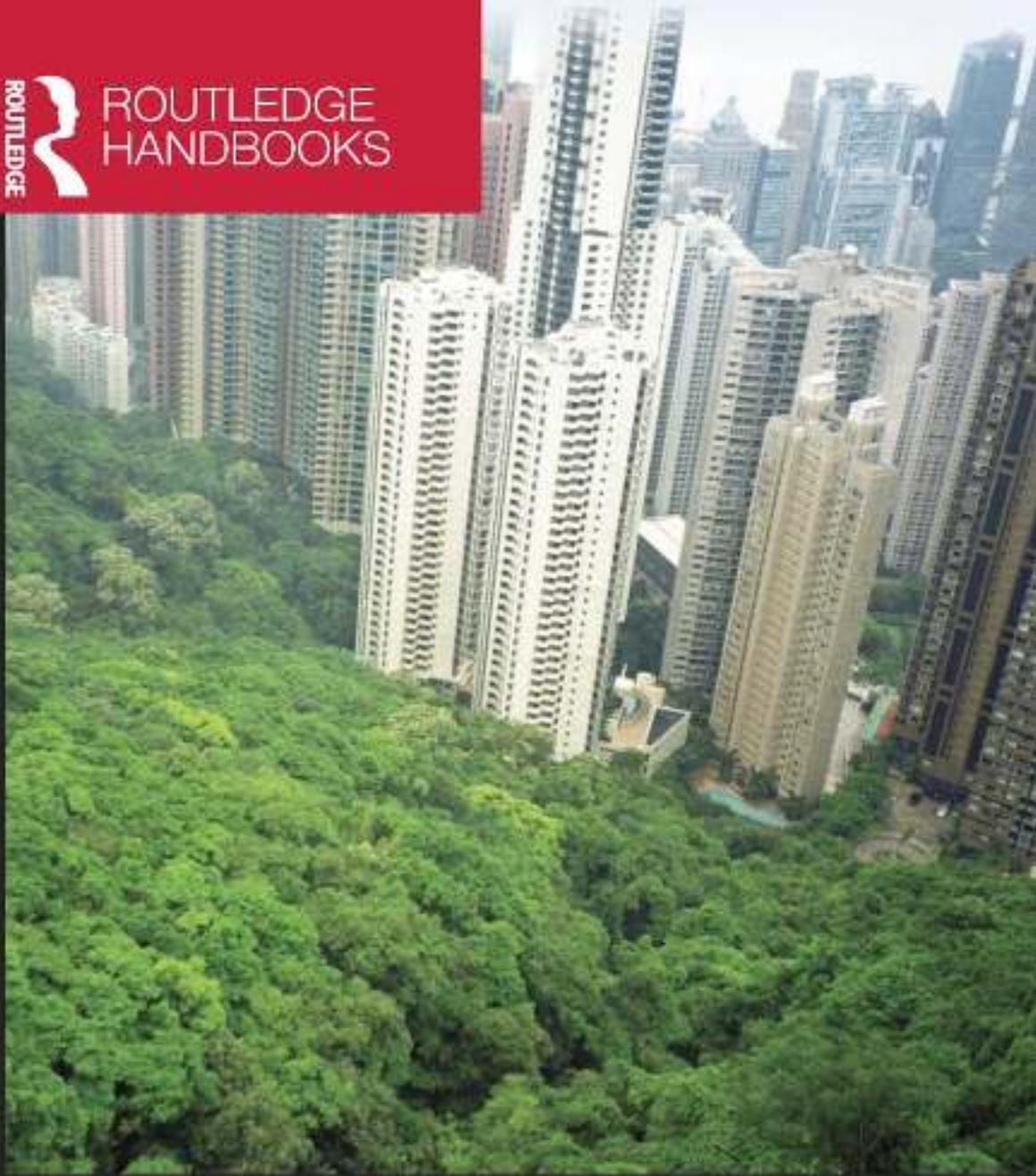




ROUTLEDGE
HANDBOOKS



Routledge Handbook of Environment and Society in Asia

Edited by Paul G. Harris and Graeme Lang

Routledge Handbook of Environment and Society in Asia

Nowhere is the connection between society and the environment more evident and potentially more harmful for the future of the world than in Asia. In recent decades, rapid development of Asian countries with very large populations has led to an unprecedented increase in environmental problems such as air and water pollution, solid and hazardous wastes, deforestation, depletion of natural resources and extinction of native species.

This handbook provides a comprehensive survey of the cultural, social and policy contexts of environmental change across East Asia. The team of international experts critically examines a wide range of environmental problems related to energy, climate change, air, land, water, fisheries, forests and wildlife.

