

Conservation and Community Rights:

Lessons from Mesoamerica





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Photography: MASTA

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Photography: Allam Ramirez Zelaya



Photography: Paul Redman

I. AT A CROSSROADS FOR CONSERVATION: Biodiversity and the rights of indigenous peoples and local communities

The world's richest biodiversity can be found in the forests, waters and farms of indigenous peoples and local communities across the world. Stewardship by these communities underpins a remarkable spatial convergence between cultural and biological diversity: where indigenous peoples remain, so do many of the plants, animals and resources critical for life on earth (see map I). According to the Worldwide Fund for Nature, indigenous and traditional peoples inhabit 95% of the 238 global eco-regions considered critical for global conservation.¹

Yet these communities and living systems are under grave and increasing threat. Destructive encroachment into indigenous and community lands continues, driving deforestation, climate change and much of the alarming loss of the planet's living systems, at a rate now on par with that of a handful of mass extinction events since the inception of life on earth 3.5 billion years ago.² The efforts of indigenous peoples and local communities to secure their rights to land and resources against this degradation represents a global movement to reverse these trends, save biodiversity and fight climate change.

Large conservation organizations and government agencies have directed significant attention and financing to

bio-diverse places, mostly by setting up protected areas managed by governments. Since biodiversity is high in indigenous territories, it is no coincidence that many protected areas have been established in the lands of indigenous peoples. Yet research has shown that protected areas have undermined conservation efforts by indigenous peoples and local communities at least as often as they have supported them.^{3 4}

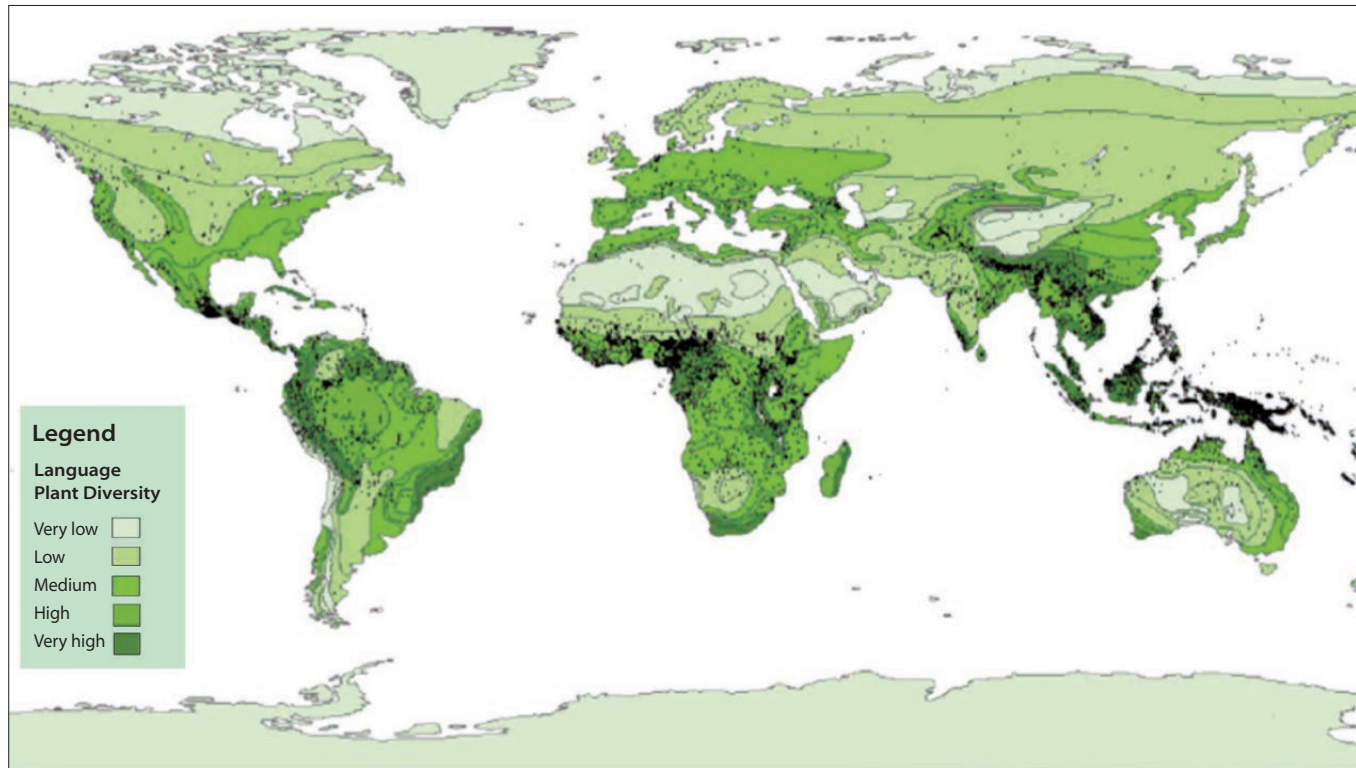
In indigenous and local communities, traditional rules, knowledge and organizations govern the conservation and sustainable use of resources; these rules often evolved in symbiosis with local ecosystems. But in protected areas, local communities have historically been treated like adversaries rather than allies of conservation. Cultural misunderstandings between local communities and those who manage protected areas have resulted in an array of counterproductive strategies, from displacing and excluding indigenous peoples from their lands to imposing rule systems and organizations foreign to local cultures, livelihoods and self-government.⁵

In 2003, the World Parks Congress*, the leading world forum for conservation organizations and government agencies, publicly recognized the lessons of past mistakes

* The World Parks Congress is organized every decade by the IUCN's World Commission on Protected Areas, and is widely regarded as a central forum for setting international standards and guidelines for protected areas.



Map I: Global plant and linguistic diversity



Source: Terralingua, 2014⁶

and declared a “new paradigm” for protected areas that would respect indigenous and community rights. Yet this paradigm has remained largely unimplemented: thirteen years after the declaration of this “rights-based approach” for protected areas, there are few examples of conservation organizations or agencies putting this principle into practice.⁷

Although few conservation organizations have embraced rights-based approaches, mounting evidence is showing the efficacy of securing the rights of indigenous and traditional peoples as a conservation strategy.^{8,9,10,11} At the same time, it is clear that when establishing protected areas and enforcing their rules conflicts with the rights of local peoples, biodiversity is often lost as a consequence.

Mesoamerica has the highest concentration of rights-based approaches in the world; the recognition of indigenous and community rights across the region has produced many important experiences and achievements in preserving biodiversity that hold many lessons for conser-

vation efforts around the globe. This paper summarizes the conclusions of a series of case studies on concrete experiences in rights-based conservation in Mesoamerica.¹²

This research offers hope for the crisis of biodiversity loss. Despite the 12.1 billion U.S. dollars spent globally each year on protected areas,¹³ 50 to 80% of these areas remain poorly managed or underfunded¹⁴ and are losing biodiversity at almost half the rate of un-protected lands.¹⁵ Yet Mesoamerican examples of rights-based conservation show that a decisive move towards supporting and securing the rights of indigenous peoples and local communities around the world can make a major and immediate impact on these alarming trends and effectively protect biodiversity.

This report summarizes the findings of a series of case studies on territorial rights and biodiversity in Mesoamerica, available here <http://www.prisma.org.sv/index.php?id=247>

II. MESOAMERICA IN THE GLOBAL CONTEXT: Experiences in secured indigenous and community rights

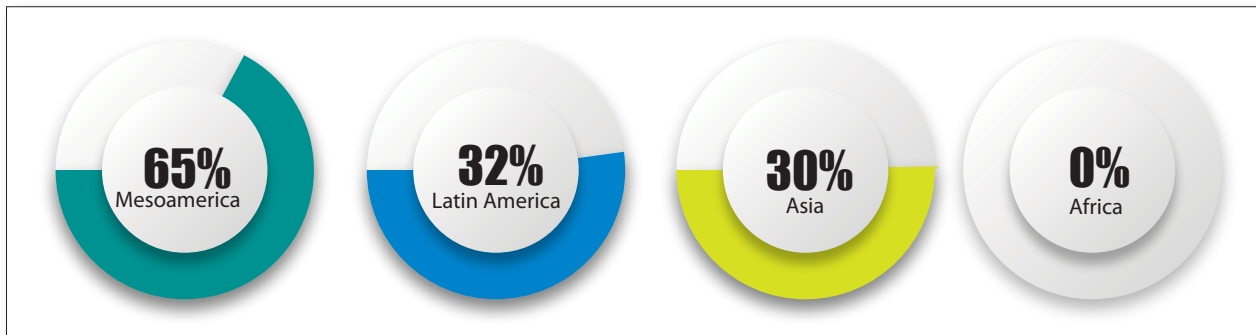


Photography: Paul Redman

The discussion of rights-based conservation is particularly appropriate for the meeting of the 13th Conference of the Parties to the Convention on Biological Diversity*. Hosted by the Mexican government in Cancun, the meetings will take place near lands and forests where indigenous and community control has resulted in

a number of lessons for rights-based approaches to conservation. From Mexico to Panama, indigenous peoples and local communities have legally recognized rights to approximately 65% of the forests in Mesoamerica, far exceeding any other region in the world (see Chart 1).

Chart 1: Recognized Indigenous and Community Tenure Rights



Source: Mesoamerica calculate by PRISMA Foundation, other data from RRI ¹⁶

* THE CBD is a United Nations Environmental Treaty signed by 193 countries. It was developed at the 1992 Rio “Earth Summit” (the United Nations Environment and Development Conference). Its articles and decisions are updated at its biannual Conference of the Parties. As an international treaty, its articles and decisions are binding and carry the weight of law.



Box I:

Mahogany management in the community concessions of Guatemala

Pre-Columbian Mayan peoples practiced *milpa*, the mixed planting of corns, beans and squash—the so-called “three sisters”—together, in a rotating fashion, in forest landscapes. Ecologists think that, through this agroforestry method along with the deliberate planting of economically useful trees, Mayans altered forest composition in Guatemala, Belize and Mexico.¹⁷ Tree species such as all-spice and chicle are unusually common in these places, suggesting that Mayans shaped forests often thought of as pristine.¹⁸

Mahogany is one of these species. Known for its durable wood and its vivid red and dark brown hues, mahogany became the object of intense commercial exploitation beginning in the mid-eighteenth century. The popularity of mahogany furniture in Europe and the US drove a large part of demand and led to overharvesting, depletion and harm to ecosystems, in a pattern that continues today.

In the Petén region of Guatemala, community groups that manage forest concessions in the Maya Biosphere Reserve have used the particular heritage of Mayan people to reverse this dynamic. Local rights recognition has allowed community livelihoods to be aligned with the long term conservation of mahogany.

