Biodiversity and Ecosystem Services in Real Life Decision Making. October 21, 2010.
30. Side Event, Financing Biodiversity in the Context of Development and Climate Change Priorities, Rio Conventions Ecosystems Pavilion. October 27, 2010.
31. Press Briefing, Indigenous Peoples COP10 Press Conference, International Indigenous Forum on Biodiversity October 25, 2010.
32. Side Event, Governance and Rights: What Works? Toward Effective and Equitable Conservation for Biodiversity and Livelihoods. October 22, 2010.
33. Side Event, Indigenous Rights and Protected Areas. October 25, 2010.
34. Side Event, Mock Protected Area Tribunal: Lessons in Comanagement at the Rio Conventions Ecosystems Pavilion. October 20, 2010.
35. The CBD broadly defines a marine protected area (MPA) as ‘any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings’. CBD/CoP7, Decision VII/5, welcoming the report of the Ad Hoc Technical Expert Group on Marine and Coastal Protected Areas (UNEP/CBD/SBSTTA/8/INF/7).
36. Side Event, Marine Protected Areas session, Rio Conventions Ecosystems Pavilion. 19 October 19, 2010.
37. Side Event, Pacific SIDS: Value Island Biodiversity: Its Our Life. October 22, 2010.
38. Side Event, UNU-IAS Traditional Knowledge Initiative, Rio Conventions Ecosystems Pavilion October 20, 2010.
39. At the 2004 CoP7 in Kuala Lumpur, the CBD included in the POWPA element 2 on Governance, Participation, Equity and Benefit Sharing, item 2.1.3 of which suggests that parties, ‘Establish policies and institutional mechanisms with full participation of indigenous and local communities, to facilitate the legal recognition and effective management of indigenous and local community-conserved areas in a manner consistent with the goals of conserving both biodiversity and the knowledge, innovations and practices of indigenous and local communities.’ (CoP VII/28). In its 2010 in-depth review of POWPA, element 2 on governance, participation and equity, SBSTTA recognised the need to diversity governance types in conservation, specifically the role of ILCs and ICCAs (SBSTTA 14 Recommendation XIV/4).
40. Side Event, Strengthening What Works—Recognising and Supporting the Conservation Achievements of Indigenous Peoples and Local Communities. October 21, 2010; Side Event, ICCAs in Coastal and Marine Environments: Learning from long-standing and brand new examples throughout the world. October 22, 2010.
41. United Nations Environment Programme – World Conservation Monitoring Centre: [http://www.unep-wcmc.org/icca-registry\\_399.html](http://www.unep-wcmc.org/icca-registry_399.html). Accessed on 5 August, 2011.
42. Representative of IUCN Commission on Environmental, Economic and Social Policy, Side Event, ICCAs in Coastal and Marine Environments: Learning from Long-standing and Brand-new Examples throughout the World. October 22, 2010.
43. Side Event, Indigenous Rights and Protected Areas. October 25, 2010.
44. Side Event, Strengthening What Works – Recognizing and Supporting the Conservation Achievements of Indigenous Peoples and Local Communities. October 21, 2010.

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