

CHAPTER 7

GOVERNANCE FOR THE CONSERVATION OF NATURE

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TITLE PAGE PHOTO

Gatherings to discuss issues of relevance for the conservation of nature are common among communities engaged in governing their territories and natural resources, as here in the iconic ICCA of Coron Island, Palawan, the Philippines Source: Grazia Borrini-Feyerabend















Introduction

In many cultures, humans perceive themselves as capable of developing cogent decisions about what to do with nature and implementing those decisions through skilful and technology-enriched means. Other cultures see decisions about nature as arising from the spiritual and ancestral beings who are part of nature, and affect us much more than we are able to affect them. Some people perceive nature as benign and sacred, to be treated with reverence and moderation. Others see it as a condition of life, which needs to be dominated and controlled. Still others sense it as an inscrutable phenomenon controlling us from within: attempting to bend nature to the will of people is, for them, just an act of hubris. Whether we believe we are exercising power over nature or feel that nature is controlling us, whether we seek power from nature or simply feel at peace within it, we all live with nature and make sense of that interaction in order to survive and add meaning to our lives.

Broadly understood as the conscious determination of action via the use of various forms of power, governance is a timeless phenomenon that humans experience in their interaction with nature. Today, the phenomenon is reaching extreme proportions and consequences in the Anthropocene era, with humans altering the conditions of the entire planet (Crutzen 2006). The human impact on the planet is the ultimate result of innumerable acts of decision-making that affect nature or, in a more institutional sense, innumerable acts of exercising power, authority and responsibility with direct relevance to nature. Governance has thus to do with policy (stated intentions backed up by authority) and with practice (the direct acts of humans affecting nature). In between, it has to do with the complex web of conditionsunderstanding, communicating, and allocating power and resources—which create matches and mismatches between the two.

Governance for the conservation of nature seeks a balance between the requirements of human and economic development and those of conserving biological diversity. The major international policy expressions of that are the Convention on Biological Diversity (CBD) and the UN Framework Convention on Climate Change. In this chapter, we will make reference to those comprehensive international agreements, but will focus attention at the national and local levels, and on area-based measures in particular. We will approach governance for the conservation of nature from an understanding of its historical and cultural roots, and we will seek to clarify how it can be affected, and possibly improved.

History, power, culture and nature

Management and governance are closely related but distinct phenomena (Table 7.1). Until the beginning of the new millennium, however, when describing decisions and action meant to conserve nature, only the term 'management' was used. This implied a tendency to focus on the technical rather than the political—that is, policy and power-related—aspects of conservation.

Table 7.1 What is the difference between management and governance?

Management	is about	What is done in pursuit of given objectives The means and actions to achieve such objectives
Governance	is about	Who decides what the objectives are, what to do to pursue them and with what means
		How those decisions are taken
		Who holds power, authority and responsibility
		Who is (or should be) held accountable

In reality, the policy and practice of conservation have always been enmeshed with the struggles for 'power over nature' that have unfolded throughout history. Considerations of governance—that is, who holds *de facto* power, authority and responsibility to take and implement decisions—are crucial for the conservation of nature. But what decisions are we discussing here?

In the distant past, the interaction between people and the environment were more likely shaped by patterns of necessity and adaptation than by 'decisions'. Fishing and shell collection provide a natural way for people to survive in a tropical estuary, as do nomadic pastoralism in dryland plains, transhumant pastoralism in alpine conditions, rice cultivation in regularly flooded areas or a hunter-gatherer lifestyle in tropical forests. Often, these interactions—the 'perceived vocation' of a given environment—allowed livelihoods to be sustained with limited disturbance of the ecosystem functions.

Landscapes, seascapes and their 'units'

Through time, landscapes and seascapes were identified as 'units', or territories of different people, often on the basis of different perceived vocations and

patterns of interactions between people and nature. With the increased complexity of societies, expanded communication and trade, enhanced knowledge of the environment and enhanced technology to exploit its riches, both such interactions and units have changed, sometimes dramatically. Thus, we refer today to an area as the 'breadbasket of the country', a communication hub, a national recreation area or an industrial area. The perceived vocation of a given environment is still the result of intrinsic conditions—such as accessibility, climate or the presence of natural resources—but increasingly also of decisions taken by relevant people and authorities. Similarly, the units (a village territory, a country, an administrative region, the property of a given family) are increasingly more politically determined than determined on the basis of the intrinsic properties of the ecosystems.

Previous generations of people on the planet had much less access than many of us to stored information, but an amazing capacity to learn and accumulate observations and experiences, in particular regarding specific places. Through time, acting and receiving feedback from nature consolidated into bodies of local knowledge and skills, varieties of carefully selected seeds and breeds, and allocation of different uses to different units in the landscapes and seascapes, based on deep knowledge and understanding of their potential. Many indigenous peoples and local communities continue to govern and manage their landscapes drawing from these accumulated observations and experiences.

Throughout history, however, humans not only perceived and adapted to their ecosystems, they also affected them in important ways. This began with the use of fire, the movement of seeds by hunter-gatherers and the changes to soil and waters made by agriculturalists (Goudie 1990). In the past few centuries, fossil fuels and powerful technologies have allowed us to affect nature in ways well beyond its capacity to re-establish itself as it originally was (regenerate). We pour cement and build settlements on top of a country's most productive topsoil. We pump aguifers dry and add chemical fertilisers to the land to grow tomatoes and sugar cane on unsuitable terrain. We build homes in the middle of forests that should naturally burn to regenerate—and then invest resources in preventing fires. We understand the ecosystems with the help of sophisticated research, instruments and analyses, but we often choose to transform them in irreversible ways.

Our landscapes and seascapes are cut into administrative units to be governed by politicians (elected or appointed) with the help of technical experts. The decisions about such units have mostly to do with how the landscape or seascape is to be developed and how much

importance is given to considerations of sustainability and the conservation of ecological and cultural values. In other words: are the pressures of urbanisation, trade, infrastructure, industry, agriculture, aquaculture, mining, logging or large-scale tourism going to be reined in? Do decision-makers uphold the local ecological and cultural values by declaring that at least a given area is 'protected', that a watershed should not be altered, or that a given species is endangered and must be cared for? The compromises struck by politicians about these questions are at the heart of today's governance of the conservation of nature. And, in many such situations, the fundamental decision is about breaking the landscape or seascape into governance sub-units—some dedicated to development and others to conservation—generally under different governing bodies.

Socioecological coherence of the governance 'units'

The degree of ecological and social coherence of governance units is a basic issue in governing landscapes and seascapes for conservation. Is the governing body taking decisions over a unit that has ecological sense—that is, forms an ecosystem? Can it take decisions that make economic sense—for example, bring returns on investments? And, is the governing body legitimate? Is it supported by a coherent social body (Case Study 7.1)?

A watershed provides a clear example. Local decisionmaking bodies can find themselves unable to affect the health of a river when they are responsible for only a small part of its course. Because of that, economic investments are less secure (for example, can we be confident that flooding will not damage the harvest) and the willingness to invest in conservation diminishes (for example, why should we invest in watershed protection if the benefits will flow away to other people). Yet, it may be politically difficult to establish a governing body for the river as a whole, as the river basin may not have enough 'social coherence': the upper and lower parts of the watershed may be inhabited by different peoples, and only in smaller units along the watershed might it be possible to find the cohesion, legitimacy, cooperation and compliance needed to have rules agreed to and respected. In addition, as mobility increases, communities tend to become even more diverse and less cohesive.

As noted by Murphree (2000), while ecological and economic considerations suggest large-scale regimes, social topography often suggests small-scale regimes—a tension that exists in virtually all environments and societies. This apparent mismatch can be harmonised by well-functioning nested governance regimes and by

Case Study 7.1 Decision-making at the ecosystem level

The Western Ghats mountain range is a major ecological feature of the Indian peninsula. The creation of an ecosystem-scale governance authority for the Western Ghats was recommended by a recent expert analysis that considered the ecological significance of the Ghats for the Indian peninsula (Western Ghats Ecology Expert Panel 2011). The proposed authority would cut across administrative boundaries and have jurisdiction over the whole mountain chain. It would preside over environmental legislation, approve industrial developments and major infrastructure, coordinate land-use planning, and secure the rights of the least powerful communities. Any proposed activity that could have an adverse impact on ecology and society would have to be submitted to this authority for approval, and the authority would consider issues at the ecosystem scale-larger than any individual protected areas within the Ghats. The proposal envisages that the Western Ghats Ecology Authority would exercise powers under the Environment Protection Act. It would focus on environmental issues (for example, protection of upper catchments of rivers, conservation of germplasm of wild relatives of cultivated plants, prevention of groundwater pollution) and arrange field investigations, marshal facts and institute action. The authority would be part of a governing system that involves many levels and actorsstate and non-state-addressing diverse knowledge domains, social relationships and competing interests. At the time of writing, the proposal is strongly challenged and not yet accepted in theory, let alone enforced.



Wildflowers on Kaas Plateau, Western Ghats, India Source: Ashish Kothari

strengthening linkages and connections among actors, levels and partners. Governance is only partially an issue of how the landscape and seascape are broken down into units and which authorities preside over them. Governance is also about coherence, the integrity and robustness of social units, and how well they interact, connect and fit with other social units and governing authorities (Case Study 7.2).

Some decisions affecting nature apply non-specifically to the entire landscape or seascape (for example, the prohibition against lighting a fire or killing a species) while others apply specifically to a determined subunit and are referred to as 'area-based measures'. Area-based and non area-based measures interplay under any governance system and their coherence is key for conserving nature.

Area-based measures for conservation and their constituent acts and processes

An area-based measure applies to a defined area of land, inland and intertidal water and/or sea. It may be ancient or recent, explicit or implicit. It may demand an active

management intervention over resources, such as clearing out an invasive species, or just passive interventions, such as barring or limiting access. The area in question may possess, or lack, any visible demarcation on the ground. The area may even be unstable in terms of position or extension, as some ecological units, such as a riverbed, are dynamic and design their own shape through time. Commonly, area-based measures result from a combination of understandings, practices, constraints and pressures at different levels.

For a given natural area (for example, a lake), the constituent act of an area-based measure for conservation originates when a relevant authority establishes a vision for it (for example, maintaining its ecological integrity, so that it can keep providing safe drinking water) and some clear objectives about how the vision can be achieved (for example, maintaining the flow and quality of affluent water, and preventing pollution and the spread of invasive species). A prime example of such a constituent act—which is a key governance act—is a decree to declare the basin of a lake a protected area (see also Case Study 7.3). The decree could be signed by the minister of the environment, establish a management board and assign human and financial resources to the management tasks. Or the decree could be by a council

Case Study 7.2 Undermining a national symbol?

The Menabé region is host to Madagascar's national symbol: the spectacular baobabs (Adansonia grandidieri) of the baobab alley of Bamanonga. The surprise is to find their feet in water even in the dry season—a recent condition, bound to break their reproductive cycle and eliminate them from the landscape. Unfortunately, the region went against its 'pastoral vocation'-the livelihood of choice for the people indigenous to this semi-arid environment—when it allowed intensive production of sugar cane under irrigation from deep aquifers. This production became possible because of capital, technologies, crops and people from outside the region. Today, the water overrun from the huge production areas is slowly but surely altering the natural environment. With that, local tourism options may wane and Madagascar may even lose its national symbol. While there is more than a single decision involved here, investing massively in sugarcane production in a dryland environment is clearly going 'against the grain of the land'.



Baobab in Bamanonga, Menabé region, Madagascar

Source: Grazia Borrini-Feyerabend

of elders reaffirming and reproducing a traditional pattern of care and respect for the lake and its tributaries, and stringent rules for the sacred island within it; or by a corporation which buys the rights to bottle water from the lake, and demands a basin conservation clause in its concession contract. In some cases, parallel decrees can operate on the same place at the same time—for example, a national park established under the minister for the environment and elders reaffirming a traditional pattern of care and respect. Clarity is always needed about who are the people in charge of implementing the decisions (responsible managers), how the needed resources will be obtained and allocated, which local, national and international rules apply (for example, about sanctions, respect of pre-existing rights, conflictmanagement procedures), and how different groups with different decision-making authorities will interact with one another. It should also be unambiguous which governing body has the authority to review, maintain, strengthen or revoke the constituent act or acts.