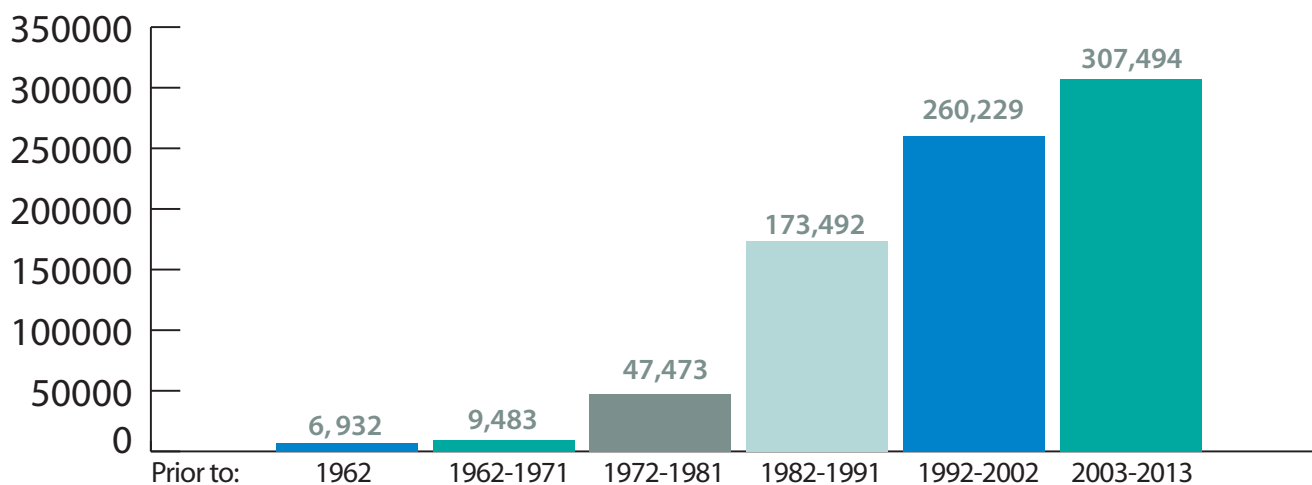
Now a large share of community income is earned from mahogany. While many concession models harvest at rates determined by financial considerations, in the Petén, communities carefully plan harvest rates and regeneration activities based on ecological concerns to ensure the long term health of the mahogany species and the local ecosystem. Thorough controls and checks to safeguard against overexploitation include Annual Operational Forest Plans and exhaustive inventories in concession areas. Independent evaluations have demonstrated this model to be sustainable, lauding the community’s activities as representing “state of the art best practices for species-level management in tropical forests.”¹⁹

The recognition of indigenous and community rights to land and resources in Mesoamerica has mostly occurred in the past two or three decades, though movements to ensure territorial security for indigenous peoples and local communities date back much farther. In many places, local movements to protect indigenous territories can be traced back to early struggles against colonial expropriation and assimilation attempts. Community and indigenous rights were won, for example, in 19th century treaties over the Mosquitia region in Honduras and Nicaragua, in the 1917 Mexican Constitution, and in the 1930s in Panama. These events were antecedents to renewed struggles against external pressures that achieved the consolidation of community forest rights in Mexico in the 1990s, which in turn informed rights recognition in Guatemala in the same decade. Similar movements for the expansion of recognized rights began in both Panama and Costa Rica in the 1970s, followed by Nicaragua in the 1980s. In Honduras, local communities gained important (though temporary) rights in the 1970s, later strengthened in 2007, while specific recognition of indigenous peoples’ territories did not make substantial headway until 2012.²⁰

Protected Areas in Mesoamerica:

As in other regions of the world, protected areas in Mesoamerica are concentrated in indigenous territories. Perhaps even more striking is the fact that these protected areas were established during the same general time period when governments were recognizing the rights of indigenous peoples and local communities to land and resources. New opportunities for conservation organizations and governmental agencies opened in the region as conflicts wound down in the 1980s.²¹ New “peace parks” sprang up, including parks spanning large areas of the Maya Forest in Guatemala, Mexico and Belize, the Chiquibul mountain range in Guatemala and Belize, and the bi-national “International Park of Friendship” in Costa Rica and Panama.²² These parks grew over thirty-two times in size between 1971 and 2013, from 9,483 square kilometers to 307,494 square kilometers, more than four times faster than the global rate of expansion of protected conservation areas. There is a major overlap between these parks and land of indigenous and traditional peoples: today, a full 38% of protected areas in Central America are found in indigenous territories.²³

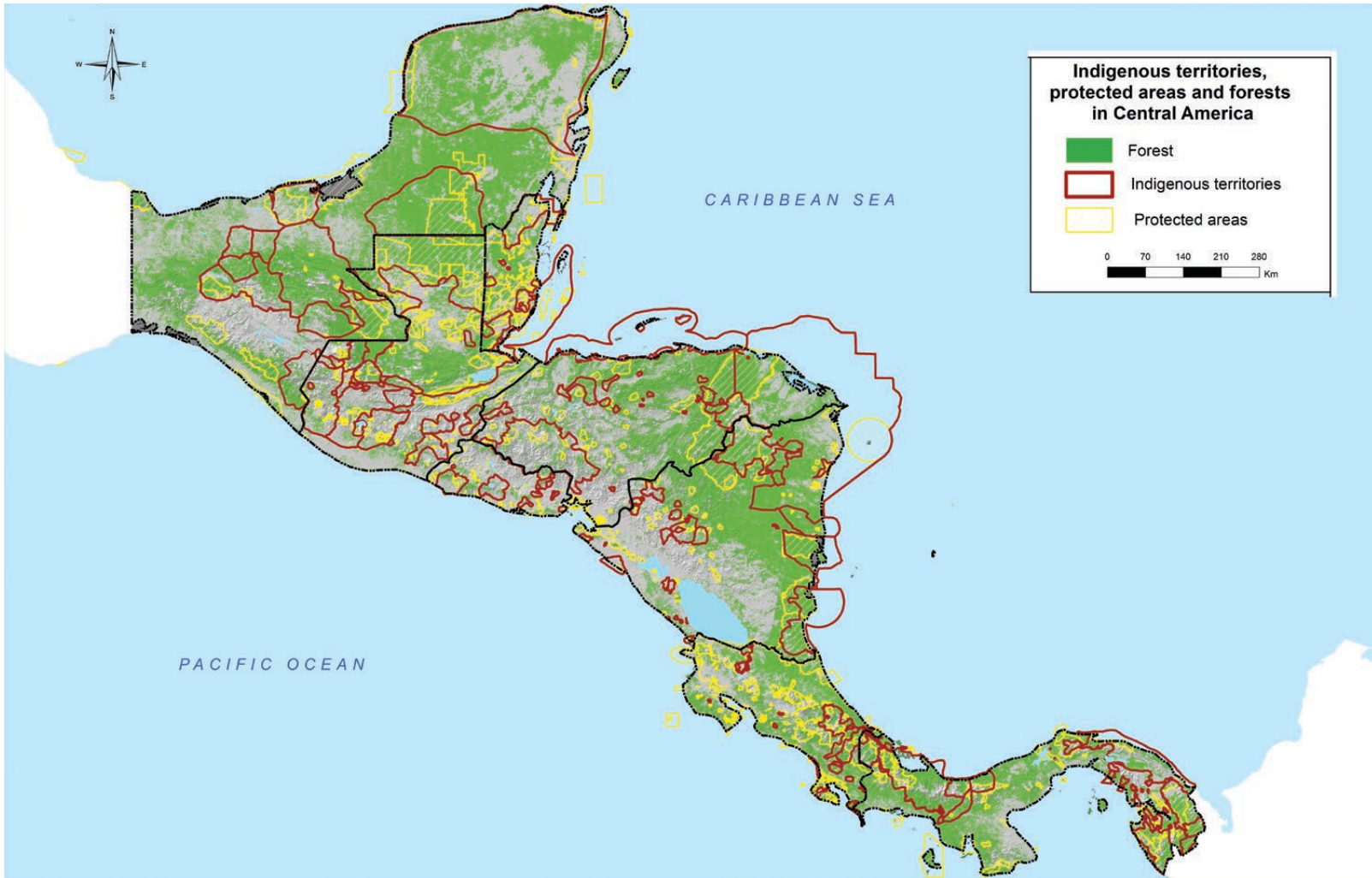
Chart II: Expansion of Protected Areas in Mesoamerica 1962 to 2013



Source: Calculated by PRISMA based on United Nations 2014 List of Protected Areas²⁴



Map II : Indigenous Peoples, Forests and Protected Areas



Source: Produced by PRISMA based on *Unión Internacional para la Conservación de la Naturaleza, Oficina Regional para México, Centroamérica y El Caribe* (UICN ORMACC) and National Geographic and Center for the support of native lands (2002), "Pueblos Indígenas y Ecosistemas Naturales en Centroamérica y el Sur de México" Washington DC.

The correlation between biological and cultural diversity in Mesoamerica

Photography: Fundación PRISMA



“In southern Mexico and Central America, the plant researcher finds himself, in the full sense of the term, in a veritable centre of creation.”

(Vavilov, 1931)²⁵

Mesoamerica has been long recognized as teeming with natural and cultural diversity. Stretching from Mexico to the southern-most borders of Panama, Mesoamerica’s varied topography, tropical environment and position between two oceans make for a particularly complex and diverse natural environment that underlies the enormous range of plants, animals and ecosystems in the region. Despite constituting only 0.5% of the world’s land mass, it contains roughly 7 to 8% percent of the world’s biodiversity²⁶ with abundant endemic species, making it the world’s third largest “mega-diversity hotspot,” according to Conservation International.²⁷ The Mesoamerican isthmus contains 17,000 plant species (17% of which are endemic) as well as 440 species of mammals (14% endemic), 690 species of reptiles (34% endemic) and 550 species of amphibians (63% endemic).²⁸

This natural diversity has evolved along with a parallel cultural diversity—a phenomenon witnessed in other key mega-diverse hotspots such as Central Africa, the Amazon Basin, and Indomalaysia/Melanesia.²⁹ Mesoamerica’s first settlers arrived over forty thousand years ago and grew into a great number of civilizations, including the renowned Mayan and Aztec Peoples. Despite the region’s

challenging climates and soils, advanced irrigation and botany techniques allowed for the evolution of a vast number of domesticated and wild plants that would qualify the region as one of the main centers for the birth of agriculture, rivaling the Near East, China and the Andean region and producing abundant varieties of maize, beans, gourds, tomatoes, avocados and a great number of fruit trees.

Despite destruction during the colonial period and successive attempts to extinguish native cultures, Mesoamerica continues to boast enormous cultural diversity. The region is home to over sixty ethnic and linguistic groups. Indigenous peoples across the region continue to put their intimate knowledge of the dynamics and functions of local ecosystems into practice, as through *milpa*, or the cultivation of corn, beans and squash together. Such practices reflect the accumulation of knowledge in communities regarding the particular ways in which livelihoods interact with the local environment. Traditional rules and accepted norms among families and community members often govern such sustainable practices. These cultural traditions many times include mechanisms to insure against environmental degradation, shared community resources to insure against shocks, and methods of maintaining group solidarity and community well-being.

These longstanding, agreed-upon methods and practices have shaped landscapes in what can be described as a co-evolution between culture and nature, both influencing each other through time. For example, although they are characterized by some scientists as “pristine,” evidence indicates that Mayan forests are more likely remnants from Mayan agroforestry systems, given the unusually high incidence of economically valuable trees, such as chicle, allspice, and cacao, among others. Moreover, remaining forests of the region show a very substantial overlap with indigenous territories, with 48% of forests in Central America standing in the territories of indigenous peoples.³⁰

Map II provides a striking visual depiction of this historical relationship between culture and nature.



Though indigenous rights proponents and conservationists shared the goal of ensuring the region's biodiversity, the two movements largely remained operationally separate. Working under different legal frameworks, conservation agencies largely ignored the rights of local peoples as parks were created. For example most of the major biosphere reserves in the region were implemented without meaningful consultation with local communities, including the Montes Azules in Mexico,³¹ Mayan Biosphere Reserve in Guatemala, the Rio Platano Biosphere Reserve in Honduras, the Bosawas Biosphere Reserve in Nicaragua,³² the Darien National Park in Panama,³³ and the Amistad International Park in Costa Rica and Panama.³⁴

Although the misunderstanding between these movements seems glaring today, at the time, the social elements of ecology and considerations about the rights of indigenous peoples had often not been introduced into the frameworks of conservation organizations, even on paper. Even where the staff of government agencies and non-governmental organizations were cognizant of the local community's rights, they had little experience addressing them, and little understanding that recognizing community rights are essential to conserving biodiversity. From the perspective of many communities, the establishment of protected areas initially did not have any ramifications on the ground; enforcement of new rules governing protected areas would not come until much later. Nevertheless, this initial disconnect between protected areas

and the rights of indigenous peoples made for conflicts not only over the rules of protected areas, but the very legitimacy of the parks themselves, some of which are even today are called into question by indigenous peoples and local communities.

In spite of these conflicts, major funding was soon forthcoming and almost exclusively directed to large conservation organizations and government agencies. In the mid-1990s a new concept of bridging the newly expanded protected areas across the region gained traction with important donors, and soon became the most significant single effort to fund conservation in Mesoamerica. Major financing came from the World Bank through the Global Environmental Facility (GEF), along with funds from other major donors such as the United States Agency for International Development (USAID), the European Union, the United Nations and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ). A 2003 analysis of the Mesoamerican Biological Corridor (MBC) found that one-third of World Bank projects contributed either directly (18%) or indirectly (82%) to the MBC; a 2001 estimate of World Bank projects indirectly associated with the MBC reached \$1.3 billion.³⁵

Despite this substantial funding, the implementation of these projects met with major challenges. The initial discord regarding the establishment of the protected areas generally hampered the processes of developing manage-

ment plans agreed upon with communities. Where such plans were developed based on a shared understanding of rights, they were very successful (see community concessions of Guatemala, page 15), though these cases are rare. Approaches that ignored local rights and harmed local people’s overall capacity to manage biodiversity have led to the degradation of ecosystems and communities alike (see, for example, the Rio Platano Biosphere Reserve, page 25, or the Monarch Butterfly Reserve, page 37).