The editors conclude that, with nearly half of the human population of the planet, and several rapidly growing economies, most notably China, Asian societies will determine much of the future of human impacts on the regional and global environments. As climate change-related threats to society increase, the book strongly argues for increased environmental consciousness and action in Asian societies. This handbook is a very valuable companion for students, scholars, policy makers and researchers working on environmental issues in Asia.

Paul G. Harris is Chair Professor of Global and Environmental Studies at the Hong Kong Institute of Education.

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Routledge Handbook of Environment and Society in Asia

*Edited by
Paul G. Harris
and Graeme Lang*

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Part I
Introduction

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East Asia and the environment

A thematic introduction

Paul G. Harris and Graeme Lang

For those of us who live in economically developed societies, it can be easy to forget that we are completely reliant on the natural environment for our prosperity, wellbeing, and survival. We rely on the environment for the most basic necessities of life, notably air, water, and food. We rely on the environment for material resources and energy that are used, whether directly or indirectly, to produce all of the material things that we take for granted. The environment and the resources that come from it are the raw materials for the majority of economic activity around the world. And, for most of us, the environment is important emotionally: with clean air and water, rich biodiversity, and natural vistas – and knowing that they are likely to thrive in the future – our sense of wellbeing is enhanced. That sense is undermined when air and water are polluted or when nature around us is degraded, overly developed, threatened or simply missing.

Because the resources and benefits from the environment come so easily to most of us – we seldom witness the direct environmental costs of resource extraction, for example – it is easy to forget that the state of the environment – whether it is able to supply human needs and more – is directly related to what all of us do. The environment seldom degrades by itself and resources do not disappear of their own accord. It is human and social behaviour that determines environmental health and, in turn, human and social vitality. Routinely, our behaviour is determined by the cultures and communities in which we live and by the institutions and government policies that largely shape our societies. In short, environment and society – broadly defined to include the actions and interactions of people and the associations and institutions they create – are unified, enormously so in cities and highly developed environments where the impacts of humanity are most obvious, but also in the remotest places on earth. Pollutants and ecological changes, often driven by demand for environmental resources in developed societies or by pollution coming from those places, have insinuated humanity into nature almost everywhere.

Nowhere is the connection between society and the environment more evident and potentially more harmful for the future of world than in Asia. (In this book we focus primarily on the societies and environments of East and Southeast Asia, although other parts of Asia are examined to a lesser extent.) It is, of course, true that Western societies have played at least as large a role in altering the natural environment, the effects of which will be felt for centuries,

with climate change being the most obvious and profound example of this. But, arguably, the future of the global environment will be determined in Asia, where countries with very large populations are developing rapidly, in the process adopting many of the environmentally harmful practices of the Western world. The most profound example of this is China. Alone it produces one-third of worldwide greenhouse gases causing global warming and other manifestations of climate change, and this pollution is on the increase. China's demand for natural resources is causing environmental destruction and severe threats to wildlife around the world. And China is using its newfound wealth to exploit other resources around the world to fuel its economy, with profound environmental consequences.

Meanwhile, the billions of people who live in China and other parts of Asia are already suffering the consequences of climate change and environmental pollution, even more severely than most people in the West. This means that the societies of Asia have a profound role not only in the future changes to the global environment, but also in the effects on individuals and societies of those changes and the individual and collective responses that will determine how much the environment declines further and whether it will be possible to cope with the changes that cannot be avoided. Asia is now at the epicentre of environmental change through both its causes and consequences. With this in mind, in this handbook we (the editors and contributors) explore the role of Asia, especially East and Southeast Asia, in shaping relationships between environment and society. We describe the human and policy contexts of environmental change across the region, in the process examining a wide range of environmental problems and their impacts. By describing and analyzing these relationships and contexts, we highlight key environmental problems, locate their causes and help to identify ways of possibly overcoming them in the future.

The handbook is organized into six additional parts. In [Part II](#), we focus on several “human contexts” of environment and society in the region, specifically human rights, justice and literary imagination. [Part III](#) takes on questions of politics and policy, considering the roles of policy institutions, democratization, civil society, and corporations. In [Part IV](#), we look at a variety of environmental issues, namely air pollution, solid waste, water and agriculture. [Part V](#) is dedicated to understanding the social implications of wilder places, in the process highlighting the region's use of fisheries, reef systems, forests, and animals. [Part VI](#) is dedicated to climate change, notably the drivers of the problem, its impacts and how societies are adapting to them, and what is being done to implement alternatives to fossil fuels. In [Part VII](#), we (the editors) draw some conclusions about what the preceding chapters tell us about environment and society in Asia.

