

NEW STEPS OF CHANGE: LOOKING BEYOND PROTECTED AREAS TO CONSIDER OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES

Harry D. Jonas¹*, Valentina Barbuto¹, Holly C. Jonas¹, Ashish Kothari² and Fred Nelson³

Corresponding author: harry@naturaljustice.org

- ¹Natural Justice, 63 Hout Street, Cape Town, South Africa
- ² Kalpavriksh, Pune, India
- ³ Maliasili Initiatives, Vermont, USA

ABSTRACT

In 2010, the Conference of the Parties to the Convention on Biological Diversity adopted the Aichi Biodiversity Targets as part of the *Strategic Plan for Biodiversity 2011-2020*. Target 11 calls for 'at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas' to be conserved by way of 'well-connected systems of protected areas and other effective area-based conservation measures'. Yet four years after their adoption, parties to the CBD and other rights- and stakeholders have not received guidance about either what kinds of arrangements do and do not constitute 'other effective area-based conservation measures', or how best to appropriately recognise and support them. The paper argues that without clear guidance on the issue, conservation law and policy will continue to inappropriately and/or inadequately recognise the great diversity of forms of conservation and sustainable use of ecosystems and their constituent elements across landscapes and seascapes, including by Indigenous peoples and local communities. In this context, and in line with calls from the Convention on Biological Diversity and the IUCN, it proposes the establishment of an IUCN Task Force to further explore the issues with a view to developing clear guidance on 'other effective area-based conservation measures' as a means to effectively and equitably achieve Aichi Biodiversity Target 11.

Key words: Aichi Biodiversity Targets, protected areas, other effective area-based conservation measures, Indigenous peoples and local communities, conserved areas, ICCAs

INTRODUCTION

In October 2010 in Nagoya, Japan, the 10th Conference of the Parties (COP 10) to the Convention on Biological Diversity (CBD) adopted the new *Strategic Plan for Biodiversity 2011-2020* (CBD Decision X/2). The Strategic Plan aims to achieve conservation and sustainable use of biodiversity through twenty Aichi Targets organised under five strategic goals. This paper focuses on Target 11, which belongs to Strategic Goal C (*To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity*) and addresses issues related to the conservation of terrestrial, inland water, coastal, and marine areas.

Specifically, Aichi Target 11 states: "By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem

services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and **other effective areabased conservation measures**, and integrated into the wider landscape and seascape." (emphasis added)

Target 11 explicitly calls on states to strive collectively to achieve the global targets for terrestrial and marine areas (17 per cent and 10 per cent, respectively) through well-connected systems of protected areas and 'other effective area-based conservation measures' (OECMs).¹ In other words, the CBD clearly envisages areas outside of protected areas contributing directly, and with equal weighting, to the overall target. However, despite four years having passed since COP 10, the continuing effort invested in developing guidance for protected areas (Borrini-Feyerabend et al., 2013) has not been matched by a similar focus on OECMs (Jonas & Lucas, 2013). This is underscored in a report by the CBD and International



San peoples from the Kalahari have lived in harmony with nature, but their contribution to the conservation and sustainable uses of biodiversity lacks appropriate recognition, particularly in Botswana and South Africa © Harry Jonas

Union for Conservation of Nature (IUCN), which states: 'While Aichi Target 11 explicitly includes "other effective area-based conservation measures", at present there is neither a clear definition of what these measures are, nor comprehensive information on the total area covered by such measures' (Bertzky et al., 2012; Woodley et al., 2012).

The next section of the paper evaluates certain trends in conservation since 1950, pointing especially to the evolution in the typology of protected areas to include a larger proportion of those with sustainable use of natural resources and those under shared governance or governed by Indigenous peoples and local communities. These trends underscore the immediate need for a more nuanced approach to forms of governance and management occurring outside of protected areas that nevertheless deliver conservation outcomes.² This leads to a critical assessment of the development of the definitions of 'protected area' and 'conservation' under the auspices of the CBD and IUCN. The assessment highlights IUCN's restriction of the definition of a protected area to exclude from the global protected area estate areas that are achieving biodiversity and landscape conservation without explicitly aiming to do so. This

translates into those Indigenous peoples and local communities who would like their areas to be recognised as protected areas suffering an inadequate level of appropriate recognition for their contributions to the conservation and sustainable use of biodiversity. The discussion then turns to OECMs, providing an overview of the existing literature and concluding that the contributions to the discourse are useful but remain neither comprehensive nor reflective of a consensus. The paper concludes by setting out a range of questions and pointers intended to better define OECMs as part of a larger initiative – as called for by the CBD and IUCN – to increase the appropriate recognition of Indigenous peoples' and local communities' contributions to the achievement of Aichi Target 11, not to mention various other Aichi Targets (Kothari & Neumann, 2014).

Notably, some forms of privately conserved areas (Stolton et al., 2014) and sustainable management (Stolton et al., 2014)³ face related challenges. Although they form an integral part of the future work on OECMs, they are beyond the scope of the present article, which instead focuses on OECMs in the context of territories and areas governed by Indigenous peoples and local communities.

TRENDS IN CONSERVATION

Protected areas coverage increased more than five-fold between 1950 and 2010, from just over 4 million km² to nearly 21 million km² (Bertzky et al., 2012). Yet the overall figure masks important differences in the kind of growth in that period. Over these 60 years, it is possible to recognise two distinct phases of protected area establishment, with 1980 representing a dividing point.

From 1950 to 1980, the most rapid growth in protected areas coverage was registered in areas classified as national parks (Category II of the IUCN protected area matrix), which grew from 705,785 km2 to 2.79 million km2 (IUCN & UNEP-WCMC, 2011). By 1980, Categories I -III comprised 44.4 per cent of the total area of protected areas recorded in the World Database on Protected Areas (WDPA); national parks comprised 32 per cent, and Category I and III areas accounted for another 12.4 per cent (IUCN & UNEP-WCMC, 2011).4 From 1980 to 2010, the proportion of national parks and other exclusionary state protected areas declined sharply in the overall global protected areas coverage, with Category II areas falling to 20 per cent of the total by 2010. In contrast, during the same period, protected areas with sustainable use of natural resources (Category VI), which include many multi-use protected areas, expanded from 9.5 per cent to 23.6 per cent of the global total (IUCN & UNEP-WCMC, 2011).5 The patterns of change were even more pronounced after the turn of the century. Between 2000 and 2010, protected areas with sustainable use of natural resources more than doubled in total size from 2.36 to 4.96 million km², eclipsing national parks to become the single largest protected area category in terms of area (Bertzky et al., 2012).6

There has also been a growth in co-management and diverse forms of governance. Co-management (now also referred to as 'shared governance') of state protected areas between government and local communities (for example, through participatory forest management) has proliferated around the world since the 1990s (Borrini-Feyerabend et al., 2004). Specifically, co-managed protected areas increased from only 6,334 km² globally in 1990 to more than 1.6 million km² in 2010 (Bertzky et al., 2012), representing an approximately 25,000 per cent increase. Moreover, from 1990 to 2010, the proportion of global protected areas under either co-management or governed by non-state actors increased from 3.9 per cent to 22.8 per cent (Bertzky et al., 2012).7

The global protected area estate is evolving to include a larger proportion of protected areas with sustainable use of natural resources and those governed by shared arrangements or by Indigenous peoples and local communities. Notwithstanding this increase, the *Protected Planet Report 2012* suggests that if we intend to meet the terrestrial and marine targets set by Aichi Target 11 (17 per cent and 10 per cent, respectively) through protected areas alone, an additional 6 million km² of terrestrial and inland water areas and an additional 8 million km² of marine and coastal areas will have to be protected (Bertzky et al., 2012).