Within the area itself, once the vision and objectives are determined, further management decisions are likely to deal with the demarcation of the area and the rules and procedures of access to natural resources, possibly via a management plan with or without a zoning system establishing diverse rules for different zones. Such decisions are important and they should be made with the engagement of local actors who know and care about the issues at stake. Debates may cover where and when to establish a no-take zone, how much should be spent to eradicate an invasive species or whether use regulations should be relaxed in a time of social stress. Decisions at

this level, which affect local livelihoods, development and the local sharing of the benefits and costs of the area-based measure, are best taken in a learning-by-doing mode.

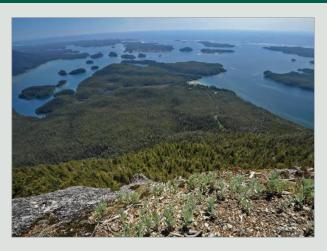
The key actors who participate in the constituent act(s) are fundamental for the existence and functioning of a given area-based measure. Through such act(s), these actors take upon themselves the governance authority, responsibility and accountability for that area or territory. An area-based measure draws much of its effectiveness and strength from the coherence between its constituent act(s) and destinations and those prevalent in the surrounding landscape or seascape. The area may thus be explicitly dedicated to industrial development, protection of biodiversity or as migration territory of an indigenous people, but other and possibly competing destinations may interact or coexist with that, with outcomes determined by the interactions among diverse forces and values. In other words, the act of governance that establishes an area-based measure is always nested within other governance decisions and levels, and crucial conditions that include political feasibility, available human and financial resources and dominant perceptions and values. Moreover, any constituent act is rooted in a particular moment in time, and measures are bound to evolve in response to changes in context and needs.

A constituent act, such as signing a decree or buying a piece of land, is often crucial, but decisions that are effectively implemented and have a strong and lasting impact are complex processes that arise and evolve over both space and time. Thus, while it is true that single decisions taken at the appropriate moment can make a fundamental difference for people and nature, governance systems also need to learn, change and evolve—in one word, have a measure of 'vitality'.

Case Study 7.3 Meares Island: indigenous resistance as a 'constituent act'

The Tla-o-qui-aht Tribal Parks of British Columbia, Canada, are based on a long history of relationships between the people and the watersheds, coastal areas and islands in their ancient territory, in what is now Vancouver Island in British Columbia. Part of the Tla-o-qui-aht traditional territory, Meares Island was declared a Tribal Park in 1984 by a pronouncement of the Hawiih hereditary chiefs. Basically, the chiefs set up a peaceful blockade to impede a forestry corporation from logging their island's ancient trees. A legal action ensued and the court granted an injunction to stop logging, as the hereditary chiefs still held an unresolved claim about their traditional territory there. In 2007, the Tla-o-qui-aht First Nations took several more steps to formalise Meares Island and several adjacent watersheds as Tribal Parks, which are now recognised by the Pacific Rim National Park Reserve, various municipalities and ministries.

- Eli Enns



Meares Island, British Columbia, Canada

Source: Eli Enns Tla-o-qui-aht Tribal Parks

Because of this, governance analysis should deal with who makes decisions and how, but also with how actors and decisions connect and relate with other actors and decisions in society, and how they learn and evolve through time, shaping the ecological and social history of the concerned territory or area.

While governance for the conservation of nature is a political phenomenon, it is also, and always, a cultural expression, reflecting the concepts, values and world views of diverse societies. Deciding about a territory—or motherland, home or country, as expressed in different cultures—engages issues of livelihood, identity, autonomy and freedom. The territory is a connecting tie among generations, preserving memories from the past and connecting those to the desired future. It is the ground on which communities learn, identify values and develop material and spiritual wealth. For many, territory is also a connection between visible and invisible realities, and the source of dignity, self-rules and self-determination as peoples.

Protected and conserved areas

While historical and cultural analyses can ground the understanding of governance, many readers of this volume are likely to face governance—first and foremost—as a large body of national executive policies and regulations, embedded in lobbying pressures, unresolved conflicts, a likely scarcity of resources and a variety of all-too-human relationships.

Within a country's legal system, a hierarchy of legal instruments and operational tools is typically in place to regulate conservation. A principal legislative element

(an act or law) usually provides the key requirements, and various codes, decrees, policies, norms, rules and subsidiary orders add the implementation details. When more than one body of law exists (for example, statutory and customary law), their relationship can be clearly articulated, difficult to discern or a mixture of both. In general, important legal instruments relate to area-based measures and a number of organisations are involved, ranging from national ministries and agencies to advisory committees, scientific committees and formal and informal local implementation bodies.

The national legislation and policy that deal with protected areas usually specify—implicitly or explicitly—the governance types that can be formally recognised. Voluntary conservation practices may be recognised, promoted and regulated (Lausche and Burhenne 2011). The provision of incentives and disincentives is an important tool to encourage such practices, which are fundamental for connectivity, biodiversity restoration and the maintenance of ecological processes outside protected areas (Lausche et al. 2013).

Protected areas

The national legal and policy contexts of governing protected areas are embedded in international legal frameworks: conventions, plans of work, declarations, pronouncements and widely accepted best practices that link them to an evolving body of learning and work that is a hopeful and exciting feature of modern societies. The broad definition of a protected area adopted by the International Union for Conservation of Nature (IUCN) (Dudley 2008:9) is foundational to our knowledge of governance for nature conservation: '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.' The definition is accompanied by, among others, this main principle: 'Only those areas where the main objective is conserving nature can be considered protected areas ... in case of conflict, nature conservation will be the priority' (Dudley 2008:10). These are instructive starting points to begin our discussion of what governance means, in practice, with regard to protected areas.

The questions in Table 7.2 can be used to deconstruct the definition of protected area and explore the details of formal designation and authority to reveal how the decisions that affect conservation are influenced by history and culture and by the interplay among formal, customary and context-specific institutions. Governance is not only about who holds authority *de jure*, but also about who makes decisions *de facto*, and about how these decisions are made. It is useful to enter into some detail, referring to the key issues introduced by the IUCN definition.

Table 7.2 Understanding governance in the IUCN definition of protected areas

Terms	Governance issues
Clearly defined geographical space	Who defines the geographical space that is to be 'protected'? Who traces and demarcates the borders? Who can modify that, and how?
Dedicated	Who 'dedicates' the land and resources to conservation? How? Through legal means? Through customary laws and rules? Is the decision imposed by law? Is it voluntary? Who will solve controversies among conflicting objectives and priorities?
Recognised	How is the protected area recognised? By whom? Consider informal and formal recognition modalities and different levels of recognition, including by local peoples and communities by society in general by local customary and/or legal authorities by national authorities by multi-country governmental bodies
Managed	Who develops and approves the natural resource rules or the management plan, where it exists? Who appoints the managers in charge of implementing the rules and/or plan? What is the managers' scope of decisions in interpreting the rules and/or plan?
Legal or other effective means	Are the authority, responsibility and accountability concerning the area codified in legislation? Are they regulated by specific agreements or customary processes, institutions and means? How are rules formed and enforced?
To achieve	Who decides how to implement the management plan or rules? Who decides what is 'effective'? Who defines the indicators? Who is in charge of monitoring and evaluating the results? Who decides about eventual needed changes in the management plan or practices?
Long-term	Who developed the vision of what the protected area should be like 'in the long term'? What does 'long term' actually mean? What guarantees are in place that the protected area will actually exist in the long term? Who will be accountable for this?
Conservation	Who decides what should be conserved and how? Who defines the conservation priorities?
Nature	Whose definition of 'nature' is applied? Who interprets the definition for application to specific policies, mandates or sites?
Associated ecosystem services	Who benefits from ecosystem services? Who carries the burden of maintaining them, including the related opportunity costs?
Cultural values	Whose culture? Who benefits from the conserved 'cultural values'? How are decisions taken to conserve or promote certain cultural values instead of others?

Case Study 7.4 The Mapuche-Pewenche: people of the Araucaria tree

In an ancient ceremony (ngillatun), the indigenous peoples of southern Chile ask the spirits to support the reproduction of the pewen tree (Araucaria araucana), which plays a central role in their social, economic and spiritual lives. These people are so connected to the pewen that they call themselves Mapuche-Pewenche ('the people of the Araucaria tree'). In this case, when the people feel as one with the land and the trees, dedicating the territory to conservation may be an understatement for a phenomenon rooted in the people's identity and in centuries of experience. And yet, these same people may not state that conservation is the primary objective of their relationship with nature.



Mapuche-Pewenche people with *Araucaria* trees, southern Chile

Source: Associación Mapuche-Pewenche Markan Kura

Conservation

The World Conservation Strategy (UNEP et al. 1980:1) stipulates that conservation includes the 'preservation, maintenance, sustainable utilization, restoration, and enhancement of the natural environment'. Preservation or protection is a conscious effort to avoid or limit damage to nature's capacity to self-regenerate. Sustainable use strives for the maintenance of renewable resources while making use of them for the benefit of present and future generations. And restoration and enhancement attempt the recovery of degraded ecosystems into healthier and more sustainable conditions—for instance, via reafforestation with locally native species or improvement of habitats for greater resilience or authenticity. For any specific site, conservation generally means a combination of activities to protect, use sustainably and restore nature in different proportions according to the situation, and the perceptions and aims of its governing body. Relative priorities among such activities are a matter of debate, and the way that debate is conducted and solved characterises the quality of a governance regime.

Dedication

The IUCN definition stresses 'dedication' as a requirement: conservation of nature must be a conscious objective, and in fact the primary objective of any protected area, as it must prevail in case of conflict with other, equally legitimate objectives. This requirement for protected areas leaves out those areas that might be conserved effectively but incidentally or as a secondary consideration: an area restricted for national security, a landscape managed to attract tourists, a forest preserved as a sacred resting ground of the ancestors and a place of rituals. At some point, some such effective area-based measures may become explicitly or primarily dedicated to conservation and thus could be seen as protected

areas under the IUCN definition. But others will not, and it is still important that their contributions—if they have a reasonable expectation to last through time—are properly recognised and supported (Case Study 7.4). 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.

Recognition

Protected area recognition happens at several levels notably, internationally, nationally and locally. The IUCN definition and the related IUCN management categories and governance types provide an international language and reference points for recognition and comparison. Article 2 of the CBD states that a protected area is 'a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives' (CBD 1992:4). The IUCN definition, which is not identical to the CBD definition but is considered to be fully compatible (Dudley 2008), specifies that recognition can happen by legal or other effective means. Importantly, this implies that an area-based measure that is informally but effectively recognised—for instance, by custom or by the will of a landowner—may be 'internationally recognised' as a protected area even when it does not qualify and is not recognised and listed as a protected area in its relevant country. At the country level, on the other hand, national legislation and policy are usually the only accepted means of recognition. In addition, a large variety of protected area definitions, means and rules exists for any given country, and only some of them are fully compatible with the IUCN and CBD definitions. Thus, an area-based measure that a given country recognises and lists as a protected area may *not* be internationally recognised as such. These layers of complexity are illustrated in Table 7.3 in conjunction with the concept of 'conserved area'.

Conserved areas

As seen above, area-based measures within a broader landscape or seascape are defined by the IUCN as protected areas only when they are recognised and dedicated to achieving long-term conservation. At the local level, however, we need to come to terms with another consideration, which is *de facto* conservation.

What can we observe at the level of the specific land, water and natural resource? Is conservation happening? Is it possible to perceive a positive conservation trend? Is that trend likely to be maintained in the long term? We use here the term 'conserved area' to describe areabased measures that, regardless of recognition and dedication, and at times even regardless of explicit and conscious management practices, achieve de facto conservation and/or are in a positive conservation trend and likely to maintain it in the long term. According to this definition, conserved areas have a major overlap with protected areas (as defined by the IUCN but also by national governments throughout the world)—but they do not coincide. For instance, some area-based measures that are nationally defined as protected areas do not manage to conserve nature (they are protected areas but not conserved areas, and some use the derogatory term 'paper parks' to describe them) and others are conserved areas but not protected areas (they do not fit the IUCN definition, or they do not fit the definition of the relevant country, or both) or, even if they fit such definitions, the concerned peoples simply do not wish them to be recognised as protected areas.

Noticeably, conserved areas that are not protected areas according to a specific country (not recognised there by legislation or policy) may be locally recognised by customary law (that is, by indigenous peoples and local communities) or by the will of their landowners. Examples of areas where biodiversity may be thriving regardless of national legal or policy recognition and dedication include commercial hunting operations designed to be sustainable, well-managed farming systems and watersheds, restored community mangroves and military no-go areas. Among such practices, those described above as voluntary conservation may fit the IUCN definition of protected areas. Others—in

particular, ancillary conservation or benign neglect—clearly do not. With this in mind, we can roughly picture the situation, as in Figure 7.1, where conserved areas cover a broader proportion of land, water and sea than protected areas (according to both international and national definitions). The figure also shows the extensive but not complete overlap between the two.