Ultimately, however, local communities have had little say about the ways in which this massive conservation financing was allocated. Various research efforts document the excessive influence of donors, technical staff and international organizations and the failure of meaningful financing to actually reach local communities.³⁶ A review of the MBC by the Independent Evaluation Group (IEG) of the World Bank found:

The MBC tends to run along the Atlantic side of the Isthmus whereas Central American capital cities tend to be located either on the Pacific side or inland. Simply put, the finance tended to get stuck both in the capitals and their central agencies. To complicate matters, many of the MBC beneficiaries live in remote areas that are hard or costly to reach. Although projects like the Nicaragua MBC project moved support to its autonomously governed regions that about the MBC later on its cycle, beneficiaries were still a layer removed from core support.³⁷

Alongside these highly visible and well-financed parks are numerous local projects that have made enormous strides in conserving biodiversity despite scant or ambiguous support. This report discusses a few of these examples—one in the Northern Sierra of Oaxaca and another in the Guna and Embera territories of Eastern Panama which includes a self-declared and operated Guna Protected Area. These examples are only a few of many documented experiences of Mesoamerican communities that have sustainably managed local resources on the basis of rights and form part of the mounting global evidence that community rights can be as or more effective than protected area policies.^{38 39}

All of these experiences in Mesoamerica can play a key role in shaping the next generation of conservation efforts globally. The movements of indigenous peoples to defend and protect their territories are increasingly well-organized and sophisticated, and are unified in a global call to recognize rights and confront the environmental crisis facing the globe.⁴⁰

Governments around the world, and in particular governments in the richly biodiverse regions of the world struggle with fragile public institutions, weak rule of law, impunity and corruption. The notion that these institutions will enforce environmentally sound behavior through external rule systems that disrupt local lives, livelihoods and cultures has been increasingly called into question, especially as these areas are extremely remote, biodiversity is rich, and government presence is next to non-existent.

In contrast, the rights-based approach can harness the power of “strong societies” striving in the context of weak states.⁴¹ Recognizing and securing rights provides a way for conservation investment to align international and national efforts with the unrecognized struggle for biodiversity by indigenous peoples and local communities across the globe.



Photography: Allam Ramirez Zelaya



What's the difference? Protected areas versus indigenous rules

Rights are materialized in rules on the ground that determine who can access which plants, animals and resources, and how the benefits and costs of these activities will be shared and divided. General distinctions can be made between the rules instituted by protected areas, on the one hand, and the rules that guide traditional and indigenous systems, on the other. These distinctions show how the overlaying of these systems has caused tensions and conflict.

Approaches to the establishment of rules in protected areas tend to be fairly uniform: a specific area is demarcated as protected and the restrictions on the use of resources within the area are set up. These restrictions range from complete prohibition of human activity to more modest regulations on productive practices.⁴² Formal rules in protected areas tend to be written, abundant and administered through central government offices frequently far removed from local communities. It is common for local communities to be unaware of these rules, or for the rules to be regarded as illegitimate. In many cases, indigenous peoples and local communities have little say in the rules developed, and changing these rules to adapt to varying social or ecological conditions is often exceedingly difficult.⁴³

Traditional rules cannot be easily encapsulated in a single definition: their sheer variety from one location to another is a defining feature of such systems. Nevertheless, such rules can be characterized in general terms. Traditional rules are often flexible and adaptive, the result of trial-and-error efforts to thrive, long term, in a given landscape. Through these efforts, people and cultures learn how to manage interactions between the community and the ecosystem. Local rules are the expression of this continuous learning.

In Mesoamerica, a broad array of shifting cultivation methods developed in relation to specific local environments. One of the most well-known is milpa, the traditional inter-cropping of beans, corn and squash in rotating fash-

ion, generally in symbiotic relationships with forest ecosystems. These methods generally leave trees in place and incorporate the forest, including successive vegetation stages, as an important and productive part of the landscape. These practices are sometimes conflated with destructive frontier methods of slash-and-burn agriculture which eliminate trees and convert land permanently to pasture within a few years, but they are historically and qualitatively different from frontier slash-and-burn farming.⁴⁴

Traditional practices are generally applied with great discernment and knowledge of ecological imperatives, depending on local soils, wildlife, topography, climate and precipitation. While some communities use fixed divisions separating conservation areas from other areas, many local systems are more aptly described as a mosaic pattern of rules that vary depending on specific resources or species, relative abundance, season or context. For example, collective rules that help communities maintain reserves for emergencies or shocks are common. Rules are also often intertwined with livelihood strategies and cultural identity. Thus, they are often not locally conceived as conservation per se, but are rather part of the productive strategies and social norms that make up broader community life.⁴⁵

A number of studies have highlighted the advantages of local rules as systems that can adapt to changes and allow users to iteratively improve them through experience. Local rules are also more likely to be perceived as legitimate, and therefore to be followed, than externally devised rules. Nevertheless local rule systems are not a panacea; rather than posit one type of rule system as ideal, many studies have emphasized the importance of understanding these differences for a more complementary and constructive relationship between rule systems.⁴⁶ This sort of complementary relationship can be seen in the community concessions of the Petén, in contrast to tensions in the Rio Platano Reserve in the Mosquitia, Honduras.

III. GUATEMALA:

Progress and setbacks on rights in protected areas



Photography: Alliance of Guatemala Community Forestry Organizations

Guatemala boasts enormous cultural diversity: approximately sixty percent of its population is comprised by indigenous peoples, including twenty-three distinct ethnicities, including Mayan, Garifuna and Xinka Peoples. Community rights lay the foundation for a number of strong conservation outcomes in the country. Yet conservation policies do not unequivocally support indigenous peoples and local communities. In the Maya Biosphere Reserve, community forests have become the last bulwark of the Petén's once vast rainforests—yet these community rights are endangered as the government has delayed in renewing their twenty-five-year concessions. Meanwhile, in the Mayan community of Semuq Champey, recent actions by the National Commission of Protected Areas have driven serious conflicts and spurred renewed demands for the respect of indigenous rights in conservation policies.

The Community Concessions of the Maya Biosphere Reserve in Petén, Guatemala

The Maya Biosphere Reserve in Guatemala's northernmost Department of Petén spans over two million hectares of lowland and hilly tropical rainforest, and forms part

of the broader Mayan rainforest that expands into Mexico and Belize, one of the largest contiguous expanses of tropical forest north of the Amazon. The region is known for its particularly high levels of biodiversity, boasting such species as jaguars, pumas, ocelots, howler monkeys and fresh water turtles, among many others. After a rocky beginning in the early 1990s, the MBR soon found solid footing in the Reserve's multiple-use zone, where rights were granted to forest communities through twenty-five-year contracts.⁴⁷

The declaration of the Maya Biosphere Reserve in 1990 was a dramatic reversal of public policy in Guatemala, following decades of outright, large-scale clearing of forests in the Petén through the semi-autonomous Enterprise for the Development and Promotion of the Petén (FYDEP). This forest clearing simultaneously relieved demands for land in the Guatemalan interior and opened up large-scale ranching, agricultural and mining projects, creating vast new sources of wealth appropriated by the economic and military elite. The resulting deforestation of this vast region drew increasing international attention, and with international support, urban environmental activists were able to muster a response in the form of the MBR.



The declaration of the Maya Biosphere Reserve entrusted its management to the newly formed National Council of Protected Areas (CONAP), following the dissolution of FYDEP in 1989. The Reserve was divided into core zones that expressly prohibited any human activity, multiple-use zones that were intended for timber concessions, and a buffer zone running horizontally across the Southern end of the MBR. This declaration and zoning of the reserve occurred without consultation of the communities residing within the reserve, some of which had been practicing sustainable harvesting of non-timber forest products (especially chicle) for generations. The MBR therefore effectively outlawed basic livelihood activities of people residing in it, touching off new tensions as these communities demanded access to forests. CONAP found itself unable to control the vast forests of the MBR. Meanwhile, chaotic deforestation rapidly accelerated within the MBR as loggers and ranchers took advantage of the governance void to exploit its plentiful natural resources.

In response, a disparate group of long-time forest communities united with more recent migrants, including both ladino and indigenous communities, formed the Association of Community Forests of Peten (ACOFOP). ACOFOP proposed that communities be allowed to manage the concessions that were once envisaged for industry. After a difficult process of negotiation, ACOFOP ultimately won rights to access and manage the forest concessions for a renewable twenty-five-year period, contingent on compliance with a series of environmental regulations, including certification through the Forest Stewardship Council (FSC). The first pilot concession had been created in 1994; by 2001, the territorial extension of community forest concessions had grown to over 378,000 hectares and ultimately reached over half a million hectares within the MBR. Today, ACOFOP is made up of twenty-three organizations representing over two thousand families and providing benefits to an estimated forty thousand people.⁵⁰

Since the granting of these concessions, the multiple-use zone of the MBR has been managed by representative community organizations, led by general Assemblies, elected Presidents and Leadership Boards. These bodies

facilitate collective decision-making in each concession as well as the implementation of these management decisions. Management rules in the community concessions have been organized around formal management plans for commercial timber and non-timber forest production, including annual and five-year plans specifying specific measures for each product to be harvested, subject to CONAP approval and in line with FSC certification. Timber management plans include full resource inventories, environmental impact assessments and detailed plans for harvesting operations. The sustainable management of these resources has provided a broad base of economic benefits. Community concession timber sales have ranged between 3.3 to 6.1 million U.S. dollars over the past eight years,⁵¹ while *xate* sales have also been significant, registering at \$181,000 in 2008. Timber activities generate approximately three thousand jobs annually, and in 2003 it was estimated that the average income of concession members, including salary and dividends, ran at \$1,140 for 39 days of work, equivalent to the average salary for six months of work in the Petén.⁵²

The community organizations are the backbone of the success of the community concessions model. These organizations are part of a multi-level arrangement that together form a complementary relationship with the government. CONAP has participated in a number of jointly coordinated monitoring efforts, such as boundary patrols, fly-overs, and the staffing of guard posts. Though at times this coordination has been substantial and has included very strong examples of co-management, this joint work has also been inconsistent; on many occasions the community concessions have been left to fend for themselves in the monitoring and protection of their territories.⁵³

The conservation outcomes of the community concessions are striking. As shown in Map III, the community concessions lost a total of 2.97% of forest cover from 1994 to 2015, seven times less than the rate of loss in the restricted use protected areas, where 21.9% of forest cover was lost, and thirteen times less than the deforestation rate suffered in the buffer zone.

Box II :

Xate Palm conserved by “Peteneras”, women of Petén

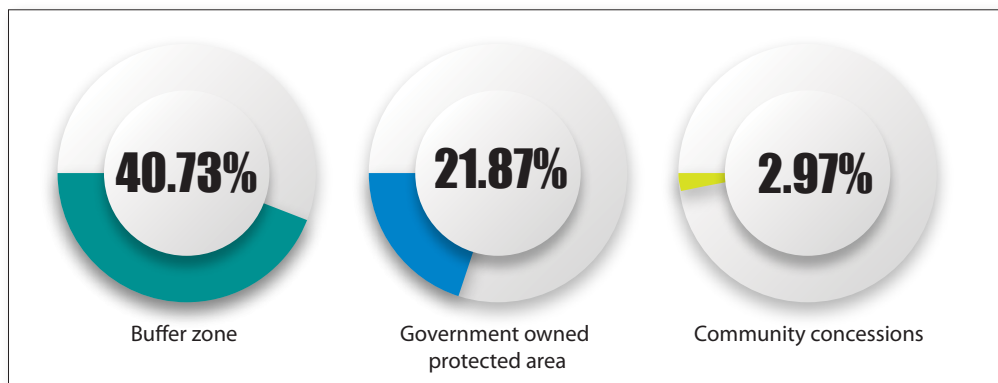
In Uaxactun, Guatemala, the xate palm is one of many plants that abound on the lush forest floor. This plant has many traditional uses, such as basket making, in addition to serving as the “daily bean” of most Uaxactun residents. This plant is highly valued by the commercial flower industry, which uses its plentiful leaves, called xate, as decoration in floral arrangements.