Inevitably, beyond the boundary of the IUCN protected areas matrix lie areas that are high in biodiversity, but for one reason or another do not meet the IUCN definition of a protected area. Types of areas that can fall either within or beyond the global protected area estate include some forms of Indigenous peoples' and community conserved territories and areas (ICCAs),8 which constitute significantly important areas of cultural and biological diversity (Kothari et al., 2012). For example, Indigenous peoples' territories encompass up to 22 per cent of developing countries' land surface (WRI, 2005) and coincide with areas that hold a significant percentage of the planet's biodiversity (Sobrevila, 2008). Forest area under Indigenous peoples' or local communities' ownership or management is estimated at about 500 million hectares; this figure has steadily increased alongside the growth in decentralised governance from about 10 per cent of the world's forests to about 15 per cent in the last decade, though much of the increase has been concentrated in a few countries, especially in South America (White et al., 2004; Molnar et al., 2004; RRI, 2012a, 2012b, 2014a).9

Estimates suggest that ICCAs may number far more than the current officially designated protected areas (of which there were 209,000 listed in the WDPA) and cover as much if not more than their total area, i.e. at least 13 per cent of the Earth's land surface (Kothari et al., 2012). Consequently, ICCAs are significant potential contributors to achieving Aichi Target 11, as recognised by IUCN in 2012: "AWARE also that Target 11 can only be met by including protected areas governed by government agencies, those under shared governance arrangements; areas in private ownership, and territories and areas conserved by indigenous peoples and local communities, and by recognizing and supporting them in national and sectoral development, natural resource management programmes and through cooperation at all levels in an integrated manner including national, regional and international cooperation" (IUCN, 2012a). Elsewhere in the literature, Nepstad et al. (2006) studied deforestation in the Brazilian Amazon and reported that even in high-risk areas of frontier expansion, many Indigenous lands prevented deforestation completely. Indigenous lands comprise approximately 20 per cent of

the region and the authors concluded they were 'the most important barriers to Amazonian deforestation'. These findings are supported by more recent analysis by Porter-Bolland et al. (2011), who concluded that forest areas managed and governed by local communities showed lower deforestation rates than formal protected areas, and by Nolte et al. (2013), who categorised almost 300 Brazilian Amazon protected areas into strict protection, sustainable use, and Indigenous lands and showed that Indigenous lands were particularly effective at avoiding deforestation in areas with high deforestation pressures. Similar results were reported for Latin America and the Caribbean, where investigations utilising forest fire as a proxy for deforestation revealed that Indigenous areas were almost twice as effective as strictly protected areas and multiple use areas in reducing tropical fires, and that Indigenous peoples' governance regimes not only protect forests but also contribute towards biodiversity conservation and climate change mitigation goals (Nelson & Chomitz, 2011). Further studies involving GIS and spatial analysis have highlighted the close correlations between forest cover, biodiversity, and ecosystem connectivity on the one hand, and Indigenous peoples' territories and management practices on the other (see, for example, Lovgren, 2003; CIPTA & WCS, 2013; Carranza et al., 2014).

The above is not to suggest that all Indigenous territories and local community areas are achieving conservation, but that this is a sufficiently widespread phenomenon to merit consideration. At the same time, in the areas where they may not be currently contributing to conservation, this may be because of a host of factors that relate at least partly to lack of their recognition and support by wider society (Jonas et al., 2012; Kothari et al., 2012). A widespread limitation on Indigenous peoples and local communities around the world is that their ability to practise conservation is restricted by inadequate rights conferred on them by the state to make and enforce rules governing resource use and access. Increasing the legal and non-legal recognition of and support for ICCAs is therefore critically important to ensure that these areas and their associated governance and management systems have the resilience to address and adapt to growing threats (Jonas et al, 2013).

THE DEFINITION OF 'PROTECTED AREA' AND 'CONSERVATION'

The historical development of the legal notion of 'protected area' has been the subject of in-depth study and research in the conservation community (Phillips, 2004). Although 'there is no definitive definition for protected areas, and there is no agreed international schema for *all* protected areas' (Gillespie, 2009), there



A Bajau Laut child in biodiversity rich waters off Semporna on the east coast of Sabah, Malaysia. Which innovative approaches to governance can help reconcile customary sustainable use of natural resources, destructive fishing practices and conservation? © Harry Jonas

are two globally accepted definitions. The first is enshrined in the text of the 1992 Convention on Biological Diversity and the second has been developed under the auspices of IUCN (IUCN, 1994, and subsequently revised per Dudley et al., 2008). The CBD defines a protected area as a: "... geographically defined area which is designated or regulated and managed to achieve specific conservation objectives" (CBD, Article 2). IUCN defines a protected area as a: "... clearly defined geographical space, recognized, 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).

It is suggested that, despite their differing formulations, there is "tacit agreement between the [CBD Secretariat and IUCN] that the two definitions are equivalent" (Lopoukhine & de Souza Dias, 2012) and many rights-holders and stakeholders are satisfied with their symbiotic coexistence. For example, while the CBD coordinates the global Programme of Work on Protected Areas, it explicitly encourages its parties to use the six IUCN management categories for reporting purposes, as

they provide the basis for the statistical recording of protected areas into the UN List of Protected Areas (now incorporated in the World Database on Protected Areas) (IUCN & UNEP-WCMC, 2011; CBD Decision VII/28, 2004). However, there remain some outstanding critiques and concerns (Dudley, 2008; Dudley et al., 2010; Govan & Jupiter, 2013). This paper examines two in particular related to the respective definitions of 'protected area' and 'conservation'.

First, an area can be assigned a management category only if it meets the IUCN definition of a protected area and the related principles, as set out in the IUCN Guidelines for Applying Protected Area Management Categories (Dudley et al., 2008). Notably, the first of these principles states: For IUCN, only those areas where the main objective is conserving nature can be considered protected areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority¹⁰.

This approach is underscored in a recent submission by IUCN to the CBD which states that: "nature conservation is the primary role of protected areas as recognized by IUCN" (IUCN, 2012b). As noted by Govan and Jupiter (2013), the point is reinforced in the latest *Guidelines for Applying the IUCN Protected Area Management Categories to Marine Protected Areas* (Day et al., 2012).

These guidelines specifically state that:

"Spatial areas which may incidentally appear to deliver nature conservation but DO NOT HAVE STATED nature conservation objectives should NOT automatically be classified as MPAs [marine protected areas], as defined by IUCN. These include:

- Fishery management areas with no wider stated conservation aims.
- Community areas managed **primarily** for sustainable extraction of marine products (e.g. coral, fish, shells, etc.).
- Marine and coastal management systems managed primarily for tourism, which also include areas of conservation interest.
- Wind farms and oil platforms that incidentally help to build up biodiversity around underwater structures and by excluding fishing and other vessels.
- Marine and coastal areas set aside for other purposes but which also have conservation benefit: military training areas or their buffer areas (e.g. exclusion zones); disaster mitigation (e.g. coastal defences that also harbour significant biodiversity); communications cable or pipeline protection areas; shipping lanes etc.

 Large areas (e.g., regions, provinces, countries) where certain species are protected by law across the entire region." (original emphasis)

This list openly acknowledges that some measures may deliver conservation outcomes, but should 'automatically' be considered marine protected areas. In this context, Govan and Jupiter (2013) argue that IUCN's definition of a protected area and the corresponding principles run counter to the approach taken across the Pacific region (and elsewhere) where the achievement of sustainable livelihoods has traditionally been the major driver for the establishment of marine 'protected areas' that function through local management. Such local forms of natural resource management, driven by livelihood interests in the sustainable use of natural resources, underpin many of the vast array of ICCAs documented around the world, and are increasingly incorporated into global and national conservation policies and programmes. These include community forests, pastoralists' grazing reserves, and many other areas where conservation (defined in a restricted way, see below) is an *outcome* of traditional or locally adaptive resource use institutions, rather than the primary or central objective of those management efforts (Kothari et al., 2012). Indeed, many Indigenous peoples and local communities who sustainably manage their territories and areas associate formal conservation efforts with either exploitative or exclusionary outside interests, and as a result some peoples and communities remain hostile to the notion of conservation as a stated management objective (Jonas et al., 2013; Stevens, 2014). This issue leads to questions (discussed more fully below) about whether the management objective, rather than conservation outcomes, is the most suitable criterion for assessing OECMs.