Human contexts

We begin our study of environment and society in Asia by looking at the basic unit of society: people. The way that people think, what they believe is just and how this affects behavior are central to the causes of pollution and resource use. The degree to which environment is considered something central to human life is vital for societal and policy change. This is evident in the extent to which the environment – particularly a healthy environment and access to its resources – is considered a right that should be enjoyed by individuals and communities. In [Chapter 2](#), Anna Riddell makes the connections between the environment and human rights. Basing her analysis on the large body of environmental law, she examines the importance of simultaneously reducing the human impact on the environment and improving people's wellbeing. She argues that protecting the environment is one way to fulfill human rights, and indeed doing so may be essential to avoid violating the rights of people to life, health, and livelihoods. This is particularly

true in the case of vulnerable groups that are most directly dependent on a healthy environment, notably the world's poor and indigenous communities. At the same time, protecting human rights can bolster environmental protection. Riddell applies these ideas to East Asia, revealing the growing connections between environmental protection and human rights. She finds, however, that progress in the region has been slow. Legally binding provisions to codify human rights and environmental protection, and specifically their connections, are scarce in East Asia. Riddell's chapter suggests that this will have to change if environmental health and human wellbeing are not to be greatly undermined in coming decades.

Riddell's chapter is oriented toward regional relationships between environment and human rights from the perspective of legal justice. In [Chapter 3](#), Piya Pangsapa turns our attention to environmental justice per se. Drawing on case studies in Southeast Asia, especially from Cambodia and Thailand, she explores the different ways in which environmental justice is being fostered by civil society. There is now an understanding among many environmental scholars and even policymakers that social and environmental justice are closely connected. Indeed, new civil society organizations and movements have arisen as a consequence of the injustices that come from environmental pollution and appropriation of local natural resources. This highlights the interdependency of the natural environment and society as well as how this interdependency can be affected by policy decisions. But perceptions of environmental justice may vary from place to place. For example, they are likely to be contingent on local ethical traditions. As Pangsapa notes, in Southeast Asia, discourses about environmental justice are largely premised on Buddhist conceptions of virtue and specifically what they say about the human relationship with the environment. By comparing activist civil society groups concerned about industrial pollution and illegal logging, Pangsapa highlights the connection between social and environmental justice in a rapidly developing region. She shows how these groups increasingly influence environmental policies, although the extent of this influence depends greatly on the willingness of policymakers in the region to let them have it. One of the important capabilities of these organizations is to bring local knowledge into policy processes, not least because this knowledge sometimes contradicts the views of outside experts. This knowledge is coupled with distinctive local traditions and religions that influence views on environmental justice. Traditional respect for nature is often at odds with policymakers' efforts to promote economic growth, thus requiring a better balance between nature and development to achieve environmental justice.

Another human context for looking at the environment can be found in literature, particularly local kinds. In [Chapter 4](#), Karen L. Thornber describes some of the ways in which local literature reflects environmental thought in the region, notably its ambiguities. East Asian literature is often perceived, particularly in the West, as celebrating the natural world. But Thornber points out that it is not this simple; local literature often portrays the way that people and societies have done great harm to the environment. Having said this, she believes that a "planetary consciousness" permeates much of the environmental literature from the region. Very importantly, however, she notes that local authors are not duped into accepting the perception that East Asia is in love with nature. Quite the opposite: they have often challenged official discourse and highlighted environmental challenges facing their societies, the region, and the world. Her objective is to analyze how literature from the region addresses the broader causes and consequences of these challenges. Different writers do this in different ways, through what Thornber calls "ecoambiguity." Writers use a variety of genres, styles, and approaches, but they share many of the same concerns about the human–environment relationship. Thornber's chapter explores the variety of East Asian environmental literature by analyzing a number of the most prominent authors of "ecodegradation," particularly from China, Japan, Korea, Taiwan, and Vietnam. She shows that examining this wide-ranging literature reveals the varied ways in which

East Asian societies have dealt with environmental and pollution issues in the contexts of their own cultures and histories. She also points to how these interpretations, and the manner in which they are expressed through literature, send important messages about environment and society across the region and indeed globally. She shows that local literatures can often negotiate ecological issues in very different ways. This may be the most important message from her chapter – that literature, and perhaps most importantly that from other places, can change the way we think about the environment and ultimately how we behave in our relationships to it.