Since the establishment of the community concessions, women’s groups have formed to exercise community rights to manage these plants in Uaxactun and other concessions. Because the community has rights to manage and harvest xate, the women have been able to obtain

certification demonstrating their sustainable practices and forge linkages to international markets, generating income for all concessions of up to \$181,000 in a single year.⁴⁸

This income has strengthened local livelihoods and played an important part in enhancing the role of women in decision making at community levels. Today xate is celebrated in the Uaxactun community, forming part of festive costumes, and continues as a symbol for the longstanding and symbiotic relationship of the Uaxactun community with the rainforests of the Petén.⁴⁹

Chart III: Deforestation in the Maya Biosphere Reserve 1994 – 2015



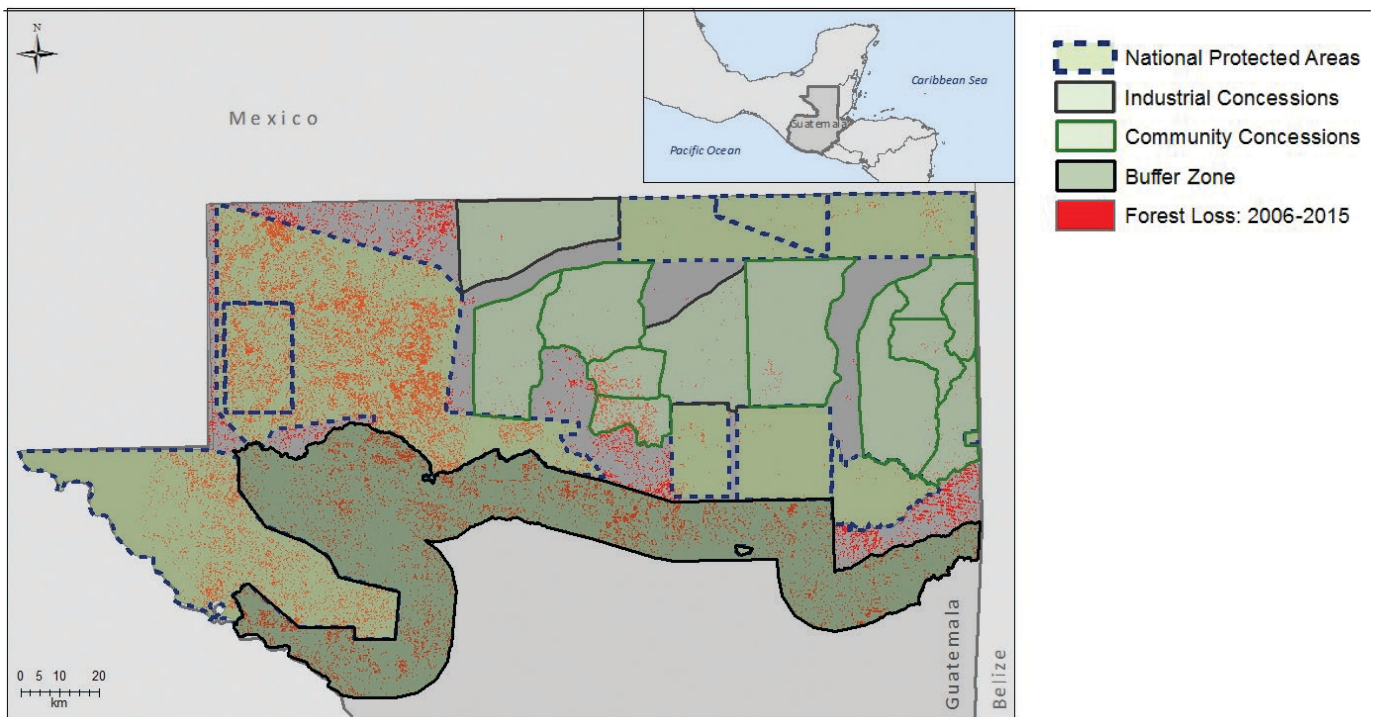
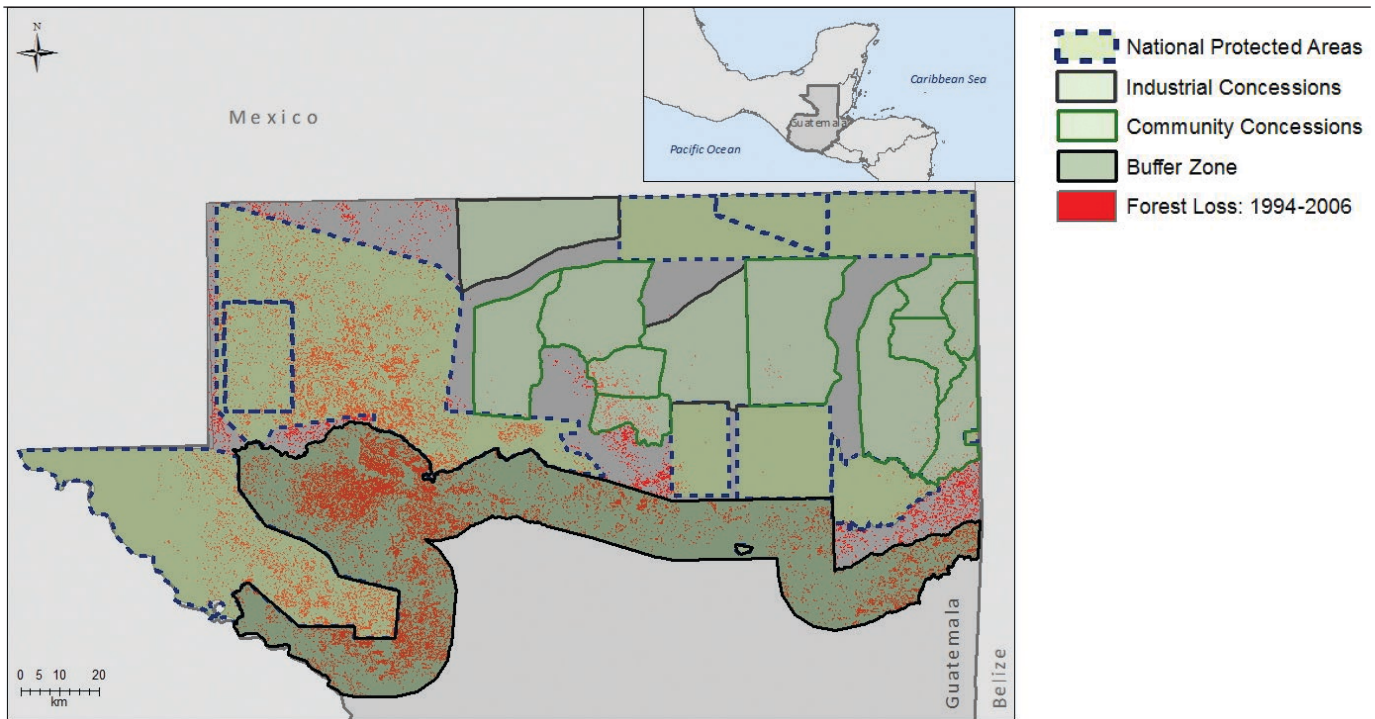
Source: Clark University, with data from WCS.

The experience of ACOFOP provides a number of important lessons and insights into rights-based approaches to conserving critical plants, animals and ecosystems. The stark contrast between the well-conserved concession areas and the state-owned areas illustrates how rights-based approaches can be much more effective than traditional, centrally managed protected areas. The success of the concessions also contrasts with the lawlessness that prevailed when communities were initially left out of the plans for the MBR. A number of research efforts

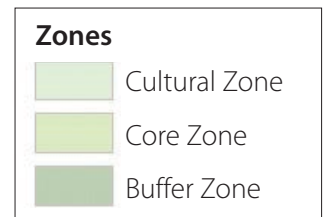
have found this success to be attributable to the strong economic benefits for communities and the constant emphasis on local participation in the elaboration and implementation of rules. As a result, the rules governing the concessions are broadly considered legitimate and each community member has a clear stake in their success.⁵⁴ This situation contrasts with state-owned areas of the MBR, where communities have been excluded from a share in the benefits of a well-managed MBR. In these areas, encroachment and deforestation have been severe.



Map III: Changes in Forest Cover, 1994-2006 and 2006-2015



Source: Clark University, Worcester, MA, USA, with dates of WCS



Semuq Champey: conflict over indigenous rights and protected areas in Guatemala

Conflict over land and natural resources is common in Guatemala, where access to land is one of the most unequal in all of Latin America.⁵⁵ The country's indigenous peoples number over six million, yet the vast majority lack adequate access to land and natural resources.⁵⁶ Over several centuries, indigenous communities have been pushed off their lands and driven onto less fertile slopes of Guatemala's highlands. Unequal access to land was a central driving force of Guatemala's civil war, which involved brutal human rights abuses against the country's indigenous peoples.⁵⁷ The restoration of these rights became a central principle to the 1996 Peace Accords, though progress on this front has been slow, as insecure land rights continue to drive poverty, food insecurity and conflicts in the country.⁵⁸

Despite the extreme scarcity of land and resources, research has demonstrated how Mayan rules have maintained forests intact, often despite high population density and demand for resources.^{59,60} It is precisely the forests protected by these Mayan communities that have come under increasing pressure from the National Commission on Protected Areas (CONAP) over the past decade. Analysis has documented how community rights have been consistently disregarded in these initiatives, sidelining many local communities in decisions about the establishment and management of these protected areas.⁶¹

In 2016, this trend was reflected in a conflict in the highland Q'ueqchi' communities of Alta Verapaz. The dispute surrounds a popular tourist destination, boasting spectacularly beautiful natural limestone formations with tiered steps of freshwater turquoise pools, where the Cahabon River cascades down waterfalls and flows underground through a network of caves carved deep in the



mountains. The area was declared a National Park in 2005, named Semuq Champey, meaning "where the river hides" in Q'ueqchi'. The protected area was established with no meaningful consultation with the Q'ueqchi' communities who have ancestral rights to the lands,⁶² though a clause was included in the declaration specifying that thirty percent of park revenue would be shared with communities.⁶³

Ten years on, Q'ueqchi' communities report that no revenue has been shared. Tensions culminated in 2016, sparking community protest against the violation of their rights through a peaceful occupation of the park. In July of 2016, heavily armed national police officers and military personnel used tear gas and physical force to dislocate communities from the area, resulting in injuries, including one that led to death of a community elder.⁶⁴

Communities report continued persecution from government authorities, including a criminalization of leaders attempting to defend their land and demand respect for their indigenous rights.⁶⁵ The case dramatically highlights ongoing conflicts over indigenous rights resulting from a lack of free, prior and informed consent for protected areas, and holds important parallels with violations of rights by conservation policies occurring around the world.⁶⁶



IV. THE CARIBBEAN FOREST FRONTIER:

Rights and rows in the Central American indigenous lowlands



Photography: Guna Yala

The remote lowland rainforests of the Honduran and Nicaraguan Mosquitia, along with the Caribbean slopes of Costa Rica and the lush tropical forests Eastern Panama, are home to a wealth of cultural and ecological diversity. Yet the lack of recognized rights in the Rio Platano Biosphere Reserve in Honduras has led to poor outcomes for biodiversity, in contrast to the strong rights in Eastern Panama which have produced significant achievements for conservation. In 2016, Honduras recognized the rights of indigenous Miskitu territories in the Rio Platano, potentially reversing past practices through the rights-based approach; yet concrete progress towards implementing these rights is yet to be seen.