Second, there are also critiques concerning the definition of conservation. The above list of criteria for identifying areas that do not conform to IUCN's definition of a marine protected area highlights that the notion of what is considered a protected area is determined at a deeper level by the way conservation is defined. The following section provides a chronological analysis of the evolution of the term in the parallel contexts of the CBD and IUCN. In 1980, IUCN's pioneering World Conservation Strategy defined conservation as 'the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations' (IUCN, 1980). It describes conservation as embracing of the traditional concepts of 'preservation' and 'maintenance', but also those of 'sustainable utilization', 'restoration' and



Sacred lake on Coron Island, part of the Tagbanwa Ancestral Domain territory in the Philippines © Ashish Kothari

'enhancement of the natural environment' (IUCN, 1980). It continues: "Conservation is that aspect of management which ensures that the fullest sustainable advantage is derived from the resource base and that activities are so located and conducted that the resource base is maintained... Living conservation has three specific objectives: to maintain essential ecological processes and life-support systems ...; to preserve genetic diversity ...; [and] to ensure the sustainable utilization of species and ecosystems (notably fish and other wildlife, forests and grazing lands) which support millions of rural communities as well as major industries." (original emphasis).

The year 1992 saw the adoption of a global treaty on biodiversity, the CBD, in which IUCN played a central role (Glowka et al., 1994). The CBD's tripartite aims are 'the conservation of biological diversity, 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). The CBD does not define 'conservation' per se, instead defining the application of the concept in the form of in-situ conservation as: 'the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive

properties' (CBD, Article 2). It defines sustainable use as: 'the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations' (CBD, Article 2).

The CBD provides important context to these definitions. First, the CBD specifically defines 'biodiversity' as: diversity within species, between species and of ecosystems', including 'domesticated or cultivated species', being 'species in which the evolutionary process has been influenced by humans to meet their needs' (CBD, Article 2). Second, the CBD calls on States to "[r]egulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use" (CBD, Article 8(c), emphasis added). Third, the CBD also calls on parties to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities [sic] embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity", and to "[p]rotect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable requirements" (CBD, Articles 8(j)/10(c), emphasis added).

Latterly, IUCN updated its definition of conservation to: 'the *in situ* maintenance of ecosystems and natural and semi-natural habitats and of viable populations of species in their natural surroundings' (Dudley et al., 2008). Notably, this definition includes the conservation of agrobiodiversity and in this context supports associated 'traditional systems of management' (Dudley, 2008). Whether this extends to other customary uses of biodiversity is uncertain, although they could be considered part of 'maintenance' especially given that domesticated biodiversity is by definition in use.

The above chronology highlights the fact that while the IUCN World Conservation Strategy (1980) explicitly includes 'sustainable use' and the CBD (1992) refers to sustainable use and customary uses of biodiversity both within and outside protected areas, the latest IUCN guidance on the linked issues of the definitions of 'conservation' and 'protected area' appears to be more restrictive (Day et al., 2012; Dudley, 2008). IUCN provides a rationale for this approach when discussing whether 'protected areas' should or should not include 'a very wide range of land and water management types that incidentally have some value for biodiversity and (original emphasis) landscape conservation', example, well-managed forests, sustainable use areas, military training areas, or various forms of broad landscape designation (Dudley, 2008). In its guidance, IUCN is clear that 'the weight of opinion amongst IUCN members and others seems to be towards tightening the definition' of protected area (Dudley, 2008). In doing so, the effect is to exclude some areas from the global protected area estate that nevertheless deliver value for biodiversity and landscape conservation; value that can equal or surpass that delivered by areas managed according to more restrictive or stricter notions of conservation, as argued above.

Without entering into the merits of this approach, we are presented with a disparity between the CBD's conceptualisation of 'the integrated management of land, water and living resources that promotes conservation and [customary and] sustainable use in an equitable way' (CBD Decision V/6, 2000) in and beyond protected areas, and IUCN's less inclusive and more recent formulation. Might it be possible for territories or areas to fit the CBD definition of a protected area but fall outside the IUCN definition? Perhaps a deeper question to ask is whether this point is merely an issue of semantics, or whether IUCN's approach is hindering the attainment of the fullest recognition and support for ICCAs and other areas where conservation is being achieved without being either an explicit or primary objective.

There are at least two situations in which Indigenous peoples or local communities, and the biodiversity they govern and/or manage, are adversely affected by the current approach. First, Indigenous peoples or local communities whose sustainable and/or customary uses of biodiversity lead to biodiversity outcomes and who want international and/or (sub-)national recognition may not be eligible for recognition as a protected area under the IUCN definition. Second, stakeholders who govern or manage biodiversity in a manner that complies with the IUCN definition of a protected area may have a range of legal, political or other reasons for not wanting their territory or area to be considered a 'protected area' under the national system of protected areas. In many parts of the world, Indigenous peoples and local communities are wary of a designation that may lead to greater regulation by and influence of state agencies (Borrini-Feyerabend et al., 2010; Martin et al., 2010; Borrini-Feyerabend et al., 2013). The result is that such peoples and communities and the areas they govern and manage are only provided with either weak or inappropriate legal, institutional and financial support, with a corresponding loss of opportunities to achieve and enhance actual conservation outcomes that could further global conservation goals and targets.

There are at least two types of response to this. The more profound one is to reopen the definitions of either 'protected area' or 'conservation'. There may be merit in revisiting these definitions, including in light of the issues raised above about possible disparities between the respective approaches of the CBD and IUCN, but it would clearly require an epochal discussion. Such an investment may be important, however, especially over the medium- to long-term. In the meantime, the second option is to continue to explore ways to offer greater and more appropriate support for effective conservation measures that promote the conservation and sustainable use of biodiversity and the integrity of ecosystem processes (among other outcomes), within and outside of state-recognised protected areas, whether the primary objective is for (restrictive notions of) conservation or some other locally defined customary or sustainable purpose or value.11 The rest of the paper is dedicated to this second approach.

OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES (OECMS)

Despite the arguments raised above regarding the definitions of 'protected area' and 'conservation', there seems to be little appetite in either IUCN or the CBD to reopen the definition of either. Notwithstanding the merits of the current approach, it should not perpetuate



Raika communities maintain an important culture and animal genetic resources, but have been excluded from the Kumbhalgarh Wildlife Sanctuary in Rajasthan, India © Harry Jonas

the current low levels of legal and non-legal recognition and support for biodiversity-rich areas that fall outside the IUCN definition of protected areas (Jonas et al., 2012). To move beyond this impasse, the authors suggest an invigorated focus on the new international term that appeared in 2010 within Aichi Target 11, namely, OECMs. Since COP10, there has been a growing international recognition that more guidance is required on OECMs, including in the following multiple instances. In September 2012, the Fifth IUCN World Conservation Congress was held in Jeju, Republic of Korea. Among its adopted resolutions and recommendations, it called on 'IUCN Commissions, IUCN Members, UNEP-WCMC, the ICCA Consortium and other organisations to collaborate in support of CBD Decision X/2' to: "Develop criteria for what constitutes 'effective area-based conservation measures', including for, inter alia, Private Protected Areas, Indigenous Peoples' Conserved Territories and Areas Conserved by Indigenous Peoples and Local Communities (ICCAs), and Sacred Natural Sites (SNS)." (IUCN, 2012a).12

In October 2012, the Eleventh Conference of the Parties to the CBD was held in Hyderabad, India. In a position paper submitted before the event, IUCN set out its preliminary thinking on OECMs (IUCN, 2012b). It states: "IUCN maintains that those 'other effective area-based

conservation measures' that contribute to Target 11 should be subject to evaluation as to whether they meet the *effectiveness criteria* for protected areas and therefore whether they qualify as '*effective*' in conserving biodiversity. If biodiversity is not at least one of the principal considerations, with adequate safeguards for their long-term persistence, they should not be factored into the % target, and their role may be limited to other qualitative functions, e.g. in contributing to the connectivity of the protected area system contemplated in Target 11." (IUCN, 2012b, emphasis added).

The focus on 'effectiveness' is notable. In this context, IUCN makes a very clear call for further guidance to be developed for and provided to parties to the CBD: "[IUCN calls] on the Secretariat [of the CBD], supported by IUCN, to provide Parties with specific guidance regarding the kinds of areas that count towards the achievement of the area coverage element of Target 11. This should clarify that areas that do not, and will never qualify as protected areas, should not be included. Specific guidance should be provided to Parties to ensure that areas that meet the requirements, but which are not currently recognized or reported, are recognized appropriately, including those 'other effective area-based conservation measures' that qualify." (IUCN, 2012b, emphasis added).

