

Luciana Porter-Bolland
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Community Action for Conservation

Mexican Experiences

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Foreword

Mexican Lessons to Take to Heart: Traveling the Path to Biodiversity and Forest Conservation in Our Age of Global Change

As we move forward in this century of Global Climate Change and the closing of wide-open frontiers, locally generated conservation and management of forests and biodiversity is of increasing national and global importance. Yet, conflicts between local people's self-generated conservation of natural resources versus state and nongovernmental organizations' externally designed conservation programs have been documented and analyzed in innumerable papers and books over the past several decades.

Self-generated conservation arose locally—either over thousands of years, in which case conservation-supportive values are embedded in cosmological and customary patterns continually adapted to evolving situations; or recently, over the past few decades, as communities have recognized that new limits must be placed on exploitation of their environment. In response to new challenges, communities have increasingly created their own formal, internal regulations and attempted to defend their resources against more powerful outsiders.

In the best-case scenario, external actors (the state, nongovernmental organizations, and private sector) respond positively to “discovered” self-generated conservation and shape their activities, laws, and programs to respect local agency of communities to take decisions. They create governance frameworks and programs that enable and assist communities to defend their resources against outside interests. Mexico is an undisputed leader in this emerging arena of innovative design responses to “discovered” conservation.

As this book illustrates, the Mexican path of collaboration has not been easy but it can be achieved. Progress has largely been made due to an admirable long-term alliance between academics based in Mexican universities, people working in the field offices of national agencies, locally grounded NGOs, Mexican community leaders, and their organizations. Together they have demonstrated to national government the

paths forward when national politicians have lacked an understanding of rural realities or the political will to confront rural issues. To be sure, Mexican community-based conservation began with the advantage of collective tenure gained through policy reforms after land-grabs led to the Mexican Revolution. In many other parts of the world, in South America and Africa in particular, the pre-Revolution situation of land-grabbing is threatening communities' self-generated conservation and management of natural resources. Unclear carbon rights threaten local conservation in many countries, yet the success of Mexican community-based conservation is again manifest in the ways communities have entered the carbon market.

Two important keys to success are Mexican willingness to appreciate and support local diversity, and an understanding that future national resilience depends on maintaining local, self-generated resilience within supportive national frameworks. Ostrom's Law — "if it works in practice, it can work in theory" — is alive in Mexican initiatives, despite push-back and challenges.

This lively and deep-running book offers invaluable stories and analyses of the Mexican experience with conservation told by some of the key actors themselves, demonstrating the willingness of Mexico to respond flexibly to local conservation options that vary from place to place within the country. This Mexican book will serve as a beacon and touchstone for other countries to guide them as they design Nested REDD+ to meet dual goals—to sequester carbon in designed landscapes in compliance with the Climate Change treaty (UNFCCC) and to achieve the Aichi Targets of the Biological Diversity treaty (CBD).

Winnipeg, Manitoba, Canada

Janis Bristol Alcorn

Preface

Community conservation or community-based conservation is not a new subject in Mexico or the world, but it has recently gained importance given changes in the way biodiversity conservation is understood and addressed. The latter applies not only to changes regarding how nature–human relations are realized but also to changes regarding how nature’s governance is evermore subject to interactions of different actors at varying scales. That is, the local is subject to different types of processes occurring at regional, national, and international levels through forces ranging from legislation, government programs, international treaties, and the market, among others. As this volume goes to press, these tensions are everywhere in evidence, since recent federal legislation has facilitated the privatization of ejidal land. Since it is at the local scale that resulting outcomes of this interconnections reflect decision-making (and affect environmental outcomes), understanding the role that local people play or could play regarding nature’s conservation becomes relevant not only for the academic arena, but also for policy and human livelihoods.

The purpose of this volume is not to provide a comprehensive overview of community conservation in Mexico, as the extent of Mexican territory and its contours, as well as the different issues regions face, are so diverse. Rather, we bring together several chapters reflecting examples or cases illustrating some of the issues at stake, hoping to stimulate the reflections of some of these matters, as well as communicate some of our research findings. The volume, written in English for an international audience, is also intended to bring the discussion of community conservation in Mexico to a supranational level, because many of the issues that are raised echo shared realities in other countries. The Mexican case stands out in the annals of community conservation for reasons explained hereafter. Transmitting the relevance of the Mexican case to a national audience is also a goal of the text.