Figure 7.1 Incomplete overlap between conserved and protected areas

'Other effective area-based conservation measures' and CBD Aichi Target 11

The concept of conserved areas or *de facto* conservation has become even more important since the parties to the CBD have used the term 'other area-based effective conservation measures' (OECMs). The CBD Strategic Plan for Biodiversity 2011–2020 (CBD 2011) set 20 targets to be met by all 193 country parties by 2020. Target 11 addresses area-based conservation and stipulates that 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas will be conserved by 2020 via systems of 'protected areas and other effective area-based conservation measures' (CBD 2011:3).

While the term 'other' indicates that these measures are not protected areas (for the IUCN and/or for the country at stake), the terms 'effective' and 'area-based' remind us of the conserved areas defined above. In the simplest and most direct interpretation, an OECM would thus be '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'. In this sense, OECMs would include first and foremost areas well conserved and reasonably expected to remain so in the long term that are not recognised, nationally or internationally, as protected areas (Table 7.3). With respect to the IUCN definition, in particular, they would comprise areabased measures of secondary voluntary conservation and ancillary conservation with a reasonable expectation to be maintained in the long term.

(ac facto conscivation)		
Conserved areas (areas conserved de facto, with a reasonable expectation that conservation will be maintained in the long term)	Recognised as a protected area under international definition (IUCN/CBD)	Not recognised as a protected area under international definition (IUCN/CBD)
Recognised as a protected area by national legislation and/or policy	The area is a protected area in the country at stake and internationally	The area is a protected area in the country at stake, although not internationally, where it <i>could</i> be considered an effective area-based conservation measure
Not recognised as a protected area by national legislation and/or policy	The area is a protected area internationally, although not in the country at stake, where it should be considered an effective area-based conservation measure	The area is not a protected area; it could be considered an effective areabased conservation measure

Table 7.3 Possible combinations of national and international recognition of conserved areas (de facto conservation)

For a country reviewing its system of protected areas to report to the CBD about progress towards Aichi Target 11, it would be important to proceed through an analysis of specific cases, their contexts, history and progress, and approach with an open mind the governance arrangements that are not recognised as protected areas but actually result in the conservation of nature. These rules of thumbs can be proposed:

- those arrangements that meet the IUCN's definition
 of a protected area but are not recognised as part of
 the national system *should* be counted as OECMs
 (and discussion could be initiated to see whether
 the protected area label is possible, appropriate and
 desirable)
- for those arrangements that do not meet the IUCN's
 definition of a protected area, discussions should
 be initiated to ascertain whether they can ensure
 conservation in the long term, and whether they
 wish to be included in national reporting as OECMs;
 if they provide the assurances and are willing, they
 should be counted as such; if they are unable or
 unwilling to do so they should not be counted.

The crucial consideration here is that the contributions to conservation made by governance arrangements that some may consider unusual should not be ignored and potentially damaged, but rather recognised and secured. And, in case a country lists a set of OECMs for Aichi Target 11, what moral and legal obligations (under the CBD) does it assume to support, secure, strengthen, respect or defend them? This should be clarified before a country is allowed to 'count' such OECMs towards Aichi Target 11.

Governing protected and conserved areas

Conserved areas that are not recognised as formal protected areas generally enjoy lower levels of legal protection and support from governmental programs and face greater threats than protected areas, being more vulnerable to appropriation for alternative uses. For some, conserved areas appear as unmanaged and underexploited lands—ideal places to develop extractive industries, large-scale monocultures or major infrastructure. Even less obvious than for terrestrial environments, coastal and marine areas conserved by customary governance may appear unmanaged and invite unsustainable exploitation by outsiders. How can conserved areas be better recognised and respected? Can 'governance' help? Indeed it can, and to understand how we now retrace how governance of protected areas was defined and introduced in the conservation arena at the beginning of the new millennium.

In 2003, the Canadian Institute on Governance offered a definition of governance of protected areas as 'the interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken and how citizens and other stakeholders have their say' (Graham et al. 2003:2). This definition is elegant, but provides few parameters and indicators to assess and evaluate the phenomenon, which are clearly useful to have.

A practical point of departure for considering governance are the key actors, governmental and non-governmental, engaged in decision-making. The crucial actors are those endowed with a national mandate (for example, an agency in charge on the basis of a ministerial decree), possessing legal rights (for example, property, lease, concession) or possessing customary

Box 7.1 Rights-holders and stakeholders

In the context of protected and conserved areas, we refer to 'rights-holders' as actors socially endowed with legal or customary rights with respect to land, water and natural resources.

'Stakeholders' possess direct or indirect interests and concerns about those, but do not necessarily enjoy a legally or socially recognised entitlement to them.

Box 7.2 Instruments and powers

Key actors use diverse instruments and powers to exercise authority and responsibility for protected and conserved areas. For formal protected areas, the crucial instruments are national laws, plans and agreements, often backed by international agreements and conventions, best-practice standards and financial support from national ministries and possibly also international agencies. Financial incentives and disincentives may be at play, as well as long-term initiatives, including education, research and training programs, technical advice, staff and rangers deployed in the field and compliance processes. Formal protected areas are often demarcated and under surveillance and possess a management plan, dedicated staff, a budget, a functioning geographic information system and a monitoring and evaluation protocol. In conserved areas, on the other hand, customary laws and social norms are more often at play, but also financial mechanisms and powers when non-governmental organisations (NGOs), individuals, communities and corporations buy territories and resources in order to conserve them, or when they actually conserve them in order to gain their livelihoods, economic benefits or visibility in a given sector. Physical barriers and active surveillance are also used, but also interiorised rules, through spiritual and cultural convictions or social pressure to conform. Both protected and conserved areas are usually governed by a combination of diverse instruments and powers, strategically applied at various levels by different actors and agencies.

rights (for example, traditional use, age-old association, continuous residence) with respect to land, water and natural resources. Other actors also possess legitimate interests and concerns (for example, they wish to set up a tourism enterprise or they are engaged in scientific research) and may be willing to invest substantially in caring for nature. In this chapter, we broadly refer to them as 'rights-holders' and 'stakeholders' respectively (Box 7.1).

A finer classification further distinguishes among the various types of instruments and powers—for example, regulatory, financial, related to knowledge or related to coercion (Box 7.2)—that the key actors apply when they take and implement decisions. And a further important consideration is the scale of decision-making and operations (for example local, at ecosystem level, national, trans-boundary, international).

For simplicity, the IUCN first chose to make sense of the governance concept as related to protected areas by focusing on two main parameters: governance diversity and governance quality. Currently, it is exploring a third: governance vitality, which we will describe later. While the first two parameters were initially defined and discussed in relation to protected areas only, we broaden the framing here to consider all three parameters in relation to both protected and conserved areas.

Furthermore, for the governance diversity of protected areas, the IUCN distinguishes only on the basis of key actors engaged in the primary or main constituent act(s). This decision has been criticised in the specialised literature (Eagles 2009; Paterson 2010, 2011) as unable to fully represent a much more complex reality. While the criticism has merit, a more complex and numerous set of governance types would render the classification more cumbersome, and it is not clear whether it would add much to the comprehension of the phenomenon.

Governance diversity

The IUCN characterises the diversity of governance for protected areas according to the key actors holding authority and responsibility for the main decisions affecting it. As many decisions are involved, however, which ones are the most important? For instance, is 'formally establishing the protected area' on the same level of importance as 'approving a zoning plan'? As a rule of thumb, we refer to the actors responsible for the constituent act(s) for the protected or conserved area, and/ or to the best answer to the question: who could decide, today, to undo the protection or conservation regime (that is, de-gazette or delegitimise the practices leading to conservation) for the area at stake? The answer would orient us towards one of four main governance types:

- 1. governance by government (at various levels)
- 2. governance by various rights-holders and stakeholders together (shared governance)
- 3. governance by private individuals and organisations
- 4. governance by indigenous peoples and/or local communities.

Together with management category, governance type is a key characteristic of protected areas, as graphically represented in the IUCN Protected Area Matrix (Box 7.5) as modified by Borrini-Feyerabend et al. (2013) from Dudley (2008). Noticeably, questions of legal and customary tenure (who holds the legal or customary rights over land and resources) are important in determining governance type, but they are not the sole determinant. On the contrary, a mix of tenure regimes can be present under all governance types, also through a variety of instruments such as formal delegation, leasing and agreements. As stated by the IUCN Guidelines for Protected Area Legislation: 'Tenure is a separate consideration from governance (although) important when considering the appropriate governance approaches for a particular site' (Lausche and Burhenne 2011:126).

Type A. Governance by government

In this type, one or more government bodies (such as a ministry or protected area agency reporting directly to the government, or a sub-national or municipal body) hold the authority, responsibility and accountability for managing a protected area, determining its conservation objectives (such as the ones that distinguish the IUCN categories) and developing and enforcing its management plan. The State or federal government often owns the land, water and natural resources, but not always, as the protected area can include lands, waters and resources legally owned or customarily controlled by private individuals or companies, local communities or indigenous peoples, or under multiple rights regimes. Governments can also be responsible for conserved areas, such as military reserves, where *de facto* conservation is ancillary.

Reflecting the trend towards administrative decentralisation, sub-national and municipal governments have become prominent in declaring and managing protected areas. In some cases, the relevant government retains overall control and takes all major decisions, but delegates the planning and/or daily management of the protected area to other actors, such as an NGO, private operator or community (Case Study 7.5). Under a national legal framework and governance system, there may or may not be a legal obligation to inform or consult local rights-holders and stakeholders prior to establishing the protected area and/or making or enforcing management decisions. Public accountability measures also vary from country to country.

Type B. Shared governance

Shared governance is based on institutional mechanisms and processes by which authority and responsibility are shared among two or more actors. This model is widely adopted for protected areas, and many countries have adopted specific laws, policies and administrative arrangements for it. In the case of conserved areas, customary institutions have devised specific models and processes all over the world. Different nuances or subtypes of shared governance may be identified (Borrini-Feyerabend et al. 2004). In 'collaborative governance', formal decision-making authority, responsibility and accountability rest with one agency (for example, a national governmental agency), but the agency is required, by law or policy, to collaborate with other stakeholders. In a weak connotation, such collaboration may mean just informing and consulting other parties. In a strong connotation, it may mean that a multi-party body develops and approves the technical proposals to be later decided upon. In 'joint governance', decisionmaking authority, responsibility and accountability are shared in a formal way, with various actors entitled to one or more seats on a governing body. This can also be stipulated in an agreement that sets out how different authorities interact with one another. Because various actors need to be involved, some form of shared governance is particularly suited for trans-boundary conservation (Sandwith et al. 2001; see also Box 7.3).

Shared governance responds to the variety of interlocked entitlements accepted in democratic societies, whereby different actors recognise one another's legitimacy and capacity to represent their constituencies (Case Study 7.6). The representatives are usually trusted experts, opinion leaders, line managers or elected politicians. It may be specified that the decision-making process has to be fully transparent, in which case debates have to be open to public scrutiny, and accountability is likely to improve. As a drawback, open debates tend to polarise positions and favour populism. Crucial to the functioning of this governance type are the decision-making modalities.

Type C. Governance by private actors

Private governance has a relatively long history, as monarchs and aristocracies throughout the world preserved for themselves areas of land or the privilege to hunt wildlife. Such private reserves had important secondary conservation benefits. Today, private ownership is still an enormously powerful force in conservation. For instance, many conservation NGOs buy, lease or manage land specifically for conservation, or receive it for that purpose from individual philanthropists. Individual landowners pursue conservation objectives because of their sense of respect for the land or their desire to maintain its beauty and ecological value. And corporate bodies become involved through social responsibility policies or biodiversity offset initiatives. Utilitarian purposes, such as gaining revenue from ecotourism or reducing levies

Case Study 7.5 Delegated management of government-governed protected areas: Retezat National Park

Romania has adopted the delegated approach for all its protected areas, with the Ministry of Environment establishing management contracts for each of them with the National Forestry Administration, various NGOs, universities, county councils and even private individuals. The delegation does not come with resources, nor are there proper coordination and monitoring, so this approach is less effective than it could otherwise be. For Retezat National Park, management is delegated to the National Forest Administration, but this park also pioneered the establishment of consultative councils—that is, platforms of key stakeholders to coordinate and discuss all important management decisions.