While the call for the development of increased guidance is laudable, the second sentence raises a major question. The statement seems to suggest that only areas that meet the definition of a protected area can count towards Aichi Target 11, including under OECMs. Parties to the CBD and other key rights-holders and stakeholders may be left wondering what an OECM is — with an emphasis on 'other' — and whether it fits the IUCN or CBD definitions of a protected area.

In addition, in October 2013, a preparatory note by the CBD's Executive Secretary for the Seventeenth Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) identified 'recognition and/or integration of indigenous and community conserved areas and private reserves in national protected area systems' as one of the existing scientific and technical gaps related to implementation of Target 11 (CBD SBSTTA, 2013). It also underscored the necessity of 'improving information on other area-based conservation measures such community-conserved areas' in the context of assessing the status of progress towards the Target 11 at global, regional, national and subnational levels (CBD SBSTTA, 2013). Moreover, the official report of the meeting states that further consideration of what constitutes OECMs for the purpose of reporting progress toward this target 'would be useful' (CBD SBSTTA, 2014).

To meet this demand, a small but growing body of literature is starting to address the concept of OECMs (Woodley et al., 2012; CCEA, 2013; Jonas and Lucas, 2013; Borrini-Feyerabend and Hill, 2014). In particular, the report of a workshop hosted by the Canadian Council on Ecological Areas (CCEA) provides a clear overview of the participants' emerging consensus on 'the interpretation of [OECMs] for the purpose of tracking and reporting progress towards meeting this part of Aichi Biodiversity Target 11' (CCEA, 2013). Workshop participants reached agreement on the following five issues relating to areas included as OECMs under Target 11, specific to the Canadian context:

- OECMs must have an expressed purpose to conserve biodiversity, and that purpose might be achieved as a co-benefit of other management purposes or activities;
- OECMs must be managed for the 'long term' to be effective, and 'long term' may be defined to mean that there is an expectation that conservation will continue indefinitely;
- In cases of conflict with other objectives, nature conservation objectives shall not be compromised;
- They should result in effective and significant conservation outcomes, and when there are existing

- measures/areas that are to be considered as OECMs, evidence of conservation outcomes should be used as part of the screening process; and
- OECMs should have a management regime that, through one of more measures that are effective alone or in combination, can reasonably be expected to be strong enough to ensure effective conservation, and if there are gaps, these will be addressed over time.

Participants at the CCEA-hosted workshop also began the development of a 'Decision Screening Tool' to guide Canadian jurisdictions in decisions relating to OECMs. The notes on the Decision Screening Tool highlight that while progress has been made, a range of issues require further thinking, including the meaning of 'long term', how the intent of the conservation measure should be recognised, and definitional issues regarding governance structures.

Borrini-Feyerabend and Hill (2015) have also engaged with OECMs, arguing that the term 'other' indicates that such measures are *not* protected areas. Thus OECMs would constitute areas that are effectively conserved and intended to remain so in the long-term, but are not protected areas, because either they do not meet the IUCN definition of a protected area or the relevant custodians of the territory or area do not want them to be recognised as protected areas. In this context, Borrini-Feyerabend and Hill suggest the following definition of OECMs: "A clearly defined geographical space where *de facto* conservation of nature and associated ecosystem services and cultural values is achieved and expected to be maintained in the long-term *regardless of specific recognition and dedication*." (emphasis added).

Borrini-Feyerabend and Hill intend this formulation to give greater recognition to area-based measures of secondary voluntary conservation, ancillary conservation with a reasonable expectation to be maintained in the long-term, and primary voluntary conservation that refuses the international and/or national protected area label.¹⁴

NEW STEPS OF CHANGE

International law is not a panacea for local level challenges, but in certain instances, it can present 'space to place new steps of change' (Angelou, 1993). Through the adoption of Target 11 at CBD COP 10 in Nagoya, a new and as yet unclearly defined term has been introduced to the broader legal and policy framework governing the conservation and sustainable use of biodiversity. Notwithstanding the initial contributions, there are several reasons why there should be an inclusive process to comprehensively explore the issues

and develop clear guidance for the parties to the CBD and other rights-holders and stakeholders.

First, a focus on OECMs could contribute to a shift away from national protected area systems that *only* include state-recognised protected areas towards more inclusive and representative 'systems of protected areas and other effective area-based conservation measures' governed by appropriate multi-stakeholder and rights-holder arrangements (CBD Decision X/2, 2010). Second, this in turn might provide a means to better recognise and support a range of 'other' conservation measures that fall outside of the CBD and IUCN definitions of a protected area but are nevertheless effective in conservation, i.e. 'conservation pluralism' (Shrumm & Campese, 2010).

Third, it is likely that an outcome of the discussions will be a greater and more widespread appreciation of OECMs as supporting not only conservation, but also a range of other values and functions essential to human survival and wellbeing, including the local livelihood, economic, political, cultural, and spiritual aspects of resilient communities. Fourth, this could foster greater focus by the conservation community and beyond on the critical linkages between land tenure, governance and biodiversity, contributing to both the Aichi Targets and the target to double the area of Indigenous and community land tenure in the next five years¹⁵, among a range of related international commitments on development, food and water, livelihoods employment, human rights, and so on, many of which are currently under discussion for the proposed post-2015 'sustainable development' agenda.

The next subsections set out a number of recommendations for next steps, including regarding the definition of OECMs; the interpretation of the definition; classes of OECMs; potential negative consequences; and the nature of the process required to effectively and equitably deliver comprehensive guidance on these issues.¹⁶

Definition: Building on the analyses by the CCEA and by Borrini-Feyerabend and Hill, further thinking is required about the following non-exhaustive list of questions relating to the definition of OECMs:

 'Other': What is not a protected area but is nevertheless an effective area-based conservation measure? As per Borrini-Feyerabend and Hill's suggested definition, it should at least satisfy the criteria set out in the term: effectively deliver conservation values; be area-based; deliver conservation values; and constitute a measure. Should it also satisfy any other criteria?

- *'Effective'*: How should 'effective' be defined in this context, and how does this dovetail with the ongoing debate about how to better measure conservation effectiveness in protected areas (Geldmann et al., 2013; Nolte et al., 2013; Carranza et al., 2014)?¹⁷ Why is effectiveness an explicit part of OECMs, but not a core criterion for a protected area, which is instead defined by its management objective, not the actual outcomes (Stolton, et al., 2013)?
- 'Area-based': Is the wording intentionally limiting the scope of Aichi 11 to exclude measures such as trade rules and industry measures? At another level, it should avoid referring only to a permanently defined area, otherwise it would exclude mobility and flexibility in boundaries exhibited by some ICCAs and increasingly required by other protected areas.¹⁸
- 'Conservation': There may be no need to revisit the
 definition of conservation, but it may be instructive to
 recall the World Conservation Strategy's definition
 while noting that the CBD separates conservation
 (albeit without clearly defining it) and sustainable
 use.
- 'Measures': How broadly should this be defined? Noting IUCN's rationale for limiting the definition of a protected area, how can we adequately address the perceived danger that OECMs may become a catchall for governments to avoid responsibility or for industrial actors to misleadingly claim their actions are leading to effective conservation?
- Beyond these criteria, are there other criteria such as governance quality that should become part of the definition of or guidance on OECMs?

Interpretation of the definition: The concept of OECMs has been introduced to perform a specific function, thus it needs to be defined and understood in context. This raises questions with regard to the small but important divergences in approaches noted above between the CBD and IUCN. On the CBD Strategic Plan for Biodiversity 2011-2020 and Aichi Targets, the following questions arise:

- Are the differences between the CBD and IUCN definitions of a protected area material, and if so how can these important differences be reconciled? Should the IUCN definition be more reflective of the approach set out by the CBD, especially given a preponderance of countries have ratified the latter?
- How do OECMs relate to the overall wording of Target 11, in particular to the objective of achieving conservation through effectively and equitably managed, ecologically representative and wellconnected systems of protected areas and OECMs?