Eastern Panama: Progress in conserving biodiversity through the recognition of the rights of the Guna, Embera and Wounaan People

Panama is known for its enormous concentration of biodiversity in a very small area, with 14,400 species of plants, 1,300 of which are endemic and two hundred of which are endangered. Almost ten percent of all bird species in the world can be found in Panama.⁶⁷ The jungles and

swamps of Eastern Panama, comprised by the Bayano Watershed, the Comarca Guna Yala, and the Darién Province, have long contained the country's most diverse living systems. This natural barrier constitutes the sole gap in Pan-American Highway running from Alaska to Argentina. The region is home to the indigenous Guna, Embera and Wounaan Peoples, Afrodescendent communities and, more recently, migrant mestizo communities. It also contains nine of the eleven Holdridge Life Zones of Panama:⁶⁸ 28% of the country's flowered plants are located only within the Darién, and a full 17% of these are endangered.⁶⁹

This region's lush ecosystems remained largely intact, managed through the traditional crop rotation and hunting and gathering systems of its indigenous peoples, until the commencement of two major infrastructure projects in the 1970s. The Bayano Hydroelectric Dam, located in Embera and Guna territories of the Bayano Watershed East of Panama City, was built at the same time as a highway deep into the Darién which eventually extended all the way to Yaviza. These projects paved the way for loggers, cattle ranchers and small-scale farmers who arrived in search of land. The decades of deforestation in the wake of these infrastructure projects have followed a general

pattern: small-scale farmers forge new pathways into the forests and use inappropriate agricultural methods that deplete the soils within a few years. Then the land is converted to pasture and consolidated in the hands of large-scale cattle ranchers.^{70,71} Logging has also played a part in this process, though it has not been central to deforestation here.⁷²

It was evident even prior to the construction of the dam and the highway that these projects would increase deforestation pressures. A burgeoning national indigenous movement recognized the potential impacts of the highway, which gave greater urgency to their calls to respect and recognize indigenous rights during the 1970s. Yet commitments to do so by the Torrijos government during this decade would take many years to be fulfilled, as the Comarca Embera Wounaan was not recognized until 1983, while other Guna territories would not be recognized until 1996 (Comarca Guna Madungandi) and 2000 (Guna Wargandi). While this recognition was important, many Guna, Embera and Wounaan communities were left out of this process (their communities were located outside Comarca boundaries). The government's reluctance to title any additional Comarcas, and a new legal provision allowing these peoples to be recognized through a more limited "collective lands" legal provision has left many Guna, Embera and Wounaan communities still struggling for recognition:⁷³ today only five out of twenty-four collective lands have been recognized.⁷⁴

While indigenous peoples demanded their rights, the threat of imminent deforestation due to infrastructure projects contributed to the declaration of new protected areas. These moved more quickly than indigenous titling. In addition to the 1960 Chepigana Forest Reserve, new areas expanded with the declaration of the Protected Forest of Alto Darién (1972), the Canglon Forest Reserve (1984), the Bagre Mountain Range Corridor (1995) and the Filo del Tallo Hydrological Reserve (1998). Darién National Park was established in 1980⁷⁵ and represents the largest protected area in the country, overlapping significantly with Guna and Embera territories. Approximately 56% of all the land protected by these parks and reserves lies in indigenous territories.⁷⁶

While the declaration of these areas moved quickly, their implementation on the ground has been controversial from the start. Guna and Embera authorities report that management plans have never been agreed upon since the inception of the park. The earliest attempts at demarcation of the Darién National Park by the Panamanian government and a local NGO, for example, were rejected by local indigenous authorities and the government agencies were ejected from indigenous territory. Today, major areas of the Darién National Park remain un-demarcated, and large swathes of protected areas are severely understaffed with little to no presence inside the parks themselves.⁷⁷

This lack of presence does not imply a lack of impact in these areas. Panamanian environmental authorities along with police continue to control the trade of restricted goods, such as timber. Small-scale timber extraction for individual income or for bartering with urban centers is controlled by these authorities in ports such as Yavisa, El Real or Meteti, where Embera and Guna People can be fined or arrested for such infractions. Such interactions have driven ongoing conflicts with Embera and Guna communities, who continue to view such enforcement actions as illegitimate.⁷⁸ While some areas allow for the small-scale extraction of some species, the red tape required to obtain such a certification (gasoline for travel, hiring of experts to perform evaluations, submitting paperwork) often costs more than the extraction pays. Despite strong rights recognized in the various Guna and Embera Comarcas, therefore, basic rules governing the protected areas contained within indigenous territories have still not been agreed upon, driving continued conflicts.⁷⁹

Perhaps the most important restriction is the limitation on indigenous forestry for economic development in Guna, Embera and Wounaan Territories. In the Comarca Embera Wounaan, for example, authorities have been working for the right to implement a community forestry model based on indigenous values and organizations for over twenty years. The process has involved a number of bureaucratic hurdles and requirements, yet by 2015, approximately 110,000 hectares were managed under this model, with 43,000 already certified by the FSC, and



Photography: Prisma

maintenance of internal roads and pathways, communal meeting houses, local housing and outboard motors. The implementation of this model has also correlated with increasing human development levels in recent years. Despite this model's economic and environmental successes, it is still prohibited within protected area boundaries. With 76% of the Embera Wounaan Comarca covered by protected areas, this represents a substantial limitation on indigenous forestry.⁸¹

In contrast to these conflicts and tensions, the Guna Yala Comarca has moved forward with its own pathway towards development and conservation. The Conservation Forest Area of Nargana is a self-declared protected area under the management of the Guna General Congress, head of the Guna Yala territory. This protected area emerged in the 1980s in response to the growing encroachment of small farmers and ranchers who had arrived on a newly constructed highway leading into the Comarca. The Guna Society used the concept of a protected area to gain national and international support for defending its territory, and within a few years of its declaration, the Guna General Congress was able to resist the encroachment of outsiders and establish well-patrolled boundaries for the park.⁸²

Substantial fees for entry to the park are managed and distributed by the Guna People, as a part of an economic model based on conservation of natural resources. Today, the boundaries of the area are patrolled by Guna surveillance teams, and entry into the area is controlled by Guna authorities, as at a border crossing.⁸³ In contrast to the invasions that dominated the Comarca when the Nargana Protected Area was established, today the Area shows a high level of sustainability, with a deforestation rate of

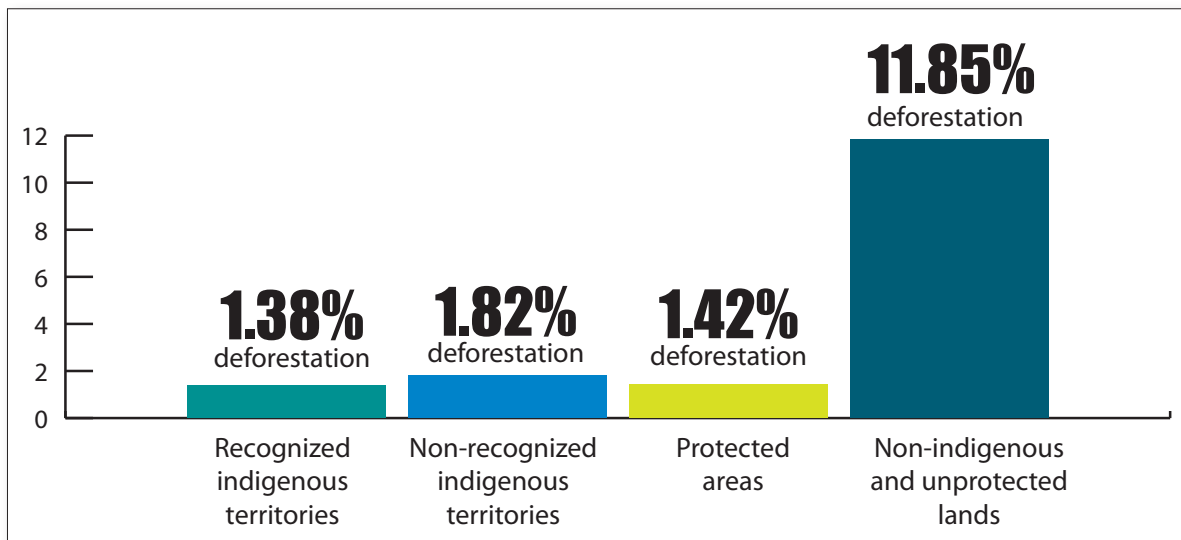
a remaining 66,000 pending approval by the government.⁸⁰ This productive model has generated new sources of income for the Embera Wounaan Comarca, which has provided major new funds for the

approximately 1.45%, eight times below the prevailing deforestation rates in unprotected and non-indigenous territories.

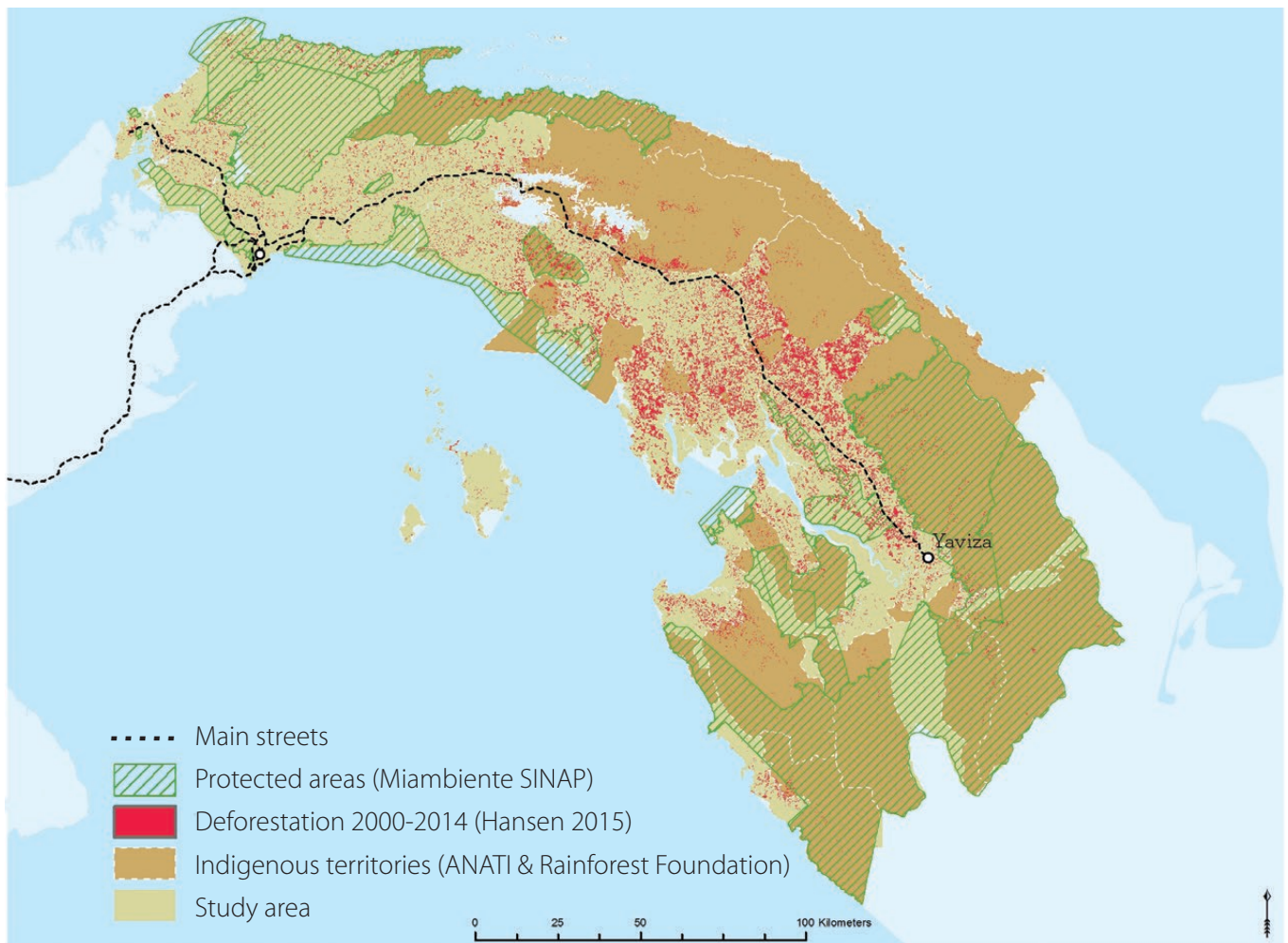
The success of the Guna model is part of broader efforts by Guna, Embera and Wounaan People across Eastern Panama to defend and sustainably manage their territories. As chart IV shows, the efforts of indigenous peoples to protect their territories have been effective. All indigenous territories, both recognized and unrecognized, show an overall deforestation rate of 1.82%. The recognition of rights has clearly strengthened these efforts: those with formal title had a deforestation rate of 1.38%, more than eight times lower than the rate of deforestation in lands that were neither indigenous nor protected areas, which was 11.85%. Recognized indigenous territories also slightly outperformed protected areas, which suffered deforestation at a rate of 1.42%.