Source: Stanciu and Ioniță (2013)



Retezat National Park, Romania

Source: Andreas Beckmann

Box 7.3 Trans-boundary conservation governance

Trans-boundary conservation offers opportunities to promote the conservation of nature, ecosystem services and cultural values while promoting peace and cooperation among nations. Trans-boundary conservation areas (TBCAs) are highly diverse and their governance is usually complex, ranging from formal arrangements between governments to informal, grassroot initiatives in civil society. The parties may include governmental agencies, private landowners, NGOs, indigenous peoples and local communities. Governance is always 'shared', but it can involve different levels of cooperation, from minimal to formal state decisions. Informal approaches are often effective as they take advantage of local knowledge, and have local legitimacy and easier implementation.

Many challenges can stand in the way of effective trans-boundary governance. Political indifference is the most common, resulting in inadequate or unreliable government commitment. Further challenges include the absence of adequate financial resources; poor compatibility among the legislation and policy systems

in the involved countries; lack of clarity regarding interagency authority and responsibility; inadequate capacities of partners; language barriers; cultural differences that cause misunderstandings; and political tensions between countries.

There is no single model for trans-boundary conservation governance—each arrangement must be designed and administered to meet the unique needs and interests of the particular region. Settings are usually dynamic, evolving on the basis of negotiation and adaptability. The most effective governance arrangements are genuinely collaborative, nested at various levels, and adaptive. Without collaboration in governance and management, there is no active and functional TBCA. And without ongoing processes of monitoring and evaluation, there is no adaptive management. Appropriate governance must fit the context and may include formal or informal arrangements, networks, partnerships or dedicated institutions (IUCN WCPA 2013).

 Adapted from Maja Vasilijevic (Personal communication, 2014)

and taxes, can be additional incentives or even the main ultimate aim. In all cases, under private governance, the authority for managing the land and natural resources rests with the landowners, who determine the conservation objectives and the rules to be respected.

A privately conserved area refers to a land parcel owned by individuals, corporations or NGOs and conserved *de facto*. When the land and resources are also dedicated to conservation and recognised as such—for instance, by a national government or by an international agency—one can speak about privately protected areas under the IUCN definition. In privately conserved areas, conservation visibility may be poor and accountability to the larger society limited. Formal recognition of the value of the estate for conservation may, however, be agreed with national governments under a variety of national legislative or policy procedures. In such cases, visibility and accountability can be negotiated as part of national recognition of 'privately protected areas'

Case Study 7.6 Crafting complex decisions for the Galápagos Marine Reserve

A five-member Participatory Management Board (PMB) was agreed for Galápagos Marine Reserve by a special law passed by the Government of Ecuador in 1998. The board was not designed to have decision-making power but the technical proposals that reached a consensus in the PMB carried an important social weight at the higher ministerial authority level, where the proposals were to be approved and were basically always approved without modification. Interestingly, a participatory board enabled difficult agreements to be negotiated and concluded about issues that seemed impossible to resolve in one-to-one discussions with individual parties, such as no-take zones extending to 30 per cent of coastal areas in the archipelago, and fishing calendars.

Source: Bravo and Heylings (2002)



Decision-making at Galápagos Marine Reserve, Ecuador

Source: Grazia Borrini-Feyerabend

or other forms of conservation covenant (Mitchell and Brown 1998). These agreements may restrict the freedom of landowners, who voluntarily accept certain obligations in exchange for specific forms of social and/ or economic acknowledgment. In rare cases, a private protected area is established by involuntary surrender of management rights because of imposed legal restrictions (Dudley 2008). Figure 7.2 graphically represents privately conserved areas as a subset of all conserved areas and with an overlap but not overall coincidence with protected areas (as recognised by the IUCN and nationally). Not depicted, but possible, is the case of privately *protected* areas that do not conserve nature *de facto*, and thus do not fit within 'conserved areas'.

A growing interest in landscape-scale conservation has encouraged groups of neighbouring private landholders to form collaborative conservancies that manage large conservation units together (Case Study 7.7). While individual ownership is retained, the private landholdings are effectively managed as a single entity, with the landowners mutually accountable to one another and helping to enforce common conservation objectives and management plans. Privately conserved or protected areas can also address accountability by forming alliances and associations whose members need to adhere to some best-practice guidelines. Such associations receive important forms of recognition as they get involved in a variety of programs, from education to monitoring and surveillance.



Figure 7.2 Incomplete overlaps among conserved areas, protected areas and privately conserved areas

Type D. Governance by indigenous peoples and local communities

Governance by indigenous peoples and local communities (Box 7.4) is the oldest form of governance of land and natural resources and is still widespread, applying to all forms of 'commons'—that is, land, water and natural resources governed and managed collectively by a community of people, settled or mobile. Throughout the world and over thousands of years, human communities have been developing their livelihood strategies, responding to the opportunities and challenges of their environments. Often, this meant fitting the local ecological conditions—that is, trying to use, manage, conserve and enrich nature-rather than altering such conditions in substantial ways. Many human cultures were actually created around that 'fitting' process, generating precious biocultural diversity (Posey 1999). Although intentional conservation of biodiversity was unlikely to be in play, by pursuing other objectives (for example, survival, security, spirituality, beauty), they did achieve the conservation of ecosystems, species and ecosystem-related values.

Case Study 7.7 Zululand Rhino Reserve

Zululand Rhino Reserve was established in 2004 as a partnership among 17 landowners who removed the fences on their land to create a reserve for endangered species. Located in northern Zululand in the Province of Kwa-Zulu Natal, South Africa, the area includes open savannah thornveld, bushveld and riverine woodland. The reserve has more than 70 mammal species and an exceptional diversity of birdlife. The World Wide Fund for Nature (WWF) Black Rhino Range Expansion Project was the conduit for the formation of the reserve, which was chosen as a release site for rhinos from other protected

areas in South Africa. The reserve has put substantial resources into the monitoring and protection of rhinos, and this new population is reproducing well. In April 2009, the reserve was proclaimed a Nature Reserve under the *Protected Areas Act* 57 of 2003, meaning it now officially contributes to provincial protected area targets.

- Sue Stolton

Box 7.4 What are 'local communities' and 'indigenous peoples'?

A local community is a human group sharing a territory and involved in different but related aspects of livelihoods—such as managing natural resources held as 'commons', developing productive technologies and practices, and producing knowledge and culture. We speak of a local community when its members are likely to have face-to-face encounters and/or mutual influences in their daily life—whether they are permanently settled or mobile. A community's sense of identity and cultural characteristics are often shared, although multiple ethnic groups can be found in the same community. A local community can only be self-identified.

While most people have an intuitive understanding of what a local community is, the term 'indigenous peoples' is often misunderstood. Convention 169 of the International Labour Organisation (ILO) defines indigenous peoples as 'tribal peoples in independent countries whose social,

cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations' and those 'regarded as indigenous on account of their descent from the populations that inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions'. (ILO 1989)

Self-identification as indigenous or tribal is to be regarded as a fundamental criterion for determining the groups to which the provisions of the convention apply. Building upon ILO Convention 169, a major step for the international status of indigenous peoples was taken in 2007 with the UN Declaration on the Rights of Indigenous Peoples.



Qasqai mobile indigenous people, Iran

Source: CENESTA

Case Study 7.8 Numerous and well-managed marine and coastal ICCAs

In Japan, government assigns exclusive access to coastal fishery resources to Fishery Cooperative Associations. The associations acquire the relevant licence and establish collective rules for resource exploitation, including specific fishing limitations and no-take zones. This has fostered the establishment of more than 1000 fisheries regulated areas under locally agreed rules that possess all the attributes of ICCAs and are locally referred to as sato-umi. Many of them include well-respected no-take areas, sometimes seasonally limited, and two-thirds of them receive some form of government recognition.

From the Japanese experience, it appears that fishers' self-imposed rules are effective in terms of surveillance, enforcement and compliance, and this is true even when rules are applied only at prescribed times. Scientists and governments support local marine ICCAs by providing scientific data and helping to reach a consensus among the fishers about the most appropriate collective rules.

- Shinichiro Kakuma and Nobuyuki Yagi



Coastal habitat restoration in Mikayo, lwate Prefecture, Japan

Source: Satoshi Yoshinaga

Most indigenous peoples and many traditional communities are characterised by a very close relationship with their territories and natural resources, conferring on them unique advantages and limitations as governing bodies of conserved and protected areas. They generally advocate for collective rather than individual rights to their land, water and natural resources, and such a collective approach tends to maintain the integrity of a territory, avoid ecological fragmentation and foster longterm objectives—all key requirements for biodiversity conservation. Collective relationships have more to do with identity than with property and monetary values. And collective rights also provide a strong basis for the functioning of community institutions, which are indispensable for sound governance and longterm management practices. In turn, recognising the conservation role and capacities of indigenous peoples and local communities provides a strong argument to promote the formal recognition of their customary collective rights.

An effective governance regime implies an institutional arrangement for taking decisions and developing rules for the land, water and natural resources. For indigenous peoples and local communities, customary and local organisations and rules are as diverse and complex as cultures. Land, for instance, may be collectively owned and managed, but particular resources, such as a type of tree, may be owned or managed individually or on a clan basis. Different indigenous peoples or communities may be in charge of the same area at different times of

the year, or of different resources within the same area. And specific procedures and/or rituals may need to be respected for activities to be allowed.

In a generic sense, and respecting their innate uniqueness and variability, the territories and areas conserved by indigenous peoples and local communities are today generally referred to with the abbreviation 'ICCAs' (Dudley 2008; Kothari et al. 2012). Conservation may involve strict protection or maintenance of an area in its natural state; preservation of specific natural features; restricted use of species or habitats; shaping and maintenance of valuable landscapes and seascapes; and sustainable and biodiversity-friendly use of natural resources (Borrini-Feyerabend et al. 2010; Case Study 7.8). There are three essential characteristics common to ICCAs:

- an indigenous people or local community possesses a close and profound relation with a site (territory, area or habitat)
- the people or community are the major players in decision-making related to the site and have de facto and/or de jure capacity to develop and enforce regulations
- the people's or community's decisions and efforts lead to the conservation of biodiversity, ecological functions and associated cultural values, regardless of original or primary motivations.

Case Study 7.9 Recognising and strengthening traditional forms of respect and care

The Bijagos archipelago of Guinea Bissau has been *de facto* conserved by its inhabitants for as long as anyone can remember. Some islands, in particular, have been maintained in a pristine state, as people could visit them only once a year for ceremonial practices. In the 1990s, some of these islands were recognised as the most important nesting sites for the green sea turtle (*Chelonia mydas*) and other species of marine turtles on the Atlantic side of Africa. This prompted their recognition as João Vieira-Poilão National Park—offered as a 'gift to the

Earth' in 2001. As local respect is only strengthened by this declaration, all should be fine. Yet, local fishers are upset at not being able to fish in a large area surrounding the park where sportfishing is instead allowed by licence from government officials. In theory, socially legitimate and legal measures coincide but, in practice, there are conflicts because of differing interpretations of what this entails. The relationship among government officials, local residents and wealthy foreigners is not always easy.



Fishers at João Vieira-Poilão, Guinea Bissau

Source: Hellio & Van Ingen

Because they are by definition 'conserved areas', ICCAs make up only a subset of all territories and areas governed by indigenous peoples and local communities. When their governing institutions decide to have an explicit dedication to conservation and ensure some form of management continuity, the IUCN recognises that such ICCAs also possess the characteristics of protected areas. Yet, most ICCAs in the world are not recognised for their conservation value in their own countries—that is, they are neither recognised as part of their national protected area systems (which may or may not be desirable) nor offered recognition and support for the conservation benefits they offer to society at large. Figure 7.3 pictures the incomplete overlap between ICCAs and protected areas, which differs if we consider protected areas recognised by the IUCN or by national governments.