 How do OECMs fit within and promote the broader context of the Strategic Plan and the objectives of the CBD? Could they be seen as viable and effective means to contribute to achieving many of the other Aichi Targets?

The following questions concern the IUCN definition of a protected area and the governance types and management categories:

- What is the relationship between protected areas (as defined by the CBD and IUCN) and OECMs, beyond what has already been discussed in this paper? Could conservation 'systems' consist of mosaics of interconnected and representative protected areas and OECMs governed in diverse ways for diverse management purposes, all contributing to effective conservation and a range of other social-ecological objectives?
- What (if any) should be the primary and/or secondary objective(s) of an OECM?¹⁹
- Should an OECM be defined and assessed by its management objective or its actual contributions to the conservation and sustainable use of biodiversity? As would be evident from this paper, our inclination is towards the latter, as long as such contributions are over a long-term period.
- Could a focused discussion on OECMs lead to the resolution of a number of issues raised *vis-à-vis* the current IUCN definition of a protected area? Specifically, might this approach lead to a) greater acceptance among critics of the definition(s) of a protected area, which (as discussed above) focuses on conservation as the primary objective, and b) a clear definition of OECMs that improves the international recognition of, among other areas, ICCAs based on sustainable use, livelihoods, or other objectives?

Forms or Classes of OECMs: Rather than attempting to describe OECMs in a catchall definition, in the same way 'protected area' is defined by the CBD and IUCN and as suggested above by Borrini-Feyerabend and Hill (2015), it may be useful to develop an illustrative (or

exhaustive) taxonomy of OECMs, in order to highlight those intended to be supported and to guard against unintended areas being designated and counted as OECMs. For example, in the context of community conservation, at least the following areas could be considered OECMs, subject to their self-designation of and/or consent to the same: areas governed by Indigenous peoples and local communities (either de jure of de facto) that achieve conservation but are not recognised as state protected areas because either the government or the custodians do not recognise them as such; and areas that do not conform to the CBD or IUCN definitions of a protected area but are effective in conserving biodiversity (for example, a range of ICCAs, locally managed marine areas and sacred natural sites whose primary management objective is customary, subsistence or small-scale use).

Another approach, which constitutes a halfway house between the catchall definition and the illustrative list, may be to make a distinction between two broad classes of OECMs, namely:

- I. The area meets the IUCN definition in practice but those governing the area refuse its designation as a protected area.
- II. The area does not meet the IUCN definition because it constitutes:
 - a. Secondary voluntary conservation, i.e. where conservation is not the primary objective but is still intended; or
 - b. Ancillary conservation, i.e. where conservation is not intended but is nevertheless occurring.²⁰

This attempt to define classes of OECMs highlights the need for greater clarity about the distinctions between the CBD's and IUCN's definitions of a protected area; we have used the term 'conservation' above in its restricted current IUCN usage distinct from 'sustainable use' in the CBD, but the definition could also be developed around the CBD's approach. Setting this crucial issue aside for the present purposes, these two classes and sub-classes of OECMs can be illustrated in a matrix, as set out in Figure 1.

Governance types → Classes of OECM ↓	Government	Shared Governance	Private	Indigenous Peoples and Local Communities
Those governing the area refuse its designation as a protected area				
II a. Secondary voluntary conservation				
II b. Ancillary conservation				

Figure 1: Illustrative OECM Matrix

Governance Types →	Government	Shared Governance	Private	Indigenous Peoples and Local Communities
PA Management Categories				
la				
lb				
П				
Ш				
IV				
V				
VI				
Classes of OECMs				
T				
lla				
IIb				

Figure 2: Illustrative Aichi Target 11 matrix, emphasising integrated systems of protected areas and OECMs

Looking ahead, this approach might lead to the development of an Aichi Target 11 matrix, an early version of which is suggested in Figure 2 for illustrative purposes. Specifically, it builds on the IUCN protected areas matrix (Dudley, 2008) to highlight the links between *systems* of protected areas and OECMs and to underscore that these two technically distinct areas should be understood as part of a continuum across integrated landscapes and seascapes.²¹

Potential negative consequences: While it is possible to envisage a number of positive outcomes issuing from the discussion and further development of OECMs, there exists potential for negative consequences. What potentially adverse ramifications might arise from a greater focus on OECMs, and how can these be foreseen in advance and minimised? For example, there is a growing concern among some protected area experts that states may use OECMs as a means to avoid what is deemed to be the more challenging path towards establishing new or expanding existing protected areas and/or to providing critically needed protection and support to bona fide OECMs under threat (particularly where local resource rights and access are undermined). Instead, certain states may find it 'easier' to achieve Target 11 by recognising at least two types of areas, either ones that are already effectively conserved and require little or no support, or areas that do not actually contribute to conservation outcomes. Moreover, this new approach may lead to a range of adverse effects, including the inclusion of dubious land uses such as industrial monoculture plantations in CBD parties' contributions to Aichi Target 11? While this is a valid concern, the following arguments may allay qualms about increasing the focus on OECMs.

The first argument put forward in fact constitutes one of the core reasons why more work is required to better define OECMs. By clarifying OECMs, states and other actors can more accurately ensure that *effectively and equitably managed*, *ecologically representative and well-connected* systems of protected areas and OECMs are scaled-up and, at the same time, guard against areas that are not protected areas or OECMs being included in national accounting for Aichi Target 11.

Second, and in response to the potential sense among some that protected areas are necessarily 'better' than OECMs, pushing for new state-governed protected areas in countries that have many unrecognised ICCAs runs the risk of conflict situations such as evictions and land dispossession. Third, more explicit and appropriate recognition of OECMs will provide them with greater resilience against internal and external disturbances (RRI, 2014b). Fourth, others argue convincingly that the important issue at stake here is not only the total area of protected areas or OECMs, but the type and quality of recognition and support that OECMs receive from states, for example, enforced legal protection against industrial developments, infrastructure, and natural resource extraction (Borrini-Feyerabend & Hill, 2014). We argue, below, that if OECMs are conceived and implemented with full respect to the requirement for conservation and in the full spirit of the Aichi Target 11, the scope for such misuse will be minimised. In this context, accurate measurement of conservation effectiveness will be of fundamental importance.

Nature of the process: To actively support the achievement of the CBD's Aichi Biodiversity Targets and implementation of IUCN Resolution 5.035, the authors



Sacred mountain with forests conserved by Bazhu village, Yunnan province, China @ Ashish Kothari

propose a participatory process and programme of work between, at least, the CBD Secretariat, representatives of state parties to the CBD, the PoWPA Friends Consortium, IUCN Secretariat and relevant commissions, World Database on Protected Areas, ICCA Consortium, Indigenous peoples' and local community networks, and other interested organisations and individuals (including those representing private conservation initiatives) to undertake the following tasks:

In the run-up to CBD COP 12 and the World Parks Congress (WPC): Continue to address the questions inherent in the current discussion about OECMs as they relate to protected areas, including in the law, policy and practice of at least the CBD and IUCN.

At CBD COP 12: Noting that COP 12 will, inter alia, conduct a mid-term review of progress towards the Strategic Plan and Aichi Biodiversity Targets,²² present at a side event and at the CBD Secretariat-organised event on community conservation to draw attention to the issue and bring together interested parties to progress the discussion.

At the WPC: Raise the issues in Streams 1, 4, 6 and 7; deepen the discussion around the nexus of land tenure and natural resource rights, Indigenous peoples' and local communities' rights to self-determination and self-governance, governance and management of terrestrial

and marine territories and areas, and inclusive and multi-stakeholder participation; explore innovative systems of conservation encompassing a diversity of governance types and management categories of both protected areas and OECMs, and biodiversity and conservation outcomes; discuss the expansion of the scope of the WDPA to include OECMs; and ensure the issues are reflected in the New Social Compact and Promise of Sydney.

Emerging from the COP 12 and the WPC: In response to the CBD's and IUCN's calls for guidance on OECMs, establish an IUCN Task Force comprising a diverse membership, as suggested above, to actively explore the issues, including through an analysis of specific cases and their contexts, histories and progress.