The endeavor of writing the volume was born from the collaboration of most of the authors in an international and interdisciplinary project addressing community conservation in Mexico. We decided to make use of the opportunity of writing a first book together to integrate research mostly from previous work. We also invited a few external colleagues to join the effort. As only few of the authors in the volume speak English as a first language, its completion represented a real challenge, which

extended the process of its creation to more than 2 years. We hope that its contents serve to provoke debate and further inquiry regarding the issues addressed.

We would like to acknowledge the anonymous comments of two external reviewers on the initial proposal for the volume, which helped us to design the final direction it would take. We would also like to give special recognition to Gary Martin, who contributed greatly in the initial phase of putting the volume together, and to Emily Caruso, who assisted in the editing process. We are also grateful for financial support for the CONSERVCOM project (through Fondo de Cooperación Internacional en Ciencia y Tecnología UE-Mexico—FONCICYT Project # 94395) and grants from the Programa de Cooperación Inter-Universitaria e Investigación Científica, Ministerio de Asuntos Exteriores y Cooperación (A/023406/09 and A/030044/10) and Fundació Autònoma Solidària-UAB (XXVII and XXVIII), which supported the work of several of the authors and editors of this volume during the book's development. We give special thanks to rural and indigenous communities in Mexico for their lessons and efforts concerning biodiversity conservation.

Xalapa, Veracruz, Mexico

Luciana Porter-Bolland

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Chapter 1

Introduction: Biocultural Diversity and the Participation of Local Communities in National and Global Conservation

Claudia Camacho-Benavides, Luciana Porter-Bolland, Isabel Ruiz-Mallén, and Susannah R. McCandless

Much of the world's biodiversity is found in areas of human settlement, where people are highly dependent on natural resources for their subsistence. In 1995, more than one billion people were living in 25 biodiversity hotspots of priority for conservation [1, 2]. However, the global tendency has been for official biodiversity conservation measures (i.e., protected areas) to often exclude communities from decision-making or consider their participation and presence as detrimental. Some authors follow this conventional approach, supporting the strict protection of areas important for biodiversity and ecosystem services against people's intervention [3–7]. In contrast, other authors argue that rural and indigenous communities have developed a cumulative body of local ecological knowledge, beliefs, and practices important for biodiversity conservation and sustainable use of natural resources [8, 9]. Along these lines, a new paradigm for understanding and implementing conservation measures considers the concept of “biocultural diversity,” which links linguistic, cultural, and biological diversity. In practice, biocultural diversity refers to the need to sustain both biodiversity and culture, because the two are interrelated and mutually supportive [9]. Based on this approach, as well as evidence showing that strict protected areas have not always been as

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successful in reducing deforestation and forest degradation as intended [10, 11], some authors argue that a global conservation strategy based on the “fines and fences” or “fortress conservation” approach puts both local communities’ subsistence and biodiversity at risk [12].

The academic debate regarding the effectiveness of strict protected areas versus community natural resource management and conservation initiatives continues and is also evident at a policy level. In Mexico, for example, there are policies at the national level that continue to consider human activities as threats to forests and biodiversity. This is illustrated by the fact that, in December 2010, during the celebration of World Forest Day, as part of the 16th Conference of the Parties to the UN Framework Convention on Climate Change in Cancun, Mexican President Felipe Calderón attributed deforestation in Mexico to traditional forms of agriculture of indigenous peoples and smallholders, along with illegal logging. He also affirmed that the integration of rural people into financial mechanisms that would allow them to receive economic compensation instead of continuing to cultivate their land was on the national environmental agenda [13].

At the same time, community-based conservation is gaining currency. The participation and importance of indigenous and local communities, including their traditional management practices, in biodiversity and landscape conservation, has been increasingly recognized both in national and international policies. Community-based conservation, for our purposes, refers to any voluntary initiative of “natural resources or biodiversity protection conducted by, for, and with the local community” [14]. This broad definition includes a great variety of initiatives ranging from self-regulated strategies for natural resources and territorial management to collaborative actions for conservation between communities and external actors. These initiatives may include a variety of objectives, governance types, and levels of local decision-making power [15].