One of the most interesting results of the study can be found in the analysis of deforestation occurring just outside of indigenous and protected area boundaries. These areas show a higher level of deforestation: 6.6% outside indigenous territories in comparison with 4.2% outside protected area boundaries (View Map IV). A variety of preliminary conclusions could be drawn from this data. Yet our research documenting the active local struggles to fight encroachment, in comparison with the poorly staffed and demarcated protected areas, suggest that this difference may be a reflection of the active surveillance and monitoring of Guna, Embera and Wounaan People. These findings are broadly consistent with previous studies in the Darién, which showed that the legal recognition of indigenous territories was associated with significantly lower deforestation levels, while this association was not present in protected areas.⁸⁴ In sum, there is strong evidence suggesting that indigenous territorial boundaries are more meaningful than protected area boundaries. Further research examining deforestation in protected areas could illuminate these issues, especially if it incorporated geographical barriers, relative distance from roads and synergies with indigenous territorial defense.

Chart IV: Deforestation rates in Eastern Panama



Map IV: Deforestation, Indigenous Territories and Protected Areas in Panama



Source: Produced by Rainforest Foundation United States, based on ANATI and Hansen et al, 2015.



Despite these achievements, indigenous peoples in Panama are struggling to maintain respect for their rights. In 2016, the Panamanian government re-launched a proposal for a major infrastructure project that would connect the power grids in Panama with those in Colombia, including several routes that would run directly through indigenous territories (View Map V). This process has not been subject to the free, prior and informed consent of Guna authorities. Like the major infrastructure projects that have driven deforestation since the 1970s, this project has the potential to dramatically increase migratory and extraction pressures in indigenous territories in Eastern Panama.

At the same time, the Guna, Embera and Wounaan Peoples whose lands have not yet been titled are struggling to achieve recognition from the government under the designation “collective lands.” But the Environmental Ministry has blocked the titling of these territories, ostensibly for legal reasons. Without citing a specific provision of the law, and despite previous indigenous titling in protected areas, the Ministry asserts that indigenous territories cannot be titled in protected areas.⁸⁵ These recent developments show both the urgency and the opportunity for the Panamanian government and conservation agencies to support biodiversity conservation by supporting and securing the rights of indigenous peoples.

Map V: Alternative routes for the electrical interconnection Panama Colombia



Source: Ministry of Environment of Panama and Conservation Strategy Fund (CSF)



A new start after a troubled history?: Indigenous titling, The Rio Platano Biosphere Reserve and the way forward for the heart of the Mesoamerican Biological Corridor

In 2016, the Miskitu People celebrated the titling of their twelve Territorial Councils, ensuring their legal rights to over a million hectares of their ancestral lands and approximately seven percent of Honduras' land area. These rights are the culmination of a centuries-long struggle of the Miskitu People to have their lands and communities recognized by the Honduran government. A large portion of this area is found in the endangered Rio Platano Biosphere Reserve, the largest protected area in Honduras and frequently referred to as "The Heart of the Mesoamerican Biological Corridor." Spanning 8,022 square kilometers, the reserve and the broader Muskitia region contain up to eighty percent of the country's plant and animal diversity, including endangered pumas, jaguars, manatees, spider monkeys, ocelots and caimans, among many others. Miskitu territories represent most of the "core" and "cultural zones" of the reserve, which adjoin the western "buffer" zone inhabited by mestizo communities.

The new rights guaranteed by titling inside the reserve have spurred new negotiations between the Miskitu People and the Honduran government about how to govern the park; these talks are led by the Forest and Conservation Institute (ICF), which is charged with implementing

environmental regulations. These negotiations are taking place at a critical time: the parties must overcome not only serious encroachment pressures on the reserve, but must also incorporate the lessons learned from over two decades of experience in implementing the protected area.

The Rio Platano Biosphere Reserve was declared in 1980 and made a UNESCO heritage site in 1982, but this declaration was made with little to no engagement with the Miskitu, Pech, Tahwaka and Garifuna peoples that reside in this region. In fact, for the first sixteen years, the park largely existed on paper, with no meaningful local presence or law enforcement. As threats from encroachment grew in the late 1980s and early 1990s, Miskitu communities—acting through the highest Miskitu representative authority in Honduras, MASTA (Masta Asla Takanka, Miskitu Unity)—confronted these invasions. They stepped up lobbying efforts to receive territorial land rights and participated in an indigenous "pilgrimage" in 1992 along with indigenous groups from across the country. These and other efforts were largely unheeded in the country's capital, however, and the agricultural frontier continued to expand. At local levels, Miskitu communities and MASTA worked to confront this problem through the formation of inter-community networks now known as Territorial Councils, local Miskitu governments that were formed principally to perform patrols to detect, report and respond to invasions.



Major conservation funding of over 5 million US dollars from the German government was operationalized in 1997. Yet while the initial vision for the Biosphere Reserve sought to incorporate local efforts and aspirations in the management of the area, the implementation of the program soon departed from this ideal. At the outset, the project assigned land rights and decision-making power over the reserve to the Honduran Government and GTZ. At the same time, the government legalized the presence of migrants who had arrived in the Reserve prior to 1997 and were considered by MASTA to be trespassers.

These signals deeply damaged Miskitu trust and the perceived legitimacy of the Biosphere Reserve, and conflicts

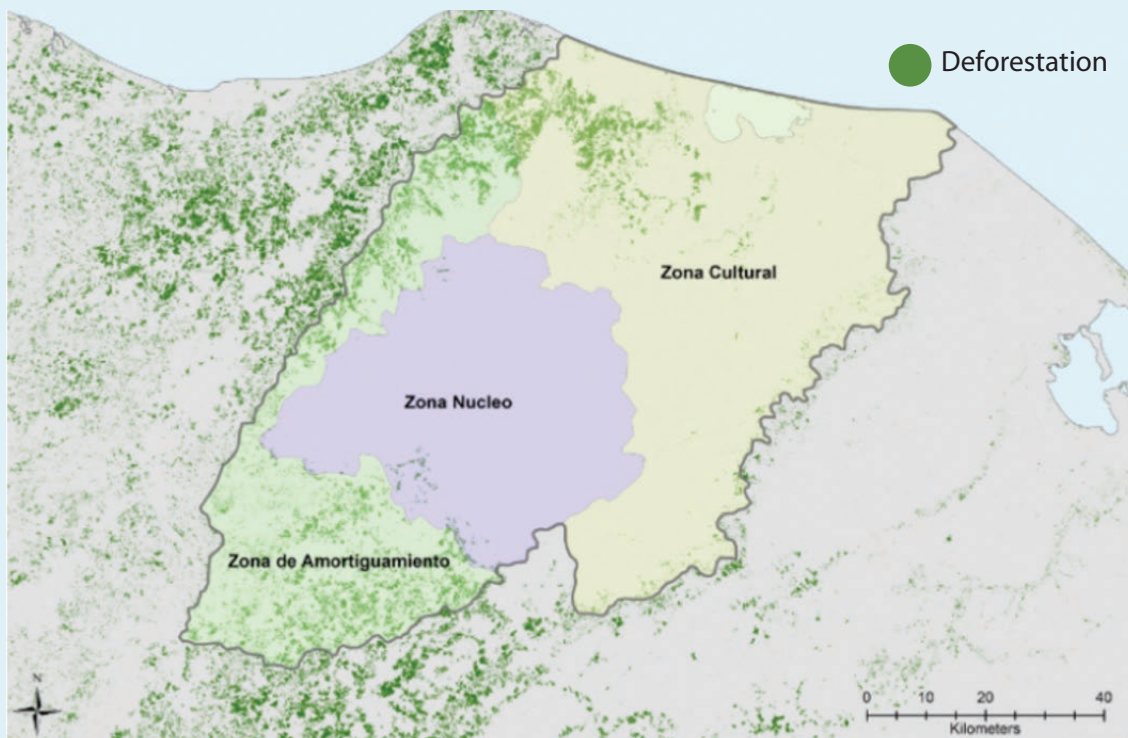
over the basic rules of the park worsened. Initiatives in the early years of the project drove controversy by promoting individual land-titling for Miskitu People as a substitute for the territorial titles sought by MASTA and by deeming Miskitu resource rules to be impractical and unnecessary. The management plan developed for the reserve suffered from similar problems.

Despite substantial initial engagement with local communities, an in-depth review of the process showed that the final rules published for the reserve did not correspond with those agreed upon with Miskitu communities. This process also established parallel organizations to monitor the reserve, ignoring the locally organized Territorial

Box IV: Deforestation in the Rio Platano Biosphere Reserve

Deforestation in the Rio Platano Biosphere Reserve: In the cultural zone where resistance to encroachment was weakened from disputes with the Rio Platano Reserve, deforestation occurred at 4.66%. The core zone, including large portions of Miskitu territory, remained largely intact. Both of these contrast with the buffer zone inhabited by more recent migrant communities, where deforestation has occurred at a rate of 16.4%.⁸⁶

Rio Platano Biosphere Reserve in the Honduran Muskitia Territories



Source: Clark University, based on Hansen et al, 2015 and the World Database on Protected Areas.

Councils. Livelihood practices in the “cultural zone” were officially restricted, and presence within Miskitu ancestral territory, only recently designated a “core zone” of the reserve, was prohibited.

The cumulative impact of these policies was a serious deterioration in the perceived legitimacy of the reserve by local people. Miskitu communities reported demoralized local organization efforts after being sidelined by the official and well-funded conservation effort. The government, for its part, was not able to fill this gap through a functioning and consistent local presence. The result was thus an overall weakening of capacity to confront encroachment into the reserve.

As local capacity for control deteriorated, encroachment expanded into the cultural zone of the reserve especially along the northern coast, north of the core zone. Despite these invasions, the Biosphere Reserve was taken off of the endangered list in 2007 (shortly following the closing of the German-funded Rio Platano Biosphere Project). The challenges on the ground continued to be grave, as the recently weakened Territorial Councils faced powerful and increasingly violent cattle ranchers linked to a variety of illicit activities. The result, as shown in Box IV was the growing expansion of encroachment into the cultural zone which would pave the way for deforestation in years to come.

Opportunities to reverse this encroachment were largely missed in subsequent years. The Forest Law of 2007 created the Institute of Forest Conservation (ICF), prescribed the formation of local forest government spaces called “Consultative Councils” and allowed for temporary rights to be granted through local cooperatives. Though some cooperatives functioned in the area for a few years, the creation of these new rules and organizations conflicted with traditional Miskitu forms of authority and thus met with substantial local resistance. An important long-term consequence of these rifts came when over \$1 million in funding to support climate change mitigation in the Muskitia through USAID became embroiled in local controversy and was halted after an international non-governmental organization attempted to work directly with cooperatives, bypassing Miskitu forms of authority.

Deforestation therefore continued throughout the 2000s and the early 2010s, bringing the area back on UNESCO’s endangered list in 2011. New threats also appeared in the form of the construction of the Rio Patuca hydroelectric dam in the late 2000s, which threatened to disrupt the main watershed basin of the Muskitia and facilitate new migration from the Muskitia’s southeastern periphery into the Tahwaka and the Rio Platano Reserve. Despite these known impacts, the indigenous peoples of the Muskitia found relatively little support for their protests against the dam and demands that their territorial rights be respected.

In 2011, MASTA led efforts to conserve the region by organizing a massive protest in the capital, where hundreds of Miskitu protesters camped outside the President’s residence. The protest did not stop the dam, though the ensuing negotiations achieved an agreement to title most Miskitu territories, including all of those inside the cultural zone of the Rio Platano Biosphere Reserve, an agreement that was finally completed in 2016.

The titling of Miskitu territories therefore represents the culmination of longstanding efforts by the Miskitu people to ensure the integrity of their territories. The governmental authorities in ICF are also demonstrating openness to dialogue in negotiating rules for the Rio Platano Biosphere Reserve, even as actions on the ground by this environmental agency continue to drive discontent among Miskitu communities (see Box V). Closing the gap.

The urgency of these negotiations cannot be overstated. Through this process, ICF and the other parties have the historical opportunity to resolve the conflicts and tensions that have precluded the establishment of functioning rules to defend biodiversity. The core zone of the reserve remains largely intact due to natural barriers, but significant inroads from encroachment have been made through the northern corridor along the Atlantic coast, and from the South along the Patuca river. An alignment of reserve rules with local norms and efforts to ensure territorial security offers a significant opportunity to reverse historical patterns of degradation and confront these challenges effectively.



Box V:

Closing the Gap: Rights on Paper and in Practice

In March 2015, after their repeated calls for government support went unheeded, the Wamakklisinasta or Territorial Council (the local indigenous government) confronted over fifty ranchers who had encroached on Miskitu land and refused to abide by local rules of sustainable land management. One hundred and fifty community leaders faced this group and ultimately detained twenty seven of them after a peaceful solution was not immediately reached. Fears about an escalation grew, as violence with impunity against rural people is common in Honduras.