RETHINKING TARGET 11

In this context, the authors ask whether Aichi Target 11 could usefully be disaggregated to develop separate percentage targets for protected areas and OECMs, in terms of indicators, monitoring and reporting. This would enable state parties and other rights-holders and stakeholders to effectively distinguish between and plan for systems of protected areas and OECMs within the overall numerical targets and other criteria for terrestrial and marine areas. In this context, the World Database on Protected Areas could play a major role in recording and monitoring the growth of OECMs.

CONCLUSION

Large areas of lands and waters that form the territories and areas of Indigenous peoples and local communities provide significant local, national and global conservation outcomes - by default or design - in addition to a range of other economic, social, cultural, and other values and outcomes, but are not officially recognised by states and seldom receive the kinds and levels of support granted to state-recognised protected areas. This paper suggests that the incorporation of the term 'other effective area-based conservation measures' within the CBD's Aichi Biodiversity Targets provides a critical opportunity to better evaluate ways and means to more appropriately recognise and support a diversity of effective conservation occurring outside protected areas around the world. For this to happen, key questions need to be addressed around the definition and practicalities of OECMs and how they can be appropriately represented within formal conservation targets and policies. One possible means to do so is through a participatory process, coordinated by an IUCN Task Force. Such a process could generate an important discussion, provide official guidance to IUCN members and state parties to the CBD, and, most importantly, lead to greater and more appropriate recognition and support for OECMs.

One final comment is necessary. Supporting countries to achieve Target 11 is a critically necessary but by no means adequate response to the ecological crises facing humanity and the planet. Overall human activity across the entire planet, not only in 17 per cent of its terrestrial and 10 per cent of its marine area, needs to become sustainable and mindful of the rights of other species. While it may be justified to pay some special attention to protected areas and OECMs, especially in the short-term, these areas cannot remain islands within an ultimately degrading landscape and seascape. More broadly, there is an urgent need to search for fundamentally different pathways of human survival and wellbeing that are sustainable and equitable across the extent of the living planet.



Contiguous forest extending from a Dusun Village (Melangkap Kapa) towards Kinabalu Park, Malaysia, which is also an ASEAN Heritage Park © Harry Jonas

ENDNOTES

¹ A note on the acronym: 'other effective area-based conservation measures' has previously been abbreviated as 'OEABCMs'. The authors took the view that this approach was overly cumbersome. Others have reduced it to OEMs. We decided to stress the following elements in the acronym we use in this paper: 'other', 'effective', 'conservation', and 'measures'.

² There is general consensus among the contributors to this paper and the peer reviewers that measuring conservation outcomes, in this context, is a critical factor.

³ For example, in the Canadian context these include: privately protected areas and conservation easements not included in the Conservation Areas Reporting and Tracking System, fishery closures, municipal water supply protection areas, and watercourse setbacks.

⁴ Notably, in 2014 circa 35 per cent of the entries in the World Database on Protected Areas do not have an IUCN category.

⁵ Interestingly, a global study from 2010 showed, for example, that sustainable-use protected areas (Category VI), on average, have the same level of naturalness (or human influence) as the national parks (Category II) recorded in the WDPA (Leroux et al., 2010).

⁶ Much of this increase is likely due to increased documentation and some level of recognition of ICCAs and other locally managed and conserved areas.

- ⁷ Notably, co-management is not a form of governance, but the Protected Planet Report provides the figure in this way. These figures refer only to the proportion of protected areas in the World Database on Protected Areas that have an assigned governance type (49% of all protected areas in the database). Also, while today 88% of the protected areas in the WDPA have a governance type, in terms of areas the governance type of 35% of the area covered by protected areas in the WDPA is unknown.
- ⁸ This paper does not address the complex and often overlapping nature of ICCAs, Locally Managed Marine Areas (LMMAs) and/or Sacred Natural Sites (SNSs). It uses the terms ICCAs to include LMMAs as well as SNSs that are governed by Indigenous peoples and/or local communities. ICCAs are described as having three defining characteristics: a) a people or community is closely connected to a well-defined territory, area or species; b) the community is the major player in decision-making (governance) and implementation regarding the management of the territory, area or species; and c) the community management decisions and efforts lead to the conservation of the territory, area or species and associated cultural values.
- ⁹ For clarity, not all of these territories and areas necessarily qualify or are self-defined by the respective peoples or communities as ICCAs.
- ¹⁰ Notwithstanding this guidance, one of the examples of protected area forests in Japan used to supply timber to temples near Nara, Japan (Dudley, 2008).
- ¹ Among other things, this would suggest that IUCN and UNEP-WCMC should scale up the inclusion of OECMs in the World Database on Protected Areas.
- ² Sue Stolton points out that this resolution uses confusing terminology by referring to 'Private Protected Areas' because as a group, like ICCAs, LMMAs and SNSs, a private conservation initiative may or may not fall within the definition(s) of protected areas. Personal communication, 27 January 2014.
- ³ Borrini-Feyerabend and Hill's analysis makes the distinction between a measure that is recognized by either international (i.e. IUCN/CBD) and/or national level bodies.
- ⁴ Borrini-Feyerabend and Hill state that: 'The term **voluntary conservation** captures the idea that conservation may be a desired result of governance as a primary objective but also as a secondary, implicit or not fully conscious, objective. In other cases, when conservation is a fully unintended consequence of managing nature, the term **ancillary conservation** is more appropriate' (original emphasis).
- ⁵ International Conference on Scaling-up Strategies to Secure Community and Resource Rights: www.communitylandrights.org/
- ⁶ While the questions in this section focus on ICCAs, LMMAs and SNSs, the questions and proposal are also directly relevant for private conservation initiatives.
- ⁷ See, for example, the Management Effectiveness Tracking Tool: www.wdpa.org/me/PDF/METT.pdf
- ⁸ ICCAs generally have defined territories (even if boundaries shift seasonally, e.g. with migration routes) and there is nothing in the OECM term that necessitates the area having to be permanent or inflexible. It should also be noted that the boundaries of some formal protected areas also change over time and that it is likely that many such boundaries will need to be changed to accommodate the growing shifts in species' distributions induced by climate change. This may, however, hinder related measurement and the tracking of progress.
- ⁹ We would argue that even if conservation is a secondary or

- ancillary objective, this should be considered part of OECMs.

 The authors are grateful to the comments by Grazia Borrini-Feyerabend and an anonymous reviewer for assisting to develop and refine these classes of OECM.
- ² Together, the protected area and OECM matrices would provide the full spectrum of options of area-based conservation under Aichi Target 11, constituting an Aichi 11 matrix.
- ²² CBD COP 12 provisional agenda: www.cbd.int/doc/? meeting=COP-12.

ACKNOWLEDGEMENTS

The authors are grateful to the following individuals for their important contributions to this paper: Grazia Borrini-Feyerabend, Nigel Crawhall, Nigel Dudley, Ernesto Enkerlin, Hugh Govan, Terence Hay-Edie, Stacy Jupiter, Mirjam de Koning, Kathy MacKinnon, Eduard Muller, Neema Pathak Broome, Adrian Phillips, Trevor Sandwith, Sue Stolton, Stephen Woodley and two anonymous reviewers. The views expressed in the paper and any errors or omissions remain those of the authors alone.

ABOUT THE AUTHORS

Valentina Barbuto: Valentina has an LLM with distinction in Global Environment and Climate Change Law from the University of Edinburgh and previous academic background in Chinese Studies. She has collaborated on land rights and investment deals with the International Institute for Environment and Development (IIED); and on the implementation of Aichi Target 11 with the International Development Law Organization (IDLO) and Natural Justice. Valentina has also worked in the DG Climate Action of the European Commission on multiple issues related to three policy areas: climate finance; forestry, agriculture and other land-use; EU strategic partnerships with third countries.

Harry D. Jonas: Harry Jonas is an international environmental and human rights lawyer, a founder of Natural Justice: Lawyers for Communities and the Environment, and an Ashoka Global Fellow. Harry is a member of a number of IUCN commissions, including on environmental law (WCEL), environmental, economic and social policy (CEESP) and protected areas (WCPA). Harry's publications include: Human Rights Standards for Conservation, The Right to Responsibility, The Living Convention and Recognizing and Supporting Conservation by Indigenous Peoples and Local Communities.