At the international level, in 1992, the Convention on Biological Diversity (CBD) recognized the importance of local communities’ rights and decision-making in management in article 8(j), which states that official policies on biological conservation must consider traditional ecological knowledge and practices, as well as promote their wider application, with the approval and involvement of local communities [16]. Thereafter, the CBD Program of Work on Protected Areas recognized the importance of equity and Indigenous peoples’ rights in conservation (Target 2.2) [17, 18]. Subsequent international agreements have also included recognition of the role of local people in biodiversity conservation, such as the Universal Declaration on Cultural Diversity of the United Nations Educational, Scientific and Cultural Organization in 2001, the GEO-4 report of the United Nations Environment Program in 2007 [19], and the CBD’s 2010 Biodiversity Target [20].

One of the most advanced forms of official acknowledgement of community-based conservation initiatives is the recognition by the International Union for Conservation of Nature (IUCN) of Indigenous People’s and Community Conserved Areas and Territories (ICCAs). During the fifth World Parks Congress (Durban 2003), the role of indigenous peoples and local communities in conservation was explicitly recognized. This status was further developed during the World Conservation

Congresses of 2004¹ and 2008² with the formal inclusion of ICCAs in its protected area matrix as a distinct governance category that crosscut the more commonly known management types, which range from Strict Nature Reserves to Managed Resource Protected Areas.

Such international policy development has led Mexican national policies to follow suit. Despite the comments of its past president, Mexico stands out on the international scene [21, 22] as an important trailblazer for community-based conservation, due to its legal achievements and local experiences. Mexico has been an early adopter, at the national and constitutional level, of enabling policy frameworks for community-based conservation [23]. The scope of the laws that grant and govern community-based rights over natural resources is varied, and these laws have their limitations. To begin, the postrevolutionary 1917 Constitution, reformulated in 1992, recognizes collective land and resource ownership in both *comunidades* and *ejidos* in Article 27 and in the current Mexican Agrarian Law.³ More recent subsequent national legislation affecting community governance of natural resources has followed in the same vein, both enabling and regulating community-based natural resource management. Since 1996, Mexico's General Environmental Law (Ley General del Equilibrio Ecológico y la Protección al Ambiente, or LGEEPA) has allowed private owners and social entities (such as rural communities) that designate land for conservation to receive recognition by the National Commission of Natural Protected Areas (Comisión Nacional de Áreas Naturales Protegidas, or CONANP) [24]. A program of certification of community and ejidal reserves formally started in 2003, and in 2008 the LGEEPA was reformed adopting the new federal protected area category of Voluntary Conserved Areas (in Spanish Áreas Destinadas Voluntariamente a la Conservación -ADVC) that includes community as well as private areas voluntarily designated for conservation [24]. There are other national laws that regulate or allow the formalization of community-based conservation initiatives, such as the Mexican General Wildlife Law (Wildlife Law) (Ley General de Vida Silvestre) [25], which since 1997 has allowed private owners and rural communities to officially establish wildlife management areas (UMAS, by their Spanish acronym). In addition, the Mexican Law on Sustainable Forest

¹World Conservation Congress, Bangkok, 2004. Resolution 3.012 ("Governance of natural resources for conservation and sustainable development"); Resolution 3.049 ("Community Conserved Areas"); and Resolution 3.081 ("Implementation of principle 10 by building comprehensive, good governance systems"). Accessed 20 Sept 2012, at: http://cmsdata.iucn.org/downloads/wcc_res_rec_eng.pdf

²World Conservation Congress, Barcelona, 2008. Resolution 4.048 ("Indigenous Peoples protected Areas and implementation of the Durban Accord"); Resolution 4.049 ("Supporting Indigenous conservation territories and other Indigenous peoples and community conservation areas") and Resolution 4.050 ("Recognition of Indigenous conserved territories"). Last accessed 10 Oct 2012, at: http://www.iucn.org/congress_08/assembly/policy

³*Comunidades* are "pre-existing corporate entities in which community members can demonstrate long-standing communal use of land and resources, whereas *ejidos* are collectives of campesinos (peasants) granted access to land and resources for which they have no prior legal claim" (Martin et al. 2010, 196; Ruiz Massieu M (1987) *Derecho Agrario Revolucionario*. México, DF: Porrúa).