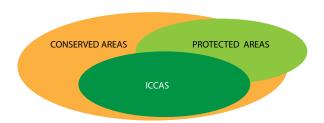


Figure 7.3 Incomplete overlaps among conserved areas, protected areas and ICCAs

Nested and overlapping governance types

In some cases, a protected or conserved area of given governance type is nested within another type or partially overlaps with it. Examples would be a large government-governed protected area containing a private reserve, such as Repovesi National Park (Finland), or a valley sacred to an indigenous people, such as Sagarmatha (Mount Everest) National Park (Nepal). Another example would be an indigenous conserved territory including a wetland

Box 7.5 Protected area systems and the updated IUCN Matrix

Management categories and governance types capture important characteristics of any protected area and, as they are independent, they can be juxtaposed in a matrix, creating a 'space of options' helpful for visualising their possible combinations. The resulting IUCN Matrix as modified by the author (Figure 7.4) is particularly helpful for visualising the combinations of management category and governance type that exist in a country's protected area system—and those that might exist. For instance, the IUCN Matrix has been valuable to

show that a national system could include much more than the areas protected by governmental agencies alone, and was able to sprout useful reforms in national conservation systems (Borrini-Feyerabend and Dudley 2005). Interestingly, the IUCN Matrix can apply not only to protected areas, but also to the conserved territories and areas that fit, in practice, the key objectives of the IUCN management categories.

Governance Type	A. Governance by Government			B. Shared Governance		C. Private Governance		D. Governance by Indigenous Peoples and Local Communities			
Management Category	Federal or National Ministry or Agency in Charge	Sub-national Ministry or Agency in Charge	Government-delegated Management (e.g. an NGO)	Transboundary Governance	Collaborative Governance (Various Forms of Pluralist Influence)	Joint Governance (Pluralist Governing Body)	Conserved Areas Established and Run by Individual Landowners	by Non-profit Organisations (e.g. Corporate Land Owners)	by For-profit Organisations (e.g., Corporate Land Owneers)	Indigenous Peoples' Conserved Areas and Territories – Established and Run by Indigenous Peoples	Community Conserved Areas and Territories - Established and Run by Local Communities
I a. Strict Nature Reserve											
lb. Wilderness Area											
II. National Park											
III. Natural Monument											
IV. Habitat/ Species Management											
V. Protected Landscape/ Seascape											
VI. Protected Area with Sustainable Use of Natural Resources											

Figure 7.4 The updated IUCN Protected Area Matrix (as modified by the authors): A classification system comprising both management category and governance type

Source: Borrini-Feyerabend et al. (2013)



The Sagarmatha biocultural and World Heritage landscape comprises ICCAs and a national park

Source: Ashish Kothari

of international importance, such as the Kushk-e Zar (Namdan) Ramsar site, the heart of the migration territory of the Kuhi tribe (Iran). In the first case, the state may have left no choice to a community or a private landowner other than to accept the imposition of a protected area upon their land. Too often this was even accompanied by the eviction of the area's inhabitants and caretakers—creating tragic situations of loss and resentment. In other cases, indigenous peoples, local communities and landowners continue to live within the protected area and make contributions to conservation by maintaining their own governance and management practices.

The case of ICCAs within government-governed protected areas is quite common. If the ICCA is maintained under community governance without recognition from or coordination with the government, there is a risk the governance and management practices may be inadvertently undermined or deliberately suppressed and replaced, generating conflicts between governments and communities. Government attempts to secure its authority may be perceived as threats to ICCA integrity, and local residents may fear a violation of their rights and capacity to exercise collective responsibilities. At times, however, one finds mutual recognition and positive collaboration between the governing bodies of protected areas and ICCAs, to the benefit of everyone involved. It is even possible that a government adheres to the 'long-term vision' of a national park solely governed by its rights-holding aboriginal community (Farrier and Adams 2011). On the basis of an examination of several

cases of overlaps, it is recommended that protected area authorities acknowledge and value ICCAs, refrain from interfering with them and support them in mutually agreed ways (Stevens and Pathak-Broome 2014).

As part of ICCAs or not, a large proportion of the world's protected areas is inhabited by indigenous peoples and local communities, or in many ways remains crucial to them because of livelihoods and/or cultural and spiritual relationships. Such peoples and communities are among the most concerned and best equipped to conserve the relevant territories and resources, if given a chance and the proper means (Ostrom and Nagendra 2006; Case Study 7.9). The challenge for conservation agencies is to overcome the practices of the past and engage people in governance for the benefit of both their own livelihoods and conservation. As part of that, the CBD Programme of Work on Protected Areas (PoWPA) and the IUCN recommend to embrace and support a variety of governance types in protected and conserved areas (Borrini-Feyerabend et al. 2013). In this sense, combinations and overlaps of diverse governance types are a conservation opportunity, where governments and societies at large can more easily share the burdens and benefits of conservation.

Governance quality

The CBD PoWPA stresses the need to recognise and support different types of protected area governance but also encourages parties to improve the quality of governance of their protected areas, regardless of type. Establishing criteria, principles and values can help to guide action. Inspiration can be taken from a variety of principles discussed by the United Nations as part of work on human rights and the promotion of public involvement in environmental governance prompted since the UN Conference on Environment and Development in 1992 (UNDP 1997, 1999, 2002). Building upon that work, the IUCN has recently published a volume of guidelines for countries willing to engage in governance assessment and evaluation processes for protected area systems or individual sites (Borrini-Feyerabend et al. 2013). Table 7.4, an extract from that work, offers a variety of considerations related to the five main good-governance principles recognised by the IUCN for protected areas.

The principles encourage the people and institutions responsible for governing protected and conserved areas to merge concerns for effectiveness (vision, performance, accountability) and concerns for equity (fairness, respect for procedural and substantial rights). Unlike governance type, however, quality of governance does not relate to a specific classification or scale. In fact, governance quality can only be understood in relation to a particular context, as culture and values strongly affect the standards of what is considered appropriate. In addition, in different situations it may be important to stress different principles, or components of principles, such as information sharing (for example, do people know and discuss the vision and aim of the protected area), legitimacy (for example, are decisions reflecting the true priorities of society) or fairness (for example, is any group truly disadvantaged by the decisions being taken).

Typically, national governments are responsible for the overall system of protected areas in their countries and should be accountable for both its management effectiveness (see Chapter 28) and governance quality. For the former, governments have to develop and foster relevant capacities and promote the overall conditions (including budgetary support and authorities that perform well and are perceived as legitimate). For the latter, governments need to ensure fair and well-enforced legislation and rules, which leave space for civil society to organise and take on autonomous or collaborating roles. In this sense, good governance of protected and conserved areas in large part depends on the overall relations and mutual engagement among governments, private and corporate landholders, NGOs, indigenous and local communities and civil society at large.

In the new millennium, the concerns, capacities and institutions of non-governmental actors—indigenous peoples, local communities, NGOs, private and corporate landowners and even civil society at large—have acquired enhanced weight and visibility in conservation in general and in area-based measures in particular.

This notwithstanding, national governmental agencies continue to fulfil a paramount governance role. On the one hand, they are the fallback actor when others have little interest in conservation. On the other, governmental agencies have a moral obligation to give voice to 'silent nature', protect the intrinsic value of plants, animals and natural systems and conserve them for future human generations. In some countries, such as Ecuador, this is actually being codified into constitutional principles.

To make matters more concrete, we will now discuss some 'quality of governance' issues of particular concern for different actors in conservation.

Quality of governance for national and subnational government agencies

Most of the world's official protected areas and systems are governed by governments, which are complex systems of ministries, agencies, administrative levels and actors that work in coordination, and sometimes in tension, with one another. Often, such agencies have different agendas and capabilities, and unclear mandates. While interagency struggles for influence are relatively common, under the impulse of PoWPA, a shift towards more collaborative decision-making has occurred (Dearden et al. 2005). This shift is increasingly inscribed in legislation.

A major aspect of protected area governance by governmental agencies is accountability to the public—that is, the use of mechanisms that inform tasks and objectives being completed on time and public funds being spent for the purpose intended. A trend towards an increased use of such mechanisms and better communication efforts is evident. State of protected area reports, annual reports and external audits are more frequently available and national advisory committees, stakeholder roundtables and parliamentary debates are more often used. There is also an indication that the proportion of protected area funding provided by government agencies and private donors has been decreasing while the proportion provided by NGOs and user fees has increased (Dearden et al. 2005).

In recent decades, protected areas are more commonly established and managed at provincial, regional and local levels, where arrangements may be simpler, more flexible and better connected with local actors, including through innovative governance arrangements that directly involve civil society. Government agencies at the national level continue to have unique roles to play as policymakers, coordinators of protected area systems, monitors and evaluators of performance, guiding agencies for training and distributors of resources. National agencies may be wisely advised to strengthen their capacity to provide these services rather than focus only on direct protected area management.

Table 7.4 Considerations helpful to assess 'quality of governance' in different circumstance and under all governance types

Principles	Considerations related to the principles
Legitimacy and voice	Establishing and maintaining governance institutions that enjoy broad acceptance and appreciation in society
	Ensuring that all rights-holders and stakeholders concerned receive appropriate and sufficient information, can be represented and can have a say in advising and/or making decisions
	Fostering the active engagement of social actors in support of protected areas, upholding diversity and gender equity
	Extending special support to vulnerable groups, such as indigenous peoples, women and youth, and preventing discrimination on the basis of ethnicity, gender, social class, financial assets, etc.
	Maintaining an active dialogue and seeking consensus on solutions that meet, at least in part, the concerns and interest of everyone
	Promoting mutual respect among all rights-holders and stakeholders
	Honouring agreed rules, which are respected because they are 'owned' by the people and not only because of fear of repression and punishment
	As much as possible attributing management authority and responsibility to the capable institutions closest to natural resources (subsidiarity)
Direction	Developing and following an inspiring and consistent strategic vision (broad, long-term perspective) for the protected areas and their conservation objectives, grounded in agreed values and an appreciation of the ecological, historical, social and cultural complexities unique to each context
	Ensuring that governance and management practices for protected areas are consistent with the agreed values
	Ensuring that governance and management practices for protected areas are compatible and well coordinated with the plans and policies of other levels and sectors in the broader landscape/seascape and respectful of national and international obligations (including the CBD PoWPA)
	Providing clear policy directions for the main issues of concern for the protected area and, in particular, for contentious issues (for example, conservation priorities, relationships with commercial interests and extractive industries) and ensuring those are consistent with both budgetary allocations and management practice
	Evaluating and guiding progress on the basis of regular monitoring results and a conscious adaptive management approach
	Favouring the emergence of champions, generating new ideas and carefully allowing/ promoting the testing of innovations, including governance and management innovations for protected areas
Performance	Achieving conservation and other objectives as planned and monitored, including through ongoing evaluation of management effectiveness
	Promoting a learning culture for protected area policy and governance practice on the basis of mechanisms, tools and partnerships that promote ongoing collaborative learning and cross-fertilisation of experience
	Engaging in advocacy and outreach for the benefit of protected areas
	Being responsive to the needs of rights-holders and stakeholders, including by providing timely and effective responses to inquiries and reasonable demands for changes in governance and management practices
	Ensuring that protected area staff, and rights-holders and stakeholders, as appropriate, have the capacities necessary to assume their management roles and responsibilities and that those capacities are used effectively
	Making efficient use of financial resources and promoting financial sustainability
	Promoting social sustainability and resilience—that is, the ability to manage risks, overcome the inevitable crises and emerge strengthened from the experience

Principles	Considerations related to the principles
Accountability	Upholding the integrity and commitment of all in charge of specific responsibilities for the protected areas
	Ensuring transparency, with rights-holders and stakeholders having timely access to information about: what is at stake in decision-making; which processes and institutions can exert influence; who is responsible for what; and how these people can be made accountable
	Ensuring a clear and appropriate sharing of roles for the protected areas, as well as lines of responsibility and reporting/answerability
	Ensuring that the financial and human resources allocated to manage the protected areas are properly targeted according to stated objectives and plans
	Evaluating the performance of the protected area, of its decision-makers and of its staff, and linking quality of results with concrete and appropriate rewards and sanctions
	Establishing communication avenues (for example, websites) where protected area performance records and reports are accessible
	Encouraging performance feedback from civil society groups and the media
	Ensuring that one or more independent public institutions (for example, ombudsperson, human rights commission, auditing agency) have the authority and capacity to oversee and question the actions of the protected area governing bodies and staff
Fairness and rights	Striving towards an equitable sharing of the costs and benefits of establishing and managing protected areas and fairness in taking all relevant decisions
	Making sure that the livelihoods of vulnerable people are not adversely affected by the protected areas; that protected areas do not create or aggravate poverty and socially disruptive migration patterns; and that the costs of protected areas—especially when borne by vulnerable people—do not go without appropriate compensation
	Making sure that conservation is undertaken with decency and dignity, without humiliating or harming people
	Dealing fairly with protected area staff and temporary employees
	Enforcing laws and regulations in impartial ways, consistently through time, without discrimination and with a right to appeal (rule of law)
	Taking concrete steps to respect substantive rights (legal or customary, collective or individual) over land, water and natural resources related to protected areas, and to redress past violations of such rights
	Taking concrete steps to respect procedural rights on protected area issues, including: appropriate information and consultation of rights-holders and stakeholders; fair conflict-management practices; and non-discriminatory recourse to justice
	Respecting human rights, including individual and collective rights, and gender equity
	Respecting the rights of indigenous peoples, as described in the UN Declaration on the Rights of Indigenous Peoples
	Ensuring strictly the free, prior and informed consent of indigenous peoples for any proposed resettlement related to protected areas
	Promoting the active engagement of rights-holders and stakeholders in establishing and governing protected areas

Quality of governance for NGOs

International, national and local NGOs dealing with environmental concerns and protected areas under all governance types have dramatically risen in number and influence in the past 30 years. For government-governed protected areas, they can act as delegated managers (this is the case of the Audubon Society in Belize) or providers of technical advice. Many NGOs play crucial policy advisory roles to governments, with additional influence related to their capacity to offer or withhold supportive funds or services, and/or to affect the opinion

of donors. They usually advocate for national provisions to incorporate international agreements, such as the CBD, the World Heritage Convention or the Ramsar Convention, and play a vital role in forging supranational protected area agreements and initiatives.