Holly C. Jonas: Based in Sabah, Malaysian Borneo, Holly is the International Policy Assistant for the ICCA Consortium and currently coordinates Natural Justice's

work in Asia. Her background is in international environmental and human rights law, zoology, and anthropology and she works on a range of issues in support of community stewardship and governance of territories and resources.

Ashish Kothari: Member of Kalpavriksh, an Indian environmental NGO, Ashish has worked for 35 years on various issues of environment and development. He was a co-chair of the IUCN Strategic Direction on Governance, Equity and Livelihoods in Relation to Protected Areas (TILCEPA), and on the steering committees of IUCN's Commission on Environmental, Economic and Social Policy and World Commission on Protected Areas. He has been on the Board of Greenpeace International and Greenpeace India, and is on the steering committee of the ICCA Consortium. He coordinated a multi-country study on ICCA recognition, and his latest book is a detailed critique of India's globalisation process.

Fred Nelson: Fred is the founder and Executive Director of Maliasili Initiatives, an organisation which promotes sustainable natural resource management and conservation in Africa by focusing on strengthening leading local civil society organisations. He lived in Tanzania for more than a decade, helped establish the Tanzania Natural Resource Forum, and has worked closely with pastoralist communities on wildlife, tourism and livelihood issues. He has done applied research on community natural resource management across eastern and southern Africa, and worked extensively on natural resource policy and governance in the region.

REFERENCES

- Angelou, M. (1993). On the Pulse of Morning. http://www.nytimes.com/1993/01/21/us/the-inauguration-maya-angelou-on-the-pulse-of-morning.html. [accessed 15/10/14]
- Bertzky, B., Corrigan, C., Kemsey, J., Kenney, S., Ravilious, C., Besançon, C. and Burgess, N. (2012). Protected Planet Report 2012: Tracking progress towards global targets for protected areas. IUCN, Gland, Switzerland and UNEP-WCMC, Cambridge, UK.
- Borrini-Feyerabend, G., Pimbert, M., Farvar, M.T., Kothari, A. and Renard Y. (2004). Sharing Power: Learning by doing in co-management of natural resources throughout the world. International Institute for Environment and Development, IUCN Commission on Environmental, Economic and Social Policy, and CENESTA, Tehran, Iran.
- Borrini-Feyerabend, G., Lassen, B., Stevens, S., Martin, G., Riasco de la Pena, J. C., Raez-Luna, E. F. and Farvar, T. (2010). *Biocultural Diversity Conserved by Indigenous Peoples and Local Communities*, ICCA Consortium and Cenesta for GEF SGP, GTZ, IIED and IUCN CEESP, Tehran.
- Borrini-Feyerabend, G., Dudley, N., Jaeger, T., Lassen, B., Pathak Broome, N., Phillips, A. and Sandwith, T. (2013). Governance of Protected Areas: From understanding to

- action. Best Practice Protected Area Guidelines Series No. 20, Gland, Switzerland: IUCN. p. 5.
- Borrini-Feyerabend, G. and Hill, R., (In press). Governance of nature, in Worboys et al. (eds.) (2015). *Governance and Management of Protected Areas*.
- Canadian Council on Ecological Areas (2013). Interpreting Aichi Biodiversity Target 11 in the Canadian Context: Towards Consensus on 'Other Effective Area-based Conservation Measures'. Summary and Results CCEA.
- Carranza, T., Manica, A., Kapos, V. and Balmford, A. (2014). Mismatches between conservation outcomes and management evaluation in protected areas: A case study in the Brazilian Cerrado, *Biological Conservation*, 173. DOI: 10.1016/j.biocon.2014.03.004
- CBD COP 5 (2000). 'Decision V/6, Decision V Approach' in Decisions Adopted by the Conference of the Parties to the Convention on Biological Diversity at its Fifth Meeting, UNEP/CBD/COP/5/23 (15-26 May 2000) Annex, para 1.
- CBD Decision VII/28 (2004). 'Protected areas (Articles 8 (a) to (e))' in Decisions Adopted by the Conference of the Parties to the Convention on Biological Diversity at its Seventh Meeting, UNEP/CBD/COP/DEC/VII/28 (13 April 2004), Programme of Work on Protected Areas.
- CBD Decision X/2 (2010). 'Strategic Plan for Biodiversity 2011-2020' in Decisions Adopted by the Conference of the Parties to the Convention on Biological Diversity at its Tenth Meeting.
- CIPTA (Tacana Indigenous People's Council) and WCS (the Wildlife Conservation Society), (2013). 'Deforestation scenarios in the Greater Madidi-Tambopata Landscape'. WCS: Bolivia. Summary available online at: http://bit.ly/1gGbfm0.
- Day, J., Dudley, N., Hocking M., Holmes G., Lafolley, D., Stolton, S., and Wells, S. (2012). Guidelines for Applying the IUCN Protected Areas Management Categories to Marine Protected Areas. Gland, Switzerland: IUCN.
- Dudley, N. (ed.) (2008). *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN.
- Dudley, N., and Courrau, J. (2008). Filling the gaps in protected area networks: A quick guide for protected area practitioners. The Nature Conservancy.
- Dudley, N., Parrish, J.D., Redford, K.H., and Stolton, S. (2010). The revised IUCN protected area management categories: the debate and ways forward, Flora & Fauna International - Oryx 44(4) 486. DOI: http://dx.doi.org/10.1017/ S0030605310000566
- Geldmann, J., Barnes, M., Coad, L., Craigie, I.D., Hockings, M. and Burgess, N.D. (2013). Effectiveness of terrestrial protected areas in reducing habitat loss and population declines. *Biological Conservation*, 161, pp. 230-238. DOI:10.1016/j.biocon.2013.02.018
- Gillespie, A. (2009). Defining Internationally Protected Areas. Journal of International Wildlife Law & Policy 12:4 229.
- Glowka, L., Burhenne-Guilmin, F., and Synge, H. (1994). *A Guide to the Convention on Biological Diversity*. IUCN Environmental Policy and Law Paper No. 30, 2.
- Govan, H., and S. Jupiter (2013). Can the IUCN Protected Areas Management Categories Support Pacific Island Approaches to Conservation. *PARKS* 19.1. DOI: 10.2305/IUCN.CH.2013.PARKS-19-1.HG.en
- IUCN (1980). World Conservation Strategy: Living Resource Conservation for Sustainable Development. Gland, Switzerland: IUCN.
- IUCN (1994). Guidelines for Protected Area Management Categories. Gland, Switzerland: IUCN.

IUCN (2012a).WCC-2012-Res-035-EN, 'Facilitating conservation through the establishment of protected areas as a basis for achieving Target 11 of the Strategic Plan for Biodiversity 2011–2020' in IUCN, *Resolutions and Recommendations*. IUCN, Gland, Switzerland.