Development (Ley General de Desarrollo Forestal Sustentable) [26] regulates the use of national forests and requires communities to design forest management plans in forests managed for timber production; these plans can include the designation of some forested areas for conservation [23].

Setting aside legal developments, more important are the multitude of local experiences that constitute community-based conservation in Mexico. This country is one of the world's 17 most megadiverse [27, 28], and an estimated 75 % of forests are held communally (Chap. 3, this volume) through the land tenure systems of *comunidades* and *ejidos*. Given that in Mexico indigenous populations constitute about 60 % of the *comunidades* [29] and 20 % of the *ejidos* [30, 31], these forms of communal organization represent a highly diverse cultural and linguistic heritage encompassing most of the nation's 68 official indigenous language groups [32]. Recognized under the current Law of Linguistic Rights of Indigenous Languages [33], these language groups represent the most direct indicator of Mexico's high cultural diversity.

The experiences of community-based conservation in Mexico reflect this biological and cultural diversity, including heterogeneous approaches and levels of community participation. As in other countries, there are two major trends. The first is for grassroots, self-regulated initiatives that foster sustainable resources use and lead to the conservation of biodiversity, ecological functions, and associated cultural values [15, 17]. The establishment or perpetuation of ICCAs that are "natural and/or modified ecosystems containing biodiversity values, ecological services, and cultural values, voluntarily conserved by indigenous and other communities through local or customary laws," fit into this tendency [34]. The second trend is the implementation of conservation activities originally proposed, promoted, and decided by external actors, mainly nongovernmental organizations (NGO), government institutions, and international agencies, which involve local people in decision-making around natural resource use. This includes, for example, the comanagement of protected areas or externally-driven programs established as a means to reclaim ownership of land foreseen as having conservation value under national policy (Chap. 5, this volume).

Although both trends coexist and interrelate in real life, the chapters in this volume show their effects on level of participation and decision-making power and the sustainability of the conservation outcomes. This is especially true because one of the defining characteristics of the grassroots, self-regulated strategies such as ICCAs is that communities hold *de jure* or *de facto* power in deciding, implementing, and enforcing management decisions [34]. ICCAs themselves constitute only a sampling of the diversity of experiences in Mexico, as these range from localized sacred sites to vast expanses of territory, and from secret to widely publicized areas. They can be categorized broadly into five types, with different degrees of official recognition [35]: (1) government-certified areas, (2) community protected areas without official recognition, (3) protected areas with a forestry certification, (4) natural sacred sites, and (5) wildlife management units. Community-based conservation promoted by external actors can also include actions such as setting land aside for conservation in exchange for monetary resources without selling the land (e.g., conservation easements and usufructs), areas established for Payments for

Ecosystem Services (PES), and establishment of conserved areas after conducting community territorial planning, among others. In an unpublished report by some of the authors of this volume, prepared for the United Nations Development Program in 2010 [36], 312 ICCAs were identified in part of the Southeast of Mexico,⁴ corresponding to more than 1,100,000 ha. These areas included 146 government-certified areas, 121 community protected areas without official recognition, 38 protected areas with a forestry certification, three examples of natural sacred sites, and four examples of wildlife management units.

This volume addresses some of the issues facing community-based conservation through specific cases within Mexico, with a particular focus on the southeastern portion of the country. It presents examples and reflections on diverse community initiatives for conservation that range from ICCAs to comanaged areas and related issues affecting local participation in conservation. We also include several chapters that focus on methodological aspects for understanding participation or addressing other aspects of community-based conservation. The contributions presented herein are addressed to policymakers, NGOs, academics, and practitioners interested in the broad subject of conservation conducted by, for, and with local communities. They add to the debate regarding the effectiveness of different conservation strategies and sustain the argument that, in a changing world, the need to incorporate a locally based approach to the protection of nature becomes a global imperative. Yet community-based conservation initiatives need to be documented and analyzed.