In protected areas under shared governance, NGOs can be full partners, with a role at times enshrined in national law, or act as facilitators, trainers, convenors, mediators, conflict managers and providers of legal, technical and administrative support. Many conservation NGOs are also managers of privately protected areas, as they buy land, or receive it from private donors, explicitly for conservation purposes. This is common in the United States, the United Kingdom and Australia, where NGOs assume public trust responsibility as non-profit entities, which confers on them tax exemptions and other benefits. Other NGOs play invaluable roles as promoters of coalitions of private owners to set up their own protected areas through land-use trusts. An increasing number of NGOs have taken upon themselves to assist indigenous peoples and local communities in asserting, defending, establishing and managing their own conserved and/or protected areas and in setting up national coalitions and federations to the same purposes.

NGOs are particularly well suited to foster improvements in governance quality. They spread information and innovative ideas, help civil society to mobilise, and facilitate dialogues and negotiation processes. They provide technical support and training to communities or smaller and younger NGOs, monitor compliance of environmental law and policies, serve as policy advocates, and suggest innovative practices (for example, create a demand for certified goods or assist people to get to court). NGOs also have limitations, however, and can inadvertently have negative impacts. They at times overstep their roles, absorb all available resources or centralise upon themselves technical issues, disempowering local actors. They may also become unduly enmeshed in local politics, creating new conflicts or overriding local agendas and priorities. Foreign NGOs, in particular, need to implement programs only on the basis of a careful understanding of community history and dynamics (Alcorn et al. 2005).

Quality of governance for private landowners

Many private landowners manage part or all of their land with important results for conservation and have obtained some form of recognition as part of the protected estate of different countries (Langholz and Krug 2004). In countries such as Costa Rica, Brazil, Chile and South Africa, the amount of protected land under private governance is estimated to be larger than that under national government agencies (Anderson 2003). In South Africa and Namibia, individual landowners often pull their land together as conservancies to allow large habitats for wildlife and set up tourist enterprises, often in partnership with the governmental agencies which manage adjacent parks. Corporate landowners are also increasingly willing to devote part of their lands to conservation, sometimes as a form of offset for the damages they cause to nature elsewhere.



Nayakheda village youth, western India, in a recently recognised community forest

Source: Ashish Kothari

A governance advantage of private landowners is that private property confers a broad set of powers and the dedication to conservation can be easily established and even inscribed in the property deeds, obliging also future owners. As this often implies social and economic advantages, however, some have expressed concern that private parks may contribute to the concentration of landownership by the wealthy. Indeed, a major social pitfall of private parks is that they can become 'islands for elites'—places where wealthy landowners host affluent tourists (Langholz and Krug 2004). As ecotourism and private hunting reserves grow in popularity and profitability, the value of land that can support such enterprises goes up. Depending upon the legal and political contexts, communities living on or near such lands may be forced to move away, either by threat of force or by economic necessity, or they may stay but lose the right to access game, medicinal plants or other resources on land designated as a reserve. Questions of equity become even more troubling where foreign ownership is involved. Governments ought to play a proactive role in monitoring and evaluating the effectiveness and equity of private conservation efforts in particular, when conservation incentives are at stake.

Quality of governance for indigenous peoples and local communities

Many local communities and indigenous peoples possess customary organisations with a role in governing nature and natural resources—some with centuries of experience, others relatively new or recently revived in contemporary forms. What most have in common is that they represent *local* rights-holders—people first in line to pay the price for wrong management decisions and possessing traditional knowledge, skills and the accumulated local experience necessary to protect or restore specific sites

and/or use natural resources in sustainable ways. Despite their diversity and complexity, and possibly because of that, customary and local institutions appear to function effectively and make important contributions to conserve natural and modified ecosystems (Kothari 2006). They do so voluntarily, in countries all over the world, through customary laws or other effective means (CBD 2010).

Besides being the repository of age-old knowledge and skills, carved on the specifics of given territories and resources, community-based governance institutions are generally flexible, responsive and capable of bending around a variety of factors and responding to change in ways that can be rapid and effective. In addition, they are often self-motivated and self-financed, as governance of a locally conserved or protected area is crucial for people whose livelihoods and cultural identity are intimately related with the natural resources. They also, however, have limitations. On the one hand, customary institutions are peculiar to their cultures and some do not reflect the achievements of universal human rights and liberating principles, such as rights to information, participation in decision-making or accountability. On the other, they often encounter problems in their relationship with governments—in particular, at the interface between traditional and modern institutions.

Often the state offers no formal recognition to the ethnic and local organisations which govern conserved areas, or not even to the indigenous people or local community themselves, which may 'not exist' as a collective legal subject but only as agglomerations of individuals. This is true in many places in Africa, Asia and Europe. In other countries—for example, South Africa—customary law is recognised by the constitution as an independent body of law. Through that, indigenous peoples and local communities are winning legal collective tenure to at least part of their lands and, with that, the right to govern them collectively. Although implementation is highly variable, this has been happening in countries as diverse as Colombia, the Philippines, Australia, Brazil, Bolivia, Italy, the United States, Canada, India, Iran, Madagascar, Tanzania and Indonesia, opening the way for governments to acknowledge their contributions to conservation. Indigenous conservation territories, tribal parks, conserved forests in mountain communities, indigenous protected areas and conserved ancestral domains are now formally recognised via a variety of negotiated agreements, which at times require guarantees for management effectiveness and governance quality.

Quality of governance for civil society at large

Civil society refers to a variety of collective actors and initiatives—distinct from family, state and the market—which maintain a degree of autonomy, ensure space and nourishment for pluralism, and engage in constructive relationships with politics and public policy. All voluntary associations attempting to influence decision-making in conserved or protected areas belong to civil society and represent a formidable potential for conservation. At times, however, they also represent a source of instability and problems. Associations created specifically to develop and exert influence on a particular protected area can be very influential. They can challenge external threats but also fight decisions that sacrifice part of their local interests for the larger common good.

Lay actors and civil society can influence conservation decisions through their power of position or unique knowledge; through personal, family or group influence and economic might; through political influence and legal expertise; and even through violent coercion or non-violent civil disobedience. These powers can be brought to bear, more or less openly, upon decision-makers. A protected area model that openly calls for the involvement of civil society at large is that of national parks and natural regional parks in France, where it is foreseen by law that workshops, broad consultations and public deliberations are to be widely used to discuss and develop ideas that will be compiled into a protected area charter including key objectives and management priorities.

There also exist less fair pathways for influence. For instance, some may attempt to bypass the decision-making chain with a persuasive phone call to top authorities. This may or may not work, but it offers an example of why the engagement of civil society is seen by some as undemocratic, as it depends on the action and opinions of a few, and not the counted votes of the majority of those with legitimate rights (an elected representative, on the other hand, rarely has discussed with his or her electors the specific decisions with regard to a protected area).

Governance vitality

The conservation community is gradually becoming accustomed to using two main parameters to understand governance: type (who holds authority, responsibility and accountability for the key decisions, the 'constituent act' of the area-based measure) and quality (are decisions taken by respecting 'good governance' principles). While these parameters are useful and informative, they do not describe whether a governance setting is able to learn, evolve and meet its role and responsibilities

in ways that are timely, intelligent, appropriate and satisfactory for everyone concerned. We refer to this property as governance *vitality* and we will describe here some initial considerations and ideas about it. This is not a fully developed treatment and, in the months and years to come, we hope the conservation community will come to define this property of governance in a more precise and complete way. Precision is not necessary, however, to understand the usefulness of the concept or to have a broad sense of what to do to enhance it for the betterment of nature and people.

As a starting point, we argue that the vitality of a governance setting (see Figure 7.5) is related to being:

- well integrated and functionally connected—that
 is, having abundant, meaningful and systemic
 interactions with a variety of actors at various levels
 in society and across sectors (including those actors
 who render decisions effective through political,
 social and financial support)
- adaptive—that is, flexible, reflective, intelligent, engaged in knowledge exchange, dialogue and debate, capable of learning from experience, capable of weighing options and taking prompt and meaningful decisions even under challenging circumstances
- wise—that is, having agreed to take decisions of meaningful scope (for example, regarding the size and socioecological coherence of the unit to manage, the number of actors to involve); being motivated by the common good and solidarity rather than greed (for example, seeking to avoid accumulation and waste, encouraging respect, goodwill, conviviality and generosity); and not only allowing, but also fostering the engagement of as many relevant actors in society as possible
- innovative and lively—that is, able to reinvent and renew itself as a living system does, providing innovative solutions, supporting the emergence of new rules and norms, responding positively to change and continuing to develop
- empowered—that is, self-conscious and self-directed, capable of organising its own unique responses to emerging environmental conditions, problems and opportunities; self-disciplined and self-critical, and able to take on responsibilities in effective and dependable ways.

Governance that is well integrated and functionally connected

Protected areas have too often been conceived as 'islands' of conservation in a 'sea' of development. Today, we increasingly recognise that conservation inside protected

areas depends in essential ways on their physical and biological connections with nature across landscapes, seascapes, with the atmosphere above, and with the soils and aquifers below. We have also begun to understand the less-visible social connections among actors in society—the farmers who decide which crops to sow and where, the NGOs campaigning for policy changes, and the national agencies setting national conservation targets and plans to reach them. Effective governance for the conservation of nature involves building positive and coherent connections among the people, sectors and decision-making levels that determine the many factors and conditions that contribute to, or impede, conservation. This understanding is not new, and resonates with what traditional cultures have known for centuries.

A backyard, a farm, a local administrative unit, a province, a nation, a continent, planet Earth—all are examples of different spatial scales, from local to global. The key actors and institutions in the governance of nature operate at these different scales both in space and over time. The principle of subsidiarity—that is, the idea that governance should be devolved to local communities closest to the natural resources with capacity to take care of them—gained prominence early this century as a way of securing community tenure and empowering local institutions that contribute to sustainability and social justice (Berkes 2004). Experience, however, has shown that it can have mixed results, sometimes buttressing local elites who enforce conformity and marginalise minorities.

Because some types of decisions are best made at particular scales, some people stress the value of networks that enable collaboration among governance actors operating at different spatial and temporal scales (Cash and Moser 2000). For example, the family is best placed to decide what to grow in its backyard and to look after it, but local councils can help make sure that native birds and wildlife can still thrive in cities by providing guidelines for wildlife-friendly plantings, or prohibiting the cutting down of key habitat trees that are essential nesting places for birds and mammals. Drawing on Hill et al. (2010), we refer to this phenomenon as scaledependent comparative advantage. In all networks, the people who bear the most direct consequences of decisions should have a voice in shaping those decisions and using their knowledge, skills and undoubted comparative advantages.

