

# Biodiversity Planning in Asia

A Review of National Biodiversity  
Strategies and Action Plans  
(NBSAPs)

Jeremy Carew-Reid, Editor



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## Preface

This book grew from papers presented and discussions held at two workshops of biodiversity planners in Asia. The first, covering South East Asia, was held in Colombo, Sri Lanka, in October 1999. There were 26 participants, from China, the Philippines, Indonesia, Vietnam, Cambodia, Thailand and Singapore. A South Asian workshop was held in Rajendrapur, Bangladesh, in February 2000. It brought together 35 participants from five countries in South Asia (Bangladesh, Bhutan, Nepal, Pakistan and Sri Lanka), representing government, universities, research institutions, IUCN and a range of NGOs concerned with biodiversity. The workshops sought to identify “lessons learned” and preliminary “best practice” guidelines and establish the high-priority information needs for effective NBSAP development and implementation in the region (those lessons and best practice suggestions are set out in Annex 1).

In the 18 months that followed the second workshop, there was intensive interaction via e-mail between participants and others in the IUCN Asia regional network of biodiversity planners. It was agreed that the biodiversity planning experience was evolving so rapidly in Asia that a benchmark of progress and experience in NBSAPs was needed. This book is a result of those discussions. It has been difficult for the authors to put together, in many cases because they were in the midst of the NBSAP process and learning day-by-day how to manage it. As all biodiversity planners know, it is often hard to record the process while it is unfolding.

The book pays special attention to biodiversity strategies and action plans at national level. It is divided into three main parts:

- **Part 1** provides a summary and analysis of the key issues confronting biodiversity planners in Asia, with a review of the biodiversity conservation challenges they are attempting to manage;
- **Part 2** presents the country case studies; and
- **Part 3** addresses economics, law and communications, three critical cross-cutting concerns identified by all country authors as requiring special attention.

This is a snapshot of the NBSAP process in Asia. It is written by practitioners who are likely to have moved on in their thinking the minute the ink dried on the pages of their chapters. But it is important to share experiences so that one country can benefit from another’s lessons; every NBSAP process is in a

different stage of development, and it is important to map the journey so that others may follow.

### The origin of national biodiversity plans

Although they go back almost 20 years, biodiversity strategies and action plans have only recently been used as government policy mechanisms. The push for an international agreement on biodiversity began in 1984, with the passage of a resolution at the 16th Session of the IUCN General Assembly in Madrid (Resolution 16/24). This called on the Director General to draft “a global agreement on the conservation of the world’s wild genetic resources”. A set of Draft Articles was circulated to all IUCN members for comment in 1989 and the principles they embraced were detailed in *Caring for the Earth*, the second world conservation strategy (issued by IUCN, UNEP and WWF in 1991).

The Convention on Biological Diversity (CBD) was signed by 153 governments in May 1992 at the Earth Summit in Rio de Janeiro. In the same year, IUCN, WRI and three UN agencies (UNEP, FAO and UNESCO) published *The Global Biodiversity Strategy*, which was developed parallel to the CBD through a process of research and consultation.

Each of these documents promotes national biodiversity strategies as the main thrust of government efforts to implement the CBD. Article 6 of the CBD requires parties to do the following:

- develop national biodiversity strategies, plans and programs; and
- integrate the conservation of biological diversity and the sustainable use of its components into relevant sectoral and cross-sectoral plans, programs and policies.

Article 6 promotes systematic and cross-sectoral planning. The success of the CBD depends on how seriously governments plan under Article 6 to integrate the conservation and sustainable use of biodiversity resources into national decision-making.

### Status of NBSAPs in Asia

Most Asian countries are now parties to the CBD (as of December 2001 the CBD had been ratified by 180 countries) and all 15 countries reviewed in this book have approved or are preparing national biodiversity strategies and action plans. Even Thailand has adopted a national biodiversity program (Chapter 10), in spite of NGO opposition to ratification of the convention. The current status of NBSAPs in these countries is summarised in Table 1.