A massive mobilization of Miskitu People ensued, with leaders arriving from the neighboring territories of Truktsinasta, Lainasta, Auhya Yari, and Finzmos, ultimately bringing over five hundred Miskitu leaders together to face the ranchers. National attention ultimately triggered the intervention of a human rights commission and a visit from the United Nations Special Rapporteur on Indigenous Peoples.

An initial agreement was made to relocate the unauthorized communities, but the government to date has not yet fulfilled this agreement, despite the clear legal authority of the Miskitu People through their territorial titles and ILO 169, a binding international treaty afforded a higher legal status than the Constitution in Honduras.

As these large-scale infractions violating both indigenous territorial titles and environmental law continue unpunished, local communities face onerous environmental restrictions that are disproportionately impacting indigenous peoples. In a series of field visits to all Miskitu territories in 2016, PRISMA researchers received reports of scores of Miskitu individuals, both in and outside the Rio Platano

Reserve, who had been arrested and incarcerated by local authorities for small-scale infractions, in particular, the felling of individual trees. Children, women and elderly people were reportedly among those incarcerated for such small-time offenses, despite their legally recognized rights to their territory and its natural resources.

Local environmental and law enforcement authorities interviewed regarding these incidents cited Forest Regulations and claimed to be unaware or uninformed of the rights afforded by the territorial titles, supported by the 2004 Property Law and ILO 169. But, in all reported cases, the actions for which people were incarcerated were approved by local indigenous authorities and in line with traditional landscape practices. Moreover, in the face of climate change impacts and the ongoing usurpation of indigenous territories by outsiders, the income from these actions is critical to Miskitu people. This situation underscores both the urgency and potential of implementing the rights-based approach in the Rio Platano Biosphere Reserve and in the broader Muskitia region.

V. THE BACKSTORY:

Changing approaches to conservation



Parks and Fortresses

In the nineteenth century, the federal government of the United States established some of the first national parks in the world, pioneering an approach that deeply influenced conservation approaches. The first two national parks in the US—Yellowstone, declared in 1872, and Yosemite, declared in 1890—protect lands that had become famous for their majestic beauty. These areas were considered pristine, untouched wildernesses that needed to be preserved from human incursion.⁸⁷

While the establishment of national parks did prevent white Americans from developing and settling on these lands, it also entailed the removal of indigenous peoples from them. The U.S. federal government expelled Native American populations who had lived sustainably for generations in the territories that became Yellowstone National Park and Yosemite National Park. By expropriating and reallocating native lands to set up national parks, the U.S. federal government took an approach to conservation that has been repeated around the world.⁸⁸

The removal of indigenous peoples from Yellowstone and Yosemite can be understood in part as an extension of

colonial policy aimed at dispossessing Native Americans. But this exclusionary approach was also inspired by increasingly popular conceptions of wilderness as pristine, untouched, and free of all human impacts. According to this way of thinking, the ideal form of conservation preserves landscapes devoid of human inhabitants.⁸⁹

However, a broad range of methods have been historically used to protect land, water, wildlife and ecosystems while also sustaining human communities. This report focuses on methods used by indigenous peoples, but even within Western societies a number of conservation models have recognized and support social, cultural and productive activities within natural landscapes. Although the vision of “pristine wilderness” overlooked long human histories in many places and myriad symbiotic relationships between communities and their natural environments, it nevertheless came to guide conservation policies around the globe.⁹⁰

The result was an attempt to imprint this idea on landscapes around the world, removing native peoples from their land and enforcing newly-erected boundaries with fences, patrols and arms. This approach earned the name



“fortress conservation” thanks to its militarized and exclusionary character. Like colonial expropriation and exclusion, these initiatives were implemented almost universally through the state and the right of eminent domain, and ultimately disrupted or dislocated many thousands of communities. According to some estimates, tens of millions of people were displaced.⁹¹

This history of violence, expropriation and exclusion underscores what is at play when disparate visions of conservation converge in the same landscape. For indigenous peoples and local communities around the world, conservation is not a benign technical tool focused on plants, animals and ecosystems, but rather a deeply political initiative. Indigenous peoples, conservationists, and government agencies often have divergent values and ideas about what conservation is, how it is to be achieved, who will bear its costs and who should enjoy its benefits. While bald attempts to expel indigenous people are far less common than they once were, the fraught history of “fortress conservation” continues to resonate and shape the politics of protected areas today.

From Participation to the Rights-Based Paradigm

By the 1970s and 1980s, it became clear to many in conservation organizations that the exclusionary approach of “fortress conservation” would not be sustainable. This was primarily a pragmatic recognition that the disenfranchisement of local populations was counterproductive to project goals. Poverty reduction and social factors thus rose in prominence in conservation policy, a trend that was reflected in the United Nations Educational, Scientific and Cultural Organization’s Man and the Biosphere Program, the 1972 United Nations Conference on the Human Environment in 1972 and the 1980 World Conservation Strategy. These frameworks highlighted the importance of poverty reduction and incorporated “sustainable development” in their frameworks as key concepts for achieving conservation.⁹²

This new thinking gave rise to a new generation of projects that overlapped more substantially with rural development policy and were frequently referred to as “Integrated Conservation and Development Projects” (ICDPs). These initiatives more explicitly began to incorporate social issues and, in particular, poverty reduction, into their projects. Yet these initiatives met with a number of problems, including difficulty in clearly articulating and measuring progress. More importantly, the “participation” promoted by these projects was frequently superficial, with local communities for the most part denied real decision-making power over these initiatives.⁹³

By the early 2000s, the growing strength of indigenous and human rights movements, along with the cumulative impact of outcries against the exclusionary practices of conservation, brought about major changes in the global conservation frameworks. These movements came to a head in 2003 at the International Union for Conservation of Nature’s Vth World Parks Congress (WPC) in Durban, South Africa, where a “new paradigm” for protected areas was declared in the Durban Accord. This agreement expressed “concern that many places conserved over the ages by local communities, mobile and indigenous peoples are not given recognition, protection and support” while also highlighting that “many costs of protected areas are borne locally— particularly by poor communities—while benefits accrue globally.”⁹⁴ The Durban Accord therefore urged commitments to:

- Support the integral relationship of people with protected areas, fully incorporating the rights, interests and aspirations of both women and men.
- Involve local communities, indigenous and mobile peoples in the creation, proclamation and management of protected areas.
- Ensure that people who benefit from, or are impacted by, protected areas have the opportunity to participate in relevant decision-making on a fair and equitable basis, with full respect for their human and social rights.

- Innovate in protected area management, including through adaptive, collaborative and co-management strategies.
- Recognise, strengthen, protect and support community conservation areas.

The *Durban Action Plan* was announced at the same WPC to ensure progress towards these commitments, outlining a set of targets and goals. Key provisions included these three targets:

- **Main Target 8** All existing and future protected areas are established and managed in full compliance with the rights of Indigenous Peoples, including mobile Indigenous Peoples and local communities by the time of the next IUCN World Parks Congress.
- **Main Target 9** The management of all relevant protected areas involves representatives chosen by Indigenous Peoples, including mobile Indigenous Peoples and local communities proportionate to their rights and interests, by the time of the next IUCN World Parks Congress.
- **Main Target 10** Participatory mechanisms for the restitution of Indigenous Peoples' traditional lands and territories that were incorporated in protected areas without their free and informed consent are established and implemented by the time of the next IUCN World Parks Congress.

Progress?

Since the Durban Accord, leading global conservation organizations have taken a number of steps to advance the principles outlined in the new rights-based paradigm. The International Union for Conservation of Nature (IUCN) has held three World Conservation Congresses (WCC) since the Durban Accord, each one including new steps



Photography: Alam Ramirez Zelaya

to recognize and support indigenous and community conservation. In 2004, the WCC consolidated the category of Community Conserved Areas, in addition to adopting a new Programme of Work on Indigenous Peoples and Protected Areas to promote rights and equity in the Convention on Biological Diversity (CBD).⁹⁵ The Barcelona WCC called on the entirety of the IUCN and its operations to apply the robust indigenous rights enshrined in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), while also calling on the IUCN's State members to reform their laws, policies and practices in order to ensure that the rights of indigenous peoples would not be affected in any way.⁹⁶ In 2012, further affirmations of UNDRIP were made, while in 2016, the IUCN achieved a landmark decision by opening up its membership to include indigenous peoples' organizations.

Similar progress has been made in the Convention on Biological Diversity, building on article 8j, which calls on states to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities," and article 10(c), which enjoins states to "protect and en-



courage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.” In 2004 the “new paradigm” was echoed by the CBD, which called for parties to “*recognize land tenure of indigenous and local communities, as recognized rights and access to land are fundamental to the retention of traditional knowledge, innovations and practices,*” and encouraged them “*to pursue the fair and equitable resolution of land claims as an essential element of efforts to facilitate the retention and use of traditional knowledge, innovations and practices.*”⁹⁷ Finally, the decision affirmed that indigenous peoples should be actively involved in the management of rights, and that their rights should be respected when establishing new protected areas. The same Conference of the Parties (COP) adopted its first Programme of Work on Protected Areas, including new commitments on equity and benefit sharing, seeking the involvement of Indigenous Peoples “in full respect of their rights.”

In 2010, the CBD COP 10 adopted the Aichi Targets on Biodiversity, which includes not only protected areas, but also “other effective area-based conservation measures” (OECMs) as methods to safeguard ecosystem, biological and genetic diversity, sparking a discussion on whether indigenous and community lands could be considered OECMs. Target 18 of the Aichi Targets once again calls for the respect of indigenous rights, outlining the objective that “the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.”

Despite this important progress in international frame-

works, governments and conservation organizations have been exceedingly slow to implement the new paradigm on the ground. A 2016 report by the United Nations Special Rapporteur on the Rights of Indigenous Peoples, referring to the new rights-based paradigm, pointed out that “significant gaps remain between these policies and their effective implementation on the ground” and that the targets of the Durban Action Plan are “still far from being achieved.”⁹⁸

A report from the United Nations Environment Programme World Conservation Monitoring Centre revealed that in 2014, less than five percent of the world’s protected areas were governed by indigenous peoples and local communities.⁹⁹ Meanwhile, a study from the Rights and Resources Initiative in 2014 found that few nations had made any progress implementing the new paradigm;¹⁰⁰ only eight of the twenty-one countries reviewed had made any progress towards consolidating rights in the context of protected areas, and most of this progress was very limited—such as allowing for co-management or allowing already recognized community land to be recognized in a national protected area system.

Meanwhile, even in recent years flagrant and sometimes large scale violation of rights have continued in the name of conservation, including forced displacement, poverty, loss of livelihoods, food security and disruption of local cultural and spiritual practices.¹⁰¹ In one of the most comprehensive reviews of rights-based conservation, Stan Stevens (2014) sums up the situation: “shifting paradigms is easier done rhetorically than on the ground. Many states and some conservation organizations are reluctant to fully and effectively implement the new paradigm, not only because it requires rethinking often strongly held assumptions about conservation but also because it challenges entrenched social and political relationships and power dynamics.”¹⁰²

VI. COMMUNITY-LED CONSERVATION IN MEXICO



Photography: Red Mocat

Mexico is frequently referred to as a “megadiverse” country: it is the fifth most biologically diverse country in the world and has over ten million indigenous peoples, belonging to more than sixty different ethnic groups. Much of this bio-cultural diversity is found in the country’s 106 million hectares of forests, roughly two-thirds of which have been recognized as belonging to indigenous and local communities.¹⁰³ This ownership is represented in two forms of common property, including approximately 28,000 *ejidos* and 2,100 (largely indigenous) *agrarian communities*, with approximately 3.2 million members.¹⁰⁴ While deforestation is complex and regionally varied, the sustainable management of forests by communities has substantially contributed to biodiversity conservation and the slowing of deforestation and degradation in the country in recent decades.^{105 106}

Underlying this trend are thousands of community-based forest management systems that have demonstrated their value for environmental and biodiversity conservation. This includes the operation of almost one thousand

community - based enterprises organized around the sustainable production of timber.¹⁰⁷ The levels of sophistication of these community enterprises vary, ranging from advanced timber transformation and construction of furniture, for example, to more limited production chains.