Forging linkages and connections across scales is critical for effective outcomes and happens via all sorts of information flows and social learning—for example, through collaboration among organisations in scenario planning, visioning and open discussion of alternatives. Crucially, information flow and collaboration can

HEART

Governance Quality

- · Legitimacy and voice
- Direction
- Performance
- Accountability
- Fairness and rights

MIND

Governance Diversity

- · Government-governed
- · Shared-governance
- Indigenous peoples' and community-governed
- · Privately-governed

SPIRIT

Governance Vitality

- Well-integrated and functionally connected
- · Wise
- Empowered
- Adaptive
- Innovative

Figure 7.5 A schematic summary of governance characteristics

bridge groups with different cultures, interests and levels of power towards goals that are positive for nature and people (Lebel et al. 2006). Terms like multi-level, polycentric and collaborative environmental governance are used to describe both the governance system and the processes of actively linking governance across scales.

Adaptive governance

Our world is changing, and is doing so at unprecedented pace and reach. Across the planet, people are growing in number, moving to cities and expanding them into megacities, changing their demographic patterns and their patterns of strengths and vulnerabilities. Food demands and consumption are changing in type and increasing overall, leading to estimates that the world will need to double food production this century, and make major investments to deliver food to mega-cities (Tilman et al. 2011), where disruptions to food transport systems, through climatic problems or lack of fuel supply, could lead to severe shortages in a matter of days. Growing consumption of mineral and fossil fuel resources is increasing the occurrence and risk of environmental disasters, such as oil spills, and accelerating humaninduced climate change and ongoing biodiversity loss. This combination threatens life as it exists on our planet (Hansen et al. 2013). Economies and technologies, societies and cultures are all changing rapidly, influenced by the revolution in information technologies (Young et al. 2006). How do we respond to the multiple challenges that pervasive and rapid change pose to the governance of nature?

Adaptive governance may be the answer. The concept of adaptive governance draws on that of adaptive management (Holling 1978; Walters 1986), which in its simplest form is 'learning by doing' (see Chapter 8). Adaptive governance is the conscious adoption of a learning attitude in organisations (Borrini-Feyerabend et al. 2004), where evolving functions and agreements are allowed to shape the decision-making organisation rather than organisational forms being imposed as straitjackets.

Through dialogue, negotiation, goodwill and careful experimentation, decision-making institutions can evolve in ways that are satisfactory and lead to better-respected decisions. In adaptive governance much of the learning takes place in actual decision-making and enforcement of decisions, and in their ongoing review. In this way, the crises and top-down restructuring of organisations that are a traumatic experience for many can be replaced with conscious ongoing adjustments and learning.

Adopting an adaptive governance approach means allowing institutions to mature through time. For instance, after an emphasis on legality and technical expertise, a governance organisation may evolve towards enhanced legitimacy, more widely shared responsibilities or supporting the development of new associations among rights-holders. Both empirical experience and theory suggest that the 'organisational culture'—that is, the combination of the individual opinions, shared knowledge, values and norms of the people who belong to the organisation—is the most fundamental level at which transformation needs to take place. For protected area professionals and staff, perspectives about peopleenvironment interactions are the central element of such organisational cultures. For example, an emphasis on relatively stable ecosystems feeds into the development of policies and scientific practices for conservation controlled by professionals and distant organisations. Conversely, notions of uncertainty, spatial variability and complex non-equilibrium ecological dynamics emphasise flexibility, mobility and adaptive resource management in which local people are central actors.

Simplified and ahistorical perspectives perpetuated by the powerful have been a persistent feature of environmental policies and interventions. Local people (often depicted as destructive, uneducated, backward or non-innovative) are blamed for environmental degradation and interventions are imposed to 'prevent further deterioration'. Such crisis narratives and practices are robust, hard to challenge and slow to change. They structure options, define relevant

data and exclude other views within bureaucracies and professional circles. And yet, research has often debunked orthodox views on people—environment interactions (Borrini-Feyerabend et al. 2004; Fairhead et al. 2012), and historical analyses, social anthropology, participatory methods and insights from non-equilibrium ecology are slowly promoting different narratives (attention to governance being a crucial component) and more peoplecentred organisational cultures.

A learning attitude in organisations can be consciously and constructively promoted via:

- participatory analysis and planning (for example, visioning, scenarios, trend analysis and participatory mapping)
- co-production and wide sharing of knowledge (for example, dialogue and exchanges among academic scientists and people with experience-based and traditional forms of knowledge; using maps and models that make assumptions and values explicit; adopting new media platforms and variables, such as digital ethno-biology and biocultural diversity measures)
- developing agreements through time (for example, foreseeing processes, mechanisms and tools for sharing information, communicating among diverse forms of knowledge, values and world views; adopting calm and intelligent ways of solving conflicts; monitoring functions, results, social acceptance of decisions and impacts in society—including in terms of collaboration and equity).

Even more fundamentally, a learning attitude can be promoted by organisational policies that foster lateral communication, collegial authority and flexible roles and procedures. Small self-managed teams within a given organisation can be endowed with the freedom to experiment, motivate and learn from mistakes. Professionals can be encouraged to work as 'intra-preneurs' (entrepreneurs within organisations), to directly manage part of the budget and pilot innovations. Specific incentives and rewards can encourage collaboration, integrity, mutual trust, continuity of initiatives, knowledge exchange, dialogue, debate, ongoing improvements in performance and the emergence of 'champions' with enabling attitudes and values.

Through such policies, governance has a chance to become more flexible and intelligent, capable of learning from experience, weighing options and taking rapid and meaningful decisions even under difficult circumstances. But adaptive governance has challenges of its own (Case Study 7.10). Dealing with relative uncertainties

may be a problem for those parties who realise that governance patterns are changing and incentives to respect current governance systems are diminishing, rendering them less sure about investing in the long term. Participatory processes and the negotiation of different and evolving values, claims, rights and responsibilities are time-consuming, and can exhaust the motivation, capacities and resources of participating actors. Financing the transaction costs (consultations, meetings) is necessary to guide and adapt the adaptive governance regimes, which can be expensive and can overwhelm existing resources.

Wise governance

A wise person is usually honest and good, but an honest and good person is not necessarily wise. Similarly, wise governance is more than just 'good governance'. We propose here that a wise governance setting is one in which decisions of meaningful scope are taken, which enhance the common good and solidarity and which not only allow, but also foster, the engagement of all relevant actors in society.

What would meaningful scope entail? As noted earlier, governance units should have socioecological coherence, and thus not be so large as to be unmanageable or so small as to be irrelevant. The number of actors to involve should not be overwhelming but manageable, so that they can work together in harmonious and effective ways. In addition, wisdom transpires when decisions are motivated by the common good and solidarity. For instance, decisions-makers can strive to avoid accumulation and waste, encourage respect, goodwill and conviviality, and discourage selfishness and greed. In this sense, wise governance needs human qualities: a sense of appreciation and understanding, a positive attitude, curiosity, attention, care, generosity, patience, even humbleness, but also perseverance, determination and, more often than not, courage. Building upon these qualities, some 'decisions' can help people be the best they can be.

The structures of decision-making, however, are also extremely important. If democracy is government by the people, in representative democracy the power vested in people is exercised through electing some representatives who govern on their behalf. Alternatively, in participatory or strong democracy, the power vested in people is exercised directly, through processes that strengthen people's connections with each other and, via diverse associations, provide for oversight of governments and allow the innate wisdom of peoples and nations to emerge, building upon the capacities of all. For many ICCAs in traditional societies, strong democracy is the

Case Study 7.10 Evaluating governance in a tropical forest environment

Rainforest Aboriginal Peoples are involved in governing their traditional lands in Australia's tropical forest region with numerous other actors, including national, provincial and local governments, environmental NGOs, local landholders and private businesses. Through a coresearch project with social scientists, spatial analysts and other partners, a diagnostic tool was developed to measure the strengths and weaknesses of such partnerships. The rainforest Aboriginal peoples defined co-governance as 'a continual solution-building process, not a fixed state, involving extensive talking, negotiations and jointly learning, so it gets better over time' (Hill et al. 2013a:1). The diagnostic tool contains a number of parts, one of which is focused on measuring the health of their institutions for 'keeping engagement strong'. They recognised that their effective engagement with their partners requires that they are thriving and able to keep their own knowledge systems alive. The diagnostic tool thus also assesses the factors that 'keep Rainforest Aboriginal Peoples strong'. Their participatory evaluation identified that the Indigenous protected areas, which are protected areas dedicated by indigenous peoples under their own cultural authority (Rose 2013), brought people together in a flexible, ongoing relationship that changes over time—whereas negotiation of legal rights and agreements alone (such as Indigenous land-use agreements that put the Government and Indigenous parties on opposite sides of the table) produced a static document as its outcome. While rights recognition is a foundation of much progress and Indigenous Land Use Agreements can contribute to collaborative management, processes for ongoing solution building are critical.



Rainforest Aboriginal Peoples Alliance workshop, north Queensland, Australia

Source: Michelle Esparon

basic pattern of decision-making. The general assembly at village level is the form it usually takes, at times strengthened by the requirement that decision-making can be taken only by consensus. Knowledge systems that underpin rights to country and culture and are mediated by connections to kin are strengthened by such indigenous and community forms of governance (Hill et al. 2012). As long as people feel free and competent to speak on issues, strong democracy allows them to shape governance pathways and opportunities. Broad public debates and 'deliberations' allow people to attempt to persuade one another of the value of their claims, while their own opinions and understandings evolve in the process. For instance, many indigenous peoples and local communities in Latin America engage in strong democracy grounded in their shared space of life when they develop their life plans (planes de vida)—a practice that has ancient roots but which spread again, recently, also as a form of resistance to externally imposed development plans (Aparicio 2002).

Governance that is innovative and lively

The many and seemingly intractable challenges facing our world—climate change, biodiversity loss, the growing need for food, freshwater and social services for huge numbers of people—highlight the need to find new solutions and discover new values, rules and norms. One new way of thinking that has emerged has been focusing on 'complex systems', nonlinear dynamics,

thresholds, uncertainty, surprise and interactions across temporal and spatial scales (Folke 2006). In that light, innovations emerge through both gradual and sudden changes, in adaptive cycles that include periods of rapid change (exploitation), periods of rigidity (conservation), periods of readjustment and collapse (release), and periods of reorganisation (renewal). Some type of disturbance triggers the sequence from a period of gradual change to one of rapid change, possibly in conjunction with larger cycles. Looking at this world as a complex adaptive system can help us understand how the parts influence each other, and how we might be able to intervene to make the system more able to innovate for desired social, environmental, economic and cultural outcomes (Hill et al. 2013b; Simonsen et al. 2014).

The capacity to reinvent and renew itself is a characteristic of all living and healthy systems and appears to be related to a 'learning attitude'—openness to novelty, willingness to experiment and curiosity that motivates people to carry out action-research and not be satisfied with easy explanations, platitudes and scapegoats. A powerful trigger can be the wise merging of local and non-local knowledge and skills—those grounded in the traditions and accumulated experience of indigenous peoples and local communities and those extracted by formal scientists through a careful analysis of different cases and contexts, or simply those based on the experience of peoples from diverse environments. Some refer to this as syncretic solutions—the wise merging of bits

of seemingly incompatible nature, which can prove surprisingly fresh and effective. In fact, this is possibly the essence of adaptive governance—the existence of lively institutions, capable of responding through time to the changing conditions that embed both conservation and human livelihoods and cultures.

Governance that is empowered

We understand as empowered governance a decisionmaking system that is self-conscious and self-directed, capable of organising its own responses to changing environmental conditions and capable of enforcing its decisions. This statement may appear trivial. Governance is the exercise of authority and responsibility by definition, yet true empowerment is rare. True empowerment is, more than anything else, a matter of capacities and a deep recognition and assumption of responsibility. Capacity-including knowledge and means—is necessary to make authority meaningful. Having authority over wildlife in a given territory means little without reliable data on the presence of such wildlife, on the habitat and conditions of reproduction, and the means necessary to survey the territory and fend off poachers. And responsibility means being mature enough to curb some of one's own rights and privileges to recognise those of others—future generations, the dispossessed, other species on this planet—all of whom bear the costs of what is done by the powerful today.

True empowerment is not only with respect to others, but with respect to oneself. Even legally autonomous governance settings-such as a management board legally in charge of a protected area or a customary authority governing an indigenous territory—include legitimate actors marginalised from decision-making for a variety of reasons, from poor access to means of communication to lack of social recognition. These people often include women, the landless, youth, indigenous, ethnic or religious minorities, mobile pastoralists and people displaced during violent conflicts or as a result of natural disasters such as floods and droughts, households affected by HIV/AIDS, and so on (Katz 2010). Levelling the playing field so that those in a position of authority fairly express the concerns of their entire constituencies—including the less powerful—is crucial to achieving empowered governance. Last but not least, empowerment is about being self-disciplined and self-critical—capacities necessary to take on responsibilities in effective and dependable ways.

