

Routledge Handbook of the Environment in Southeast Asia.
Edited by Philip Hirsch. London and New York: Routledge, 2017.
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Philip Hirsch's edited volume provides an incisive and comprehensive examination of the complex environmental challenges facing Southeast Asia, one of the world's most economically, demographically and ecologically diverse and dynamic regions in the world.

The book comprises thirty chapters in total, each interesting in its own right and each showing how thinking and writing about the environment vary depending on the author's disciplinary background, and ideological and political stance. In Part 1, the introductory chapter by Hirsch sets out the premise of the book and what readers can expect from each chapter. The next ten chapters have thematic slants (Part 2), eight focus on sectoral issues (Part 3) and twelve on regional and country studies (Part 4)

The section on themes includes chapters on physical geography, population and economic change, environmental movements, legal and governance issues, and political mobilization. It illustrates how an environmental story can evolve from a theme or a conceptual angle, often constructed imaginatively, and framed around historical, contemporary and future challenges.

In chapter two, Avijit Gupta looks at the physical geography of Southeast Asia and how it has changed over time. How population trends and economic development affect the environment is examined in chapter three by Peter Boomgard. In chapter four, Rodolphe De Koninck and Pham Thanh Hai examine the link between population growth and deforestation. Environmentalism, which serves as a potent political force driving change in Southeast Asia, is discussed by Tim Forsyth in chapter five. Power relations and how unequal relations have shaped ecologies and their governance is examined by Peter Vandergeest and Robin Roth in chapter six. In the following chapter, Keith Barney uses the concept of neoliberalism to explain environmental governance and governmentality. In chapter eight, Ben Boer argues that despite the plethora of environmental laws, regulations and international and regional environmental legal frameworks in Southeast Asia, implementation remains patchy. On the theme of laws and governance, chapter nine by Robert Fisher provides a broad analysis of the decentralized forms of governance occurring in forestry, fisheries and protected areas, and how this has failed to resolve

problems of environmental degradation. Transboundary environmental issues are addressed in chapter ten by Antonio P. Conteras who argues that advocacy and mobilization are important for redressing such issues.

Chapters eleven to eighteen examine sectoral issues in natural resources. Clear policy messages are presented by the various authors, each empirically grounded in an understanding of the circumstances surrounding an environmental issue or sector. In chapter eleven, Frances Seymour and Peter Kanowski focus on how forests and biodiversity can best be protected. In the following chapter, Rob Cramb argues convincingly that shifting cultivation has been a sustainable activity which has not affected the ecological functions of forests. However, governments have increasingly used their powers to allocate vast areas of swidden fallows for large-scale commercial plantations at the expense of indigenous farmers. Water, rivers and dams are discussed in chapter thirteen by Carl Middleton who contends that extensive hydropower development presents the greatest threat to river systems and has affected both the ecology and the livelihoods of those who live and work along those rivers.

In chapter fourteen Simon R. Bush and Melissa Marschke look at the social and political ecology of fisheries and aquaculture, overcapacity of fishing fleets, markets, and the tension between governance and equity. Urban environmental transitions are explored by Peter J. Marcotullio in chapter fifteen. Transitions expand beyond economic indicators to social, health and environmental measures to explain development. Edsel E. Sajor in chapter sixteen examines how the developments of peri-urbanization and mega-urban areas have impacted the environment. In chapter seventeen, Albert Salamanca and Jonathan Rigg argue that adaption to climate change is effective only when set within conditions specific to particular areas and political and power relations that structure society in that area. Environmental migration has become a key theme in the climate change debate but Rebecca Elmhirst contends in chapter eighteen that migration may not just be a reaction to displacement caused by climate, but may also be undertaken to improve livelihoods shaped by the environment and environmental change across the diverse agro-ecologies of Southeast Asia.

The environment in the context of region, subregion and country is explored in part four. Setting an environmental issue in this context frames the issue within a particular culture, society, political structure or history, and potentially allows for rich empirical

and analytical case studies to be undertaken for a region that is ecologically diverse. Some chapters certainly go beyond providing useful information by presenting analytical and politically nuanced critiques of government policies (see for example, the chapter on natural resources in Cambodia by Mak Sithirith, the study on environmental governance in Myanmar by Adam Simpson, and the study on Singapore's environment by Carl Grundy-Warr and Victor R. Savage). Some, however, are less critical and tend to be richer in information; still useful in their own right but less captivating to the reader looking for politically nuanced critique.

The role of ASEAN in shaping the region's environmental agenda is discussed by Koh Kheng-Lian and Md. Saiful Karim in chapter nineteen. Assessing hydropower development in the Mekong subregion using strategic environmental assessment as a tool is covered by Jeremy Carew-Reid in chapter twenty. Mak Sathirith in chapter twenty-one attributes tension in resource use in Cambodia as arising from the gap between competing representations of space and contested boundaries and the realities of local livelihood. The following chapter, by Jeff Neilson, focuses on Indonesia and the decisive role played by political systems and economic structures in shaping patterns of environmental change during key historical periods. In chapter twenty-three, by Yayoi Fujita Lagerqvist, the focus moves to Laos which has been recognized for its rich forest resources and where hydropower and mining have traditionally been the main contributors to the economy. In chapter twenty-four, Fadzilah Majid Cooke and Adnan A. Hezri trace the evolution of structure and agency of environmental movements in Malaysia, while at the same time recognizing the distinctiveness of environmental organizations in East and West Malaysia. Myanmar's chequered environmental movement is discussed by Adam Simpson in chapter twenty-five.

As demonstrated by Doracie Zoleta-Nantes in chapter twenty-six, the conditions of natural environment resource systems in the Philippines have been left wanting for decades. Meanwhile, as described by Grundy-Warr and Savage in chapter twenty-seven, Singapore has been able to resolve many of its inherent land, water, energy and environmental constraints because of its strong system of centralized government. The Singapore government has invested much into making the country green, but this has stemmed not so much from a deep ideology of environmentalism but rather more from pragmatism where a green Singapore instead of urban concrete buildings will be more attractive for investors and more liveable for

its population. The chapter on Thailand by Pinkaew Laungaramsri discusses gender and class in nature conservation politics. In the study of resource management and rituals in Timor-Leste by Lisa Palmer, the traditional practice of *tara bandu* or prohibition ceremony has re-emerged following independence to address problems relating to resource exploitation. The environmental challenges faced by Vietnam are addressed by Le Anh Tuan in chapter thirty. Those challenges come in the form of environmental threats to the Mekong River Delta such as water pollution, salinity intrusion, acid sulphate soils, fresh water shortages and excessive flooding. A raft of legislation have been introduced to deal with these issues but government agencies have remained slow in dealing with environmental degradation. As comprehensive as the coverage is in this section, it is rather surprising that Brunei is not included.

All in all, the various chapters contain discussions which are not only thought provoking but also useful for academics, students and policy makers who want to understand environmental issues through either the various conceptual lenses, different disciplinary and inter-disciplinary approaches, or grounded case studies in a particular country. Capably tied together by Hirsch, this edited volume serves as a very useful intermediate to advanced primer for those who want to quickly grasp the diversity of issues surrounding the environment, and the dilemmas that relate environmental change to communities, politics and economic development in Southeast Asia.

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