**Table 1. Status of NBSAPs in Asia**

Country	NBSAP Status
Australia	NBSAP completed and approved in 1996
Bangladesh	NBSAP preparation expected to begin in 2002
Bhutan	Completed and approved in 1998
Cambodia	NBSAP in preparation (2001)
China	NBSAP completed and approved in 1993
India	NBSAP in preparation (2001)
Indonesia	Completed and approved in 1991; a second plan is in preparation (2001)
Lao PDR	NBSAP in preparation (2001)
Malaysia	Completed and approved in 1997
Mongolia	Completed and approved in 1996
Nepal	Being finalised (2001)
Pakistan	Completed and approved by the Pakistan Environmental Protection Council in 1999
Philippines	Completed and approved in 1997
Singapore	CBD concerns addressed through the Singapore Green Plan approved in 1992–3
Sri Lanka	Completed and approved by Cabinet in 1998
Thailand	Has not ratified the CBD but completed and approved a national biodiversity policy in 1997
Vietnam	Completed and approved by the Prime Minister in 1995, and reviewed in 1998

In South Asia, the NBSAPs in Sri Lanka and Bhutan are the most advanced, and are entering the implementation phase. Pakistan has completed its NBSAP and the Pakistan Environmental Protection Council has recently approved the document. Nepal's NBSAP is nearing finalisation, although there have been difficulties in reaching a consensus on its content, particularly relating to

institutional arrangements. The NBSAP process has progressed less swiftly in India, where there have been difficulties in carrying out a national planning exercise due to the federal government system and the varied interests of the different states. Each state is now taking the lead in preparing its own BSAP; these will be consolidated into a national biodiversity policy framework. Bangladesh was the last to initiate its biodiversity plan, but was one of the first countries in the region to prepare a National Conservation Strategy.

In SE and NE Asia, governments have been equally committed to preparing NBSAPs. In fact, China and Vietnam were the first countries in Asia to do so, in 1993 and 1994 respectively. Cambodia and Lao PDR have recently begun preparing strategies, and are benefiting from the lessons of their neighbours. For the purpose of this book, Australia has been included with its SE Asian neighbours. It has advanced into state, regional and local biodiversity action plans and has many lessons to share.

National and local governments in Asia want biodiversity plans — and they want them for good reasons. The NBSAP process has brought agreement on shared problems, on resource allocation, on priorities, and on collective action. It has led to major advances in the more conventional areas of biodiversity conservation, such as expansion in protected area systems and in captive breeding.

### Classification of biodiversity plans

The main focus of this book is biodiversity planning at a national level. Many countries of the region have gone beyond that, however; in fact, some began the process at another level or from a number of starting points. Table 2 provides a simple classification of the main types of biodiversity plans. All BSAPs fall somewhere on this matrix.

The geographic limits of biodiversity plans varies from global to local. Regional plans can be international or cover a smaller area at the sub-national level. Natural systems such as the Mekong River and the Himalayan Mountains can also be the focus of biodiversity planning. These initiatives are necessarily international and challenge governments to work cooperatively.

Plans can be comprehensive, treating all aspects of biodiversity resources; they can be specific to a sector, such as agriculture, forestry or industry; or they can be thematic, i.e., dealing with a species or ecosystem type. In sector and sub-national regional planning, biodiversity concerns are most often subsumed as part of larger economic development plans, but to date conservation has not been well integrated into these plans and they are not BSAPs.

The kinds of plans most often prepared in Asia are those in the shaded categories in Table 2, but there are examples within other categories (India and Australia, for example, are preparing BSAPs for individual states).

**Table 2. Classification of biodiversity plans**

Geographical coverage	Comprehensive	Sectoral	Thematic
Global	Global Biodiversity Strategy	Individual industries and multinational corporations, such as BP and Shell, have begun preparing BAPs	BAPs have been prepared for species
Regional (international)	Some environmental strategies of regional organisations such as ASEAN include biodiversity components, but not well developed	The IUCN World Commission on Protected Areas has prepared regional protected area action plans for South and SE Asia	Regional species action plans have been prepared
National	<b>Most countries have NBSAPs; they are the focus of this book</b>	Some sectoral master plans in most countries now consider biodiversity issues, particularly those relating to forestry and agriculture	Some countries have national wetlands action plans (e.g. Nepal, Cambodia)
State or provincial	Few countries have begun BAPs at this level. Exceptions are Australia and India.		
Regional (sub national)	A growing trend to prepare regional BAPs, e.g. Philippines, Vietnam, China, Sri Lanka and Australia		
Local government	Only just beginning to receive attention.		
Site specific	Protected area management plans		Species site specific action plans

## Biodiversity Planning in Asia

There are large gaps in the biodiversity planning effort. The sub-national levels (i.e. provincial/state level, regions, and local government), for example, have received little attention. Most sectors leave biodiversity to the Ministry of Environment to address in its “sector” plan. Development plans in the forestry, fisheries and agriculture sectors have given increasing attention to environmental issues, but the overriding emphasis remains on production rather than improved management of biodiversity or natural systems. Separate biodiversity plans to guide the operations of individual sectors are rare.