Many of these enterprises have been pioneers in the implementation rigorous management plans and activities, including permanent forest extractive reserves and the use of participatory forest inventories for the elaboration of sound management practices.¹⁰⁸ These enterprises have also challenged assumptions that indigenous and community organizations are incompatible with enterprise models. Community forest enterprises in Mexico have built unique organizational hybrid forms merging community governments with entrepreneurial activities.

In many communities the *Comisariado* (the Supervisor of the ejido or community resources) serves as the enterprise manager, while supporting administrative positions are treated as community service posts in the cargo or ejido systems.* Experienced or respected community mem-

- The ejido system involves mandatory work requirements and maintenance of ejido land and resources, while the indigenous cargo system, is characterized by “rotating responsibilities based on merit and accumulated by service in an ascending hierarchy of positions”(or cargos).



bers make up a sort of “Board of Directors” while Community General Assemblies function like shareholder’s meetings.¹⁰⁹ Today, approximately eighty percent of the Mexican forest industry is supplied by community forests,¹¹⁰ while ten percent of national timber production, approximately one million cubic meters of timber per year, are part of a national certification process, covering approximately seven hundred thousand hectares in 2009.¹¹¹

A much larger group of communities are performing ongoing management and protection of their biodiversity and ecosystems. In one of the most comprehensive studies of forest communities ever performed, Merino and Martinez found that almost half of communities surveyed have set aside areas exclusively for conservation, that 79% perform regular forest surveillance and monitoring and that infractions are addressed 88% of the time.¹¹² These studies reflect the operating rule systems that are functioning across many communities in Mexico, which have demonstrated their ability to conserve local ecosystems and biodiversity.^{113 114 115 116 117 118} This is critical for biodiversity conservation, given that one hundred percent of



the Priority Land Regions identified by the National Commission for Biodiversity in Mexico (CONABIO) are either contained within or border on community forests. Similarly, all of the 111 Priority Watershed Regions, also identified by CONABIO, include community forest areas.¹¹⁹

Box VI:**Historical struggle for community forest rights in Mexico**

Modern day community forest management in Mexico was born out of a history of community struggle to reverse the deforestation and degradation that dominated Mexican landscapes for most of the twentieth century. While communities' legal rights to lands were enshrined in the 1917 Constitution, their rights over timber and forests would not be consolidated until the 1990s.¹²¹

At the beginning of the twentieth century, forest policies consisted largely of granting large forest concessions to industry, with little oversight. Successive pieces of legislation beginning in the 1940s made the forest sector ever more centralized, bureaucratic and underfunded: the rigorous rules set by the government far outpaced its ability for enforcement, resulting in widespread deforestation. As these patterns worsened, the Mexican government began to simultaneously declare logging "bans" over large areas. Yet government capacity to implement such bans was also low.¹²³

Local communities, meanwhile, were not incorporated in either strategy: timber production paid communities a pittance and left them with the enormous costs of degradation, while heavily restrictive forest "bans" precluded basic livelihood practices and took away communities' incentives to invest in the sustainable management of their forests. The result was widespread "rentismo," where logging was carried out under short term contracts associated with clientelism, corruption and even violence.¹²²

The country's forests were rapidly felled and communities were cut out from benefits and left with the costs of landscape degradation. By the 1950s, the country's resource base was highly degraded; according to one summary, "of the different types of forest in the country, 34% had been exhausted, 44% had been subject to logging but were still exploitable, and only 22% were still considered virgin forest."¹²⁴



Grassroots mobilization to oppose these abusive practices emerged in the 1960s and 1970s through regional alliances to combat the renewal of concessions, especially in Oaxaca, Guerrero and Durango.¹²⁵ These communities, organized in *ejidos* and *agrarian communities*, found allies in national agrarian and forestry agencies and ultimately won a major victory in the 1986 Forestry Law, which rescinded the industrial concessions, required that loggers apply to owners (not third parties) for permits and recognized the right of communities to form their own logging businesses.¹²⁶

These reforms signaled a major shift towards community governance in the country. They were complemented by reforms in 1992 that removed references to the "usufruct" status of community and ejido lands and granted unprecedented levels of autonomy in local decision-making. The result was a nation-wide shift towards a strong model of community rights-based forest management.¹²⁷



Sierra Juarez de Oaxaca: Indigenous Leadership in Conservation

The Mexican state of Oaxaca provides a clear example of indigenous-led biodiversity conservation. Oaxaca is home to eighteen different indigenous ethnicities with their own languages. The strength of these communities and their relative remoteness in the valleys and highlands of the varied Oaxacan topography allowed them to resist colonization and maintain their own traditional organizations, governments, customs and practices. 76% of the Oaxacan territory is now owned by indigenous communities and ejidos.¹²⁷ The Sierra Juarez region, located at the continental divide of the Eastern Sierra Madre Mountain Range, is home to Zapotec, Chinantec and Mixes communities as well as the largest cloud forest of Mexico, an ecosystem known as a critical habitat for species that were once widespread but are now reduced to small areas (paleoendemism), as well as the largest Jaguar corridor (*Panthera onca*).¹²⁸

The 1950s brought major changes for the Sierra Juarez region. Though indigenous peoples had legal rights to their land, the government at that time interpreted these rights as distinct from rights to forests and timber and thus established a major forest concession in community lands, without negotiation or prior agreements with the community. Community forests were subsequently degraded by the Tuxtapepec Paper Company operating the concession.

A community movement eventually confronted the concession's environmental costs and its illegality in local eyes. This movement gained increasing force in the 1970s and began to openly challenge the company; for years activists physically prevented the company's entry into community forests, while lobbying the government for policy change. In 1982, the community finally overturned the Presidential Resolution that had granted the concession indefinite rights.¹²⁹ As the industrial concession pulled out, communities established community forest enterprises aligned with local rules and customs. By 1989, several communities joined together in the Zapoteca-Chinanteca Union (UZACHI), consolidating their efforts to sustainably manage forests and quickly becoming an influential model for other community projects across the country.

The results of these efforts have demonstrated their value to local ecosystems and biodiversity. A 1992 study reported that the extension and densities of community forests have increased in comparison with forest conditions during the time period of the concession,¹³⁰ and fifty percent of community forest areas, especially cloud forests, have been designated as community conservation areas. A later study showed that community management expanded forest cover by 3.3% between 1980 and 2000.¹³¹

Constant monitoring, fire and plague control have been the foundation of this effort. These communities were the first in the world to receive certification from the Forest Stewardship Council. These environmental achievements are accompanied by social improvements as well, as revenue from timber management has been invested in the community, providing a source of employment and improvement in the lives and livelihoods of community members. The money from these activities has purchased mills, installed electricity and plumbing and built workshops, ecotourism infrastructure, spring water bottling plants, schools and clinics, among many other public works.¹³²

Despite these conservation successes, these communities are facing new mineral extraction projects that have depleted some local water reserves and poisoned others. The Oaxacan communities have been struggling against these threats with little support, as the Mexican Mining Law (2014) defines mineral extraction as in the national interest, despite its harmful effects on human health, biodiversity and ecosystem sustainability and community rights.

Protected Areas and Over-Regulation in Mexico

Despite the success of many community forests in Mexico, forestry and conservation regulations can be severe. Regulations placed over the operations of local forest enterprises are extremely cumbersome, significantly increasing the costs of managing their own forests for communities and creating incentives for informal or illegal use of forests.^{133 134}

Disputes over protected areas are very much part of the problem. Many of the most important protected areas in Mexico have failed to recognize rights, driving ongoing disputes over local rules. As we have seen in other areas, where official protection of conservation areas is low and communities are left out of decision-making regarding their own resources and territories, local rules deteriorate and ongoing conflicts and tensions around illegal logging are the result.

The Monarch Butterfly Reserve in Michoacan, Mexico, highlights how tensions between official protected areas and communities can lead to unsustainable social and environmental outcomes. The majority of the Biosphere Reserve is largely contained within formally recognized *ejido* and *community* lands that have formed the basis for Mexico's community forestry successes. Yet most of these communities have never been able to exercise their rights.

The Monarch Butterfly Reserve in Michoacan, Mexico

The forests of Michoacán are home to the wintering sites of the Monarch butterfly, making the area one of the most well-recognized and highly valued conservation sites in Mexico. This winter home of vast numbers of Monarch butterflies, long known to communities in the region, was discovered by Western science in 1976.

Yet despite the recognized importance of the region to the conservation of the Monarch butterfly, the implementation of Monarch Butterfly Biosphere Reserve since its inception in 1986 has been plagued with conflicts and tensions, largely the result of rules that have been established unilaterally in community forests, overriding community rights. These conflicts have underpinned constant pressures on the natural resources of the region, which has been deforested since 2000 at a rate of approximately 3.8%,¹³⁵ with an increase in small-time unsustainable logging in the reserve and decreasing numbers of Monarch butterflies arriving in the region.¹³⁶

The Monarch Butterfly Biosphere Reserve is home to 59 ejidos and 13 agrarian communities, occupying more than eighty percent of the reserve's forest. While the recognized rights of these local communities have been the foundation for sustainable community forest management in other parts of Mexico, in this region community rights have been severely limited for at least sixty years.

Early forest "bans" from the 1950s to 1970s imposed severe restrictions on logging.¹³⁷ However, this ban was never effectively enforced and deforestation in the region contin-

ued, largely feeding the local logging industry. Community organizations were nevertheless weakened, since an inability to receive benefits from sustainable forest management hampered community efforts to protect forests, while simultaneously encouraging local involvement with illegal logging—sometimes the only option for local livelihoods.¹³⁸

The Biosphere Reserve has largely continued these dynamics, imposing onerous regulations on forest use that have never been agreed upon with communities. Poverty and low social development are widespread in the Reserve, and despite some compensation through an environmental fund, its impact on local livelihoods remains limited. The exclusion of local communities from benefits and the failure to agree upon basic rules in the reserve therefore contribute to continued environmental pressures that threaten both the forests and the critical sites for the conservation of the Monarch Butterfly.¹³⁹

Despite the disincentives for community organization, several communities continue to emphasize the importance of protecting local forests and have made strenuous efforts to maintain local organizations to achieve this goal. These efforts have achieved important ecological gains, for example, in the ejido San Juan Zitucuaró and the indigenous communities of San Cristóbal, and Carpinteros, where deforestation averages 0.03%,¹⁴⁰ at least eight times lower than the prevailing rates of deforestation in the reserve.



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VII. MEETING THE CHALLENGE FOR CONSERVATION IN THE 21ST CENTURY

The cases presented here have demonstrated the potential of the rights-based approach to empower local efforts to protect cultures and ecosystems, adding to mounting evidence of the efficacy of rights-based management. At the same time, these cases show how the centrally managed protected areas often fail to provide a functioning system of regulation at local levels and thereby fail to conserve biodiversity, especially where their rules conflict with or disrupt local efforts.

Given the scale of global threats to biodiversity, it is clear that protected areas in their current form are highly unlikely to meet their goals without a major shift in their approach. This shift could be critical for indigenous peoples and local communities around the world resisting an onslaught of external pressures, and conservation organizations are well positioned to provide such support.

Mesoamerica offers a number of concrete examples that can inform global efforts to implement rights-based approaches. In Mesoamerica, the primary obstacle to the rights-based approach has been removed with the recognition of the rights of indigenous and traditional peoples in the majority of the region's forest ecosystems. Around the world, governments, scientists, activists, donors and development agencies have an enormous opportunity to conserve biodiversity by promoting the rights of local communities and indigenous peoples all over the world.

Recommendations:

- Recognize and secure indigenous and community rights to land and natural resources in national legislation and conservation policy.
- Invest directly in communities to strengthen rule systems and enterprises aligned with the long-term health of local ecosystems
- Ensure that local communities have free, prior and informed consent about protected areas and collaborate with them to develop agreed upon rules for conserving biodiversity, including restitution of indigenous and community rights.
- Avoid parallel or conflicting rule systems in favor of complementary roles and strategies. Where threats are largely external to communities, governments and conservation organizations can help with boundary defense; where threats are internal, they can support dialogue for the resolution of conflicts and development of shared rules.
- Prioritize legitimacy in the eyes of local communities as key for compliance with regulations, emphasize developing shared rules, solve disputes and address unequal enforcement issues quickly, inform and empower with scientific information, and focus less on regulating behavior.
- Support indigenous peoples and local communities in broader efforts to defend their territories against large-scale threats, beyond the scope of individual projects.

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