The volume is divided into three parts. Part I presents two chapters that provide a general approach to the context of community-based conservation in Mexico. Victor M. Toledo begins his contribution, *Community conservation and ethnoecology: the three dimensions of local-level biodiversity maintenance*, by situating his work at the local level within the complex realm of biodiversity conservation. In this realm, he explains, citing Berkes' work, a multitude of actors and institutions interact at different levels (i.e., global, regional, and local). At the local scale, Dr. Toledo points to the prominent role of rural communities and within these the role of indigenous people in conservation, both in Mexico and throughout the world. To frame this position, he defines three main characteristics of indigenous groups that are relevant: *kosmos* (belief systems), *corpus* (knowledge systems), and *praxis* (management systems). He provides several case examples of indigenous groups throughout Mexico, making particular emphasis on the Maya. These examples provide descriptions of current management systems in which local beliefs, knowledge, and practices contribute greatly to the production and reproduction of biodiversity. This multicultural aspect of Mexico endows the country with valuable characteristics for community-based conservation that should be recognized and valued.

The next chapter (Chap. 3), by Leticia Merino-Perez, *Conservation and forest communities in Mexico: Experiences, visions and rights*, focuses on aspects that relate tenure history with forest management and conservation. Dr. Merino explains

⁴The review included the states of Distrito Federal, Estado de Mexico; Guerrero; Hidalgo; Michoacán; Morelos; Puebla; Querétaro; San Luis Potosí; Tabasco; Tlaxcala; Oaxaca Veracruz.

the distinctive character of Mexico in which, after Mexican Revolution, agrarian policy favored communal forest tenure. The latter has made rural communities the predominant forest holders in the country. This makes the local participation in forest conservation particularly important. Nonetheless, history indicates that forest tenure has been accompanied by restrictions on communities' forest use rights, rendering local inhabitants, for the most part, historically excluded from forest stewardship and management. In her contribution, Dr. Merino reports that although sustainable forestry is only present in a small minority of Mexican forested regions, many communities are involved, to different extents, in forest protection. However, the challenges inherent in potentiating their participation in conservation include tenure conflicts, poverty, and the need to strengthen local institutions, among others. Dr. Merino also explains that one of the biggest challenges is the way environmental policy favors an official discourse (reflecting global trends) in which conservation and forestry agendas remain separate, rather than bridging the gap between forest management and conservation. In her words "'No use' nowadays, appears to be the ideal management strategy, and empty territories the preferred conservation landscape" (p. 25, this volume). This exemplifies the contentious context underlying issues inherent in community-based conservation in Mexico.

Part II presents a series of case studies regarding local participation in conservation. Although these case studies are not comprehensive of all issues facing community-based conservation in the different regions of Mexico, they represent examples of some of the contested issues at stake. We favored case studies in the southeast of Mexico and particularly the Yucatan Peninsula not because they proved more relevant, but rather because of personal bias, given the authors' work. However, it is important to highlight that the southeastern region of the country has some of the nation's highest proportions of speakers of indigenous languages and the highest floral diversity in the country. Specifically, the state of Oaxaca alone, a leader in community-based conservation, had 43 registered community conservation initiatives in 2010, in addition to many others that decided not register their conservation areas [35].

Chapter 4, *Community Conservation Experiences in Three Ejidos of the Lower Balsas River Basin, Michoacán*, by Andrés Camou-Guerrero, Tamara Ortiz-Avila, Daniel Ortiz-Avila, and Jorge Odenthal, discusses their experiences in the formation of community-based conservation areas in three *ejidos*. The *ejidos* participated in an internationally funded but nationally administered project called Conservation of Biodiversity in Indigenous Communities (COINBIO). In their chapter, the authors provide an analysis of the elements that both supported and limited the establishment of community conservation areas. They explain how the process of creating the conservation areas was based on the reconstruction of the territory's socio-ecological history. The authors found that all three cases showed that the establishment of community conservation areas promoted collective action, caused people to reflect on their perspectives concerning the mid- and long-term use of their territory and its natural resources, and strengthened the search for productive alternatives. Among the limitations was the initiatives' lack of coordination with regional