Among the first biodiversity plans in the region were those relating to specific sites (usually protected areas) and individual species. Thematic plans are becoming more common, particularly for endangered species and ecosystems under threat. A number of countries have developed national wetland strategies, for example, in response to their obligations under the Ramsar Convention.

### The Asian biodiversity planners’ network

This short overview, along with the rich material presented in the chapters of this book, show that there is great value in biodiversity planners remaining in contact and passing on lessons as their methods evolve. UNDP, UNEP and IUCN are working together to facilitate the development and strengthening of a biodiversity network in Asia. The exchange of information fostered by the network has enabled some countries to bypass difficulties or give less emphasis to certain stages in the NBSAP process where these have proved to be cumbersome or fruitless in others’ experience. It has also helped to refine and better target the ongoing processes in most countries. Annex 3 provides contact details for those readers who wish to find out more about participating in the network.

Background information on the authors and their contact details are provided in Annex 4, to encourage readers to establish links and to provide comments, feedback and suggestions. It is easy for biodiversity planners to feel isolated, and an ongoing exchange of experience and lessons learned will strengthen and add momentum to NBSAPs and their resulting initiatives.

## Acknowledgements

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Most chapters of this book arose from presentations at two regional workshops and benefited from the discussions and comments of biodiversity planners participating in these events. Each chapter then went through intensive drafting and interaction between the authors and editor, and, as part of that process, the chapters were peer reviewed by experts with specialist knowledge of particular countries or themes. Those reviewers are Graham Baines, Mahesh Banskota, Barry Flamm, Don Gilmour, Paul Im, David James, Peter Johnston, Bill Jones, Mao Kosal, Craig Leisher, Jeff McNeely, Scott Perkin, Balakrishna Pisupati, Kishore Rao, Tony Whitten, Josette Wonder, and Wendy Yap. We are grateful for their extensive suggestions and comments and for contributing valuable ideas and information to the chapters.

A special thanks to Scott Perkin and Balakrishna Pisupati of RBP for guidance and support. Scott initiated the project and continued to be a guiding force throughout its implementation. Patricia Halladay did a wonderful job in designing the book and in providing editorial comments. Also, our appreciation to Renuka Vitharana and Gamini Ranawaka of RBP for preparing the CD version.

Finally, this book is the result of the collective hard work and commitment of the authors and NBSAP focal points in Asia. The book is dedicated to them for taking the time to reflect on their experiences and sharing it with others in the cause of biodiversity conservation.



Biodiversity Conservation. Speeches Shim. USAID support helps provide needed training so wildlife rangers across Southeast Asia can more effectively counter wildlife trafficking. USAID. The illegal trade of wildlife represents one of the largest threats to biodiversity in Asia. Wildlife trafficking is the fourth largest black market in the world, with an estimated annual value of \$20 billion. The unsustainable wildlife trade also degrades the health of ecosystems, human health, governance structures, and economies. Overfishing and destructive fishing practices are also quickly depleting shared Biodiversity Planning in Asia. Action (1994-1998) includes a strategy for the conservation and sustainable use of biodiversity by promoting the development of a framework of the protection and conservation of endangered species and heritage areas, and strengthening capacities for research and development to enhance biodiversity conservation.<sup>29</sup> There is a need, however, for a stronger regional legal regime; a first step would be obtaining the remaining three. Biodiversity Planning in Asia. more than 99 per cent of temperate lowland grasslands in southeastern Australia have been lost; about 75 Biodiversity loss is expected to continue to 2030, particularly in Asia and Africa. This chapter examines the sources of this loss – land use changes, unsustainable use of natural resources, invasive alien species, global climate change and pollution – and explores policy responses to halt further damage. The Outlook Baseline projects continued biodiversity loss to 2030 (as measured by human interference in biomes), with particularly significant losses expected in Asia and Africa. Continued population and economic growth will put pressure on biodiversity through land use changes, unsustainable use of natural resources and pollution. Climate change will also put pressure on biodiversity in the coming decades. Agriculture will continue to have major impacts on biodiversity. A biodiversity action plan (BAP) is an internationally recognized program addressing threatened species and habitats and is designed to protect and restore biological systems. The original impetus for these plans derives from the 1992 Convention on Biological Diversity (CBD). As of 2009, 191 countries have ratified the CBD, but only a fraction of these have developed substantive BAP documents.