The governance frontiers

Despite recent growth in coverage of protected areas, major gaps still need to be brought under conservation governance and management to secure specific ecosystems and species (CBD 2010). In addition, even existing area-based conservation measures need to become much better connected and dramatically improve their management practices (Leverington et al. 2010). Overall, society at large must become more aware of environmental issues, supportive of appropriate activities and capable of providing reasonable limits to the forces of economic development. Working on governance is the expression of the hope that we can still curb excessive and inequitably distributed economic growth, consumerism and environmental destruction, stop destructive financial speculation and find more sustainable, equitable and satisfying challenges for the evolution of human society and cultures.

We already see the benefits of improved governance awareness and action.

Attention to governance has allowed an increase in the coverage of protected areas in national systems.

Many CBD parties have reviewed their systems of protected areas and understand that only an innovative treatment of governance allows them to expand their coverage as foreseen by Target 11 of the CBD Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets. France instituted in 2006 a new Protected Area Law that requires shared governance of all its national parks. It is only as a consequence of that law that it has become possible to create three new national parks since 2006, protecting more than 2 million hectares. In Australia, innovative governance under Indigenous protected areas has resulted, over the past 15 years, in the dedication of more than 60 new protected areas, totalling more than 48 million hectares and representing about 40 per cent of Australia's total protected area estate. In Namibia, the coverage of community conservancies and other similar arrangements has increased to about one-quarter of the surface of the country, generating major financial benefits for their residents and the country as a whole (NACSO 2013). Ecuador and Madagascar have also embraced the full suite of IUCN governance types for their protected area systems (Ministry of Environment of Ecuador 2006; Madagascar Protected Area System 2009), allowing not only their expansion, but also their consolidation and better shared responsibilities.

Attention to governance has been improving the effectiveness and efficiency of management. Besides global analyses that confirm the relationship between governance and management effectiveness (Leverington

et al. 2010), countries such as Finland and Canada (Väisänen, cited in Borrini-Feyerabend et al. 2013; Johnston 2006) provide evidence that investing in accountability and public engagement renders the work of national protected area agencies more effective, and better appreciated in society. From Australia to Colombia, from Canada to Namibia, governments, funding agencies, regulatory bodies and stakeholders in general are also becoming well aware that territories under shared governance or directly conserved by indigenous peoples, local communities and private landowners provide conservation benefits at little cost to society—a strong recommendation for supporting their efforts.

Attention to governance has been improving the appropriateness and equity of decisions. Protected areas require many types of decisions, responding to opportunities and threats to their ecological integrity and social and cultural significance. Weak results are often due to the failure of legislation, policies and decisionmaking processes to understand and 'fit' the situation, and to make available meaningful guidance and effective incentives (for example, social recognition, financial support) to managers and others. As well exemplified by current processes in the Philippines (Lim 2012), when governmental agencies support legitimate and responsive governance settings, they can solve socioecological dilemmas, including conflicts with indigenous peoples. Governance diversity can also maximise the ecological, social and cultural benefits derived from area-based conservation measures. For instance, wildlife conservation areas in Tanzania and group ranches in Kenya are generating important benefits for the engaged communities, which used to bear only costs from the presence of wildlife in their territories.

Attention to governance has promoted better linkages between area-based conservation measures and the surrounding landscapes and seascapes. Governance arrangements that fit their context nourish linkages to the wider landscape/seascape and help to connect to broader decision-making. Appropriate and responsive governance processes engage the rights-holders and stakeholders who live and work with the land and the sea and can address environmental issues outside the borders of area-based conservation measures. For example, in Australia, the Wilinggin, Dambimangari, Uunguu and Balanggarra Aboriginal groups work with the North Kimberley Fire Abatement project to set up businesses based on 'burning country the right way' to reduce greenhouse gas emissions under the Australian Government's Carbon Farming Initiative (KLC 2014) within and outside their Indigenous protected areas.

Attention to governance has been providing precious help in facing ongoing challenges and global change.

Far from being immutable, area-based measures for conservation can be dynamic and adaptive processes, capable of responding to existing challenges and global change. Who could have foreseen, a decade ago, that in one of the poorest and most neglected regions of Senegal, grassroots conservation would restore mangroves and fish biodiversity, quadruple fish catch, inspire communities, convince regional and national authorities and shoot to international attention in just a few years (ICCA Registry 2012)? New area-based conservation measures such as these, which pioneer the merging of traditional and modern features and are based on governance by grassroots institutions, should be accepted with caution and on the basis of thorough analysis; but conservation must be open to them if it wishes to be visionary and nourish new energies and insights.

Improving governance for sustainable living

The focus on governance of protected areas that began in Durban in 2003 has helped to broaden the spectrum of legitimate actors and area-based measures in conservation, and stresses considerations of principles and values that produce concrete benefits for conservation. We are now ready to implement solutions, beyond established parameters and comfort zones, to improve governance for the conservation of nature—the basis for sustainable living on our planet.

But how does governance improve? In some cases, change comes from within, and in others, it is brought about by recriminations and conflicts from outside. Another possible way is through conscious collective analysis and planning. Numerous CBD decisions and IUCN resolutions and recommendations appear to encourage this last option, and a recent work, co-sponsored by the IUCN and CBD, offers a methodology to assess and evaluate governance and plan to improve it for systems of protected areas or individual sites (Borrini-Feyerabend et al. 2013).

A central novelty of the IUCN and CBD methodology is that it focuses clearly on landscapes, seascapes and conserved territories and areas, including but not limited to protected areas. What works, in practice, to conserve nature? Who can take the key governance decisions? What have we learned about rendering such decisions as informed, legitimate, fair, appropriate, prompt and as wise as possible? The methodology suggests that the concerned actors should approach these questions from an in-depth understanding of local natural and social history. Which

species appear to grow and live well in the context? What major natural phenomena—animal migrations, water flows, regeneration processes-characterise it? How did people live there for generations? How did they cope with the seasons? Where did they build? What did they eat? What are the fundamental features of their culture, those that did not develop through imitation of distant others but by adaptation to the unique local environment? From an understanding of the ecological and social history and identity of the place, we can draw useful lessons about conservation as well as development. Are we seconding and allowing nature or are we impeding it? Are we trying to grow corn on dry land suitable for mobile pastoralism? Are we raising cattle on thin tropical soil? Are we planting eucalyptus or pines where chestnut or araucaria could thrive? Are we choking waterways, eroding hillsides, exhausting aquifers? What can we do to live well in tune with nature and not waste natural resources, going against the grain of nature?

Many cultural landscapes and seascapes in the world look aesthetically pleasing and filled with culture because they express the capacity of people to understand nature and thrive by following that understanding. Sometimes this involves leaving nature to follow its own course, like protecting a forest and using its resources in a careful and limited way. At other times people work hard to build terraces, channels, steps and pathways, orchards and gardens, pastures and wells. When they do that with respect, intelligence and care, both the landscape and the people benefit, and the results are immediately visible. They express a form of deep connectivity between people and nature, a mode of interaction that keeps distinctive nature alive, within and outside protected areas.

But, is such deeper connectivity related to governance? It seems bound to be. The hypothesis that immediately comes to mind is that only governance settings of appropriate type and rooted in the socioecological history of the place can nourish this type of connectivity; only learning through time can nourish its store of local knowledge, skills, decisions and institutions. This is an area for analysis and research, as measurable parameters to describe deep connectivity would need to be developed and studied in relation to governance diversity, quality and vitality.

In the meantime, a variety of innovative pathways towards the governance of nature for sustainable living—combining human wellbeing and conservation of nature—is being advanced and tested by peoples, communities, government agencies, researchers, enterprises, elders, spiritual leaders and citizens with intelligence, care and willingness to engage. These include:

- rethinking and reorganising the landscape and seascape into more coherent socioecological units
- assigning authority for development matters to ecosystem-wide authorities, responsible (and accountable) for conserving ecosystem functions and promoting social peace, economic equity and wellbeing
- providing recognition and incentives to a proliferation of conservation models, such as protected areas under any appropriate governance types, conserved areas, voluntary and ancillary conservation
- reviving the commons via securing collective rights to land and natural resources for the indigenous peoples and local communities strongly connected to them
- promoting deliberative and inclusive methods for environmental decision-making (for example, open discussion of alternatives via citizen juries, future searches, consensus conferences, polls, referendums, open comparison of scientific and traditional ecological knowledge, of business models and solidarity economies)
- promoting a sound business model to the environmental sector (for example, using financial incentives and disincentives to regulate behaviour, as in the 'polluter pays' principle for climate change)
- focusing attention on social justice and eradicating inequities based on gender, class, caste, ethnicity, race, etc.
- intensifying connections and feedback among decision-makers in different sectors and at different levels via major investments in information and communication
- applying to the conservation arena lessons drawn from innovative political movements throughout history and lessons about resilience in a variety of sectors (for example, education, health)
- promoting economic democracy with mechanisms such as participatory budgeting, citizen income (freedom from abject poverty and degrading conditions), community-based savings and loans (solidarity economy), high taxes on financial speculations, truly green innovative production and producer and consumer control over the market
- promoting information democracy by reform in the education sector (education for critical thinking and well-informed decision-making) and the communication sector (investigative journalism, news pluralism, regulation of media businesses)
- developing community plans towards living well—including about local production of food



Enhanced solidarity is a by-product of successful community conservation initiatives in Casamance, Senegal

Source: Grazia Borrini-Feyerabend

- and satisfaction of basic needs—and exchanging, comparing and integrating those at various levels
- improving policymaking by mandatory participatory research and planning, affirmative action to redistribute responsibilities authority and (for example, to compensate for gender discrimination), and clear mechanisms accountability
- supporting environmental agencies to promote an internal learning culture so as to become flat, responsive organisations that offer incentives for engagement and innovation
- ensuring a measure of direct democracy, by which
 people always have a chance to engage in taking the
 key decisions the consequences of which are primarily
 felt by them, but also to assume their responsibilities
 towards society in general and the constitutional
 principles upon which society is founded.

Conclusion

On the eve of the World Parks Congress in Durban in 2003, governance questions began to be broadly examined for protected areas throughout the world. Building upon initial insights, in the following decade

it became possible to develop a system of governance types and recommended adherence to good governance principles that are slowly but steadily being embraced by the country parties to the CBD. Today, the visible face of enhanced diversity and quality of governance for conservation of nature is apparent in new and emerging actors and collaborations, new policies being approved, and new practices taking root on the ground. In the space of a few years, this has enlarged the coverage of protected areas, and improved the effectiveness and efficiency of management and equity of decisions. It has also provided better links with surrounding landscapes and seascapes and precious help in facing ongoing challenges and global change. A flurry of ideas and pathways—in combination or as alternatives—is also emerging to foster governance vitality and learning-by-doing for the conservation of nature.

Yet we need to remain careful. All stakeholders cannot have an equal say in matters crucial for livelihoods and conservation. Equity is not equality, and existing rights, the quantity and quality of engagement and fair compensation cannot be pushed aside. Similarly, a sense of governance stability is necessary. Adaptive governance is needed, but constant change, rules that are not dependable and lack of security for investments generate chaos. Subsidiarity and attention to contexts

and respect for local cultures and values are important, but so is the common good, including viable ecosystems and a stable climate, as are universal human values, such as those that put a brake on greed, selfishness and violent and destructive behaviours. People with diverse values, opposing interpretations of the world and divergent interests need to be heard and engaged in dialogues, but conflicting values and visions for the future cannot be pursued together. Decisions must be taken and maintained through time for governance to have coherent results.

How do we strike a balance between fairness and acquired rights, stability and innovation, local meaning and values and broader liberating principles? We suggest a 'human rights-based approach', by which a multiplicity

of procedural and substantive rights is respected. But we also suggest that the effectiveness of decision-making and the rule of law are secured, and that rights are always balanced by responsibilities, including towards the rights of future generations and the rights of nature. There is no recipe to ensure that, but lessons and insights are accumulating in learning-by-doing processes throughout the world. In conscious and participatory efforts towards enhancing its own diversity, quality and vitality, governance can unfold at its best for the conservation of nature.



Meeting between visitors Neema Pathak and Michael Lockwood and villagers/custodians at Baripada near Pune, India, to hear about the conservation management of the area including how catchment protection and restoration work had improved the reliability of the local water supply with subsequent benefits for cropping.

Source: Graeme L. Worboys

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