Politics and policy

Ultimately human–environment contexts develop into, and in turn derive from, politics and the policies of governments. Indeed, it is here where much of the scholarly work on environment and society in Asia is being directed. In [Chapter 5](#), Sangbum Shin looks at environmental policy institutions in comparative perspective. His chapter provides an overview of policymaking processes in East Asian countries, examining how policy institutions have responded to major environmental problems, including climate change. He looks at the roles played by government agencies, legislation and policies, in the process exposing some of the channels by which nongovernmental actors have roles to play as well. In particular, Shin is interested to compare environmental institutions with an eye toward revealing some common patterns across the region. In doing this he tries to identify the extent to which these patterns correlate with economic development. Overall, Shin finds that East Asian governments’ environmental institutions are very much top-down entities, with this being most true in Northeast Asia and somewhat less so in Southeast Asia. Generally speaking, government agencies are by far the most important and powerful environmental policy actors across the region, although some nongovernmental actors have significant influence in Southeast Asian contexts and civil society is becoming more environmentally engaged across the whole region. Central governments tend to be more powerful than sub-national ones, undermining the ability of regional institutions and actors to play a greater role in crafting and implementing environmental policies. Shin points out that regional cooperation among countries to address shared environmental challenges is much more active in Southeast Asia, despite some serious issues requiring cooperation across the whole of East Asia. He shows that both domestic and international factors influence environmental policy across the region. Shin argues that more effective policies for addressing environmental problems in East Asia will require institutional reform. In contrast to existing top-down practices, “environmental decentralization” will be needed if countries of the region are to address successfully climate change and other environmental challenges. In short, more cooperation and participation by local actors, both governmental and nongovernmental, from across the region can help to make environmental policy more effective. This would not only have environmental impacts within the region, but might also have significance as the region’s role in global environmental problems, not least climate change, grows in importance.

In [Chapter 6](#), Mary Alice Haddad turns more specifically to the politics that underlie environmental policy. As Haddad points out, most countries of the region have experienced simultaneous and interconnected economic development and environmental crises. Sometimes this has resulted in civil unrest in response to environmental pollution and other ecological problems. Haddad argues that the first instinct of regional governments is to suppress any political unrest that might emerge from developmental pressures on the environment. While some of this still occurs, particularly in China, generally speaking in the countries analyzed by Haddad – China, Japan, South Korea, and Taiwan – governments reversed course and have, in recent decades, arguably embraced environmental protection and “green growth.” This is somewhat

surprising considering the pro-business inclination of these countries' governments and the general weakness of environmental ministries and indeed environmental nongovernmental organizations. The move toward something akin to pro-environment policies is happening across the region despite the significant variety in political regimes. A central question asked by Haddad is whether and how democracy – and democratization – has shaped environmental politics in East Asia. She provides an overview of environmental politics in the four countries, explains the process of political development in each, and attempts to make comparisons. Importantly and significantly, Haddad shows how environmental protection was one of the first issues – indeed, *the* first in most cases – around which civil society activism developed in all four of these countries. She determines that the type of political regime – the amount of democracy in each country – was less important in explaining this than was the timing of the different environmental movements with respect to domestic and international political opportunities. Haddad concludes that democracy matters for environmental movements, but more important for the region, and possibly for other regions, is how well environmental groups are able to time their actions in the process of ongoing political development.

Building on Haddad's analysis, in [Chapter 7](#), Fengshi Wu and Bo Wen examine nongovernmental movements and environmental protests in East Asia, focusing particularly on China, Japan, and South Korea. Wu and Wen argue that since the mid-twentieth century environmental activism stoked by pollution has greatly influenced wider public awareness of the environment and improved environmental governance. Unlike in the West, however, where such developments were largely a function of economic development, in East Asia they have been more closely tied to political development and specifically to the process of democratization. This helps to explain why environmental governance across the three countries examined in the chapter is at different stages, with China lagging Japan and South Korea. Wu and Wen demonstrate that the differences in environmental activism in these countries are generally explained by political culture and each country's progress toward democracy. For example, environmental nongovernmental organizations have had a bigger role in national politics in South Korea than in Japan, despite the latter's longer history of environmentalism. Due to the former country's more radical political transformation in the 1980s, such organizations had a role in creating a democratic and participatory political culture. At the other end of the spectrum, in China the impact of such organizations has been constrained by an authoritarian regime that limits their scope of action and works hard to prevent them from influencing the wider political culture. Wu and Wen also examine how different kinds of environmental activism can result in different environmental policy responses across the country cases. They assess the impacts of environmental activism across three dimensions: public environmental awareness, policy responses (and their actual environmental effects), and long-term institutional reform. As one would expect, Wu and Wen found major differences across the three countries. In China, nongovernmental organizations are not as closely tied to victims of pollution as in the other countries, whereas in Japan and South Korea they have merged with resistance movements. The consequence is that organizations in these last two countries, especially South Korea, have had bigger impacts on raising public awareness and fostering effective environmental policies by government.

A complete picture of environmental politics and policy anywhere in the world must include the role played by corporations and wider industrial interests. In [Chapter 8](#), Phillip Stalley fills in this part of our picture by examining the responses and responsibilities of businesses to environmental challenges in East Asia. As Stalley points out, economic success in the region has come at great environmental cost, with countries across the region becoming some of the largest sources of pollution worldwide. The environment and people have suffered as a

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