- IUCN (2012b). 'Position Paper on Protected areas', Agenda Item 13.4. Submitted to the eleventh meeting of the Conference of the Parties to the Convention on Biological Diversity.
- IUCN and UNEP-WCMC (2011). The World Database on Protected Areas (WDPA) [On-line]. Cambridge, UK: UNEP-WCMC. Available at: www.protectedplanet.net.
- Jonas H., Kothari, A. and Shrumm, H. (2012). Legal and Institutional Aspects of Recognizing and Supporting Conservation by Indigenous Peoples and Local Communities: An Analysis of International Law, National Legislation, Judgements and Institutions as they Interrelate with Territories and Areas Conserved by Indigenous Peoples and Local Communities. Natural Justice and Kalpavriksh: Bangalore and Pune.
- Jonas, H.D. and Lucas, S. (2013). Legal Aspects of the Aichi Biodiversity Target 11: A Scoping Paper. International Development Law Organization: Rome.
- Jonas H.C., Jonas, H.D. and Subramanian, S. (2013). The Right to Responsibility: Resisting and Engaging Development, Conservation and the Law in Asia. UNU-IAS and Natural Justice: Yokahama and Cape Town.
- Kothari, A., with Corrigan, C., Jonas, H.D., Neumann, A. and Shrumm, H. (eds.) (2012). Recognising and Supporting Territories and Areas Conserved by Indigenous Peoples and Local Communities: Global Overview and National Case Studies. Technical Series no. 64. Secretariat of the Convention on Biological Diversity, ICCA Consortium, Kalpavriksh, and Natural Justice: Montreal, Canada.
- Kothari, A. and Neumann, A. (2014). ICCAs and Aichi Targets:
 The Contribution of Indigenous Peoples' and Local
 Community Conserved Territories and Areas to the
 Strategic Plan for Biodiversity 2011-20. Policy Brief of the
 ICCA Consortium, no. 1, co-produced with CBD Alliance,
 Kalpavriksh and CENESTA and in collaboration with the
 IUCN Global Protected Areas Programme.
- Lopoukhine, N., and de Souza Dias, B. F. (2012). Editorial: What does Target 11 really mean? *PARKS* 18(1) 5. DOI: 10.2305/IUCN.CH.2012.PARKS-18-1.NL.en
- Lovgren, S., (2003). Map Links Healthier Ecosystems, Indigenous Peoples. *National Geographic News*. Available online at: http://bit.ly/1kENKxB.
- Martin, G., del Campo, C., Camacho, C., Sauceda, G.E., and Juan, X.Z. (2010). Negotiating the web of law and policy: Community designation of indigenous and community conserved areas in Mexico. *Policy Matters* 17: 195-204.
- Molnar, A., Scherr, S. and Khare, A. (2004). Who conserves the world's forests: community driven strategies to protect forests and respect rights. Forest Trends and Ecoagriculture Partners, Washington, D.C., USA.
- Nelson, A. and Chomitz, K.M. (2011). Effectiveness of Strict vs. Multiple Use Protected Areas in Reducing Tropical Forest Fires: A Global Analysis Using Matching Methods. *PLoS ONE*, 6(8): e22722. DOI:10.1371/journal.pone.0022722.
- Nepstad, D., S. Schwartzman, B. Bamberger, M. Santilli, D. Ray, P. Schlesinger, P. Lefebvre, A. Alencar, E. Prinz, G. Fiske, and A. Rolla, (2006). Inhibition of Amazon Deforestation and Fire by Parks and Indigenous Lands. *Conservation Biology*, 20(1): 65-73.

- Nolte, C., A. Agrawal, K.M. Silvius, and B.S. Soares-Filho, (2013). Governance Regime and Location Influence Avoided Deforestation Success of Protected Areas in the Brazilian Amazon. *Proceedings of the National Academy of Sciences*, 110(13): 4956–4961.
- Phillips, A. (2004). The History of the International System of Protected Areas Categorisation. *PARKS* 14:3 4.
- Porter-Bolland, L., Ellis, E.A., Guariguata, M.R., Ruiz-Mallén I., Negrete-Yankelovich, S. and Reyes-García, V. (2011). Community managed forests and forest protected areas: An assessment of their conservation effectiveness across the tropics. Forest Ecology and Management. DOI:10.1016/j.foreco.2011.05.034.
- Rights and Resources Initiative (2012). Respecting Rights, Delivering Development: Forest tenure reform since Rio 1992. RRI, Washington DC.
- Rights and Resources Initiative (2012b). What Rights? A Comparative Analysis of Developing Countries' National Legislation on Community and Indigenous Peoples' Forest Tenure Rights. RRI, Washington DC.
- Rights and Resources Initiative (2014a). What Future for Reform? Progress and slowdown in forest tenure reform since 2002. Washington DC: Rights and Resources Initiative.
- Rights and Resources Initiative (2014b). Recognizing Indigenous and Community Rights: Priority Steps to Advance Development and Mitigate Climate Change. Washington DC: Rights and Resources Initiative.
- Shrumm, H. with Campese, J. (2010). Exploring the Right to Diversity in Conservation Law, Policy, and Practice, In Shrumm, H. (ed.), IUCN-CEESP *Policy Matters* 17, pp.10-14.
- Sobrevila, C. (2008). The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but Often Forgotten Partners. The World Bank, Washington, D.C., USA.
- Stevens, S. (2014). *Indigenous Peoples, National Parks and Protected Areas: A New Paradigm Linking Conservation, Culture and Rights*. USA: University of Arizona Press.
- Stolton, S., Shadie, P. and Dudley, N. (2013). *IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types*, Best Practice Protected Area Guidelines Series No. 21, Gland, Switzerland: IUCN.
- Stolton, S., Redford K. and Dudley, N. (2014). The Futures of Privately Protected Areas. Gland, Switzerland: IUCN.
- White, A., Molnar, A. and Khare, A. (2004). Who Owns, Who Conserves, and Why it Matters. Forest Trends Association, Washington, D.C., USA.
- Woodley, S., Bertzky, B., Crawhall, N., Dudley, N., Londono, J.M., MacKinnon, K., Redford K., and Sandwith, T. (2012). Meeting Aichi 11: What Does Success Look Like For Protected Area Systems? *PARKS* 18(1): 23. DOI: 10.2305/IUCN.CH.2012.PARKS-18-1.SW.en
- World Resources Institute (2005). World Resources 2005: The Wealth of the Poor Managing Ecosystems to Fight Poverty. Washington DC, USA: World Resources Institute

RESUMEN

En 2010, la Conferencia de las Partes en el Convenio sobre la Diversidad Biológica adoptó las Metas de Aichi, como parte del Plan Estratégico para la Diversidad Biológica 2011-2020. La Meta 11 aspira a que "al menos el 17 por ciento de las zonas terrestres y de aguas continentales y el 10 por ciento de las zonas marinas y costeras" se conservan por medio de "sistemas de áreas protegidas bien conectados y otras medidas de conservación eficaces basadas en áreas". Sin embargo, cuatro años después de su adopción, las partes en el CDB y otros interesados no han recibido orientación sobre qué tipo de arreglos constituyen o no "otras medidas de conservación eficaces basadas en áreas", ni sobre la mejor manera de reconocerlas y apoyarlas. El documento sostiene que sin una orientación clara a este respecto, la legislación y las políticas sobre conservación seguirán reconociendo de manera inapropiada y/o inadecuada la gran diversidad de formas de conservación y uso sostenible de los ecosistemas y sus elementos constitutivos en los paisajes terrestres y marinos, incluidos los pueblos indígenas y las comunidades locales. En este contexto, y en línea con las solicitudes del Convenio sobre la Diversidad Biológica y de la UICN, propone el establecimiento de un Grupo de tareas de la UICN para explorar más a fondo estas cuestiones, con el fin de desarrollar una orientación clara sobre "otras medidas de conservación eficaces basadas en áreas" para cumplir de manera eficaz y equitativa la Meta 11 de Aichi.

RESUME

En 2010, la Conférence des membres de la Convention sur la diversité biologique a adopté les objectifs d'Aichi pour la biodiversité dans le cadre du Plan stratégique pour la biodiversité 2011-2020. L'Objectif n°11 demande qu' «au moins 17 pour cent des zones terrestres et d'eaux intérieures et 10 pour cent des zones côtières et marines» soient conservées au moyen de «systèmes bien reliés d'aires protégées et d'autres mesures de conservation effectives par zone». Pourtant, quatre ans après leur adoption, les membres de la CDB et d'autres parties prenantes n'ont reçu aucune instruction sur le genre de dispositions qui constituent les «autres mesures de conservation effectives par zone», ni sur la façon de les reconnaître de manière appropriée et de les soutenir. Ce document fait valoir que, sans une orientation claire sur cette question, la loi et les politiques de conservation continueront de reconnaître de façon inappropriée ou inadéquate la grande diversité des formes de conservation et d'utilisation durable des écosystèmes et de leurs éléments constituants, tant terrestres que marins, y compris parmi les peuples autochtones et les communautés locales. Dans ce contexte, et conformément aux appels de la Convention sur la diversité biologique et l'UICN, le document propose la création d'un groupe de travail à l'UICN pour explorer de façon plus approfondie ces questions en vue de développer des directives claires sur les «autres mesures de conservation effectives par zone» comme un moyen d'atteindre efficacement et équitablement Objectif n°11 d'Aichi.