

# Evidence-based Conservation

LESSONS FROM THE LOWER MEKONG

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EDITED BY TERRY C.H. SUNDERLAND,  
JEFFREY SAYER AND  
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# Evidence-based Conservation

There is a considerable gap between the science of conservation biology and the design and execution of biodiversity conservation projects in the field. Science is often failing to inform the practice of conservation, which remains largely experience-based. The main reason is the poor accessibility of evidence on the effectiveness of different interventions. This is the basis for this book adopting an 'evidence-based approach', modelled on the systematic reviews used in health sciences and now being applied to many policy arenas.

*Evidence-based Conservation* brings together a series of case studies, written by field practitioners, that provide the evidence base for evaluating how effective conservation and poverty alleviation strategies can be better implemented. A series of systematic reviews use experiences and data from fifteen integrated conservation and development projects conducted in the Lower Mekong region, specifically in Vietnam, Laos and Cambodia. They provide wide-ranging overviews of the effectiveness of protected areas and how innovative tools and methods for monitoring and evaluation can be utilized for more effective outcomes. Results are in the form of management and policy recommendations, based on the quality of evidence and the cost utility of the intervention. By bridging the gap between field practice and conservation, the analysis should lead to more effective integrated conservation and development interventions. The book represents one of the first attempts to apply the evidence-based approach to conservation and development.

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Lessons from the Lower Mekong

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*Terry C.H. Sunderland, Jeffrey Sayer  
and Minh-Ha Hoang*

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# Foreword

## Critiquing conservation

Among the manifold ways that humans are changing the planet, few are more alarming than the rapid loss and degradation of tropical ecosystems. Many tropical regions have now lost much of their natural forest cover, sometimes in just the last few decades. The Brazilian Atlantic forests, West Africa, Madagascar, Sumatra and the Philippines are just a few examples of regions that have been devastated biologically – places where native forests persist as mere vestiges of their former magnificence.

The dramatic environmental changes overrunning much of the tropics are increasingly being felt in Indochina – the environmental backbone of which is the Mekong River, one of the world's great waterways. The Lower Mekong Region, which includes large expanses of Vietnam, Laos and Cambodia, faces pressures that are particularly acute.

By virtually any measure – cultural, economic, biological, political – the Lower Mekong is a region of great importance. It supports a dense and rapidly expanding human populace, growing economies, and a patchwork of indigenous cultures. The great river and its tributaries are vital as fisheries, as transportation corridors, and as the lifeblood of the region's agriculture.

The biodiversity of the Lower Mekong is simply stunning. A key component of the Indo-Burma Biodiversity Hotspot, its biota is a blending of two great natural realms – the humid tropics of Indomalaya and the towering spires of the Himalayas. Scattered across the region are pockets of extremely high endemism, where many species occur uniquely. In such places many biological mysteries remain; for instance, in recent years more species of large mammals have been discovered in the Mekong region than anywhere else on Earth.

From an environmental perspective, darkening clouds are gathering on the Mekong's horizon. A pulse of foreign investment and lending is promoting an avalanche of new roads and transportation projects. Many of these are penetrating into once-remote parts of the region, threatening in some cases to open a Pandora's Box of new environmental pressures. The Lower Mekong already has 77 active dam projects, and scores more are planned. Commercial agriculture and forestry are expanding apace, often at the expense of native forests and wetlands.

Local communities in the Lower Mekong have long relied on small-scale farming, hunting and harvests of myriad natural products. But in a region

experiencing intense population growth, the ecological impacts of such activities are biting harder. Protected areas and forest sanctuaries are increasingly suffering from human invasions, illegal logging and unchecked poaching. The costs to nature are often high, as evidenced by the recent demise of the region's last Javan rhino.

In the context of such dramatic changes, the Lower Mekong has increasingly been the focus of aid and conservation projects seeking to stem its myriad environmental challenges. Many of these are ICDPs – integrated conservation and development projects – that attempt to promote the environmental sustainability of local communities, especially those living in and around protected areas. Many such projects also strive to improve environmental law enforcement, and thereby reduce threats such as illegal logging, land-grabbing, and wildlife-trading. Other projects seek to use payments for ecosystem services to provide incentives for nature conservation.

But are these projects – which collectively have cost hundreds of millions of dollars – succeeding? That is a vital question, and one that international donors and lenders are very eager to know. The chapters herein, with support from the MacArthur Foundation, represent an important effort to critically assess these projects.

In brief, the results seem mixed. Some projects have achieved notable successes whereas others have seemingly had little real impact. Assessing such projects, however, is far from straightforward. It is a natural temptation for those undertaking such projects to overstate their successes and downplay their failures, and many projects lack clear milestones or performance indicators.

In broad-brush terms, I believe it can be argued that many applied conservation projects in the Lower Mekong Region are at least 'holding the line'. Even if their advances are less than spectacular, they are striving to progress in a political and social milieu that is extremely challenging. In critically assessing these projects, one can discern many important lessons for the future. The editors of this volume, Terry Sunderland, Jeffrey Sayer and Minh-Ha Hoang, deserve a great deal of credit for bringing together such a broad and critical collection of conservation assessments.

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However, we accept that any shortcomings in this manuscript are ours alone.

## Acronyms and abbreviations

5MHRP	Five Million Hectares Reforestation Programme
AAF	Animal Asia Foundation
ABE	Association of Buddhists for the Environment
ACSC	Advancing Conservation in a Social Context
ADB	Asian Development Bank
ADRA	Adventist Development and Relief Agency
AFAP	Australian Foundation for the Peoples of Asia and the Pacific Limited
AK	Anakut Komar
ARBCP	Asia Regional Biodiversity Conservation Program
ARD	Associates for Rural Development
ASEAN	Association of South-East Asian Nations
BCCI	Biodiversity Conservation Corridor Initiative
BCI	Biodiversity Corridors Initiative (specifically refers to the corridor between Dong Hoa Sao and Xe Pian National Protected Areas), Laos
BMNP	Bach Ma National Park
BMZ	Bundesministerium Für Wirtschaftliche Zusammenarbeit
BNR	Bokeo Nature Reserve
BPAMP	Biodiversity and Protected Areas Management Project
BZ	buffer zone
CALM	Conservation Areas for Landscape Management
CARERE	Cambodia Area Rehabilitation and Regeneration Project
CBD	Convention on Biological Diversity
CBNRM	community-based natural resource management
CCAFS	Climate Change, Agriculture and Food Security
CCBA	Climate, Community and Biodiversity Alliance
CCPF	Central Cardamom Protected Forest
CDM	Clean Development Mechanism
CECG	Cambodian Elephant Conservation Group
CEDAC	Cambodian Center for Study and Development in Agriculture
CEEE	Centre of Ecotourism and Environmental Education
CET	Community Extension Team